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conveyor

The Alchemy Issue

Symbol key:

☉	Silver
☿	Monas Hieroglyphica
♁	To Sublime
☼ ☽	Gold
♁	To Mix
☵	Water
♁	Earth
♁	Fire
♁	Air
☼	Blood
♁	A Retort
♁	Copper



Some Reflections on Metal
Introduction by
Hugh Aldersey-Williams



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Shannon Ebner, Falk Messerschmidt,
and Khanh Xiu Tran
Words by Jeremy Haik



The Visible and the Veiled
Photographs by Richard Learoyd
Words by Dominica Paige



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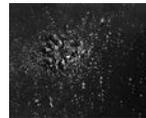
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Tales from the City of Gold
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Words by Liz Sales



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Perfection (Fiction as It Is)**
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Aaron Hegert, Zachary Norman,
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DOCUMENT



METAPHOR





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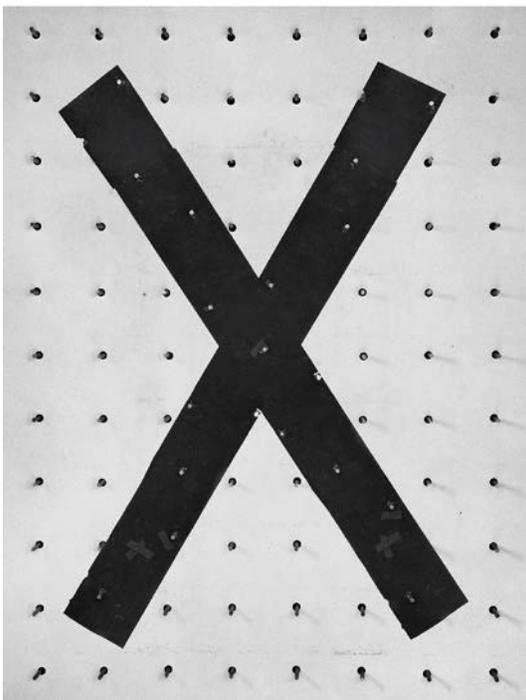
The practice of alchemy sits at the crossroads of many disciplines, some of which may appear, to the contemporary mind, to be at odds. Chemistry is the central figure, but the fields of literature, religion, mythology, and philosophy are also significant. Alchemy's history is a dense tangle of conflicting accounts, and its texts are equally labyrinthine. These works combine meticulous laboratory procedures with metaphorical language and imagery, and this unlikely pairing leaves the practice somewhere between science and art. Similarly, artists who work with photography often succeed in reconciling indexical reality and strict laboratory procedures—whether darkroom chemistry or digital color management—with metaphor and symbolism. In curatorial statements and exhibition catalogs, photography is often compared to alchemy via direct analogy: both rely on transformation through chemistry and process. More significantly, the deeply interdisciplinary qualities of both practices produce works that fuse analytical observation, empiricism, and precise documentation with symbolism, poetics, and metaphor.

Jeremy Haik is an artist, writer, and educator. His work deals with the relationship between written and visual forms of language in the context of digital information systems and historical narrative.

In his comprehensive study of alchemy, Lawrence Principe notes, “arriving at a solid, satisfactory conclusion about alchemy can seem as difficult as finding the Philosopher’s Stone itself. Alchemy’s primary sources present a forbidding tangle of intentional secrecy, bizarre language, obscure ideas, and strange imagery.”¹ To further complicate matters, many alchemical texts have been lost to the tides of history. Of the thousands of documents that have survived, most are nearly impossible to understand thanks to their elaborately encrypted and symbolic language. The authors of these texts were determined to keep the revelations that appeared to them tightly guarded, and so they kept the precise details of their experiments illegible to the casual observer.

¹
Lawrence Principe, *The Secrets of Alchemy* (Chicago: University of Chicago Press, 2013), 2.

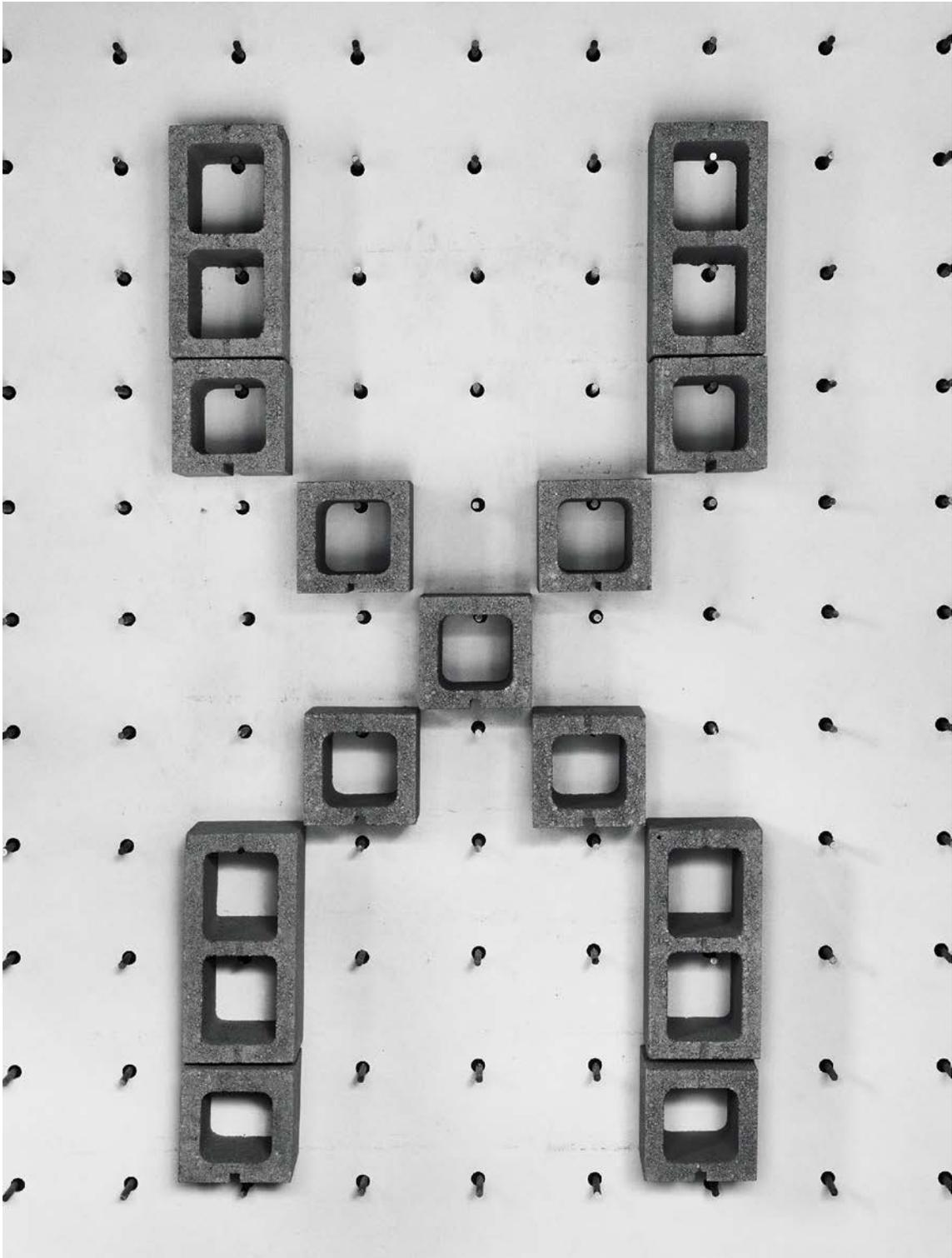
²
Zoltan Kövecses, *Metaphor: A Practical Introduction*, 2nd ed. (Oxford: Oxford University Press, 2010), 264.



Alchemists had legitimate reasons for this secrecy. Imagine that you have the knowledge and skill to turn lead into gold, or to produce an elixir of immortality. Would you share your discoveries with the world, or keep them to yourself? If there were other individuals who could help you in this process, how would you communicate with them without being discovered? Would you be a target for desperate individuals and institutions? These concerns led alchemists to encrypt their writings with intricately constructed allegory, drawing from a deep well of mythological knowledge. By borrowing from the fluid narratives of myth, these laboratory procedures were transformed into strange variations on familiar stories in which mysticism, science, and religion were collapsed into one. The material that survived is simultaneously poetic and analytical, descriptive and cryptic, weaving together ancient stories and the bleeding edges of scientific practice.

This poetic language that defines alchemical texts is uncommon in most contemporary scientific literature. Metaphor is crucial in helping to conceptualize and therefore understand the world; Zoltán Kövecses, a linguist and author of several books on the study of metaphor, goes so far as to say, “No scientific discipline is imaginable without recourse to metaphor.”² But metaphor is also by nature imprecise and flexible in meaning, allowing room for multiple interpretations. As science grew more specialized and collaborative, clarity and effective communication became more critical. Robert Boyle’s 1661 text *The Sceptical Chymist* strongly advocated for the use of rigorous, practical evidence and reproducible results, written in plain and unambiguous language. The subsequent rejection of alchemy’s flowery and confusing language and the emphasis on clarity and empirical rigor were the beginnings of the fault line that would ultimately separate alchemy from modern science.

Our personal experience of the world, outside the controlled environment of the laboratory, is often one of ambiguity, uncertainty, and misleading information. Experiences and phenomena that refuse clear and unambiguous description are what compel both science and art forward. Photography is uniquely positioned to offer insights to both laboratory scientists who rely on rigor and clarity and to artists who rely on metaphor and ambiguity. In their respective practices, Shannon Ebner, Falk Messerschmidt, and Khanh Xiu Tran take advantage of photography’s ambidexterity to examine the relationship between language and images.



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Through their use of this uniquely flexible medium, the boundaries between precision and allusion begin to blur, text becomes suspect, and language's firm grip on the meaning of images is willfully unraveled.

Shannon Ebner

examines language both formally and conceptually through her photography. Most of her images are created using large format film rendered in descriptive tones of black and white. This reductive color palette suggests an appeal to truth and reason over the affective influence of emotions; historically, black and white images have been viewed as objective, direct, and uncluttered by the vivid distractions of color. The phrase "black and white" is shorthand for something clear and obvious. This abridged version of the outside world dodges the psychological influence of color and presents an uncompromised observation of forms and shapes in physical space. The demands of her labor-intensive, analog process also lends the work an impression of highly controlled, technical virtuosity.

Yet Ebner's images rely just as heavily on her creative translation of the forms she encounters as they do upon her technical skill in capturing them. Her typology

of X marks examines this most basic of letters in various incarnations: studio compositions, graffiti, and industrial residue. As much as it may simply document the range of possible variations of a single letter, it also leaves room to reconsider the meaning it points toward. If the variety of forms the letter X can inhabit is so seemingly limitless, it would follow that the meaning behind it is equally fluid and evasive; if the shape is flexible, is the meaning flexible too? This seamless combination of direct observation built on a ground of shifting and fluid meaning is a study in photographic poetics in which the precise clarity of meaning in both photography and language are invisibly pulled to the side.

This preoccupation with formal observation is evident in Ebner's consistent materialism. Her images have a visceral weight, depicting spray paint on concrete walls and letters arranged out of cinder blocks alongside excavated landscapes, torn signage, and rough-hewn wooden letters. Her photograph *The Crooked Sign* lingers on a street sign ripped from its concrete base, lying twisted and facedown on the ground. The sole purpose of the sign's existence is to convey information through language and symbols, but here it is upturned and erased. The container of the message and the physical reminder of its upheaval are all that remain. Language consists of concepts and ideas; in Ebner's images, those ideas are given physical form in a constantly shifting and eroding environment.

In his essay "Blind Spot: On the Metaphor of the Sun," Tom Trevor describes the work of French poet Francis Ponge as a "literary alchemy" in which he is "not seeking a disembodied, objective truth, but, rather, crafting a self-reflexive, extended metaphor... to transcend the reductive equivalence of language."³ Ebner names Ponge as an influential figure, and her own photographic alchemy is made up of images that set the rigor of objective observation against the fluid and shifting meaning of everyday experience. Her work is a synthesis of language and material form that operates as both document and metaphor, transforming the banal contents of letters and post-industrial debris through careful photographic technique and the eyes of a poet.

DEAR READER COMMA
THE TWENTY-SEVENTH
LETTER OF THE ALPHABET
IS A BLANK COMMA DELAY,
A DEAR READER
PHOTOGRAPH IN YOUR MIND
COMMA EYE, THE LIQUID
TREATMENT CAUSING
ECSTATIC DELAYS
NOW GO OUTSIDE THIS
TIME AND PLUG IN
SOME REALLY LONG CHORD
THIS WILL MAKE YOUR
PHOTOGRAPHIC DANCE THE
ELECTRIC COMMA
AND PROMPTLY DISARRANGE
THE PHOTOGRAPHIC
UNIVERSE I STATE
THIS COMMA TURN IT
AROUND TURN IT
AROUND

—Shannon Ebner, text from the
exhibition poster for *The Electric
Comma*, Sadie Coles, 2013

3

Tom Trevor, "Blind Spot,
On the Metaphor of the Sun:
Light, Language and Melancholia,"
in *Black Sun: Alchemy, Diaspora
and Heterotopia* (London:
Aidinghouse, 2013), 20.

Falk Messerschmidt

focuses on the tension between language and images, especially on the influence they hold over one another. Through a combination of appropriated imagery along with found and invented text, his work charts alternative historical narratives and examines the amorphous nature of cultural identity. His project

Toponymy is the study of the names people have given to places (from the Greek topos meaning place and onoma meaning name). The city currently known as St. Petersburg offers an interesting study in the fluidity of toponyms: the city—then known as Petrograd—was the site of the October Revolution of 1917 led by Vladimir Lenin and the Bolsheviks, and on January 26, 1924, five days after Lenin's death, Petrograd was renamed Leningrad. The Siege of Leningrad proved one of the longest, most destructive, and most lethal sieges of a major city in modern history, and the name of the city itself is laid on an equally shaky foundation, shifting between no less than eight iterations, official and unofficial, over the last three hundred years, including Petersburg, St. Petersburg, Petri, Petropolis, Piterpol, Petrograd, Red Petrograd, and Leningrad.

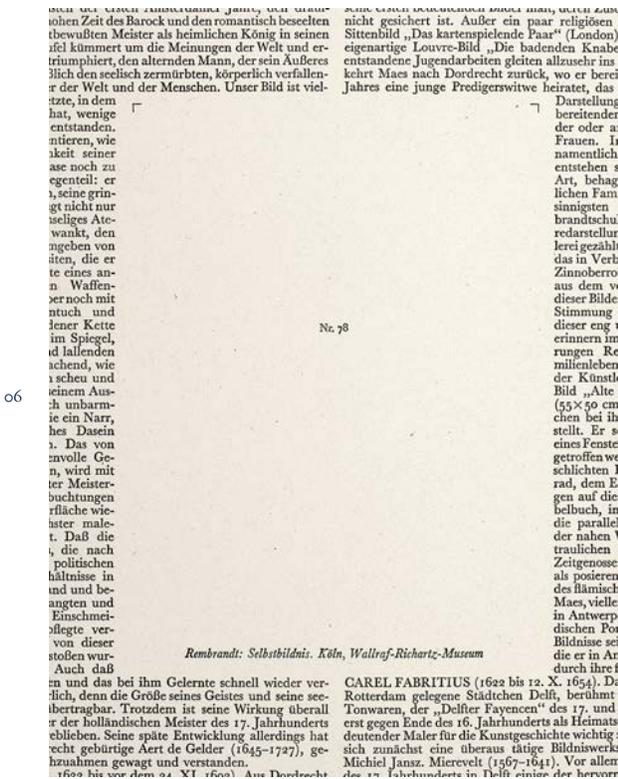
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Hazimir Malevich, *The Non-Objective World* (Chicago: P. Theobald, 1959), 67.

Russian Night consists of found slides depicting various landmarks in what was formerly Leningrad (present-day St. Petersburg, Russia's second-largest city). The slides were scanned without a backlight—the component that illuminates transparent film. Each scan depicts the slide's cardboard frame, captions in Russian and English, and a dusty, black void where the image should be. These empty frames call to mind Allan McCollum's *Plaster Surrogates*, or Kazimir Malevich's *Black Square* paintings (the first of which was, coincidentally, exhibited in St. Petersburg in 1915). While *Russian Night* shares a flat, graphic quality with these works, it is an inherently photographic project. Rather than using photography to render an image of the visible world, Messerschmidt subverts the mechanics of photography to render St. Petersburg invisible.

In *The Non-Objective World*, Malevich writes, "the visual phenomena of the objective world are, in themselves, meaningless; the significant thing is feeling, as such, quite apart from the environment in which it is called forth."⁴ Messerschmidt's black squares function as metaphoric, as-yet-unfilled screens for the projections of the imagination. Framed and directed by the minimally descriptive language of the captions, he presents us with a photographic profile of St. Petersburg that relies as much on his own actions as it does upon the active participation of the observer. Some of the locations and monuments no longer exist, and in some ways the version of St. Petersburg that the original slides were meant to depict does not either. The emptiness in these images could suggest nothingness and absence or unresolved potential and opportunity in equal measure. In this project, language explains and clarifies but also primes and suggests, leveling the weight of future possibilities with that of historical fact.

Messerschmidt's project *She took it with a pinch of salt* is a series of images charting the quasi-fictional biography of two German immigrants. The project consists of a grid of appropriated historical images and documents, with a corresponding guide that functions as a map of the piece. The guide assigns a number to each image and corresponding passages of text—similar to a museum exhibition guide—and most of the entries cross-reference other entries. To fully engage this work requires jumping along a zigzag path, bouncing from image to text, text to text, and back to image. Messerschmidt has made it intentionally



Rembrandt: Selbstbildnis. Köln, Wallraf-Richartz-Museum

CAREL FABRITIUS (1622 bis 12. X. 1654). Das Rotterdam gelegene Städtchen Delft, berühmt: Tonwaren, der „Delfter Fayencen“ des 17. und erst gegen Ende des 16. Jahrhunderts als Heimatsdeutender Maler für die Kunstgeschichte wichtig: sich zunächst eine überaus tätige Bildniswerk Michiel Jansz. Mierevelt (1567–1641). Vor allem das 17. Jahrhundert in Delft einige der hervorst



difficult to experience the project in its totality by asking the viewer to rely on an abundance of fragments and pieces.

There is an underlying sense of organizational rigor within the piece, and Messerschmidt cites scientific documentation as a formal influence in the presentation of his work. He also conducts extensive research in historical archives, such as the Library of Congress, when gathering his materials. In spite of this outward veneer of scientific rigor, Messerschmidt's work leaves ample room for instability and uncertainty within his investigations. By asking the viewer to jump between these fragments in his work, Messerschmidt highlights the way in which contextual information from one element colors the way we respond to the others. The final impressions of any one of his pieces vary greatly from viewer to viewer depending on the order in which the elements of the piece are digested. Each viewer chooses a unique path through the work, and each reading of the work is equally as valid as the next. According to Messerschmidt, the elements of his work "describe an ocean of phenomena; some things can not be described with words, others can not be described by images," and yet both text and image can point to the same experience and "adhere to the same notion." His

awareness of these limitations is evident in the way his work avoids presenting a totalizing narrative in favor of approximating truth through the accumulation of related fragments.

Hanh Xiu Tran

examines the effects of networked systems and algorithmic image processing on the way images are contextualized within digital space. Her project *Geode: A Technical Guide* is a record of her investigation into the potential that lies within a single image. The project centers on a faded photograph of unknown origin. This photograph contains few identifiable features beyond what Tran describes as four discrete compositional elements: a windowpane, an eclipse shape, a foggy area, and a zigzag line. In her project statement, she speculates that the image "looks, at first glance, as if it were taken from space."⁵ The four elements are isolated using a variety of image manipulation and enhancement techniques in order to extract as much information from the original as possible. These cropped and enhanced fragments are then submitted to one of several image-based search engines and the results form the basis for further investigations.

At the heart of *Geode* is the reverse-image search, or content-based image retrieval. Before this method was

Isolated in 5 tones.



Color palettes from top to bottom row:

1. *Shady Lady and Coffee Bean*
2. *Grey Chateau and Nero*
3. *Delta, Baltic Sea, and Silver*
4. *Boulder and Lily White*
5. *Bud and Madras*

There are two fundamentally different strategies for image completion. The first aims to reconstruct, as accurately as possible, the data that should have been there, but somehow got occluded or corrupted. The alternative is to try finding a plausible way to fill in the missing pixels, hallucinating data that could have been there. This is a much less easily quantifiable endeavor, relying instead on the studies of human visual perception.

—James Hays & Alexei A. Efros, quoted in [Geode: A Technical Guide](#)



B3(3). Looking through a bulged side window of a S-2 Tracker.

developed, concept-based searches (such as a standard Google search) were the predominant form of Internet search traffic. In this type of search, users enter keywords such as verbal descriptions, names, or dates. The search string is checked against images that have already been tagged and matches are returned to the user. Since computational imaging software that could directly and accurately analyze and evaluate the visual contents of images did not yet exist, images had to be tagged either manually through human effort (in 2006 Google launched the crowdsourcing game *Google Image Labeler* in which players tagged images manually to improve search accuracy) or by existing on a website with related text. The most significant drawback of this search method is the need for a specific linguistic vocabulary to describe the image in question. In *Geode*, the need for this vocabulary is absent. By taking advantage of developments in image-analysis algorithms, content-based search allows the use of a purely visual syntax in place of text. These methods are especially useful if the user needs to circumvent language or translation barriers or, as in Tran's case, if the user is attempting to establish a visual context for images of unknown origin and content.

By relying heavily on the use of reverse-image search and computational image analysis, Tran's efforts to establish a visual genealogy of her source image fall largely outside the textual constraints of language. The text that does appear serves as an organizing principle for the images, labeling, numbering, and indexing them in objective and tersely descriptive language. The mysteriousness of the source image and the meticulous cataloging of the search results lend a forensic tone to the work. Conceptually, the project bears similarities to Aby Warburg's unfinished *Mnemosyne Atlas*, a sprawling collection of photographs pinned together on large, black panels depicting a wide range of objects from antiquity up to Warburg's time in the early 20th century. *Mnemosyne* marked "photography's invasion of art-historical discourse and its installation in the place traditionally reserved for the text."⁵ The images in *Geode* offer an analogous brand of historical observation that operates solely within the realm of photographic images, unaided and unencumbered by text. And, as in *Mnemosyne*, *Geode's* collected search results do not achieve their full effect when viewed singularly; only in its sum juxtaposition does the visual network of relationships begin to take shape.



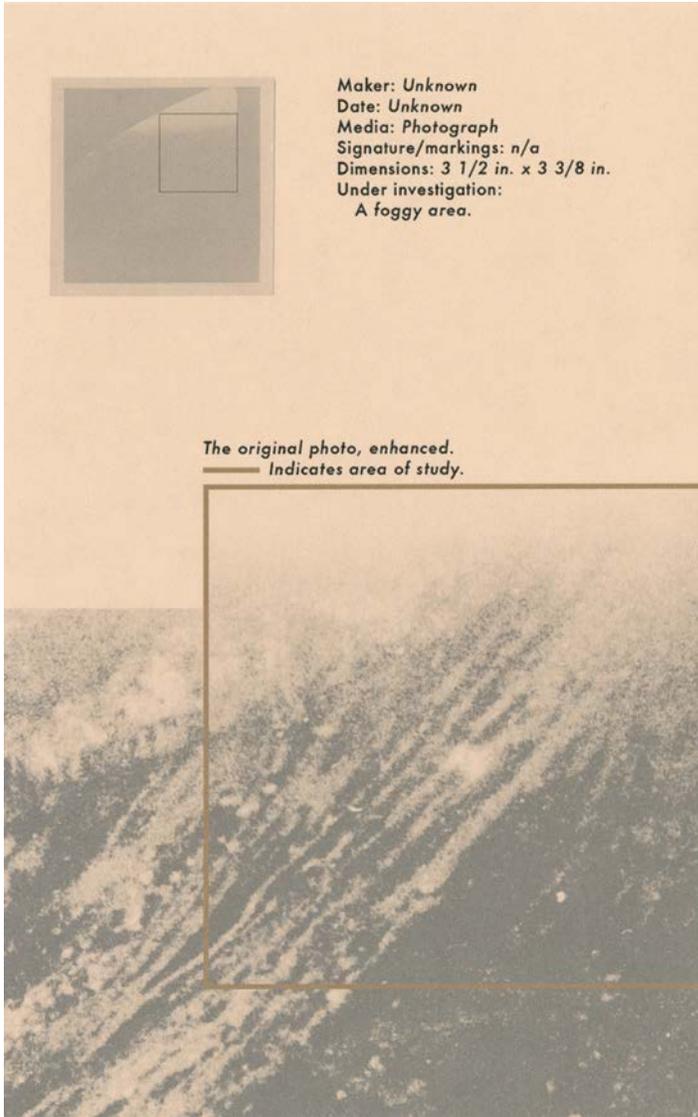


II

\1(3). *Phytolithe buliforme*. A1(4). *Venus on the sun*. A2(1). *Transit of Venus*. A2(2). *Black hole on Mars*. A2(3). *Webcam view*.
 \3(3). *Comet ISON*. A3(4). *Optical experiment*. A3(5). *Mars lab*. A3(6). *Fireball*. A3(7). *Swiss cube*.
 \4(2). *B29s*. A3(3). *Bersaglieri*. A4(4). *Chilkoot trail*. A4(5). *Flying drone*. A4(6). *Baychimo*.
 \4(9). *X-24B aircraft*. A4(10). *Flying motor*. A4(11). *Mars dust devil*. A5(1). *Catch in cricket*. A5(2). *Supernova Annie*.

5
Hanh Xiu Tran, "Geode: A Technical Guide" (master's thesis, School of Visual Arts, 2014), 3.

6
Philippe-Alain Michaud, *Abu Warburg and the Image in Motion* (New York: Zone Books, 2004), 278.



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13-15

Both the enhancement and the reverse-image searches rely on a mathematically derived set of equations and analysis algorithms. The logic of mathematical precision and the fuzzy ambiguity of her source images turn out to be surprisingly fluent partners. Their complementary relationship marks the impressive power of these search engines to map a *Mnemosyne*-like network of connections between seemingly unrelated images and subject matter; images of bombers, car windows, NASA explorations, and geological surveys appear as relevant results in her searches. The sheer breadth of the project leaves some question as to whether these efforts reflect a genuine investigation or whether they are subtly masked indictments of truth and meaning within the scientific process and within photography itself.

Strictly speaking, none of these artists are practitioners of alchemy. The consensus among historians of alchemy is that the word itself is often applied too casually. Lawrence Principe cites several unusual examples of this trend in book titles such as *The Alchemy of Finance* and *American Alchemy: The History of Solid Waste Management in the United States*. What these artists do share with the alchemists is the use of language and images as flexible, malleable containers for meaning. Alchemical thinking was as literary as it was scientific, relying on experimentation but also employing myth, metaphor, and allegory to explain its results. In broad terms, the purpose of language itself is to capture meaning, package it into a clean and universally understood box, and send it on its way in the form of speech or writing. A perfect language would offer absolute certainty and clarity. As these artists show us, however, such a language does not exist, and the systems that do exist are laced with doubt and ambiguity.

As the practice of alchemy began to wane before newer innovations and discoveries, the richness of symbol and metaphor that defined its writings started to dissolve within the emerging scientific discourses. Systematized language and units of measurement like the metric system—first introduced in 1799—positioned laboratory science as a herald of observational truths based on rational empiricism. Photography’s early years, thanks in part to its precise mechanical vision, seemed to offer the same promise of truth and clarity. And even in spite of our increasingly sophisticated uses of photographic images, this false promise persists in certain pockets, such as surveillance. By bringing text and image together, the artists in these pages refuse to collapse the meaning of either one into tidy packages. In their work, text and image are suspect; they remain elusive and rife with dead-ends and encrypted meaning. These artists recognize in the photographic image the same uncertainty, doubt, confusion, and intentional secrecy that the practitioners of alchemy recognized in their own work. Photography can be a metaphor for alchemy, not only in its reliance on transformation and chemical processes, but, more importantly, because it recognizes the flexibility of the alleged reality it depicts, and because, rather than attempting to capture—and caption—that reality, it revels in its ineffectiveness in the face of false certainty. ♁

- 01 Ebner, *The Crooked Sign*, 2006
- 02 Ebner, *EKSIZ*, 2011
- 03 Ebner, *XSYST*, 2011
- 04 Ebner, *XIS*, 2011
- 05 Messerschmidt, *She took it with a pinch of salt*, installation view, 2012
- 06 Messerschmidt, *Untitled*, 2011
- 07 Messerschmidt, *Russian Night 06*, 2009
- 08 Messerschmidt, *Russian Night 24*, 2009
- 09 Tran, *5 Tones*, 2014
- 10 Tran, *Looking through a bulged side window of an S2 Tracker*, 2014
- 11 Tran, *Search Results (Group A)*, 2014
- 12 Tran, *Area of Study*, 2014
- 13 Tran, *Isolation by False Coloring*, 2014
- 14 Tran, *Ground Truth Segmentation I*, 2014
- 15 Tran, *Multiangle Imaging Spectroradiometer (MISR) mystery image*, 2014