

Broken

*Environmental
Photography*

The Hasselblad Foundation's exhibitions and research and the annual Hasselblad Award in Photography, together with the 30-year-old School of Photography at the University of Gothenburg—the only university environment in Sweden to offer everything from bachelor's degrees to postgraduate studies in photography—have paved the way for a unique national center for research into photography in Gothenburg. This center is also part of an extensive international network.

Since 2009, the Hasselblad Foundation and the University of Gothenburg have arranged research symposiums featuring prominent, internationally established photographers, researchers, theorists, and historians. The varying themes reflect different aspects of the research carried out by the Hasselblad Foundation and the University of Gothenburg.

Based on these symposiums, the Hasselblad Foundation and the University of Gothenburg have worked together with the publishing house Art and Theory to produce a series of publications entitled *Negative*. The series takes its name from the photographic process invented by Henry Fox Talbot. A negative is an image of reality in which light and dark have been reversed. In a similarly fundamental manner, *Negative* aims to critically review and analyze the practices, historical writings, and aesthetics of photographic culture.

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Accessing the Landscape Photography, Technology, and Place Today

Recent developments in locational technology have fostered a remarkable new array of possibilities both in our ability to locate ourselves within a landscape and in our ability to see a place without going there in person.¹ In turn, these developments have affected artists' involvement with the landscape, whether by enabling or altering a visit to a particular place or by mediating an engagement to a site or series of sites. Through a series of photographic projects made both within and outside the realm of fine art, this essay explores how new technologies and social media such as GPS, Google Maps, Twitter, and Flickr position us with regard to our surroundings, to our environment, and to the landscape. Whether these technologies guide us to a particular place or act as "place" themselves, they are revising our relationship to the environment, particularly in regard to individual and shared experience.

What is the difference between engaging virtually with a place and going there in person? How do we use digital applications to enhance—or just alter—our lived experience of the reality before us? What does it mean, now, to access the landscape by locating a predetermined GPS point? In all of these scenarios, what is lost might be obvious or easily named (such as the loss of an unmediated experience), but more intriguingly, and perhaps more difficult to pin down: what additional viewpoints, perspectives, and observations might be gained? To begin to chart what is distinct about this aspect of our technologically enabled contemporary experience, this essay considers artists who use technology to find or get to a specific landscape, and artists who use technology to picture a landscape without physically going there—in essence treating the technology as "place" itself. This simple distinction foregrounds the artists'

¹ This essay was originally prepared as a talk for the symposium *Environmental Photography* held at the University of Gothenburg, Sweden, on April 25, 2013, and has been modified from that presentation.

processes and their physical relationship to the world around them, well beyond the relationship that is ultimately set up for the viewer.

Going There

There is a history of photographers using technology to get to some specific place. To take one example, nineteenth-century survey photographers in the American West, along with their teams of explorers, found and followed their routes along the fortieth parallel or west of the one hundredth meridian using the geolocational survey technology of the day, the forerunner to our current satellite-enabled global positioning system technologies. Timothy O'Sullivan was the photographer for Clarence King's Survey of the Fortieth Parallel on which, from 1867 to 1872, King and his survey corps covered a band of land 100 miles north to south by 300 miles east to west, describing the geography and topography of the territory between the Rocky Mountains and the Sierra Nevada mountain range in what would become the western United States.² Their charge was a practical one, inflected with commercial and political concerns: to study rock formations, soil and mineral deposits, and botany and to map atmospheric conditions, mining regions, and more.

But our culture's new, and newly accessible, locational technologies, including GPS, Google maps and Street View, augmented reality apps, and the like, are far more widely accessible and used daily by millions of people in non-artistic realms. So many of us now navigate our daily lives through various GPS navigational tools, an experience that is only loosely related to finding our way with traditional printed maps, that artists who use such tools today are thus immersed in a pervasive cultural practice.

One of the most historically engaged artists using precise GPS coordinates to determine the site of his photograph is the American photographer Bruce Myren. His project *The Fortieth Parallel* is explicitly informed by the great western surveys noted above and, in particular, by the King survey. Though that governmentally sponsored survey was roughly anchored by the fortieth parallel of latitude, the corps was expressly intended to deviate "with sufficient expansion north and south to include the lines of 'Central' and 'Union Pacific' railroads,"³ giving them a considerable amount of latitude—literally speaking—in their documentation of these western regions. Myren, by contrast, though using this history as one of several historical reference points, took the notion of survey-

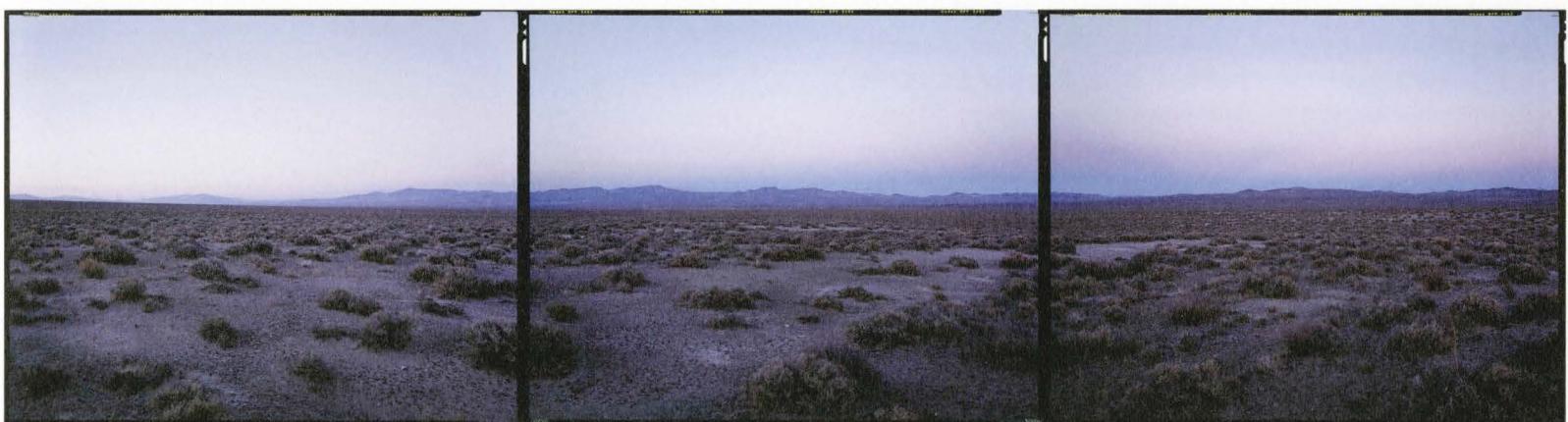
Bruce Myren,
N 40° 00' 00" W 119° 00' 00"
Fernley, Nevada, 2012

Bruce Myren,
N 40° 00' 00" W 93° 00' 00"
Winigan, Missouri, 2011

Bruce Myren,
N 40° 00' 00" W 79° 00' 00"
Somerset, Pennsylvania, 2006

2. There is considerable literature on O'Sullivan and the survey projects; recent publications include Toby Jurovics, ed., *Framing the West: The Survey Photographs of Timothy H. O'Sullivan* (New Haven: Yale University Press, 2010), Keith Davis, ed., *Timothy H. O'Sullivan: The King Survey Photographs* (Kansas City: Nelson-Atkins Museum of Art, 2011), and Robin Kelsey, *Archive Style: Photographs and Illustrations for U.S. Surveys, 1850–1890* (Berkeley: University of California Press, 2007).

3. The quotation is from a letter written by the Chief of Engineers in the US Department of War to Clarence King, authorizing the survey and outlining its parameters. The letter is cited by Alan Trachtenberg in *Reading American Photographs: Images as History* (New York: Hill and Wang, 1989), 121.



ing the fortieth parallel both more literally and more methodically.⁴ As the fortieth parallel crosses the United States, there are fifty sites at which the “line” intersects with a whole degree of longitude. These sites are known as “confluences”—and Myren determined to photograph them all. He would thus travel to every site at 40 degrees north from 72 degrees west to 124 degrees west. Once at the confluence, a location he knows he has arrived at only by consulting his handheld GPS, Myren operates from within a roughly twenty square foot area to make a photograph with his 8x10" view camera, a camera that resonates back to those used by the nineteenth-century survey photographers.

Myren’s sites—the confluences—are, by definition, arbitrary. They are, at the same time, rigorously defined. Far from freely roaming his environment or even traveling by road, trail, or path to areas of scenic or aesthetic interest, Myren determined his fifty precise locations before he had been to any of them, based on the arbitrary measurements of the global graticule extending north and south from the equator and east and west from the Greenwich meridian. These are places whose significance, for Myren, is an abstract numerical coordinate that exists not for natural reasons but to fulfill a human need for measurement and for precision.

Numerical coordinates of latitude and longitude is an ancient, though not timeless, system: it was in the second century BC that the Greek mathematician, geographer, and astronomer Hipparchus first proposed a system of latitude and longitude to map specific locations. These lines comprise a uniform global system, though are fully arbitrary in a local sense. Today, the technology has evolved into Global Positioning Systems, or GPS, a system conceived of in 1940 and fully operational by 1995. The system produces a remarkable degree of accuracy from a system of satellites that coordinate and relay locational calculations to a tremendous and ever-increasing range of users on the ground. GPS receivers, which can be found anywhere, from a delivery truck to an airline cockpit to a chip in a smartphone, calculate incoming data from four different GPS satellites by accounting for the size of the satellite’s orbit and its distance from the other satellites in the system as well as from the receiver on the ground. The process results in the location of the device, and though it is an incredibly complex system, that complexity is essentially invisible to those of us who rely on it everyday, for even the most mundane tasks.

4. I am focused here on the relationship of confluences to an experience of place, though Myren’s interests encompass the histories of settlement and mapping in the US as well as his own personal history. See his project statement at www.brucemyren.com. For an overview of the project also see Sarah Pollman, “Bruce Myren: Landing at Zero,” *Big, Red, and Shiny* 2, no. 10 (July 15, 2013). I am grateful to Myren for phone calls and conversations over the past two years about the project.

To some degree, the sheer effort involved in Myren's project to make these landscape photographs is similarly masked in the final product. With no easy access to many of the confluences, Myren frequently found himself hiking, climbing, and bushwacking off-trail. Myren's very human struggles to actually get to these arbitrary yet highly specific sites are not just the obsessions of an artist or an obstinate insistence on creating a very difficult project in an era of easy photography, but a poignant insistence that we pay attention to our collective cultural dependence on this system of geo-coordinates. That no roads or trails go to many of the confluences indicates how little conscious physical connection we collectively have with this global numerical order. Nevertheless, it is a system that, though developed for military use, now pervades the many conveniences of our lives, from tracking FedEx deliveries to navigating congested commercial airline routes and keeping buses on schedule to the many rather frivolous features of our smartphones, like checking in on Facebook or geotagging our photographs.

The cartographer John Fels and cartographic historian Denis Wood have theorized "postings" on maps as a type of evidentiary claim, the "fundamental cartographic proposition that *this is there*."⁵ There is a correspondence between an indication of location on a map and a photograph of a place: like a cartographic posting, Myren's photographs claim a location. Unlike the numerical coordinates, the photograph provides visual evidence, though that evidence, like his experience at the site, is dependent on ephemeral circumstance—from the landowners he meets to the weather he encounters. The latitude and longitude data, however, cement the location in an absolute way; the confluence is impervious to cultural whim or societal shift. If the social landscape, and even over time the geologic landscape, are in flux, the numbers are not: these confluences represent stability and permanence in the face of change.

Another photographic project that is similarly occupied with landscape from the arbitrary perspective of whole-numbered geographic coordinates is the Degree Confluence Project. Though the project operates outside the realm of fine art, it similarly determines an aesthetic and photographic engagement with the landscape. According to its website, "the goal of the project is to visit each of the latitude and longitude integer degree intersections in the world, and to take pictures at each location."⁶ Those who participate in the project must follow specific rules for their photographs,

5. Denis Wood and John Fels, *The Natures of Maps: Cartographic Constructions of the Natural World* (Chicago: University of Chicago Press, 2008), xvi. I have also visited these ideas in my essay on Frank Gohlke's and Andrew Freeman's respective GPS and geolocated projects, "Cartographic Postings: GPS, Photography, and Landscape," *Afterimage: The Journal of Media Arts and Cultural Criticism* (March/April 2010).

6. www.confluence.org

making images in the four cardinal directions (north, east, south, and west), and participants are encouraged to share a narrative of their visit to be uploaded to the website along with their photographs. Participants in the project and visitors to the website, which, notably, is the project's sole form of public presentation, may narrow down an area of interest from country to region to specific confluence, honing in either through textual description or by clicking on a map. Each photographed confluence has its own page comprised of the requisite photographs and a short report submitted by the site's visitors. This system is repeated throughout the website, with some degree of variation, for the over 6,000 confluences around the world that have been visited and photographed under the auspices of the Degree Confluence Project.

One of the stated goals of the project is to create "an organized sampling of the world."⁷ Like many other encyclopedically oriented online projects that are facilitated through digital means, the Degree Confluence Project is defined by its awesome scope and ambition. With a team of volunteers working around the planet the project is roughly one-third complete: of the 16,345 confluences around the globe that meet the parameters of the project, over 6,000 have been visited and photographed.⁸

The Degree Confluence Project has somewhat of the flavor of a global scavenger hunt, and its international community of confluence-seekers establishes a community that is compellingly situated as both connected online and deeply involved in an immersive outdoor experience. Aesthetically, the photographs compiled on the website share a generally archival flavor: for the most part, participants are making photographs intended as rather straightforward records rather than objects of independent aesthetic interest. The accumulation of photographs on the site is noteworthy. As in Myren's *The Fortieth Parallel* project, it becomes quickly evident that most confluences are in non-urban areas, and the claims of the site, to create "an organized sampling of the world" is more successful than one might initially suspect. Indeed, wandering through the site begins to function a bit like a kind of twenty-first-century armchair travel, particularly because each participant is encouraged to submit a brief narrative along with their photographs.

Personal experience may elaborate this point: in advance of a recent trip to Sweden, I "traveled" vicariously to confluences around the country, got a sense of the region's landscape and geography,

6254 successful, primary, confluences,
590 secondary confluences,
363 incomplete confluences,
12554 visitors and
104624 photographs in 186 countries.
[\(more stats\)](#)

How To ...

project links

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- [Contact us](#)
- [IRC](#)
- [Member page](#)
- [Worldwide maps](#)
- [Visitor index](#)
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confluence visits

- [Pending](#)
- [Antipodean visits](#)
- [Special visits](#)
- [Methods of Transportation](#)

countries

- [All countries](#)

Countries with visited or incomplete confluences:

- [Afghanistan \(4\)](#)
- [Albania \(3\)](#)
- [Algeria \(24\)](#)
- [American Samoa \(0\)](#)
- [Angola \(8\)](#)
- [Antarctica \(13\)](#)
- [Antigua & Barbuda \(1\)](#)
- [Argentina \(250\)](#)
- [Armenia \(3\)](#)
- [Australia \(511\)](#)
- [Austria \(12\)](#)
- [Azerbaijan \(5\)](#)
- [Bahamas \(4\)](#)
- [Bangladesh \(7\)](#)
- [Belarus \(28\)](#)
- [Belgium \(4\)](#)
- [Belize \(2\)](#)
- [Benin \(9\)](#)
- [Bermuda \(1\)](#)
- [Bolivia \(25\)](#)
- [Bosnia/Herzegovina \(7\)](#)
- [Botswana \(37\)](#)
- [Brazil \(336\)](#)
- [Brunei \(1\)](#)
- [Bulgaria \(12\)](#)
- [Burkina Faso \(21\)](#)
- [Cambodia \(8\)](#)



The goal of the project is to visit each of the latitude and longitude integer degree intersections in the world, and to take pictures at each location. The pictures, and stories about the visits, will then be posted here.

overview

The project is an organized sampling of the world. There is a confluence within 49 miles (79 km) of you if you're on the surface of Earth. We've discounted confluences in the oceans and some near the poles, but there are still 10,091 to be found.

You're invited to help by photographing any one of these places. Read the [Information](#) pages, and [contact us](#) if you have questions.

2 ladies conquer a 5100 masl virgin CP

Maria Viloria and Janet Ramon conquer alone a virgin confluence **12S 76W**, in Andes mountain range at 5100 masl.

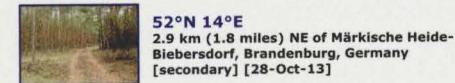
a holiday in Victoria [Australia]

Earlier this year **Ross Finlayson** went on holiday to **Victoria, Australia** where he took in 8 points, starting at **38s-144E**

[Older news...](#)

21 newest confluence visits

(view on Google Maps)
The date the confluence is posted to the site is used to determine the newest confluence visits.



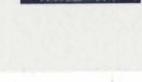
52°N 14°E
2.9 km (1.8 miles) NE of Märkische Heide-Biebersdorf, Brandenburg, Germany
[secondary] [28-Oct-13]



49°N 9°E
1.4 km (0.9 miles) W of Sachsenheim-Hohenhaslach, Baden-Württemberg, Germany
[28-Oct-13]



49°N 8°E
3.3 km (2.1 miles) WNW of Schleithal, Bas-Rhin, Alsace, France
[secondary] [28-Oct-13]



50°N 9°E
1.5 km (1.0 miles) SSE of Mainhausen-Zellhausenen,

Degree Confluence Project website

7. Ibid.

8. As the website notes, "there are 64,442 latitude and longitude degree intersections in the world (counting each pole as one intersection). After discounting many confluences near the poles, and in the oceans, 16,345 meet the goals of the project, with most of these (14,029) being on land." At the time of writing, 6,243 confluences have been visited and photographed.

and listened in, in a way, on the travel experiences of the confluence hunters. For instance, two visitors to the confluence 58°N 12°E shared that they had visited the confluence on their way “to celebrate a friend’s 50 year anniversary at the old Marstrand castle outside Gøteborg (Gothenburg for English speakers.)”⁹ This visitor also uploaded a photograph of his GPS zeroing out on the confluence site: another kind of visual proof, or cartographic posting, that he was there. At the page for 58°N 11°E, which is in the ocean off the southwest coast of Sweden but in sight of land, the Scandinavian Project Coordinator for the Degree Confluence Project submitted a lively report on the challenges of getting his group’s boat to the precise confluence, with anecdotes from his sailing adventures that included a recent voyage to the island Käringön in the Swedish archipelago, where he noted that “for supper we had several kinds of seafood, including the famous crawfish that you can buy directly out of the cooking pot outside the fishmonger!”¹⁰ These details serve as deeply humanizing points of an otherwise rather bureaucratically organized archival project. As such, they invite a digitally oriented online community to share, in a way, their very analog experience. Though the confluence seekers necessarily immerse themselves in the physical environment to create their photographs and gather stories for strangers, the project exists at a nexus of the physical and digital worlds. Though the work happens at the confluence, the community exists online.

Nate Larson and Marni Shindelman, working together, similarly track precise coordinates of latitude and longitude, but do so more explicitly to follow a human trace left behind in a specific place. In their *Geolocations: Tributes to the Data Stream* series, the artists use publically available GPS metadata in Twitter posts to track and make photographs in the locations.¹¹ There are currently over 200 million active Twitter users around the globe engaging in the social media network founded on the exchange of posts that are limited to 140 characters, or “tweets.” The company, which launched in 2006, reports that approximately forty million tweets are posted every day. While Twitter users may opt out of the service’s feature that includes attaching GPS metadata to every tweet, by default tweets are geographically associated through that metadata to the precise location from which they were sent. The tweets that Larson and Shindelman choose may be emotional, funny, or politically inclined, and choosing them is a process in and of itself. But it

9. Terje Mathisen and Tone Norloff, <http://confluence.org/confluence.php?visitid=7229>.

10. See <http://confluence.org/confluence.php?id=24825>.

11. See the artists’ website on the project: <http://larson-shindelman.com/>. I am grateful to the artists for discussing the project with me in Chicago on March 9, 2013.

is considering them with regard to a particular place that shades the project with an unexpected poignance.

Larson and Shindelman include the original tweet with their photographs. Often, the combination of image and “found” text produces a disjunction between place—as interpreted in the artists’ photograph—and emotion—as revealed by the tweet. An image of idyllic palm trees swaying against a deep blue sky is at emotional odds with the tenor of the tweet: “Baby, I can feel myself given [sic] up.” The palm trees, rather than symbolizing a kind of paradise, seem instead, in the context of someone on the verge of giving up, to be precarious and unbalanced themselves. In other works, fear collides with a vision of tranquility, technological confusion intersects with the decidedly romantic, indecision meets a formal balancing act, and expressions of emotional futility confront the aesthetically banal.

Larson and Shindelman always encounter a location well after a sentiment has been tweeted, and the person (along with his or her emotional state) has long since departed. This temporal disjunction leaves viewers to recognize the fleeting and ephemeral against a seemingly more stable environment. In an image accompanying a tweet about swine flu, viewers may try to imagine the state of mind of the person who posted the message, and who that person thought would read their dissatisfied tweet. We try to imagine that unknown person in this location, squaring an attitude with a place. We may even find ourselves passing judgment—and then stopping to recognize the fundamental ambiguity of the project and the narrative set up by Larson and Shindelman who cannot, of course, know with any certainty that the subject of their photograph has anything to do, beyond shared geography, with the experience of the person whose words we read.

As such, Larson and Shindelman typically avoid illustrating a tweet. This is in part due to the “after the fact” nature of their return to each site, but they also resist seemingly easy renditions of place. The tweet, “About 50 people waiting to get healed @ Rock Church” suggests, on its own, a literal line of worshippers, or perhaps, since the moment has passed, just the church itself. Rather, Larson and Shindelman focus on a contemplative vista seen, perhaps, from the church—and slyly interrupted by the central, if minute, presence of a ONE WAY sign. They thus create a visual complement to, and perhaps commentary on, the tweeted message: did those fifty people



Baby, I can feel myself givin up.



I dont plan on gettin swine flu vaccine cause its government made and everything government made aint good plus I think its killin not helpn



About 50 people waiting to get healed. @ The Rock Church

Nate Larson and Marni Shindelman,
Untitled, from the series *Geolocations: Tributes to the Data Stream*,
2009–present

Nate Larson and Marni Shindelman,
Untitled, from the series *Geolocations: Tributes to the Data Stream*,
2009–present

Nate Larson and Marni Shindelman,
Untitled, from the series *Geolocations: Tributes to the Data Stream*,
2009–present

12. Quoted in Clare O'Neill, "I Know Where You Tweeted Last Summer," *NPR: The Picture Show*, December 4, 2012, <http://www.npr.org/blogs/pictureshow/2012/11/28/166112177/i-know-where-you-tweeted-last-summer>.

13. Quoted in Kerri MacDonald, "Anonymous Tributes to Anonymous People," *LENS* (blog), *New York Times*, January 6, 2012, <http://lens.blogs.nytimes.com/2012/01/06/anonymous-tributes-to-anonymous-people>.

14. Much of the discussion below of Umbrico's and Klett and Wolfe's work appeared, in the context of a somewhat different framework, in my recent essay "Abundant Images and the Collective Sublime," *Exposure* 46, no. 2 (Fall 2013): 4–14. I thank the editors of this volume for inviting me to republish this material in the present discussion.

15. For a critique of what has emerged recently as an "in-real-life" fetish, see Nathan Jurgenson, "The IRL Fetish," *The New Inquiry*, June 28, 2012, <http://thenewinquiry.com/essays/the-irl-fetish/>.

waiting get healed? And what were the results: one-way to heaven or one-way to hell?

While tweets may be received anywhere, Larson and Shindelman's photographs locate them in a spot in the lived world. Larson explains, "Twitter has over 350 million posts a day, and we see ourselves as archivists, pulling down and preserving a small fragment of them that would otherwise be lost to the vastness of the Internet. Our photographs anchor the post to a place—this happened here, someone felt this here, this was experienced here."¹² The photographs, again, act as a kind of cartographic, or geographic posting.

The visual articulation of place has another effect as well, which is to anchor the message to one person's individual—and often solitary—experience. Despite the tendency to describe Twitter using numbers (140 characters, so many users, so many tweets) Shindelman observes that "there are singular people posting things, not just millions and millions of tweets a day. They actually exist somewhere."¹³ So, as much as the project is about the anonymity and the placelessness of the Internet, it is just as much about individual human being's lived experience and their surrounding environment. Larson and Shindelman remind us of the humanity within a sea of seemingly virtual digital data.

The Flickering Sun

This essay has thus far considered projects that revolve around conceiving GPS coordinates as invitations to immerse oneself in the landscape. There are, however, artists for whom an investigation of landscape can happen entirely virtually.¹⁴ And while this may seem like a tempting practice to dismiss as a lack of engagement in so-called "real life," in fact projects that are based in large part on mining the digital realm for photographic representations of our physical environment are as fully occupied with understanding our contemporary relationship with the world around us as wholly offline projects.¹⁵ And in the work of several artists, the environment we can consider in understanding their work is located both in our traditional sense of space and in an online realm. Indeed, more and more, online experience shapes and directs our physical-world encounters.

The New York-based artist Penelope Umbrico works with Flickr, the online photo sharing site that was launched in 2005 and

that reported in April 2012 that over seven billion photographs had been uploaded to their site since then.¹⁶ Umbrico started her popular series *Suns from Flickr (Partial)* the year that Flickr launched, and it effectively encapsulates several of the seemingly contradictory aspects of digital abundance and accumulation in an aesthetic realm. Her subject is the sun, and rather than set up a project in which she photographs a sunrise or sunset everyday, from wherever she is (as others have done), she uses Flickr as her source. To create the works—and there have been many versions of the installation—she begins by typing the word “sunsets” into Flickr’s search engine, and she then culls the retrieved imagery from the millions of user-submitted photographs of sunsets. Rather than reproducing the images she chooses in their entirety, she crops them so that the setting sun is the dominant and central feature in each. This means that the specificities of particular locations are eliminated, and she extracts a kind of common core from this collective image database—picturing our collective relationship to arguably our environment’s most potent factor, the sun, all from the space of her studio. Umbrico uploads the cropped images to Kodak, and orders 4x6" prints online through the company’s EasyShare system.¹⁷ The installation conveys a sense of sublime endlessness, even though the few thousand individual images that make it up are really just a small fraction of the now over ten million sunsets available on Flickr.

Umbrico’s sunsets are distinctly depersonalized. But, as a result, they are more easily read as emblematic of a universal experience. Notably, Umbrico’s installation has a distinct materiality. Despite each individual photograph’s digital origins, the effect of seeing a wall full of sunsets, printed out as 4x6" prints, is viscerally felt; the viewer can soak up a field of sunsets en masse. Because Umbrico has cropped each original image, the suns are generalized. So despite her editorial hand, the Suns from Flickr refer rather pointedly to a collective and cultural production.

Both photography and the Internet, Umbrico suggests, “function as indexical records of our collective culture—a visual index of data that represents us: a constantly changing and spontaneous auto-portrait.”¹⁸ Umbrico’s sunsets address the implications of an anonymous collective of accumulation—our impulse to gather a record of the sun’s daily comings and goings, evidence of its centrality in our lives. For any individual, what may have started as a deeply personal moment—the contemplation of a sunset—becomes, as the

16. Leena Rau, “With 7B Photos, Flickr Debuts New Speedy, HTML5 Image Uploader; Drag And Drop Interface, And More,” *Tech Crunch*, April 25, 2012, <http://techcrunch.com/2012/04/25/with-7b-photos-flickr-debuts-new-speedy-html5-image-uploader-drag-and-drop-interface-and-more/>.

17. E-mail correspondence with the artist, November 22, 2011 – February 12, 2012.

18. Ibid.

experience is photographed and subsequently uploaded to Flickr, a participation in a decidedly routine collective ritual. As Umbrico has observed, photographing sunsets “is something we all engage in, despite our better artistic judgment, knowing that there have been millions before and there will be millions after.”¹⁹ The sun is a constant, and our relationship to it couldn’t be both more banal, in a daily way, or more complex, in environmental terms.

Umbrico’s sunsets have proven to be decidedly user-friendly. In a fantastic display of aesthetic circularity, viewers routinely photograph themselves in front of this panoply of sunsets, almost as they would a real sunset. Better yet, those viewers upload their photographs back onto Flickr. Then, Umbrico finds them, prints them out, and arranges them in an installation just as she does with the “original” suns. Umbrico suggests that one appeal of having one’s picture taken in front of her Suns is “a similar physiological response to the visual warmth of the images that is analogous to the actual warmth of the sun.”²⁰ In other words, her installation makes viewers feel good—we can engage with the sun in an easy way.

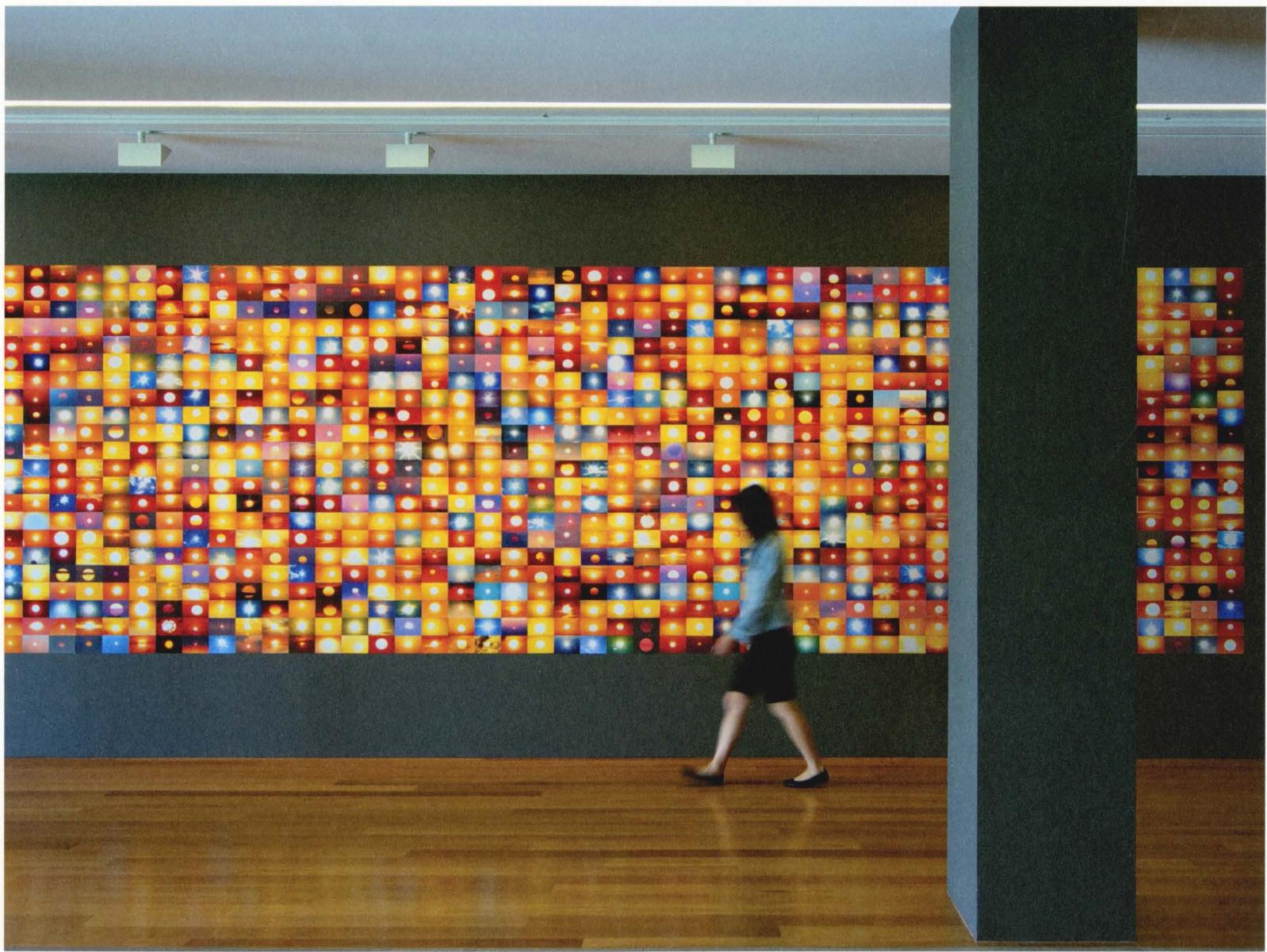
The collaborative team of Mark Klett and Byron Wolfe has also worked with the Flickr data stream. Remarkably, they have also mined the site for images of suns, both rising and setting. Unlike Umbrico’s work, however, their engagement with Flickr is distinct to place. In particular, they have focused on the Grand Canyon, in Arizona, where the two have worked extensively on site for other projects. The image *One hundred setting suns at the Grand Canyon arranged by hue; pictures from a popular image-sharing web site*, 2011 differs in presentation from Umbrico’s sunsets. The cropped Flickr images are arranged by hue and then recombined into one digital file and produced as a single print (although a very long one, at 82" wide). In this aesthetic, the physicality of the individual prints is less important than a uniform visual presentation.

The process begins in a similar way to Umbrico’s, by searching Flickr’s site for the appropriate terms. But because of the specificity of location—of place—the piece begins to address the artists’ notion of “image density.” Their concept of image density is a way of tracking locations and views that tourists and visitors to the Grand Canyon photograph over and over. To know the image density of a place is to know what people look at, what they choose to record, and where they record most often. Wolfe refers to this as “quantifying the sublime.”²¹

¹⁹. Ibid.

²⁰. Ibid.

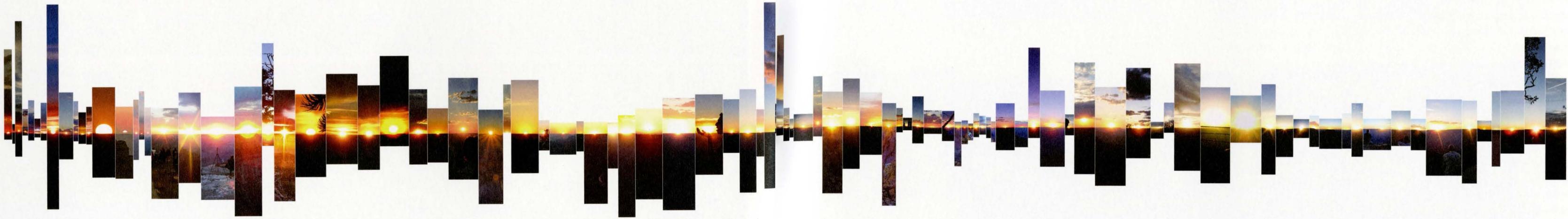
²¹. Telephone interview with the artist, November 2012.



Penelope Umbrico,
2,303,057 Suns from Flickr (Partial)
9/25/07, 2007



Penelope Umbrico,
People in front of Suns
(From Sunsets) from Flickr,
2011–ongoing



Mark Klett and Byron Wolfe,
*One Hundred Setting Suns at the Grand
Canyon arranged by hue; pictures from
a popular image-sharing web site, 2011*

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The Getty
Trust



Mark Klett and Byron Wolfe,
*Fifty sunrises at Mather Point arranged
by a shared horizon; pictures from a
popular image-sharing web site, 2011*

Klett and Wolfe's long-term collaboration has grown out of their work in the realm of re-photography, and years worth of literally retracing the footsteps of photographers who came before them.²² The Flickr work is a clear departure from their established practice of a precise and historically based view of the contemporary landscape. And yet, at the same time, Klett and Wolfe continue to investigate the views of other photographers. But rather than following Timothy O'Sullivan or Ansel Adams, their guides are the legions of amateur photographers who have shared their work on Flickr. And it is the collective ritual of these visitors to photograph the canyon that provides Klett and Wolfe with a repository of views of this particular and deeply iconic place. Wolfe's reference to their practice as "quantifying the sublime" strikes me as a concept precariously balanced on the brink between sincerity and cynicism. To be sure, camera-toting tourists are an easy and fun target, seemingly mindlessly recording the same obligatory souvenir shots, over and over. Those tourists are suspected of not really seeing a place and thus, by extension, not really experiencing it. But Klett and Wolfe's project is not cynical. Rather it is deeply human: an investigation that recognizes and appreciates, rather than mocks, the routine viewing and photographic habits of Grand Canyon visitors.

Klett and Wolfe's interest in the idea of image density, of quantifying how many photographs have been made of particular views, actually began with an interest in how many photographs had been made from particular locations. That is to say, Klett and Wolfe first began with the problem of how to visualize where photographers had stood (and they made topographic studies of photographic viewpoints in Yosemite, in this regard) but evolved into the problem of how to visualize what people had looked at most, based on where they pointed their cameras.²³ Their conceptual way of approaching Flickr, then, differed markedly from Umbrico. Umbrico's sunsets are of anyplace; they record the broad propensity of people to take a photograph of the setting sun no matter where they are, until every specific sunset becomes a totality of the concept "sunset."

A second piece by Klett and Wolfe, *Fifty sunrises at Mather Point arranged by a shared horizon; pictures from a popular image-sharing web site, 2011*, gets at this point more directly. In this case, Wolfe mined Flickr for literally overlapping photographs and graphed them onto one another in a kind of "average" view of a Grand Canyon sunrise. Wolfe started by lining up familiar topographic

²². I am grateful to the artists for a phone interview with Byron Wolfe, November 2012, and e-mail correspondence with Mark Klett, August 2012. For a discussion of their working process, see especially Rebecca Senf, "Reconstructing the View: An Illustrated Guide to Process and Method" in Mark Klett and Byron Wolfe, *Reconstructing the View: The Grand Canyon Photographs of Mark Klett and Byron Wolfe* (Berkeley: University of California, Press, 2012).

²³. Phone interview with Wolfe, November 28, 2012.

features in the photos. He then adjusted the opacity of the overlaid images. Through this process, Wolfe could virtually “stand” where the fifty Flickr photographers had stood to watch the sunset—all from the comfort of his home in northern California. Unknown family members and friends appear as ghostly forms, their images not quite strong enough in the composite layering of separate photographs to be recorded for posterity, at least in this iteration. Their forms humanize the Grand Canyon pilgrimage, the ritual of rising early to watch the sunrise, and its subsequent photographic capture.

Umbrico and Klett/Wolfe’s projects function as core samples, dwelling on the same subject—the sun—seen again and again, either from vantage points around the world, or vantage points within a few feet of one another. As such, they tap into shared experience (and, via Flickr, shared experience shared). This aspect of sharing, and the new methods of doing so, are emblematic of our current cultural relationship with the photographic medium, whatever it is documenting.

The work discussed in this essay dwells on an interrelationship between humans and the environment, as it is mediated by new technology and new sources of digitally mediated imagery. All of these artists are working at an intersection with the environment, not only with its technological mediation, but also its social mediation, and each project expresses an experience that is at once deeply personal, profoundly social, and highly dependent on technology. Klett and Wolfe looking at a cultural eagerness to participate in a collective ritual at the Grand Canyon; Umbrico herself fascinated with a cultural fascination with the sunset photograph, and the necessity to share and re-circulate these personal moments; Larson and Shindelman insisting on the presence of place in a disconnected social mediascape; and Myren expressing the conflict between the ease and convenience that results from today’s geolocation systems with the remarkable complexity of that system itself. Their emphasis on the intersection of social habit and landscape defines a nexus in which the environment is at once social and technological, natural and mediated, individually experienced and collectively shared.

Social, mobile, and geolocation technologies affect us out in the field and affect the means through which we conceptualize the environment even from the comfort of our computer screens. Far from being a development to lament, it is rather one that requires reorientation and thoughtful examination of present practice.

By taking seriously the social and cultural dimensions of these increasingly widespread and generally mobile technologies, the work collectively points to their pervasive and inevitable effect on humanity's engagement with the world around us, from navigating our daily lives to the serious environmental challenges of our time.