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Evidence, memory and the malleable photograph

ABSTRACT

This article explores the capacity of the photograph to furnish evidence, which derives both from its indexicality and from the visual accuracy of the raw image. Photographs achieve the status of evidence not because the photograph itself has any implicit identity but rather because the State recognized that the photograph could provide proof of identification – mug shots – as early as 1850 when police departments hired photographers to take mug shots and crime scene photographs. Courts accepted the photograph as evidence as early as 1859 and continue today, even employing 'Instagram' officers whose job entails monitoring Instagram accounts of persons of interest. The article then explores why the photograph remains believable today to the public even with contemporary discourse about the malleability of the photograph.

In her seminal text, *On Photography*, Susan Sontag wrote: '[p]hotographs furnish evidence. Something we hear about, but doubt, seems proven when we're shown a photograph of it' ([1977] 2001). In the 35 years since Sontag wrote that, critics and scholar have repeatedly questioned whether photographs can ever be evidence or unequivocally stated that they cannot. Despite the volumes written by scholars questioning the veracity and vicissitudes of the photograph, particularly the digital photograph, the viewing public still generally believes that a photograph is true, and as true, proof (evidence) of what happened. Why?

KEYWORDS

photography evidence memory fraud activism revolution A photograph's capacity to furnish evidence derives both from its 'indexicality' and from the visual accuracy of the raw image. Indexicality, a term coined by philosopher Charles Peirce, 'depends on a physical relationship between the object photographed and the image finally created' (Gunning 2008: 24). The image on a film negative literally comes from the light reflecting off the object in front of the lens and falling onto light-sensitive material. The image on a memory card comes from 'data about light that is encoded in a matrix of numbers' (Gunning 2008: 24). In the context of indexicality, little difference exists between the film negative and the digital negative.

The relationship between light and proximity to the object forms the basis for the public's belief in the 'truth' of a photograph and its value as evidence. Even when almost all digital images are retouched post production, the public still believes in photographic truth, in part because most post production only alters the original and often only slightly; post production usually does not so completely erase the original images as to negate its indexicality.

John Tagg would note that this implicit trust in the photograph derives not from the photograph itself, which has no implicit identity, but from status within the sphere it inhabits. Writing about the photograph he states: '[i]ts status as technology varies with the power relations which invest it' (Tagg 1999). For the photograph as evidence, that value and status exist in the sphere granted by the State. Police departments and law enforcement agencies in the United Kingdom and the United States understood the value of the photograph for proof of identification as early as the mid-1800s and indeed police departments hired photographers as early as 1850 to photograph crime scenes and to take mugshots.

US courts have been granting the photograph a privileged status as evidence – a guaranteed witness of the actuality of events that it represented – as early as 1859 when an appellate court accepted photographs in a land grant case that hinged on whether a document of title was forged (*Luco v. United States* 1859). The appellate court accepted the photographs because '... as evidence, the photograph admitted no ambiguity' (Green-Lewis 1996). In 1860, in *Marcy v. Barnes*, a case involving a disputed



Figure 1: Catherine O'Neill, mug shot, facing front and to her left (1906).

signature on a promissory note, magnified photographic copies of signatures were admitted as evidence along with the testimony of photographer Albert S. Southworth. After the jury found for the plaintiff, the defendant appealed and challenged the admission of photographic evidence. The appellate court accepted the photographic evidence because '... we are unable to perceive any valid objection to the use of such prepared representations' (*Marcy v. Barnes* 1860).

An 1869 case challenging a photograph's legal status as evidence involved a case of fraud against a Boston, Massachusetts's photographer William H. Mumler (Cloutier 2004; Kaplan 2008). Mumler, a self-taught photographer, experimented with making self-portraits in which a shadowy, ghost-like apparition appeared. Mumler claimed that he did not know how the 'ghost' figures appeared. Even fellow photographers who claimed to have followed him during the photographic sessions and into the darkroom claimed not to know how he was producing these spirit photographs. As the ghosts materialized in his images Mumler garnered accolades and a thriving career. The jig was up when the same ghost – who in reality was a Boston resident very much alive – turned up in two photographs. In 1869 in New York City, Mumler was arrested for fraud and accused of selling photographs under false pretenses. Both Mumler and the photograph as evidence were on trial.

During a preliminary hearing before New York City Court of Special Sessions Judge Dowling to assess whether there was sufficient evidence to send the case to a grand jury, the expert photographic witnesses for the prosecution testified that photographs could be manipulated in the darkroom. The testimony was complicated because these same witnesses wanted to preserve the authority of the photograph as evidence. They carefully emphasized the mechanical (and not malleable) process of photography. When explaining how photographs could be manipulated, they pointed out how such manipulation was easily detectable and that manipulation took skill and time, attempting to mitigate damage to the idea that photographs were not true. Just as bad counterfeit money does not discredit genuine money'... fake photographs are not alarming unless there is a risk that they might be confused with authentic ones' (Mnookin 1998: 37). If fakery took time and skill, it was not so much the photograph that was on trial, but the photographer or as activist photographer Lewis Hine stated in 1909: '[p]hotographs don't lie, but liars may photograph' (1980: 110-13). Witnesses for the defence supported the photograph as evidence, testifying that they believed in spirits because they had seen Mumler's photographs: '... the pictures themselves furnish evidence in their gauze-like appearance, that has not been imitated' (Mnookin 1998: 37). After seven days of testimony, the judge reluctantly dropped the case against Mumler because he said that the prosecution had not proven that the photographs were fraudulent and had not introduced any evidence that Mumler was a fraud.

Photographs became routine evidentiary tools in the early 1900s and were used to prove, among other things, locations of buildings and terrains in land disputes, accidents and to distinguish corpuscles of human blood from animal blood. Judges grasped the idea of idexicality even as they did not use the term, describing photographs as 'light printed pictures produced by the operation of natural laws and not by the hand of man' (*Porter v. Buckley* [1906] 1928). Oliver Wendell Holmes wrote about photography, '[f]orm is henceforth divorced from matter [...] Give us a few negatives of a thing worth seeing, taken from different points of view, and that is all we want of it' (1859).

In 1911, Thomas Jennings was convicted of murder based on a photograph introduced as evidence that he left his fingerprints on a freshly painted fence, even as eyewitness testimony was ruled inadmissible because it was contradictory (Green-Lewis 1996: 187). Most recently, the US Supreme Court in Brown v. Plata ordered the State of California to reduce its prison population to 137.5 per cent of capacity, based in part on photographic evidence submitted at trial (Brown v. Plata 2011). The photographic evidence was so compelling that three black and white images were attached to the Supreme Court's decision. The San Francisco police department employs an Instagram officer who monitors Instagram feeds (Mcalone 2015). In one recent case, Officer Eduard Ochoa had been following an account, '40glock', that displayed photographs of the Instagram account owner (identified in court papers only as 'K.B.' because he was a minor) out on probation, with a gun tucked in his waistband. Police used these images as the basis to search K.B.'s house because being on probation prohibits gun ownership. An appellate court affirmed the firearms conviction, accepting the Instagram photos as evidence, noting that a photograph is authenticated 'by showing it is a fair and accurate representation of the scene depicted' (The People v. K.B. 2015). The Courts are nonplussed about the potential for digital manipulation, observing correctly that image manipulation can be verified.

Judges and jurors in the early twentieth century believed photographs, but scholars and critics challenged the photograph as truth because a photograph was mere description and it was malleable, both while it was being taken (a photographer makes many decisions such as lens focal length, point of view, angle, exposure, etc.) and then in post production. While it is obvious that digital post production can significantly alter an image, even pre-digital, a final print could look very different from the negative.

As the malleability of the image became so obvious with digital photography, it would be reasonable to assume that the twenty-first-century courts and jurors would be less likely to believe photographs. Recent studies involving mock jurors indicate that photographs remain persuasive. In more than one study, mock jurors shown gruesome photographs were far more likely to convict the defendant than those not shown photographs, but who heard equally gruesome verbal testimony (Nemeth 2002). Even neutral photographs increased the likelihood of conviction. Although jurors more readily convicted the defendant if shown photographs, they insisted that the photographs did not influence them.

Why is the belief in the truth of a photograph so persuasive even as we do not think it should be? In part because photographs have become so ubiquitous that as viewers we do not think about their persuasive power. As viewers we do not realize the degree to which we are being manipulated by the photograph's capacity to create sympathy through a compelling depiction of reality. Every photographer has an actuality, a certifying presence. Something happened, someone existed and this connects us to the continuity of humanity.

We generally still believe photographs because of the long history of authentication by the state but also because as a species we have evolved to remember images far more accurately than words. One study in 1971 proved that people could remember 2000 pictures with more than 90 per cent accuracy in recognition tests over a period of several days after seeing the image, even when they had only seen the images for a short time (Grady et al. 1998: 2703–08). This ability is both neurological and evolutionary. As primitive beings, survival – how to transverse the land or what plants not to eat – depended on

visual cues. Brain studies show that we form the neural connections that allow us to encode visual information far more quickly than we form the neural connections needed to encode text (Grady et al. 1998: 2703–08). 'One theory of the mechanism underlying superior pictures memory is that pictures automatically engage multiple representations and associations with other knowledge about the world, thus encouraging a more elaborate coding than occurs with words' (Grady et al. 1998: 2703–08). An ability to remember what we see and an unshakable belief in the truth of photography are not necessarily linked, and yet we have transferred our ability to remember what we see to what the photograph shows us, accepting it as being as trustworthy as our experience. We trust the indexicality of the photograph and because we do, we have come to rely on photographs as historical records. We use photographs to enhance and even create memories, particularly collective public memory, defined as our cultural relationship with our shared past.

In general, neuro-biologists talk about memory as a dynamic mental construction generated from an underlying knowledge base (Conway 1997: 5). Memory does not exist in a vacuum and it is not static. It continually changes, shifts and even transforms. We have several types of memory: public, collective, collaborative, individual and autobiographical, which is the memory of everyday life events. Collective public memory is formed and based on events that are instantly understood, without hesitation or interpretation, and layered onto autobiographical memory, that is, we share an originating event, layer it onto ongoing acts that create future shared memory of the same event. Paying extended attention to an image in the present activates a stronger connection between the past and the future because we each view an image through our own values and belief systems, which we add to our experience of the event we are viewing. Before the invention of photography, public memories were formed and then triggered by other senses. Oral histories created shared

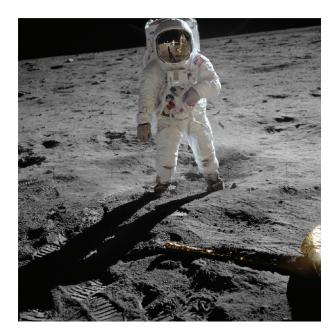


Figure 2: N. Armstrong (1969), Buzz Aldrin on the Moon.

memory, for example. In the 1950s, in America, television news emerged as a source for public memory. The television images of Neil Armstrong and Buzz Aldine walking on the moon formed a collective public memory. We saw it together, even though we were all sitting alone watching the event on our individual televisions.

Photographs have replaced television because they are so ubiquitous. Although it is impossible to accurately state how many photographs have been uploaded to the Internet, a May 2014 report from the Kleiner Perkins Caufield Byers (KPCB) analyst Mary Meeker states that all'Internet connected citizens share over 1.8 billion photographs a day' (Khedekar 2014). Assuming the accuracy of Meeker's data, a year later we have posted 657 billion more photographs. With so many photographs of everything, we have come to rely on them to form memories. The photograph is temporal and temporality is a common aspect of memory formation. The photograph may be a'mirror with a memory', but as a memory generator, it becomes our mirror and our memory (Wendell Holmes 1859: 74). Even though scholars know that any photograph can generate simultaneous multiple discourses, the lay public generally participates in only one of those dialogues: the photograph functions as evidence that something happened.

Photography is also unique in its mnemonic capacity because it can be widely and easily distributed. A simple photograph produced on newsprint reaching thousands of people or today a simple cell phone image sent instantly to millions of people becomes a public memory, and sometimes an iconic image. For example, Nick Ut's iconic Pulitzer Prize-winning image of Phan Thu Kim Phuc, running naked, burning from napalm is universally regarded as one of the most famous photographs from the Vietnam War. It is an iconic symbol of the horror of war in general and the Vietnam War specifically. It was almost not published because the editors worried that her nakedness might offend readers, as if the nakedness was what was most offensive about this image. However, when it was published, it instantly resonated with the American public and is now credited with influencing Americans to press for an end to the war because it signified the immorality of the war.

If the collective memory of a culture determines what memorials it erects, then maybe the public memory is partly determined by what photographs become iconic. Why did Ut's image from Vietnam resonate with the public? It was not the first image of burned Vietnamese children published. It was not even the American military that dropped the napalm. The South Vietnamese forces accidently dropped it. Ut and the nearby American soldiers (seen in the photograph) immediately tended to Kim Phuc and took her to a hospital. Yet this image evoked moral outrage because it embodied the characteristics that differentiate photography from other visual media and why photographs are instrumental in creating memory: a photograph becomes *our* experience. Kim Phuc is naked, vulnerable, running with her arms outstretched directly at us, directly into our arms. We do not see her burns, but we see her pain so clearly. She is crying out to be saved and we respond by saying, '[y]es, we will save you. We will protect others by ending this war'.

Photography demands reciprocity between viewer and image. It creates a dialogue and in 1972 that dialogue was whether Americans would allow such horror to continue. Would we allow more human collateral damage? We responded with our collective public memory formed by this photograph and our own experiences with friends and acquaintances who had been drafted, wounded or killed in action, and demanded an end to the war. Ironically, as this moment became part of our collective memory, Kim Phuc struggled her whole life trying to erase it from all memories because it and she were used as a propaganda tool by the Vietnamese government. Before she received political asylum in Canada, where she currently lives, she said, 'I got burned by napalm and I became a victim of war, but growing up then, I became another kind of victim' (Bang 2015).

We have come to rely on photographs for memory, and yet to quote Errol Morris, '[p]hotographs attract false beliefs the way flypaper attracts flies' (2011: 92). They attract false beliefs and can create false memory because we believe them. More than 30 years of research on memory distortion demonstrates that remembering is not just a matter of retrieving the correct piece of information from a database, but rather involves a reconstructive process, through which the original memory can be continuously modified. Post-even misinformation can lead people to recall events differently from the way they actually occurred or even to recall wholly false events that never occurred (Sacchi et al. 2007). Scholars from the University of Padua, Italy, and the University of California, Irvine, showed that participants doctored images of the 1989 Tiananmen Square protest in Beijing. They had the viewers answer questions about the original photograph, which clearly shows one lone man standing in the square. After viewing the doctored photograph in which a throng of spectators was added, the participants insisted that the streets were lined with people, even though they had previously remembered the event as depicted in the original photograph. The doctored photographs altered their memory. The study results suggested that reviewing photographs increases the likelihood of remembering details from previously presented material, but under certain conditions, it also leads to the creation of false memories (Sacchi et al. 2007: 1009).

Iranian photographer Azadeh Akhlaghi's project, *By an Eyewitness*, challenges what happens when historical events are visually imagined (Fakhari 2014). Curious about Iran's history, and only a toddler during the Iranian Revolution of 1979, she was fascinated that there was no photographic evidence of key historical events. She researched the historical written record and photographically recreated key historical scenes as accurately as possible. She wanted her faux documentary photographs to function both as witness and as evidence. The images have quasi-historical titles comprised of the name of the important historical figure and the event date. Today, they function in an art space sphere, but how will these images be viewed ten or twenty years hence, filtered through social media and stripped of their authentication as art? Will they be viewed as documentary photographs, historical (false) evidence of the revolution?

Should we worry about this? Photographs reveal and conceal. Just as they create multiple discourses, they register as several layers of truth, which I term indexical, situational and universal. The indexical truth is the raw facts that we see irrespective of whether that those facts are recorded and processed through analogue or digital processes. When Alexander Gardner shot the now infamous image, *The Home of a Rebel Sharpshooter*, the dead body was actually lying there. The gun was propped up against the wall. As indexical truth, this is a true photograph. It reveals accurate detail of the moment. The gun and the body were proximate to the camera when the photograph was taken. However, it conceals the fact that Gardner posed the image by dragging the dead body, which he found 40 years away, to the sniper's den, turned the face towards the camera and placed the gun in the corner. As situational truth the photograph

fails. The dead rebel had not died in the sniper's den with his head conveniently turned towards the camera. The gun was not even a real sniper's rifle. On the level of the universal truth of war, the photograph is true. Snipers did shoot from this vantage point. The Civil War was awful and bloody. More than 625,000 soldiers died, which proportionately would equate to seven million dying today.

Migrant Mother, Nipomo, California by Dorothea Lange is one of the most famous Farm Security Administration (FSA) images. This image of a worn-out woman, a baby in her arms, with the look of resignation bordering on desperation on her lined face, with two children hiding their faces on her shoulders, is the photographic icon of the Depression. After it was published in the San Francisco News on 10 March 1936, as part of a story demanding relief for this woman and the other starving pea pickers in Nipomo, 20,000 pounds of food was sent to Nipomo and more than \$100,000 was raised. In reality, the subject of the photograph, Florence Thompson, was not a pea picker. She was a widow with five children driving from Los Angeles to Watsonville, California, to find work. Her car had broken down and a man towed it to Nipomo to fix it for her. She was about to leave Nipomo when Lange showed up and made this iconic image. Even though FSA photographers were told not to alter the scene to get more dramatic photographs, Lange chose to manipulate the story by cropping out two of Thompson's children, believing that the urban audience would be more sympathetic to a woman with three, not five children. Thompson died poor, angry and bitter about the commodization of her image and that although she had become part of our public image she never benefited financially from the photograph. Should the back story devalue this photograph? As indexical truth, it succeeds. Thompson was waiting in Nipomo and she was poor. As situational truth it fails. She was not a starving pea picker and she was just passing through the camp. As universal truth of the severity of the depression for so many Americans it succeeds.

Despite the malleability of the photograph, almost all photographs succeed as indexical truth, some also as situational and many as universal. We should not dismiss the value of documentary photographs as evidence, persuaded by the maelstrom of postmodern criticism. We should restore our trust in the photograph as evidence, if only indexical evidence, but also carefully consider the trustworthiness of the photographer. We should rethink the meaning of photographic truth because we need to see and trust images of lynching from the American South, or images from Abu Ghraib, or of maimed children from the DRC or from the genocide in Rwanda. We need to insist on the veracity of the image to preserve our collective memories and to prevent us from a kind of collective amnesia that allows us to sanitize, and forget, the past.

REFERENCES

Bang, T. (2015), 'AP "Napalm Girl" Photo from Vietnam War turns 40', New York: The Associated Press.

Brown v. Plata (2011), 131 S. Ct. 1910.

Chéroux, C. (2005), 'Mumler's ghost', Clement Cheroux, Andreas Fischer, Pierre Apraxine, Denis Canguilhem, Sophie Schmit, (eds), *The Perfect Medium: Photography and the Occult*, New Haven, CT and London: Yale University Press.

- Cloutier, G., et al, (2004), 'Effect of Phonemic Perception Training on the Speech Production and Phonological Awareness Skills of Children With Expressive Phonological Delay', in *America Journal of Speech-Language Pathology*, ASHA.org.
- Conway, M. A. (1997), *Recovered Memories and False Memories*, Oxford and New York: Oxford University Press.
- Fakhari, G. (2014), 'Iranian photographer Azadeh Akhlaghi revives history through staged images – interview', Art Radar, http://artradarjournal. com/2014/09/19/iranian-photographer-azadeh-akhlaghi-revives-historythrough-staged-images-interview/. Accessed 1 July 2017.
- Grady, C. L., McIntosh, A. R., Rajah, M. N. and Craik, F. I. M. (1998), 'Neural correlates of the episodic encoding of pictures and words', *Proceedings of the National Academy of Sciences*, 95:5, pp. 2703–08.
- Green-Lewis, J. (1996), *Framing the Victorians: Photography and the Culture of Realism*, Ithaca, NY: Cornell University Press.
- Gunning, T. (2008), 'What's the point of an index? Or faking photographs', in K. Beckman and J. Ma (eds), *Still Moving: Between Cinema and Photography*, Durham: Duke University Press, p. 24.
- Hine, L. (1980), 'Social photography: How the camera may help in social uplift', in A. Trachtenberg (ed.), *Classic Essays on Photography*, New Haven, CT: Leete's Island Books.
- Kaplan, L. (2008), *The Strange Case of William Mumler, Spirit Photographer*, Minneapolis: University of Minnesota Press.
- Khedekar, N. (2014), We now Upload and Share over 1.8 billion Photos Each Day: Meeker Internet Report, Tech2, http://tech.firstpost.com/news-analysis/nowupload-share-1-8-billion-photos-everyday-meeker-report-224688.html Accessed 1 July 2017.
- Luco v. United States (1859), 64 U.S. (23 How.) 530 edn.
- Marcy v. Barnes (1860), 82 Mass (16 Gray) 161, 163 edn.
- Mcalone, N. (2015), 'San Francisco's police department has an "Instagram officer" and is looking to hire tech savvy cops', Business Insider, http://uk.businessinsider.com/san-franciscos-police-department-has-an-instagram-officer-who-looks-for-photos-featuring-criminal-activity-2015-7?r=US&IR=T. Accessed 17 July 2017.
- Mnookin, J. L. (1998), 'The image of truth: Photographic evidence and the power of analogy', Yale Journal of Law & the Humanities, 10:1, http://digital-commons.law.yale.edu/yjlh/vol10/iss1/1.
- Morris, E. (2011), *Believing is Seeing: Observations on the Mysteries of Photography*, New York: Penguin Press.
- Nemeth, R. J. (2002), *The Impact of Gruesome Evidence on Mock Juror Decision Making: The Role of Evidence Characteristics and Emotional Response,* Louisiana State University and Agricultural and Mechanical College.
- The People v. K.B. (2015), Crim A149960 Cal. App 1st edn.
- Porter v. Buckley ([1906] 1928), 147 F. 140, 143 edn, 3rd Cir.
- Sacchi, D. M., Agnoli, F. and Lotus, E. F. (2007), 'Changing history: Doctored photographs affect memory of past public events', *Applied Cognitive Psychology*, 21, p. 1005.
- Sontag, S. ([1977] 2001), *On Photography*, New York: Picador USA and Farrar, Straus and Giroux.
- Tagg, J. (1999), 'Evidence, truth, and order: A means of surveillance', in J. Evans and S. Hall (eds), *Visual Culture: The Reader*, London and Thousand Oaks: Sage Publications, p. 244.

- University of New South Wales (2007), 'Grisly court evidence makes juries more likely to convict', https://www.sciencedaily.com/releases/2007/ 11/071119100343.htm. Accessed 1 July 2017.
- Wendell Holmes, O. (1859), 'The Sterescope and the Stereograph', The Atlantic Monthly Magazine, June, https://www.theatlantic.com/magazine/ archive/1859/06/the-stereoscope-and-the-stereograph/303361/. Accessed 1 July 2017.

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