

Methodological Approaches to Disclosing Historic Photographs

Eric Margolis and Jeremy Rowe

NOTES ON HISTORIC PHOTOGRAPHS

Our research draws from the genre often called 'historic'. In a real sense all photographs are historical; they are two-dimensional representation of scenes captured with lenses, and frozen in a fraction of a second. From the instant of exposure, the photograph recedes into the distance of time. However, for the purpose of analysis and discussion, this chapter uses a conventional historians' definition of 'historic' photographs as being 50 years or older.

Like the photographs in Barrett's descriptive and explanatory categories discussed below, people tend to accept historical photographs at 'face value', as accurate, indexical reflections of reality. Historic images have been concentrated in libraries, museums and archives, and have become increasingly popular for illustrating books and used in 'documentary' motion pictures. There are also less visible, but very active markets for sale and private collection of historic images. Some historic photographs come with extensive

provenance: they were made by known or important photographers; they are accompanied by collateral information, such as written documentation; or they are well-known and have been studied by generations of scholars. Other photographs are drawn from the much larger category of 'vernacular' photographs. Such images come from more obscure sources and usually offer little documentary information to provide a 'warrantable' understanding of the photograph, other than that provided by the image itself. We may be provided with only observable information such as the size, format, and subjective description. Collateral information such as date, location, photographer's name, subject, or reason for being made have been lost or are unavailable to the researcher.

The vernacular genre, as popularly described, includes indigenous or 'native' photographs, typically made by unknown or amateur photographers that tend to depict common subjects, objects, family, and events of daily life. There are literally millions of these vernacular historical photographs, which are becoming more accessible and

widely available to researchers. Access to vernacular historic photographs previously required time-consuming and costly trips to archives. Increasing numbers of large-scale digitization projects, the resulting online access to these collections, and social media and sharing sites like Flickr, Photobucket and Picasa are making millions of vernacular images readily available to researchers.

Many sites also solicit and share input about the images that can assist in identification and interpretation. Additionally, traffic in buying and selling photos has moved from swap meets and estate sales into regional trade shows and conferences like the National Stereoscopic Association, the Daguerreian Society, and Papermania, and to large-scale online auction sites like eBay and Delcampe. These images, and where still extant, the associated data concerning their provenance, constitute a significant resource for all the human and cultural sciences with tremendous untapped potential for researchers. In what follows we explore ways to investigate the meanings of historic photographs.

INTRODUCTION: TO GLIMPSE A WORLD THAT WAS

Clifford Geertz saw the strength of ethnography as its ability to 'put us in touch with the lives of strangers' and to 'see things from the other's perspective' (Geertz, 1983). In confronting our own history we similarly try to fathom the lives of strangers. Traditionally, historic research primarily incorporated document analysis and oral history. But as culture has become more visually literate, photographs, graphics, and other images offer the historian/ethnographer an additional window on the 'webs of significance' that Geertz (following Max Weber) said comprised culture (Geertz, 1973: 5). Some researchers have adopted and use cameras as recording mechanisms to provide their own images for analysis. Others, the authors included, emphasize 'found object'

photographs originally made for reasons other than research. In either case, by themselves photographs provide only 'thin' descriptions, but this information can prove helpful in constructing our own 'thick' descriptions (Geertz, 1973). Erving Goffman (1976) emphasized the human ability to make categorical inferences about the glimpsed world in 'real life' and the glimpses provided by photographs:

To glimpse a world ... is to employ a set of categories more or less distinctive to glimpsing and often entirely adequate for the job they are designed to do (22).¹

In the essays that introduce Goffman's (1976) study of the portrayal of gender in advertising images, he makes the point that photographs – posed or candid – are of the same nature as a glimpse of 'real life.'

We are all in our society trained to employ a somewhat common idiom of posture, position, and glances, wordlessly choreographing ourselves relative to others in social situations with the effect that interpretability of scenes is possible. ... however posed and 'artificial' a picture is, it is likely to contain elements that record instances of real things (21).

Visual ethnography has an academic interest in analyzing historical photographs to learn as much as possible about the way the world was. The study of historic photographs builds upon the same foundational issues as other visual research techniques. There are also different analytic approaches, such as the 'postpositivist' and 'hermeneutic' paradigm communities (Kuhn, 1970). Berger and Mohr (1982) noted the connection of photography both to the modernist project of positivism and to the discipline of sociology:

The camera was invented in 1839. August Comte was just finishing his *Cours De Philosophie Positive*. Positivism and the camera and sociology grew up together. What sustained them all as practices was the belief that observable quantifiable facts, recorded by scientists and experts, would one day offer man such a total knowledge about nature and society that he would be able to order them both (99).

This chapter presents two approaches to photographic research, each presented in the voice of one co-author. In general we believe that potential synergies exist in approaching photographic research from perspectives of both postpositivist evidence from indexical and iconic sources, and interpretivist/hermeneutical approaches that draw on symbolic dimensions that are essential in the examination of photographs. Each brings tools and lenses for viewing and analysis of photographs that are neither mutually exclusive nor individually exhaustive.

While Margolis leans toward theoretical hermeneutic approaches, Rowe applies a postpositivist evidentiary process that he terms *photographic forensics*. In a previous co-authored piece about an album of Arizona Indian school photographs, the co-authors found that each technique added value to the analysis: the whole was clearly more than the sum of the two parts (Margolis and Rowe, 2002). This chapter continues the dialogue between and about the two approaches to photographic analyses, providing general background to each approach, and brief examples that catalyze the discussion.

Today, there is a growing awareness of the limitations of the strict positivist position that considers photographs as merely a 'mirror with a memory' (as daguerreotypes were labeled soon after their introduction in 1839). Similarly, few argue that cameras function merely as 'pencils of nature', a popular implication in the nineteenth century. Englishman William Henry Fox Talbot produced the first book illustrated with photographs in 1844. Talbot laid the foundation for this interpretation with his introduction: '... the plates of this work have been obtained by the mere action of light upon sensitive paper. They have been formed by optical and chemical means alone, and without the aid of any one acquainted with the art of drawing....' (Fox Talbot, 1844 [1989] Book No. 1, np). W. J. T. Mitchell (1994) contended that:

It is getting increasingly hard to find anyone who will defend the view (variously labeled 'positivist',

'naturalistic', or 'superstitious and naive') that photographs have a special causal and structural relationship with the reality that they represent (282).

We don't necessarily agree with Mitchell's concern that positivist beliefs in images have been killed off by postmodernists like Victor Burgin. As discussed later, Errol Morris, among others, maintains a firm distinction between words and photographic images in his analysis, and argues that photographs do have a 'special' relationship with what stood before the lens.

Currently, there are two vibrant meta-physical conceptions of photographs. The first we'll term 'postpositivist' in that, while confident in the indexical relationship between a photograph and the material world in front of the lens, assertions about photographic meaning have two limitations:

- 1 These assertions are statistically probable, not certain.
- 2 They must be subject to rigorous testing and must be in principle falsifiable if they are to be considered scientific (Philips and Burbules, 2000).

The photographic researcher/critic makes 'warranted' statements backed by evidence – but the warrants can be extended or even overturned at any time by new evidence.

The second conception emphasizes 'interpretivist' views. In contrast to the postpositivist perspective that considers photographs as documents that convey descriptive or explanatory representations, merely reflecting reality, or even representing 'the thing in itself', John Tagg (1988), following Foucault, emphasized photography in terms of associated power relationships: 'Photography as such has no identity. Its status as technology varies with the power relations that invest it. Its nature as a practice depends on the institutions and agents which define it and set it to work' (63). Hermeneutic perspectives emphasize photographs as texts, demanding semantic and semiotic interpretation to determine meaning.

Postpositivist approaches to researching historical photographs

Postpositivism emphasizes that photographs represent 'things in the world'. It recognizes that cameras are not simply mechanical transcription devices, and acknowledges that photographs result from photographers infusing their own perspectives and interpretations of subjects through decisions about framing and composition, by manipulating depth of field and exposure time, choosing when to release the shutter, etc. Oliver Wendell Holmes commented in 1859: 'The photograph has completed the triumph, by making a sheet of paper reflect images like a mirror and hold them as a picture ... the mirror with a memory'.² An anonymous quotation plays on this by inserting the importance of the human element: 'The camera is a mirror with a memory, but it can not think'. Nonetheless, traces of the old positivist belief in 'observable facts', recorded mechanically, analyzed or quantified by 'objective' scientists and experts lurks close to the surface of what Martin Jay termed 'the dominant scopic regime' (Jay, 1994). For postpositivists the most important quality of a photograph is its indexical connection to things in the world. As Edward Steichen described the relationship between optical/chemical machinery and operator:

The camera is a witness of objects, places, and events. A photograph of an object is, in a sense, a portrait. But the camera with its glass eye, the lens, and its memory, the film, can in itself produce little more than mirrored verisimilitudes. A good photograph requires more than that. The technical process simply serves as a vehicle of transcription and not as the art.

The photographer, unlike the painter and regardless of his subjective feelings, is forced by the very nature of his medium to concentrate on the object, on what Goethe referred to as 'Das Ding an sich' in a portrait: on the person, or the meadow, the mountain, the flowers, or the horse being photographed' (Steichen, 1984: Chapter 10, facing plate 164).

Art educator Terry Barrett (1986), created a taxonomic system for art historians that categorized photographs as descriptive,

explanatory, interpretive, ethically evaluative, aesthetically evaluative, and **theoretical**. Much of Barrett's conceptualization can be applied equally well within our framework for researching historical photographs. The first two categories, for example, are useful when discussing how historical photographs emphasize a postpositivist approach to research. As Barrett explained, 'The photographs are falsifiable in that potentially they could be empirically demonstrated to be true or false, accurate or inaccurate' (Barrett, 1986: 56). Barrett defined these photographs as:

- **Descriptive:** photographs such as crime scene photos, X-rays, portraits, and photographic reproductions of art.
- **Explanatory:** includes photographs made by visual sociologists and anthropologists and photographs like Andrew Davidhazy's stop motion shots.³

In addition, Barrett's typology is also useful for considering photographs with more interpretive/hermeneutic characteristics. Our intention, here, is to move away from having two hard and fast approaches, as in the old paradigm wars. Our emphasis is rather on the interpenetration of postpositive and hermeneutic approaches to researching historical photographs, without de-emphasizing their differences. As such, Barrett's second two categories work to emphasize interpretivist views of research on historical photographs, which regard photographs as texts to be interpreted:

- **Ethically evaluative images** include much of what has been termed 'liberal documentary' (Rosler, 1990). Barrett includes the works of Riis and Hine in the category that uses photography to force moral judgments in the viewer.
- **Aesthetically evaluative images** seek a response from the viewer as well. They 'function as notifications that the photographic presentation of people, places, objects, or events is worthy of aesthetic apprehension (Barrett, 1986: 57).
- **Interpretivist approaches to researching historical photographs.**

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Hermeneutic perspectives emphasize photographs as texts demanding semantic and semiotic interpretation to determine meaning. Allan Sekula termed assumptions that a photograph can 'transmit truths'; 'reflect reality'; or be an 'historical document' as *fallacy*. 'The very term document entails a notion of legal or official truth, as well as a notion of proximity to and verification of an original event' (Sekula, 1983: 195). Sekula also asked in regard to exploring and understanding power relations: 'How is historical and social memory preserved, transformed, restricted, and obliterated by photographs?' (Sekula, 1983: 193). The iconic and symbolic life of photographs is the basis that the hermeneutic approach insists on for meaning – photographs are defined by their social and cultural contexts and, as a result, can never be either ethically or aesthetically neutral.

POSTPOSITIVIST APPROACHES

Postpositivist photographic researchers hypothesize that the image and its contextual information contain data such as where, how, by whom, when and why the images were produced; and use this information to attempt to infer embedded representations within the images. Ultimately the goal is to use this information, and knowledge of photography, culture and context, to reach a warranted comprehension of the image. Jeremy Rowe devised a three-part strategy for photo research:

- 1 **Evidence – objective, factual, documentary information provided by the photograph or its context.** This is its provenance, or context (e.g. format, content within the photograph, attribution to photographic studio based on imprint or printed identification from the period, etc.); the focus is on primary source information.
- 2 **Interpretation – where we have little documentation and must rely on deductions built on circumstantial evidence and context that can be clearly verified to and by others.** Interpretation builds on the factual evidence with

explanatory or derived information that can be clearly verified to and by others (e.g. dating from format or image content, contextual comparisons with companion or other known images, verified period or more recent written identification, etc.); includes secondary source material.

- 3 **Speculation – subjective inferences not necessarily based on evidence provided by the photograph.** It is the information that can augment the factual information that may range from attribution by later generations based on family legends, to hearsay or creative interpretation to 'leaps of faith' based on desire to fit the image into a specific hypothesis or intellectual framework without sufficient factual basis (Rowe, 2002).

The first two of Rowe's strategies stand firmly in the postpositivist tradition. They draw on what Roland Barthes *termed*: 'studium' – informed by education. Studium is the socially prescribed, statistically 'average' meaning of the historian, the social scientist – interested in describing what the image depicts: date, location, event, caption and so on. (Barthes, 1981: 22–26). Valuable research methods include standard historical research into the photographer and the events depicted, content analysis of the image, which can be used for hypothesis testing and for a more inductive process of hypothesis generation, and close analysis of the photograph itself.

Many visual ethnographers recognize the importance of understanding the relationship between the researcher and the subject, yet these same researchers rarely address the importance of understanding the relationship between the photographer that created the image and the image, or exploring the context in which the images were originally created. The evolution from reliance on text alone, to incorporating images as sources for researchers, requires new methods and analytic techniques. Though many researchers reference the link between image and subject, photographer and ethnographer, few have taken the next step to examine the information embedded in the image (format, media, imprint, notes, etc.) or of incorporating knowledge of the larger body of work

created by a photographer, or of comparisons with work by other photographers who may have made additional images of an area or event. If such images can be located, they can provide a foundation for inferences such as the prominence of the subject at the time, and permit triangulation of style and context across the work by each individual photographer.

Recently, aided by copyright policy and emerging current practice, many library and archival collections, commercial sources, and some collectors have been successful in demanding source credits when images from their collections are published. However, providing credit to the photographer, when known, in popular press publication captions (other than to a few well-known fine art and journalistic photographers), has been rare. When information about the photographer, format and other contextual information is presented at all, it is usually separated from the image and appears in end credits or on a photo source page at the end of the publication.

The interaction between the photographer and viewer extends to the size, format, presentation style, and labeling or captioning of the images that are produced. Changes in the presentation of the photograph in print or online publication, e.g. cropping or extraction of detail within a photograph, can have significant implications on the viewer's interpretation and understanding of the image. Such changes are rarely noted as photographs are reproduced. For example, images are routinely cropped to fit layouts, and image information such as format, mount type or style and photo credits are regularly removed. Historic images such as *cartes de visite* and cabinet cards are typically cropped and printed without mount information that can often identify location, and provide assistance in verifying date. Photographer's imprints are rarely included unless a notable photographer produced the image. Stereographs are routinely reproduced without noting the original format, and using only one of the stereo pairs instead of presenting

the overall image. Even simple information about the original format of the photograph can be potentially valuable, but is rarely noted in publications.

Identification of the photographer can provide valuable context about related work from which researchers can infer information about style, approach (as in documentary vs staged or posed), ability to interact with the subject, use of props, etc. For example, studying photographer-produced stereographs in the late nineteenth century can provide insight regarding the entrepreneurial nature of the photographer, interest in location work in addition to studio portraits, etc. (Rowe, 1991, 2008). Knowledge that the photographer or photographic publisher produced primarily prints from original negatives, as opposed to marketing copy photographs of the work of that of others, can offer additional insights.

Changes in mount colors or styles of imprints, when combined with knowledge about the photographer and changing styles, can provide collateral information that can provide a range of dates when the image may have been produced (Rowe, 1997: 116–118; 2007: 75–88). Imprints identifying the photographer open the door to researching photographic business records and directories of photographers that can provide additional data for analysis.

The technology to scan, enlarge, crop and enhance photographs during research has dramatically improved the ability of researchers to explore images for embedded clues. Examination of information embedded within the image, such as artwork, calendars, or signage, can provide temporal cues about when the image was originally made. Software provides researchers with capabilities for comparison of images that were previously extremely difficult if not impossible using traditional magnification and photographic techniques. Included are techniques such as: overlaying images; scaling; transformations to match perspectives, contrast and sharpness enhancement; and automated comparison tools that can identify and compare

elements within the images.⁴ Rowe coined the term *Photographic Forensics* to describe the full spectrum of photographic analysis from: examining image content using these techniques to identify embedded clues; mount and format data; contextual information about the photographer (when known) and related images by other photographers; and the contextual information associated with single photographs or collection of images (Rowe, 2002).

Often, the date the photograph was taken can add substantial information about the subject through an understanding of the style and symbolism of the era. For example, a woman wearing a black veil and clothing may indicate mourning. Dark clothing with black gloves covering the palm but with bare fingers can symbolize a progression of the mourning process over time. Arrangement and relationship of multiple individuals within the frame, or placement of hands or contact between subjects; each had its own Victorian symbolism.

Information on the approximate cost and resulting economic impact of the photographs on the subject when it was made can also be valuable. Knowing that a large daguerreotype was a significant expense in the 1840s, about \$150, can be an indicator of the wealth of the subject. Knowing that smaller 1/6-plate-sized images cost about \$30 in the 1840s, with the price dropping to \$7.50 for two portraits by the late 1850s, provides additional insight to the subjects of these images (all prices adjusted to current dollars).

The social context of *cartes de visite*, which were exchanged in the 1860s, and knowledge that images of notable authors, performers, and politicians were collected and included in family albums provides valuable understanding of collections of family photographs of the era. The dates that tax stamps appear on the reverse, or changes in mount style and borders occurred, also provide useful information in dating photographs and discovering locations. Recognizing photographic copies vs originals, particularly

when copies were made of much earlier images, such as the common practice of making *cartes de visite* copies of daguerreotypes or ambrotypes, can similarly improve the accuracy of dating and attributions.

Another potential source of contextual information is knowledge about the photographer. For example, was she or he the sole operator in a small town, or one of a number of studios in a city? Did she cater to upper or working class clientele? Were the images known outside of the region and was the photographer recognized for artistic or documentary styles? Is the photograph in question typical of the photographer's work, or is it unusual in terms of pose, interaction with the photographer, or inclusion of props?

Learning about the nature of the equipment and photographic process frequently contributes useful information. Was the process used common or more unique when the image was made? Did the process produce a single copy of the image, like the daguerreotype, ambrotype, or tintype, or a negative capable of producing many prints? Was the camera mounted on a tripod or studio stand, or hand-held? Was lighting manipulated, or was flash or auxiliary lighting added? Was the equipment high-level professional or lower-cost amateur gear? Does the image fit into the aesthetic style of the time, or is it retrospective or groundbreaking?

In addition to examining clues within the image, researchers can explore available contextual or documentary information that may be associated with the photograph. In comprehending meaning, provenance and the history of the photograph and the collection, archive, or source can provide additional clues about why and how the photograph was made and why it was valued and preserved. Examining contextual information, such as companion images in an album or collection, proof sheets or other images made by the photographer, can reveal information about the photographer's intent, as can journals, daybooks, assignments, or other collateral references (cf. Margolis and Rowe, 2002). There may also be captions and other descriptive

information about the image and subject. If available, studying both the negative and original print can be meaningful.

As noted, images change their meaning as they are cropped or reprinted (cf. Margolis, 1988). Some photographers use cropping to provide editorial control and to shape the meaning that the image conveys. Christopher Lyman's study of the Edward Curtis collection, for example, revealed how Curtis himself altered the images of Native Americans to eliminate traces of modern life as he composed shots and printed his negatives (Lyman, 1982).

Original owners can often provide substantial information about the images in their personal collections. But most historical photographs have been completely torn from their original contexts. In most cases, it is only a matter of luck when the collateral information remains paired with the photographs. Unfortunately, only a single gap in provenance can break the tenuous connection to virtually all of this collateral information associated with an image. In the growing image marketplace, individual photographs are often separated from collections or removed from albums with their associated captions and context to sell the images individually in an attempt to increase revenue. In other cases quirks of history and custody, much of which is desirable documentation, is simply missing. But, as we shall see, this lack of context does not make these images meaningless.

Confounding the impact of missing information is the impact of dissemination of incorrect information about a photograph. Unfortunately, once incorrect information becomes widely available it takes on a life of its own through references and citations, making it extremely difficult to rein in misinformation or correct errors. Rowe developed a research strategy to determine the accuracy of the attribution of an image published with the label 'Kaloma', that was claimed to be Josephine Earp by author Glenn Boyer (1998 [1976]). Soon after the publication of Boyer's book, *I Married Wyatt Earp*, debate arose

about the real subject of the image labeled 'Kaloma'. The image of Kaloma took on a life of its own through Boyer's book cover and the trail of auction catalog descriptions that built upon his attribution. Since no provenance has yet surfaced definitively to identify this image, it provides an exemplar of the process of analyzing clues that are associated with the image to demonstrate a postpositivist approach to photographic research.⁵

Photographic research is based on obtaining as much information as possible about an image, then building a logical context for a possible identification of the image. As new information is located, it is compared, and the interpretations checked for 'fit', given the new data. This embedded contextual information can be structured into three categories of increasing confidence as noted above: evidence, interpretation, and speculation.

Each level of analysis can provide a valuable source of information that can be evaluated, verified, and weighted as part of the research process. For example, evidence such as photographer's imprints can usually provide valuable insight about the image. But for copy photographs the mount imprint may not accurately state the original photographer. For example, the well-known images of Geronimo by Irwin, Randall and Wittick, and C. S. Fly were frequently copied, and today examples of these images exist with imprints of dozens of other photographers.

Interpretation based on the format of the photograph or information within the image, such as building signs, can help verify or refute written identification that may have been added to the mount.

All written information associated with an image should be confirmed, particularly if it was added after the image was originally produced. Well-intentioned family members, collectors and museum staff often add attributions to the photographs that pass through their hands. Their impressions or knowledge, and the accuracy of the written information, should be verified before it is assumed to be correct.

Speculation may be based on interpretation of available evidence, on emotional reaction to a photograph, or desire to ‘trim’ a piece of the puzzle of history to make it fit a particular research hypothesis or philosophy. Speculation can also be benign or unintentional, based on little knowledge or on incorrect information. Personal desire or a potentially escalating value for a given photograph can also drive speculative interpretations. For example, images of young Abraham Lincoln are rare, likely due to both his economic circumstances and frontier location. As a result, extremely high values are placed on any new image of Lincoln that might surface. Several well-intentioned individuals have found vintage photographs that they feel appear similar to known Lincoln portraits. Without specific evidence or provenance linking the images to Lincoln, attempts to generate such connections range from trying to convince experts to authenticate based on the apparent physical similarity, to computerized morphing of the image to the known Lincoln portraits.

Each photographic identification is only as accurate as the weakest link in the chain of information about the image that is available at a given time. Anecdotes and speculation can make great stories, but without evidence to support the assumptions, provide merely weak links in the process of accurately identifying a photograph.

Rowe examined the image labeled ‘Kaloma’ and the attributions based on evidence, interpretation of that evidence, and speculation about the image and its impact on the perception of the image and market value (Rowe, 2002). Based on evidence available to date, the trail of information about the image of ‘Kaloma’ begins in 1914, when the vignetted image of a beautiful young woman boldly posed for the camera in a sheer gauze peignoir became popular (Figure 18.1). Titled ‘Kaloma’, it was originally produced as a photogravure. These high-quality reproductions from photographs were produced from engraving plates on a printing press, and were much less costly for

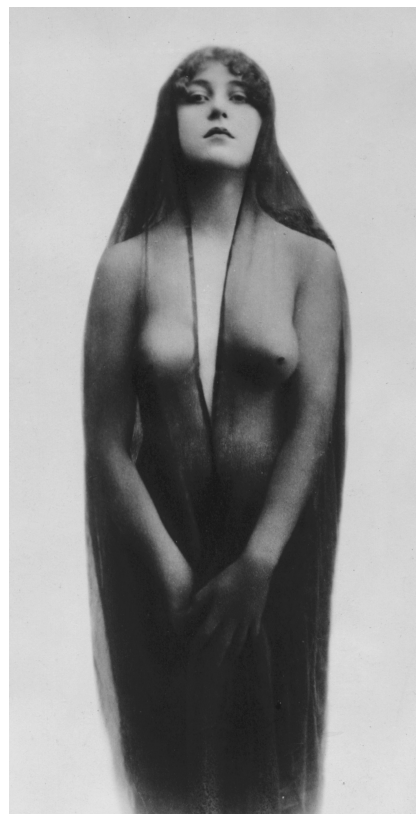


Figure 18.1 Kaloma, the vignetted image of a beautiful young woman boldly posed for the camera in a sheer gauze peignoir. Collection of Jeremy Rowe vintage photography, vintagephoto.com

publication runs than actual photographs. Photogravures were often printed with title and publication data below the image and were commonly used to create many copies of high-quality illustrations for books, postcards and art magazines. Though photogravures had been used since the 1850s; their surge in popularity was between 1890 and 1920.

Many of the prints of Kaloma bear a credit to either the ABC Novelty Company in New York or to the Pastime Novelty Company at 1313 Broadway, New York. Labels on the back of commercially framed prints indicate that it was widely popular. Prints of ‘Kaloma’ have surfaced with framing shop labels from

Hawaii and states throughout the USA and into Canada.

The risqué image was popular and sold well as both photogravure and silver print. Also in 1914, the image appeared on the cover of 'Kaloma, Valse Hesitante (Hesitation Waltz)' composed by Gire Goulineaux, and published by the Cosmopolitan Music Publishing Company, 1367–69 Broadway, New York. Kaloma's popularity continued as she became a pin-up during World War I, and appeared after the war on postcards. After discrete airbrushing darkened her peignoir, Kaloma also appeared in other popular advertising during that era.

The relatively benign history of Kaloma changed significantly in 1976 when Glenn Boyer used an airbrushed version of Kaloma as the cover illustration for *I Married Wyatt Earp*. Gradually, interest in the image began to shift from risqué nostalgia. Kaloma became an icon of the mania for Western collecting that grew through the 1980s and escalated dramatically in the late 1990s. Almost entirely as a result of the book cover attribution, copies of the Kaloma image began to sell for hundreds, then thousands of dollars as portraits of Josephine Marcus Earp.

Questions about the historical accuracy of Boyer's book and the attribution of the cover photograph of Kaloma arose in the mid-1990s. The debate about the cover image escalated, reaching the popular press in the late 1990s. Donald Ackerman wrote to the *Maine Antique Digest* (M.A.D.) in June 1997, requesting assistance in verifying the attribution of the Kaloma image as Josie Earp. Ackerman noted the similarity to the early silent film publicity stills that he was familiar with and questioned the attribution to the 1880s and the strength of the purported link to Josie Earp. He further noted that recent auction sale prices would likely draw more copies into the marketplace, and that additional copies of the Kaloma image were being offered by H.C.A. Auctions in their 27 April 1997 sale and an auction house in Kingston, New York on 28 May of that same year (Ackerman, 1997).

The following month, M.A.D. published a response to the Ackerman letter by Bob Raynor of H.C.A. Auctions. Mr. Raynor acknowledged that H.C.A. represented the Kaloma image as that of Josie Earp after researching the image, and argued 'Both Sotheby's and Swann Galleries identified and sold the photo image in 1996, both auctions prior to the December H.C.A. auction'. Raynor stated:

Please note that the image was used as a dust cover of the book *I Married Wyatt Earp*, published by University of Arizona Press, 1976. Additionally, the image was used in another book, Wyatt Earp's *Tombstone Vendetta*, published by Talei, and also in *Pioneer Jews*, Houghton Mifflin, 1984.⁶ In all instances the image was identified as Josephine Earp (Raynor, 1997).

Though this level of research is credible, it is interesting to note that all of the references hinge on, and post date, the attribution of Boyer's book cover.

As prices rose, so did the number of auction sales of the 'Kaloma' image. Sotheby's 8 April 1998 sale included a photograph labeled an anonymous picture, taken in 1914 and titled 'Kaloma', of a siren-like figure dressed in a sheer gown with a plunging neckline. Described in the catalog as a hand-tinted photograph of Josephine Marcus Earp, the one-time wife of lawman Wyatt Earp, the photograph was estimated at \$3000–4000 and sold for \$2,875. The Sotheby's catalog saw broad distribution and afterward was frequently cited as the source used to 'identify' Kaloma images as Josie Earp in many subsequent auction and dealer sales.

As the perceived value and notoriety of the image of 'Kaloma' rose, so did the stories that surrounded her:

- Josephine Earp was born in 1861 and would have been 53 in 1914. After this fact became an issue, Kaloma conveniently began to be described as a later print of an image of Josie taken in Tombstone, Arizona in 1881, when she would have been 19 or 20 – roughly the same age as the subject of Kaloma.
- At some point purported ties to C. S. Fly began to surface as the original photographer of a drunken Josie coerced into posing for the portrait.

- Legends of attribution prospered. Quotes from many sources have been touted as the definitive word on the history of the image. Unsupported tales of bar owners or those in attendance when the image was supposedly made have been used to rationalize the Kaloma image as a portrait of Josie Earp.
- Similarities with other, better-attributed images of Josie Earp have been cited but little provenance has been given that could definitively connect any of the Kaloma images to Josie Earp.
- As an example of the market incentive, many copies of the 'Kaloma' image surfaced and citations in auction catalogs and from dealer sales, all after the 1976 publication of *I Married Wyatt Earp* were regularly used to 'verify' that Kaloma is Josie Earp and establish a high potential value.

Unfortunately, little concrete evidence has been found to help settle the controversy. Rowe (2002) published an analysis of the evidence and speculation that revolved around the 'Kaloma' image that looked at a number of context and dating clues in the photograph as a starting point for his analysis. Several significant questions were posed. Why has no evidence of the tie between 'Kaloma' and Josephine Earp surfaced that predates publication of Boyer's book in 1976? Also, where are the primary source citations from the period between Josie's time in Tombstone, and the emergence of Kaloma in 1914 that link the image to the personality? What do we actually know about the image titled 'Kaloma' from the available evidence?

If one examines the image to see what evidence is presented, certain inferences and interpretations can be derived. Photographic styles changed regularly every few years as photographers sought to justify new portrait business, and as lenses, formats and emulsions continually evolved. By looking at large numbers of images it is possible to get a feel for the photographic style of a given era. Images that don't fit the norm do exist, and are often highly valued by collectors as precursors of future styles and trends.

However, most images generally fit the stylistic trends of their era.

The Kaloma image exhibits three strong stylistic elements that can be used to try to assign a range of dates to the original photographic image:

- 1 The sultry interaction between the subject in Kaloma and the photographer is very direct. This aesthetic style is more common and representative of risqué images and nude studies from the postcard era (1905–1920) and appears rarely in earlier nineteenth-century images.
- 2 The full-figure vignetting of the image is also stylistically more common during the postcard era. However, earlier images were reprinted in current formats years after they were originally taken. It is possible that the central image of Kaloma could have printed from an older negative and vignettted to update its appearance.
- 3 The use of narrow depth of field (the range of sharp focus in the photograph) was popularized by art photographers in England and Europe beginning in the late 1880s, and became popular in America around the turn of the century. However, only a small fraction of commercial photographers regularly used this technique. Aesthetically, the Kaloma image shares much more with post-1900 images than it does with earlier images such as the cabinet cards that were popular during the early 1880s, when the image had to have been taken if Josephine Earp was in fact the subject.

Risqué photographs like the Kaloma image have been made and sold since the 1840s. The subjects of such 'art' photographs were not usually identified. It is highly unlikely that even if the subject of Kaloma had been identified at some point, such documentation by photographer or publisher would still exist. However, given the heated levels of discussion about the current attributions, and possible liability given Kaloma's high sales prices based on its attribution to Josephine Earp, it is not likely that even if such information is available, that publishers or distributors would actively take sides in this matter. Obviously, locating any original documentation of the sitter of the Kaloma image would be key to unraveling the controversy about this image.

Copyright notifications have been printed on photograph mounts and occasionally in the image area since the 1850s. Notices were occasionally printed or etched in the negative, or later added to the mount or print with a rubber stamp. Though copying and piracy were common, pirates rarely included previous notices when illegally reproduced. The Kaloma images seen to date have all been associated with copyright notices dating from after 1914. The 'Kaloma' photograph on the sheet music is unattributed, though the music is copyrighted to Cosmopolitan Publishing Company.

The number and format of extant copies of the image also provide some clues. If in fact the image were of Josephine Earp one would assume that it would have been popular and many copies would have been made and marketed soon after it had been taken. If it had been originally taken in the 1880s, most of the extant copies would likely be in the cabinet card format. This would hold true even if it were merely an unidentified nude image made during that era. Virtually all of the copies of the Kaloma images identified to date are printed paper photographs or postcards that date after the 1914 date indicated in the copyright notice. Rowe is not aware of any copies of this image that have surfaced in original nineteenth-century cabinet card mounts.

The purported attribution to the C. S. Fly studio in Tombstone can also be evaluated. In addition to his entrepreneurial personality, Fly was known for the aggressive marketing and promotion of his photographs, particularly of his Geronimo series. Thousands of copies of images made during the surrender of Geronimo in 1885 were printed and sold, each prominently identifying Fly as photographer and most carrying his copyright notice. Similarly, portraits of personalities visiting Tombstone, and photographs of local events like the hanging of John Heath, were also broadly distributed. If as speculated, Fly took a salable image of Josie Earp, it is highly unlikely that he would not have sought to capitalize on the opportunity to sell copies.

To date, no copies of the Kaloma image have been located on C. S. Fly studio mounts.

Looking at the purported attribution of the subject as Josie Earp provides a bit of additional insight. During much of their lives, the Earps were popular, widely known, public personalities. Though few commercial portraits of the Earps exist today, if images of the Earps had been available at the time it is likely that they would have had a large and ready market. Individual cabinet card portraits were relatively affordable, costing about \$1.25 per dozen, with group portraits slightly more expensive at about \$1.50 per dozen. It is also highly likely that period documentation and references to such images would have been produced, providing additional evidence for such attributions. The lack of such evidence is telling.

Looking at the evidence provided by the image and trying to read the story that it tells logically leads to it being an early twentieth-century photograph of a beautiful young woman, likely made after about 1910, which was taken about the time that it first burst on the scene in 1914. No clues clearly indicate this image was copied from an earlier image of Josie Earp or another as-yet unidentified young woman. Given the broad exposure that the image of Kaloma has had since the publication of the Boyer book, and strong interest in the legends of Tombstone and the West, the search for compelling evidence to link this image with Josie Earp will likely continue. In short, at this point there is little evidence, some *interpretation* loosely based on that *evidence*, and much *speculation* about the subject of the image known as Kaloma.

Content analysis

An important postpositivist approach is content analysis, a technique developed in the field of media studies. It is a taxonomic and counting strategy for determining the relative frequency of certain representations within groups of images. Philip Bell (2001) gave an

excellent review of the technical procedures but concluded:

It is also of limited value in many research contexts, and might best be thought of as a necessary but not sufficient methodology for answering questions about what the media depicts or represents. Content analysis alone is seldom able to support statements about the significance, effects, or interpreted meaning of a domain of representation (13).

The technical procedures, in Bell's account, are a form of hypothesis testing. Content analysis requires defining explicit categories that are exhaustive and mutually exclusive, and employing checks like inter-coder reliability. These techniques are most applicable to comparisons between two discrete sample populations that can be considered comprehensive representations of the sample population. Content analysis is most applicable to research where a collection of images defines the sample population than with less comprehensive collections that only are representative of the populations being analyzed. A hypothetical example to illustrate Bell's method involves an analysis of magazine covers.

One of Bell's examples involved two subjects using explicitly defined categories to code and compare the portrayal of subjects and social contexts expressed in images of women appearing on the cover of *Cleo Magazine* during two periods, 1972–4 and 1996–7. Points of comparison included observables such as hair color (number of blonds and brunettes), age (older and younger models), and social distance (involved or distant). For example, values coded for social distance were: 'intimate, close personal, far personal, close social, far social, and public' (Bell, 2001: 29).

The two coders were naive in the sense that they were blind to the hypotheses being tested. Each was trained to 'classify images according to the specified definitions' (31). The coding was then compared to establish statistical reliability. The magazine covers were presented randomly, and technical

procedures were used to determine if there was a statistically significant difference in the points of comparison for the representations of the observables between the early and later periods. Bell noted that not only could coders be trained to recognize easy observables, e.g., blond or brunette, but also they could accurately discriminate between more semiotic categories, for example 'social distance', which he operationally defined as 'how much of the (human) participant's body is represented in the frame' (29).

Similar procedures can be applied to sample populations of historic photographs. For example, one might examine representative collections of studio portraits from two periods, the 1880s and the 1910s. Social distance could define one axis of comparison and one might hypothesize that social distance decreased as photographers and subjects became more comfortable with the camera's presence, or as exposure times decreased and head clamps became unnecessary, reducing the discomfort of posing for portraits.⁷ Similarly, one might test the oft-noted increase in smiling faces over time. The same sample of portraits could be coded with a set of values for facial expression: frown, deadpan, slightly upturned lips, teeth visible, mouth open in a toothy grin. Once again, naive coders could be asked to discriminate randomly presented images, then their judgments compared until high values for agreement were achieved, and ultimately the hypothesis that smiling increased could be tested.

There are two weaknesses of content analysis as a tool for analyzing historic photographs. The accuracy of this technique depends on the ability of the sample to represent the total population, and is extremely sensitive to misinterpretation because of sample bias due to the inability to identify or have access to the entire population, and the likelihood that some images are more likely to be chosen than others. Although it is relatively easy to assemble collections of historic photographs, in many cases it is difficult to create a representative sample that is realistic,

comprehensive, and unbiased, and that can be used to provide accurate inferences about the sample population.

Also, as Bell noted, even when representative samples can be identified, the entire approach is under-theorized and cannot speak to whether the hypotheses would have been 'meaningful to those who habitually "read" or "use" the images' (25). 'In short, content analysis cannot be used as though it reflects un-problematically or a-theoretically the social or ideological world...' (24). This is especially true in the case of historic photographs. In most cases, it is virtually impossible for modern coders and content analysts to know how the content was perceived at the time the images were originally made.

Still, content analysis has been used to test hypotheses in historic photograph collections. For example, in his 1993 book *How Teacher's Taught*, Larry Cuban employed, as data, Frances Benjamin Johnston's famous set of more than 700 photographs made in Washington DC schools in 1900 (Cuban, 1993). Cuban counted whether desks were bolted down or movable and also compared classroom activities to determine whether progressive or traditional classroom techniques were employed. In his analysis, he found that traditional techniques of schooling were overwhelmingly depicted:

Out of almost 300 prints of elementary school classrooms, nearly 30 show groups of students working with large relief maps in geography, preserved rabbits and squirrels being used for a lesson, students watching a teacher carve into a cow's heart to show the parts of the organ, and classes taking a trip to the zoo. The remaining 90% of the prints show students sitting in rows at their desks doing uniform tasks at the teacher's direction (Cuban, 1993: 26).⁸

Close inspection

Where content analysis tries to tease meaning from large collections of images, one can also study single historical photographs in particular detail. 'Photographs do not translate from appearances. They quote from

them' (Berger and Mohr, 1982: 96). Thus, the optical/chemical apparatus may record things the photographer did not see, and much can be learned by closely and systematically examining photographs. As noted above, one can frequently find clues: clocks recorded the time of day; calendars show month and year; and license plates, newspaper headlines and flags similarly help date images. Postmarks, notations and dedications, provenance and collateral contextual information can also expand the understanding of the image and its subjects.

In Margolis' research on classrooms, what might be incidentally written on blackboards provides clues to curriculum. Small details provide insights. The social and technological history of the medium provides useful information.

Tintypes, daguerreotypes, panoramics, Kodak snapshots, and digital files each had their day and produced certain social reactions to image-making technology. Each technique has its own representative vocabulary of process evidence. Examples include: quality of surface preparation and sharpness of focus and tonality of daguerreotypes; consistency of collodion flow and contrast in tintypes; size and evenness of exposure and focus for panoramics; image size and processing or mounting artifacts for snapshots (such as the representative circular images produced by the first string-set Kodak cameras); and file format, bit depth and resolution for digital images. In addition, other contextual information or comparisons with other similar images to infer studio quality or importance to the subject provide additional clues. Other information, such as estimating how long an exposure might have taken, or how rapidly a series of subsequent images could be made using a given technology, may also be useful (cf. Newhall, 1964; Leggat, 1995).

Probably one of the most thorough and provocative postpositivist approaches to discovering the meaning of photographs was undertaken by filmmaker Errol Morris, who writes the blog *Zoom*, for the *New York Times*. Morris wrote three long pieces

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comparing two Crimean War photographs made by one of the first war photographers, Roger Fenton, in 1855. Morris initially seemed ready to defend the ‘pencil of nature view’, asserting ‘Photographs provide a “window” into history’. The implication was that the comment applied to the history of a specific moment, and specific place ‘as if we have reached into the past and created a tiny peephole’ (Morris, 2007b). But Morris had no patience with interpretive or hermeneutic accounts. His obsession with Fenton’s two images of the ‘Valley of the Shadow of Death’ began in reaction to Susan Sontag, whom he cited from *Regarding the Pain of Others*:

Not surprisingly many of the canonical images of early war photography turn out to have been staged, or to have had their subjects tampered with. ... Fenton made two exposures from the same tripod position: in the first version of the celebrated photo he was to call ‘The Valley of the Shadow of Death’ ... the cannonballs are thick on the ground to the left of the road, but before taking the second picture – the one that is always reproduced – he oversaw the scattering of the cannonballs on the road itself (Sontag, 2003 quoted in Morris, 2007b).

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The two photos were taken from the same position: one showed a valley and road covered with cannonballs, which Morris christened ‘on’; the other showed the same view with no cannonballs present, which Morris named ‘off’. Morris did not believe Sontag (and others discussed) could warrant their conclusions about ‘faked’ photographs based merely on cursory views of the photographs, or on other primary source data about Fenton’s work in the Crimea. He consulted five ‘esteemed curators’, experts on Fenton familiar with his letters, photographs, and documentary material on the Crimean War, and received contrasting interpretations: two supported Sontag’s argument, arguing that ‘off’ came first; two suggested the opposite, arguing that the balls were removed so the road could be used or that the cannonballs had been ‘harvested’ by British soldiers so they could be recycled and fired back at the

Russians. One expert was ambivalent. Morris (2007b) wondered:

Would it be possible to order these photographs not based on anything that Fenton said (which might be unreliable) – but based on evidence in the photographs themselves? This idea appealed to me because it did not require me to imagine something about Fenton’s intentions, that is, about his internal mental state.

The answer was provided by Morris’ friend Dennis Purcell, who focused on small changes in the images. ‘We were scrutinizing individual rocks in the Fenton photographs:

When the rocks are uphill, and you look at the road, you see that the balls are off the road... . Then, you look at the rocks after they have been dislodged – rocks that were kicked and then tumbled downhill – the balls are on the road... . In short, the first shot had to be taken when the balls were uphill (Morris, 2007c).

Morris concluded: ‘The one thing that we know about the rocks ... is that they were not posed. No one noticed them, let alone posed them. But together they helped unlock the secret of how to order the Fenton photographs.

I tried hard to prove that Keller and Sontag were wrong.... I failed. I can’t deny it. But I did prove that they were right for the wrong reasons. It is not their assessment of Fenton’s character or lack of character that establishes the order of the pictures (Morris, 2007c).⁹

Of course, as Morris noted, both photographs were posed, if only by being framed by the photographer. The real dispute between Morris and the ghost of Susan Sontag is actually a paradigm difference between the post-positivist focus on photographs as indexical signs that are causally related to the objects that they reflect, and the hermeneutic view that the use and understanding of photographs is governed by socially established symbolic codes. While recognizing that photographs cannot be ‘true’ or ‘false’, Morris insisted on *photographic* proof of which image came first, while the semiotician/hermeneutician insists that the meaning of

photographs, as perceived things in the world, are created by interactions between photographer, image, and viewer.¹⁰ Sontag's point was not an attack on Fenton's character, it was the political argument that 'early war photography turn(s) out to have been staged, or to have had their subjects tampered with' (Sontag, 2003; quoted in Morris, 2007b) and nothing in Morris's dissertation on cannonballs, especially the conclusion that she was right for the wrong reasons, disproves her argument. Hermeneutic and postpositivist paradigms rely on different approaches and standards of 'proof' to warrant their assertions.

INTERPRETIVE/HERMENEUTIC ANALYSES

In keeping with the Sekula and Tagg view of photography as a technology of power and a mechanism for creating 'texts' which must be 'read' to make sense, interpretative approaches seek photographic meaning in quite different ways from the postpositivists. This is not to argue that hermeneutic approaches may not take advantage of the techniques discussed above, just that hermeneutic approaches may go further and in different directions from the post-positivist approaches. In essence, there are two semiotic approaches to analyzing photographs, both discussed in other chapters in this volume:

- 1 Structural semiotics, which assumes there are certain signs that can be read and understood by everyone or nearly everyone in a culture.¹¹
- 2 Social semiotics/iconology, which argues that different people and different social groups have

differing understandings of the meanings of texts – including photographs.¹²

Oral history, using photographs to solicit comments and analysis about the image and its original context, can be very helpful but is limited to the life span of potential interviewees. If human sources are not available, researchers must seek to understand the meanings of embedded information, such as Victorian hand gestures, dress, flowers, and group poses, by identifying and studying other resources.

A grounded theory approach to content analysis

Content analysis is not restricted to postpositivist hypothesis testing; it can also be employed more iteratively and inductively. Systematic approaches associated with grounded theory have been found to work effectively when applied to content analysis (Glaser, 1978; Glaser and Strauss, 1967; Strauss, 1987). Margolis collected and coded photographs of schools in the Farm Security Administration – Office of War Information Archives (FSA–OWI) into emergent categories using a three-phase process (Margolis, 2005).

As a first step, Margolis counted the number of school photos in these collections by year and discovered that they increased steadily (as shown in Table 18.1):

The second phase applied 'open' coding categories that were neither mutually exclusive nor exhaustive. Using a 'constant comparative' approach, the photographs were examined sequentially and provisional judgments were made about appropriate category coding for each image. For example,

Table 18.1 School photos in collections, by year

Date	1935	1936	1937	1938	1939	1940	1941	1942	1943	Total
School photos	42	79	74	177	292	436	351	1305	1711	4467

FSA–OWI images were coded using categories such as ‘connotation’ date, location, photographer, race of teachers and students, as well as ‘denotative’ or semiotic categories describing the image: social distance, perceived age of children, and whether the schools appeared to be ‘healthy happy places’ or impoverished and unhealthy. The categories Margolis used were not mutually exclusive; each photograph could be coded into more than one category if appropriate.

The third phase examined similarities and differences, and each category was reconsidered for applicability using axial coding. As new codes were identified, they were added. The categories were collapsed or expanded when appropriate as the process continued. The process was both inductive in reaching for hypotheses, and deductive in testing theories as they emerged (Charmaz and Mitchell, 2001). In the FSA–OWI project Margolis concluded that the number of images coded ‘schools as social problems’ declined, and the number of schools depicted as ‘healthy American schools’ increased. Moreover, schools in the social problem category disappeared entirely when the sponsorship of the documentary process shifted from the Farm Security Administration’s mission of the 1930s to the Office of War Information project of the 1940s. A theoretical hunch led to adding the code ‘patriotic’. As a result he found only a single image of saluting the flag before 1942, while in 1942–3 alone, 18 shots of pledging allegiance to the flag were taken (Margolis, 2005: 111).¹³

Theoretical coding offers another potential benefit: the ability to identify and recode for categories that were noted as absent, or null. Margolis repeated analysis of the collection, adding the codes ‘Black schools’ and ‘White schools’. He discovered that these categories were mutually exclusive within the collection. Additional research of photographs from other sources from the 1930s and 1940s found a number of Black and White children in the same class; however, such images were not found in the FSA–OWI collection.¹⁴

While grounded theory avoids some issues related to the conclusion that postpositivist content analysis is un- or under-theorized, this approach cannot solve problems related to adequacy of the research sample in representing overall population, nor does it address Bell’s question: Does the analysis yield statements that are meaningful to those who habitually ‘read’ or ‘use’ the images (Bell, 2001: 25)? Both forms of content analysis remain at the epistemological level of structuralist semiotics; the investigators define the categories as if these ‘resources’ were available to everyone (Jewitt and Omori, 2001).

INTENTIONALLY CREATED PHOTOGRAPHIC SYMBOLS

In *Camera Lucida*, Barthes coined the term ‘punctum’ to characterize the personal/emotional effect some photographs have on the viewer (Barthes, 1981: 22–26). Many photographers seek to create images that function at this level, and such images virtually cry out for semiotic/symbolic examination.¹⁵ As Rowe noted previously, above and beyond the ‘truth’ of the image there is a ‘sultry interaction’ between the photograph of Kaloma and viewers. The ‘risqué’ symbolism is an integral component of the image and cannot simply be ignored. Similarly, the *cabinet card* (Figure 18.2) is a complex image with carefully constructed symbolic elements on many levels. The tableau is carefully created and posed in a photographer’s studio to show ‘Professor Lutz’ being teased by his students.¹⁶ Analysis can begin with an inventory of iconic qualities. The professor is male; all the future teachers are women. The image blatantly parodies the ‘normal school’ class for future teachers.

Each woman poses, or was posed, to represent specific types of resistant student behavior. Two appear to engage, and potentially distract, the instructor while the rest of the class acts out a range of misbehaviors.



Figure 18.2 An original cabinet card group photograph, c. late 1890s or early 1900s, by a portrait photographer at Blodgett's Studio in Hicksville, Ohio. Collection of Eric Margolis

None of the other students attend to the lesson. Two pass a note; one pokes her classmate with a pencil, while another feigns sleep. The woman on the right appears to be tickling the student with her hands raised. While the professor concentrates on his lesson with the two students, another reaches to take the pencil from behind his ear.

Other meanings about the image and its intent can be deduced. The body is of course the site of desire, as are classrooms full of bodies. This image can be seen to speak to intentionally or desublimated sexuality. Despite a death grip on his pointer, the male body of Professor Lutz (or Lust?) struggles to maintain rigidity and decorum while surrounded by teasing young women. Underlying sexual tensions are revealed in images of school classrooms composed of all female students with a male professor. The arch gaze of the spectators contributes to the power,

sexuality, and repressed desire that saturate this image. Sex, of course, is an often unspoken text of schooling – and photography. Semiotic/iconographical approaches, though, cannot ultimately tell us the meaning the image had to its subjects and participants. All the women signed the back of the card, so perhaps it was made as an end of term gift. Alternately, the image could be a play or tableau, or even a photo to be used as a lesson about teaching. On the other hand, it is hard to miss Barthes' 'punctum' as it was constructed by both photographer and subjects.

CONCLUDING REMARKS

The role of historic photographs in research, and their use by historians, sociologists, ethnographers, geographers, and others is

still being defined. When Margolis began studying coal miners in the mid-1970s historical societies and libraries gave essentially unrestricted access to the copying and use of their photographs. Rowe used to peruse boxes of unaccessioned material while curating exhibits and researching early photographers of the American Southwest.¹⁷ Discoveries of new materials and relationships between images didn't depend on cataloging and 'finding aids' alone; luck and proximity were valuable collaborators. The rules of discovery have changed, though, as archives have begun to realize the value of their collections and the fragility of photographic materials and have emphasized preservation over convenience. As we noted above, the digitization of vast collections and their availability on the Internet has made images available as never before. 'Accidents of discovery' that used to only come from scanning Hollinger boxes now also come online. Increasing access to enormous online public collections like the California Digital Library and 'American Memory', which incorporated hundreds of smaller collections, or commercial archives like Alinari, Corbis, and Getty continue to grow. Online sharing of images through Facebook and FLICKR and other sites permits individuals, and increasingly museums, to post images, creating huge visual resources with research potential. These formal and informal resources and online access appear to approach Oliver Wendell Holmes' dream, in 1859, of an 'Imperial, National, or City Stereographic Library' where people could visit to see 'any object, natural or artificial' (Trachtenberg, 1989:16).

Historians and social scientists are just beginning to come to grips with the fact that photographs are much more than illustrations. Photographs are finally being recognized as valuable data sources that should be examined, using a variety of rigorous approaches and techniques, to explore the depth of information that they contain. Also, we agree with Barthes that photographs are

intricate texts that must be responded to with the emotions, as well as with analytical reason.

This chapter does not propose a single methodology for the studying and analyzing of historic photographs. Images are complex, and as the value of the information that they contain is recognized, the palette of approaches to analyze and explore them will also be expanded and refined. Our intent is to share approaches that have proven valuable, to catalyze discussion, and to exchange ideas for continuing the evolution of approaches to photographic research.

NOTES

1 McDermott and Raley (Chapter 20) begin from a similar epistemological presupposition in their chapter, 'Looking closely: toward a natural history of human ingenuity', tracing all visual social science to the rapid processing of symbolic interactions done by all people.

2 Holmes, Oliver Wendell (1859) 'The stereoscope and the stereograph', *Atlantic Monthly*, 3(20): 738–748.

3 <http://people.rit.edu/andpph/exhibit-3.html>

4 See Mark Klett's contribution (Chapter 6), 'Repeat photography in landscape research', for an excellent discussion of the digital technologies he uses to make rephotographs of historic images.

5 Some of the content of the present essay is excerpted, condensed, or elaborated from my previously published work in the study of historic photographs and especially the Kaloma image. For example, see: <http://vintagephoto.com/reference/kaloma/1-02JosieKaloma%20article.htm>

6 See: Rochlin, H. (1984) *Pioneer Jews – A New Life in the Far West*. Boston, MA: Houghton Mifflin.

7 Clamps and stands were used to hold subject's heads still during long exposures, such as in a studio. Improvements in the plates in use by the mid 1880s allowed for shorter exposures, and the clamps were eventually unnecessary.

8 Many of Frances Benjamin Johnston's photographs can be examined online. Several hundred of images of school classes can be found in her collection at the Library of Congress (keyword: 'school'). Available from: <http://lcweb2.loc.gov/pp/fbjquery.html>

9 Morris's postpositivism is most visible in his Popperian assertion of falsifiability (in the Postscript to his three-part series):

AQ4 Note 10:
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I spoke with Dennis Purcell recently and asked, 'Do you think these essays will put this issue – the issue of which came first – finally to rest.' Dennis replied, 'No. I don't think so. There could be some guy who reads your essays, writes in, and says: 'You know, there aren't just two photographs. I found another. There are actually three' (Morris, 2007b).

10 In an earlier *New York Times* blog, Morris also recognized that social knowledge was essential:

Without a caption, without a context, without some idea about what the picture is a picture of, I can't answer. I simply cannot talk about the photograph as being true or false independently of beliefs about the picture. A caption less photograph, stripped of all context, is virtually meaningless. I need to know more (Morris, 2007a).

(In this he follows Gombrich (1961), who argued back in the 1960s that only captions or labels [as statements or propositions] can be true or false, not pictures.) But unless one is discussing formal logical propositions, this conclusion seems to defy common sense since if I look at a painting, say Jackson Pollock's 'Number 5', I don't need a caption to tell me the meaning of what I am seeing, I just make it up. As John Berger wrote, 'In every act of looking there is an expectation of meaning' (Berger and Mohr, 1982: 117). Morris is right in that 'truth' is not a quality of photographs, but as Berger makes clear, meaning is. In the case of vernacular photographs torn from their context, we also create meaning in viewing them, but, as I will argue, we make the meanings using socially established and learned clues.

11 See Winfried Nöth's contribution (Chapter 16), 'Visual semiotics', for a detailed discussion.

12 Marion Müller's contribution (Chapter 15) in this volume provides an excellent introduction to a long German literature on iconography and iconology, which has been little noticed outside Germany. Social semiotics/iconology lends itself to use of techniques, like audience studies, in communication and photo-elicitation research. These techniques are also addressed in Francesco Lapenta's contribution (Chapter 11) in this volume.

13 It might be possible to discover in the FSA–OWI written archives whether the decision to make 'patriotic' photographs was made by Roy Stryker who directed the project, or by individual photographers. The images and their sparse captions do not provide that information.

14 Margolis speculated that integrated classrooms would have angered the Southern 'Dixiecrats' who were an important part of the Roosevelt administration. Testing this hypothesis, as with the 'patriotic' images, however, would require analysis of many additional sources beyond the sample collection assembled by Margolis for his research.

15 In an earlier article, Margolis and Rowe conducted a detailed hermeneutic analysis of a photograph from the Phoenix Indian School with the title 'Good Night' (see Margolis and Rowe, 2002).

16 This is an original cabinet card group photograph, c. late 1890s or early 1900s, by a portrait photographer at Blodgett's Studio in Hicksville, Ohio.

17 Archives frequently went unguarded. Researchers brought briefcases gear including cameras, lights, and copy stands and were left alone. On a more positive note, while reviewing a collection for an exhibition, Rowe was able to identify and reassemble a missing album (Number 2 in a three-album series documenting construction of the Phoenix, Prescott and Santa Fe railroad, c. 1891 by J. C. Burge), by identifying mount and captions information that appeared on photographs that had been disbound and distributed throughout the collection by individual image topic.

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