

Jonathon Keats is recording the city of Berlin using pinhole cameras and a method he calls "deep photography" to make some of the longest photographic exposures known.

The Lans Naw



ow is elusively situated somewhere between the past and the future. It is an immeasurable period of time, which moves onward second by second as much as day by day. Jonathon Keats' recent image-making endeavors attempt to extend our perception of the present further into the future. The American artist and philosopher has designed pinhole cameras and photosensitive materials specifically for two different epoch exposure times: a century and a millennium. Keats' *Century Camera* project and *Millennium Camera* project have been aptly described as "deep photography" because they engage geological time rather than clock time. Geological time is something we are not usually conscious of because it is measured in durations so much greater than our lifespans. During our conversation, Keats expressed that he "sees these cameras as temporal telescopes with the potential to make people aware of deep time and see the consequences of their actions from the perspective of the far future."



In 2014, Keats designed and manufactured one-hundred pinhole cameras, each with a century-long exposure time. Team Titanic — a German transdisciplinary artist collective — distributed the cameras to local residents of Berlin on May 16, 2014. The participants were each asked to place the simple, lensless device in a secret location. Each camera is now in the process of exposing a one-hundred-year-long photograph of the city. Because the duration of this project will exceed any single participant's lifetime, each must eventually disclose the location of their camera to a descendant expected to live to see the coming century. They will instruct this person to retrieve it on May 16, 2114, and return it to Team Titanic for exhibition. Keats says, "Each one of these images will be like a one-hundred-year-long movie collapsed into one single frame."

Often it seems that the more advanced imaging technology becomes, the more quickly it becomes obsolete and inaccessible. For example, cave paintings dating back 40,000 years have outlived thirty-year-old digital artwork stored on failing floppy disks. Many contemporary archivists warn us that present-day materials ranging from digital art to official documents may be lost forever once the software needed to access them becomes defunct. To give future Berliners the best chance at accessing these images, Keats is employing the oldest and simplest imaging technology available: the pinhole camera. This apparatus employs an optical effect first observed in the fifth century BCE: light that passes through a small aperture into a light-tight structure projects an inverted image of the external scene onto the opposite side of that structure. A pinhole photograph is made when this image is captured by photographic film.

Film is too light sensitive to accommodate a one-hundred-year exposure time. To combat this challenge, Keats' Century Cameras house black card stock. Like film and photographic paper, regular paper materials have light sensitivity ratings. Keats explains, "When you leave a book open in the sun for a long time, all the ink fades and the exposed pages eventually turn white. Similarly, if you project an image onto black card stock, the bright areas will fade, leaving you with a printed picture." This material and method also do not require post-processing or any other kind of photographic knowledge from the Berliners of 2114. The future members of Team Titanic may simply take the card stock images out of the cameras and display them for viewing.

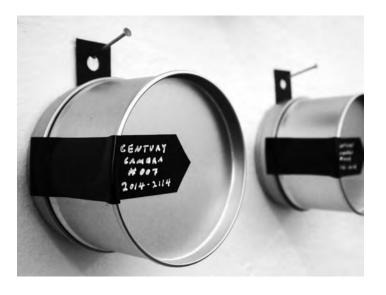


Based on our understanding of photographic imaging, the final images will best picture architectural elements in a camera's field of view that have remained unchanged for the entirety of the exposure. Structures that are demolished after 50 or so years and replaced with new buildings will appear as if double exposed, with new buildings superimposed on the old ones. Slow-moving objects, such as a tree growing, will appear ghostly, whereas quick-moving objects like cars, cyclists, and pedestrians won't appear at all. The final images will provide a record of Berlin's urban evolution from multiple points of view.

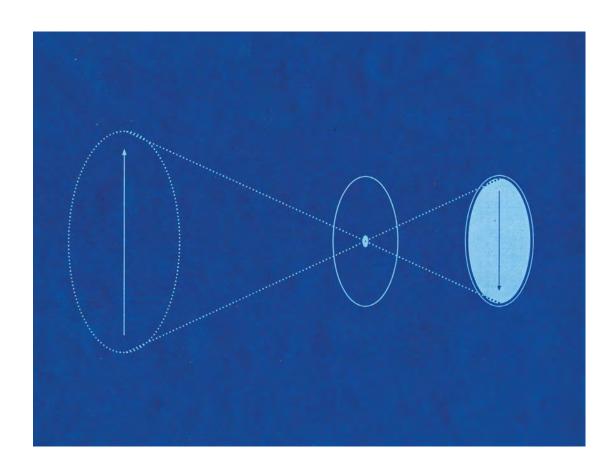
Despite its simplicity, the scale and duration of this project leave much to chance: in one hundred years all the cameras may be destroyed, the original participants may forget where they left them or even that they participated in the project at all, their ancestors may fail to carry out the plan, and even if they do, Team Titanic may not still exist. Keats is not as concerned with the practicality of the Century Camera project as he is with its conceptual impact. He maintains that "regardless of whether or not these images ever reach gallery walls, just knowing the cameras are there makes us more aware of our impact on future generations." Keats hopes that placing a means of surveillance in our future ancestors' hands will give us a greater sense of responsibility toward our urban environment. This is as much a social experiment as a photographic one.

Keats is a self-described experimental philosopher known for creating public thought experiments as part of his practice. He explains, "I have always had a rigorous curiosity about the world. So, I decided I should study analytic philosophy in school, and it was a truly amazing experience. However, the conversations that I was having in the classroom

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p.38: The Millennium Camera Project (Amherst), 2015–3015. p.37: Photographer Unknown, Stearns Church Looking SW, ca. 1905. Courtesy of Amherst College Archives and Special Collections. p.38: <u>Photograph From Inside a Century Camers</u> p.38: Century Camera (Rollei), 2015–2115. This page, from top: The Century Camera Project (Berlin), 2014–2114; The Millennium Camera Project (Amherst), 2015–3015.

were not conversations I could have with my roommates, let alone the world at large. Once I graduated, I started searching for ways to do philosophy outside of academia." The term experimental philosophy is most often used to describe a field within the discipline that utilizes empirical data to answer theoretical questions. However, Keats is borrowing the title from the sixteenth century, when it was used synonymously with the term natural philosophy to broadly describe the study of nature. While he describes his projects as "thought experiments," they are not modeled after the rhetorical exercises the term calls to mind. His unique practice of socially engaged philosophy is akin to social practice, the performance-based art medium that focuses on community engagement.

Through one of these experiments, Keats has found a way to outlast his own death and achieve what he calls "temporary immortality." In response to the Copyright Act of 1978, which states that one's intellectual property spans one's lifetime plus 70 years, Keats built a holding company to take copyright over his mind, asserting that he created it—neural network by neural network—through the act of thinking, thus making it his intellectual property. Investors may option his mind at a rate of ten dollars per one million neurons. Upon his death, his six billion neurons will transfer to the Jonathon Keats Holding Company. At this point, anyone who has purchased an option will have the opportunity to buy their held neurons at a rate of ten thousand dollars per one million neurons. If all neurons are sold, the holding company will retain sixty million dollars. This money will be used to cover the cost of keeping Keats' brain functioning, both technically and legally. So, while the Berliners participating in the inaugural Century Camera project will not live to see their work exhibited, Keats may, in a sense, be present for its unveiling.

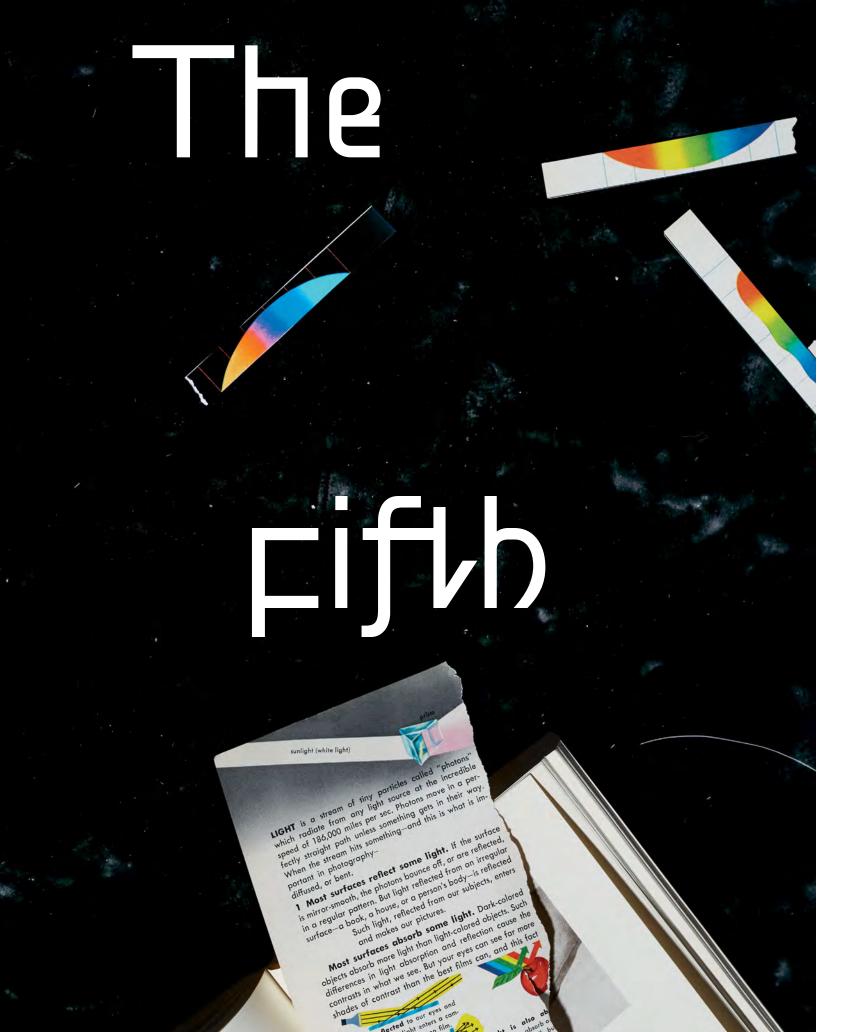
Earlier this year, Arizona State University Art Museum installed Keats' first Millennium Camera, designed to take a thousand-year-long exposure of the city of Tempe. Amherst College, Keats' alma mater, followed shortly thereafter, installing a Millennium Camera that is presently documenting the evolution of the nearby Mount Holyoke Range. Both institutions have committed to exhibiting these epoch images in Spring 3015. Like the Century Camera project, this endeavor is concept driven. Keats explains, "We are in the midst of one of the greatest environmental changes imaginable. In the same way that I believe a one-hundred-yearlong surveillance project could affect urban development, a one-thousand-year-long exposure might affect our relationship to geological time and thus the planet as a whole."

However, the conceptual strength of this project is buttressed by Keats' earnest efforts to ensure that it is also a technical success. He designed the Millennium Cameras with materials formidable enough to survive to see the year 3015. Each includes a solid-gold aperture and a copper backing coated in rose madder. Over the next thousand years, light will expose an image onto the paint, shifting the color without degrading the integrity of the material, just as in light-compromised Renaissance-era paintings.

Keats' cameras are open sources. His hope is that eventually every city will have a Millennium Camera prominently placed and every one of its citizens will inherit a Century Camera as a birthright. If his vision comes to fruition, the projects could act as a counterbalance to our rapidly accelerating experience of time and lengthen our sense of the present on a global scale. Keats suggests, "Maybe you can participate by committing to publish a second run of this magazine in a hundred years that includes the images made with these cameras."

Info
Jonathon Keats is an experimental philosopher and conceptual artist who has sold real estate in the extra dimensions of space-time, made an attempt to genetically engineer God, and copyrighted his own mind in order to get a seventy-year post-life extension. He is currently shooting both century- and millennium-long photographic exposures.

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Simultaneous conversations between leremy Haik and Liz Sales



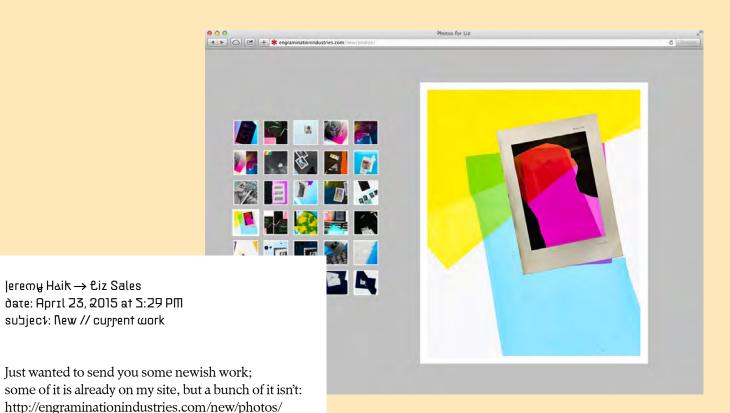
he arrow of time is a temporal concept developed by Arthur Eddington in 1927. The British astronomer surmised that time is asymmetrical or moves in one direction and that this direction can be established by observing the progression of entropy, gradual decline into disorder. This concept is in keeping with what has come to be called "the fifth arrow of time," our psychological and perceptual experience of a continuous movement from past to future. However, a linear notion of time is not an inherent part of the human experience.

In the nineteenth century, industrialization changed our perception of time from one based on cyclical rhythms in nature to one based on the mathematical measurements of the ticking clock. In the present, new, nonlinear technologies seem to be shifting our perception again. For example, we often look in our email inbox to find we are having multiple conversations with the same person in different threads. Email applications have adapted to this new form of simultaneous communication by grouping these various conversations together.

Between April and July 2015, artists and *Conveyor Magazine* editors Liz Sales and Jeremy Haik engaged in an exchange of ideas, documents, and images over email. This platform for engaging in nonlinear dialogue is apt for presenting Haik's photo-based images. The artist manipulates and rephotographs multiple layers of printed material, often from scientific and Classical sources, again and again. The resulting work acts as an atemporal map of language and history in step with our evolving experience of space and time.

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The cifth Arrow 45



£iz Sales → |eremy Haik date: May 10, 2015 at 6:41 PM re: New // current work

Jeremy Haik → Liz Sales

subject: New // current work

As an exercise, I've been thinking about your work in relation to models of space and time. In our day-to-day lives, we still operate under the assumption that time and space are absolute and respectively independent aspects of objective reality, even though we have long abandoned the notion of Newtonian absolute time as expressed in Philosophiæ Naturalis Principia. You seem to be playing with this assumption.

For example, when you photographed a measuring tape, it lost its authority over space and can now be reproduced at any size. By using a tailor's cloth tape instead of a ruler, you were able to fix a flexible measuring instrument in a permanent shape on a flat photographic surface. This reminds me of Marcel Duchamp's *Three Standard* Stoppages, which consists of three measuring sticks. The artwork was created by dropping three meter-long pieces of thread onto a canvas and cutting out their shapes to create three new expressions of the meter that fell, outside standardized measurements. Both works indicate that there is nothing inherent in nature that dictates that an inch has to be a certain length or travel in a specific direction.

 $|eremy Haik \rightarrow Liz Sales$ date: May 29, 2015 at 2:26 AM re: New // current work

I think there's a relationship between that idea and the mechanics of a camera. A camera is most certainly a mechanism for rendering a map of the world. And, by its nature, it precludes the possibility of simultaneous events or of a continuous flow of time/space; it's an isolation chamber of forced perspective that only allows a singular viewpoint with respect to both time and space. I think you could even say that it disrupts that continuity and functions as an incredibly small and unsophisticated model of the universe.

I've always felt that the diagrams from a bubble chamber (the apparatus used to make the path of ionizing particles visible as a row of bubbles in liquid) show us something about the nature of a photograph that no single photograph can:

The messiness of the bubble chamber is totally at odds with the Greek notion that perfectly arranged geometry is the true framework of nature, as opposed to being imposed upon nature by human thought. To me, the bubble chamber is a record of pure motion and possibility unencumbered by the specifics of matter (this person, that object, and so on). With a camera, moments are cut out from the flow of time. Another way to put this is that the pathway of time branches off with each click of the shutter.

The bubble chamber feels to me like a map of potential outcomes simultaneously taking place within the camera body, most of which don't make it into the image. Is this confirmation bias? Do we expect to see space and time in a linear way, so that our devices only show it to us as such?





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Liz Sales → |eremy Haik
òate: May 13, 2015 at 11:15 PM
subject: Laocoön and His Sons

When I visited your studio, I noticed that undermining the idea of the photographic copy, and with it the authority of technology, is a significant part of not just the work you produce but also your process itself. I found it so interesting that each of your individual works is the result of hundreds of test images, each a slight variation of the others. When viewed together, no single test image feels like the original or starting image. They all seem to exist at once, like a temporal paradox. Maybe this aspect of your practice also reflects your interest in the bubble chamber as a means of seeing multiple potential outcomes simultaneously.

I would like to look at some of your test images discarded in the making of a single work, as well as individual works that utilize the same source image. You've used images of *Laocoön and His Sons* in both ways. Could you send some examples of this and talk a bit about your relationship to this sculpture and its history?



|eremy Haik → £iz Sales ∂ate: June 13, 2015 at 5:17 PM subject: Laocoön and His Sons

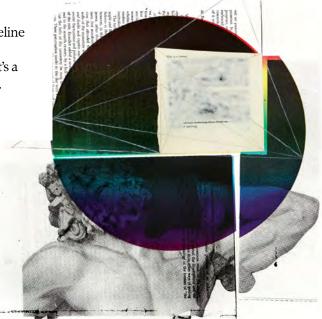
I put a folder in the Dropbox called "progression."

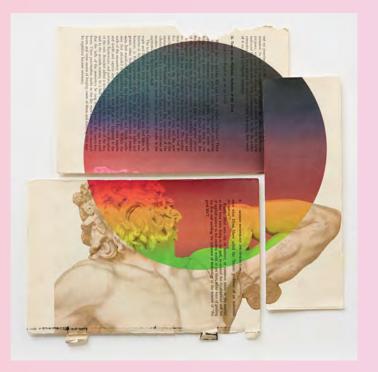
Here's the website I made for a class that's about the *Laocoön Group*: http://laocoon.engraminationindustries.com

There's a little bit of historical overview there. I also put a pdf in the Dropbox that has some quotes about the sculpture and a timeline of sorts. What I like about it is that it represents for me this idea that I think I mentioned to you of time as a corkscrew; basically, it's a combination of circular history (eternal return) and linear history.

£iz Sales → |eremy Haik òate: July 7, 2015 at 9:15 PM subject: Laocoön and His Sons

I enjoyed how you relate the history of Laocoön and His Sons to the corkscrew theory of history via graphs of cyclical changes in cultural data. This idea reminds me of the ancient Greek concept of the Great Year (which was actually 24,500 years long, based on the precession of the equinoxes) wherein the world was destined to be repeatedly destroyed and created anew. Ancient Buddhist and Hindu cosmologies describe the universe as a never-ending series of cycles as well. The idea of linear time seems particular to both Western society and the twentieth century.





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Jeremy Haik → Liz Sales

subject: Geometry

page 250.

 $\text{Liz Sales} \rightarrow |\text{eremy Haik}|$ date: May 29, 2015 at 9:37 PM re: Geometry

I remember reading this passage but only as a quotation in another text. Fritjof Capra cites Margenau in The Tao of Physics: An Exploration of the Parallels between Modern Physics and Eastern Mysticism. He explains that Greek geometry, which was understood to be the true nature of space, influenced Western philosophy and science for 2,000 years (until Einstein), while Eastern philosophy has always maintained that space and time are constructs. In Buddhist texts, for example, the past, the future, and physical space are nothing but words used to describe superficial realities.

Many contemporary artists are using geometry formally or even decoratively. This is akin to what Walter Robinson wrote in his post "Flipping and the Rise of Zombie Formalism" in Artspace this past April. However, you seem more interested in tapping into the history and cultural weight of geometry. I think there is a connection to be made between your use of geometric constructs and the Classical illustrations and astronomical imagery you appropriate from textbooks. In my mind, you are using the language of Western knowledge to speak to the malleability of all knowledge.

It is interesting to me that we need to be reminded that space and time are constructs. Einstein published the gravitational field equations of general relativity in 1915. A hundred years later, we still have a Newtonian mindset, at least in our day-to-day lives. Why do you think that is?

Jeremy Haik \rightarrow £iz Sales date: May 29, 2015 at 11:16 PM re: Geometry

My initial thoughts are that this is partly a consequence of scale, specifically the fact that it's very hard for us to imagine things beyond the physical scale of our bodies (space) and the existential scale of our less-than-one-hundred-years-long lives (time). What does five hundred years mean to me? Or even one hundred? How about a single light-year? Or the distance to the sun? How are we supposed to reconcile our experiences of living with time and space that are meaninglessly vast? This is why we have systems that generally work on and are limited to the human scale. Newtonian physics works great when you're playing pool, but not so much when you're measuring the interactions of subatomic particles. Also, we've only contemplated the possibility of relativity for just over one hundred years. By some accounts, that means we've spent about 0.05% of our shared history as a species grappling with this idea.

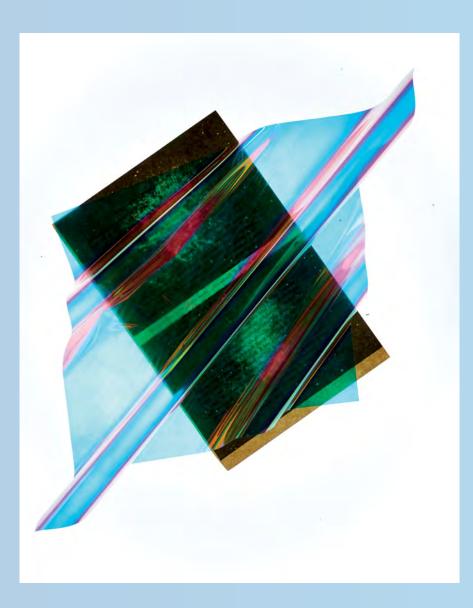
I think the cognitive dissonance that we face is a consequence of the privilege we give to data: we use numbers that somehow seem to offer truth or objective reality, but even if they do represent this reality, it's a reality we have no first-hand experience of. We only quantify these irreconcilable scales (large and small) by measuring their impact on the things we can see and relate to. Here's an analogy: I'm sitting outside with an iPad on my lap. I could look up at the sky, but what if my head were fixed downward? All I would know of the clouds would be the reflection I saw in the screen. I think that once we get beyond the human scale, we're basically looking down a hall of mirrors at reflections upon reflections.

20 51 Liz Sales → Jeremy Haik
date: June 9, 2015 at 12:40 AM
subject: Flatness

I wanted to revisit Hito Steyerl's essay "In Free Fall" because it puts into words some ideas I've been trying to articulate about perspective in contemporary photo-based art in general and your work in particular. She writes about how the modern construction of linear perspective not only transformed space but also introduced the notion of a linear timeline, which allowed mathematical prediction and with it the idea of linear time progression. She calls this the second temporal meaning of perspective: a view of the calculable future. She proposes that the dying out of linear perspective, the erasure of the horizon line, and the flattening of space in art and media also signify the death of linear time, making it easier for us to see all time as existing simultaneously.

I see these ideas in your work, especially in A Unique and Non-Repeatable Science. The multiple layers of printed material, Polaroids, and other objects you use to construct the images seem to have contradictory perspectives. When you fold a flat image that previously represented a three-dimensional space, you transform that space into something that is impossible to map.

While I think it is easy to relate the flattening of space and the flattening of history in *A Unique and Non-Repeatable Science*, I wonder if you have any thoughts on what she calls "the calculable future."



Info | Jeremy August Haik is an artist and writer. His work has been exhibited most recently at Aperture Gallery, New York; Unseen Photo Fair, Amsterdam; Newspace Center for Photography, Portland; Cindy Rucker Gallery, New York; PCNW, Seattle; Michael Matthews Gallery, New York; The Camera Club of New York; and Guest Spot, Baltimore. His writing on photography has been published in print and online most recently by Steadfast Magazine, Der Greif, and Baxter St. CCNY. Haik is a regular contributor to Conveyor Magazine. He currently lives and works in Brooklyn.

|eremy Haik → £iz Sales òate: June 13, 2015 at 4:07 PM re: Flatness

Basically, my thoughts are the same as hers: that the notion of a calculable future is completely flawed. To me, the fact that it is something that arises out of this notion of linear perspective (of time especially) also has a lot to do with the human-scale data collection that I mentioned in another thread. I see it this way: the perception of linear progress is the result of an accumulation of observational data from the past. Mathematics offers ways of averaging and therefore predicting the future expression of those data points, but the prediction is contingent on all external factors remaining the same. Alternatively, external factors can be modeled in the same way (through the projection of past data) and can then be included in the model, but those external factors have their own external factors, and so on, and so on.

Calculating the future means that all variables have been removed. Otherwise, it's not a calculation but an estimation. This is, of course, impossible, but when you view the world through a grid, it becomes tempting to assume that all of its contents are mapped and accounted for. Calculation of the future (and much of science, for that matter) relies on controlled experimentation and useful data that has been collected without contamination from the outside world — in isolation. So, with regard to the work, you could say that I'm taking visual data from the past and applying this same method of isolation and extraction. This process is physically evident in the work, whereas with data-driven analysis, this ripping-out-from-the-world is invisible; all you see are the numbers. I'm looking at this past information to make a projection of the future, let's say, but I'm also referring to the fact that my data is amputated from the fabric of history. Does that make sense?

I think Derrida's idea of hauntology, from *Specters of Marx*, is relevant; I stuck that in our Dropbox too. I also talked about this in the email exchange piece I did with Penelope Umbrico for the "Spectre// Spectrum" issue of *Conveyor Magazine*.



£iz Sales → Jeremy Haik ∂ate: July 9, 2015 at 11:27 AM subject: Flatness

I reread your exchange with Penelope as well as the passage she included from *Specters of Marx*. While you discussed that text in relation to the figure of the ghost, which is neither present nor absent, it is surprisingly relevant to our conversation as well.

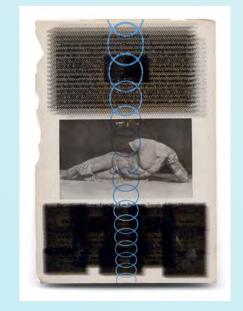
In the passage on the figure of the ghost, Derrida writes, "Repetition and first time, but also repetition and last time, since the singularity of any first time, makes of it also a last time. Each time it is the event itself, a first time is a last time." This means that within a single event, time is flat; all time exists simultaneously. However, he goes on to explain that we never return to a precise moment in the same way. We return to a new past. Outside of the single event, he describes a temporal and ontological disjunction more akin to the bubble chamber as you described in a previous message.

Liz Sales → Jeremy Haik date: June 9, 2015 at 1:23 AM subject: Text

Robert Rauschenberg approached Willem de Kooning and asked him for a drawing to erase. De Kooning agreed and Rauschenberg erased, matted, and framed the work, and titled it *Erased de Kooning Drawing*.

In a sense, Rauschenberg's text fills the vacuum he created by erasing the drawing. I've also been thinking of *Erased de Kooning Drawing* in relation to *Un-titled*, images of vintage book covers from which you have digitally removed all text.

After you've scanned a book cover and digitally removed its text and other linguistic elements, you don't give the new work a title. In fact, the series is called *Un-titled*. There is something about that that I really like. It forces the viewer to deal with the visual space you've created. An image with no text is very different from an image that once contained text but no longer does.



|eremy Haik \rightarrow Liz Sales date: June 11, 2015 at 1:46 AM re: Text

It's funny that you should bring up Rauschenberg, as I used him as a reference in my thesis paper for graduate school (and also, perhaps more importantly, $Factum\ I$ and $Factum\ II$). This was not in reference to the book covers but in reference to these:

http://haikstudio.com/gallery-category/projects/#wo-things-that-never-happened

(I stuck a larger image of the two small text pieces in the Dropbox; they are identical pages of the Borges story "On Exactitude in Science." I blacked out one with ink and cut the other from the page.)

I'm going to put my thesis paper in the Dropbox too; it's a lot more focused on the text work. Skim it as you see fit. I just reread it and, while it's a little overwrought, the underlying ideas are still pretty relevant, especially with regard to the text.

Liz Sales \rightarrow |eremy Haik date: July 3, 2015 at 1:05 PM re: Text

I'm glad you shared your thesis with me because I was not familiar with your diptych *On Exactitude*. Jorge Louis Borges' "On Exactitude in Science," about the life of a map that is an exact replica of the territory it represents, touches on many of the themes we've been discussing: a futile mechanism for mapping reality and the complex relationship between a copy and its original.

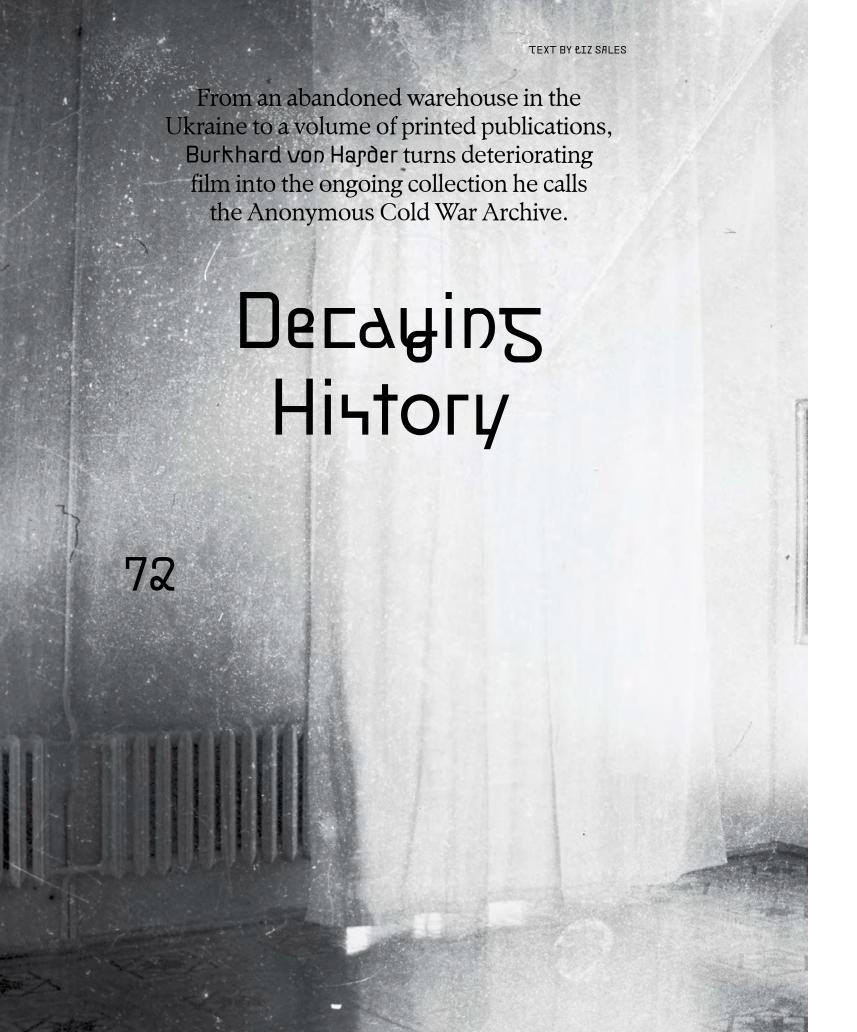
I've never noticed this before, but Borges' story lends itself to photography not just thematically but also physically. It is so short that it can easily be reproduced photographically while maintaining a readable text. By removing this text and rephotographing the story, you engage Borges' idea that language is yet another artificial system that has "nothing to do with reality."

ðaτe: July 3, 2015 af 1:05 re: Text

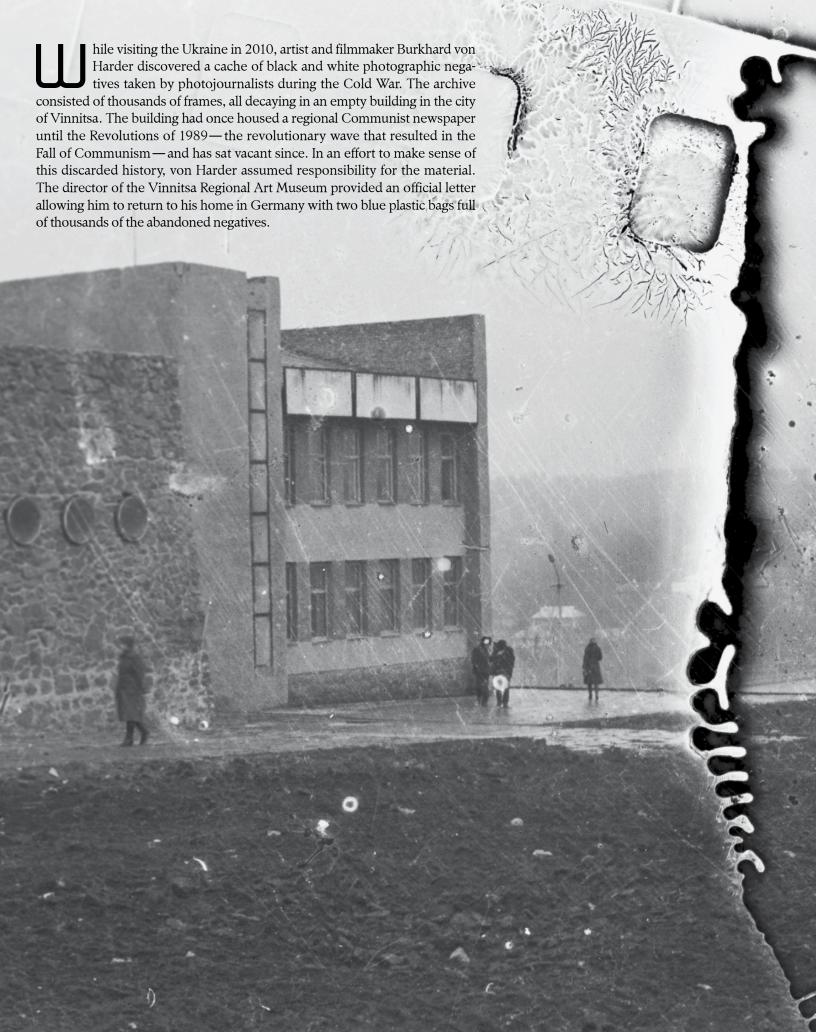
This conversation, which needed to be cut short in order to be included in this issue, continues in the artists' respective inboxes in perpetuity.



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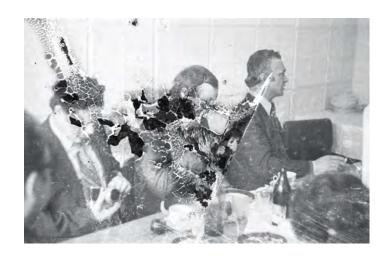
Back in Germany, he worked intuitively with the images, creating various edits and incarnations under myriad titles. First, he worked with the most damaged and abstract images. These made up his first three publications, collectively titled *Cold War in a Trash Bag.* Later he created a set of 12 limited edition silk screens, dedicating each to an artist whose work the damaged frame called to mind. Finally, he made visual kōans by condensing the most poetic filmstrips into 45 individual books titled *My Anonymous Cold War Archive*. This title has changed over time as well, first to *Black and White Atlantis* and then, ultimately, to the more neutral *Ukrainian Cold War Negatives: Anonymous Black and White Images from the Cold War Years*.

Since photographers often shoot multiple frames of a single subject, the anonymous images in each of these books are most distinguishable from one another by their unique signs of deterioration: the rips, scratches, and tears each negative collected after being discarded and left to decay. Von Harder's playful edits do not directly address the history of propaganda journalism in Cold War era Ukraine so much as they uncover the new imagery created by twenty-one years of neglect.

Like the source material and the title, the books themselves are subject to constant, subtle changes from one copy to the next. By using an on-demand publishing platform, he is able to make subtle changes to the layouts, as well as upload new content periodically, so that each volume purchased may differ from those ordered earlier. By exercising this technique, *My Anonymous Cold War Archive* links the ephemeral nature of memory and analog photography with the digital archive, playfully challenging the commonly held assumption that the digital archive exists in suspended animation in perpetuity.

Von Harder has worked so closely with the archive he rescued that he finds it uncanny how many others like it disappeared into landfills across Eastern Europe. Recently, he revisited Vinnitsa with a film crew to document the story of the abandoned negatives only to discover that the building was no longer accessible—it had been converted into law offices. The archive that has consumed so much of his creative imagination would truly have been lost forever if he hadn't taken possession of it that day. \Box

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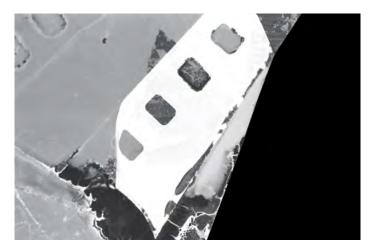




















Info Burkhard von Hapòer is a German artist and filmmaker. He directed the documentary films <u>Narbe Berlin</u> (2009) and <u>Narbe Deutschland</u> (2015), and <u>You Can't Push Back the River</u> (1996). Von Harder is represented by Being 3 Gallery (Beijing, China).