

# PHOTOGRAPHIC INQUIRY AND EDUCATIONAL TECHNOLOGIES: GENERATING MEANINGFUL NARRATIVES

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## ABSTRACT

*This article examines the possibilities of photography as a tool for Qualitative Research data collection, data analysis, and display. The authors argue that the new vanguard of Educational Technologies (ETs) further illuminates the analytical possibilities of photographic data and ETs can serve as an engaging way to interact with meaning-making related to the increasingly more visual socio-cultural context of qualitative inquiry. ETs related to creating and displaying photographs combined with engaging multimodal pedagogies can produce endless possibilities for arranging data and generating meaningful narratives.*

*Keywords: Photographic Inquiry, Visual Qualitative Research, Educational Technologies, Creative Qualitative Research.*

## INTRODUCTION

While the authors have, in earlier articles, discussed Educational Technologies (Ets) (Mulvihill & Swaminathan, 2012b) and creative qualitative inquiry approaches (Mulvihill & Swaminathan, 2012a; Mulvihill & Swaminathan, 2013), the particular focus of this article drills more deeply into one exemplar, namely the uses of photography, aided by educational technologies to position the visual within the inquiry process. In the social sciences, visual methods encompass photography, video, and graphic representations. In this article, the authors focus on photography as both a tool for data gathering in research as well as a source of data for analysis. In addition, the authors discuss pedagogical uses of photography.

### Photography and Visual Images in Everyday Life

Keith Kenney (2009) argues that the use of the visual medium such as photographs, videos or 'mashups' for communication is on the rise in every area of life. No less powerful or complex than linguistic systems; visual communication refers to 'looking' or 'framing' and not merely 'seeing.' Maria Sturken and Lisa Cartwright (2001) assert that seeing is arbitrary in the sense that we see all the time. Looking, in contrast, is directed. Looking (or visibility) is the act of making sense of what we notice in the world (Rose, 2006).

The camera, owned in the beginning by a select cultural and artistic group, developed into a tool owned by the masses moving photography from a science and art or technology into that of a hobby or even a habit for everyday communication. The ease of using smart phones or iPads as cameras, image storage in clouds or dropbox, as well as one or two taps to transfer onto Facebook, Twitter, Tumblr, Pinterest, and other public boards or spaces matched with the capability to instantly adjust all dimensions, colors, shapes and more by cropping, editing, or merging images make photography an appealing tool for generating narratives.

### Photography and Qualitative Research

Photographs have, almost since the beginning of photography, been used as a way to showcase descriptive data in social science research. One of the earliest examples was John Thomson who portrayed the life of London's poor population (Thomson & Smith, 1877). In the United States, Jacob Riis also used photographs as a way to document "How the other half lives" in New York City (Riis, 1890) and opened the eyes of the public to the dilapidated interiors of schools in urban areas. Lewis Hine's photo documentaries of child labor were instrumental in creating the first child labor laws (Stott, 1973).

The use of photography in qualitative research (see for

example, Becker, 1986; Ball and Smith, 1992; Harper, 1994) has not been without controversy. Some scholars (Tagg, 1988) claim that photography does not allow the researcher to 'objectively' know anything while other scholars maintain that it allows researchers to understand and study aspects of life in ways that cannot be understood otherwise. The turn towards multimodal data in qualitative research (see for example, Dicks, Soyinka and Coffey, 2006) has brought back photography and visual images to the center of new approaches in qualitative research.

Schwartz (1989) clarified that the gathering of photographic data only sets the stage for the central task of interpretation and reminds scholars that the "... tendency to treat photographs as objective evidence ignores the convention-bound processes of both image making and interpretation. In order to benefit social research, the use of photographic methods must be grounded in the interactive context in which photographs acquire meaning." (Schwartz, p. 120). Furthermore, Byers (1966) reminds us "the photograph is not a 'message' in the usual sense. It is, instead, the raw material, for an infinite number of messages which each viewer can construct for himself"(p.31). In this sense, photographs can be interpreted by the viewer in a number of ways. For example, one viewer may consider a photograph to represent the confirmation of a fact or a faithful reproduction of a place; while another may think of the photograph as a commemoration of an event. Still others may be moved to an emotional response by the photograph even if it is not related to them directly. Edward T. Hall (1966) has suggested that such responses occur because a "photograph conveys little new information but, instead, triggers meaning that is already in the viewer" (Byers, 1966, pp. 31). Barthes (1981) takes the view that that photographs can either contain information or content or they can provoke an emotional reaction. According to Barthes (1981) while two people with access to similar cultural codes can possibly acquire the same information from a photograph; the emotional reaction to a photograph is dependent on the perceptions, and/or the emotional memories of the viewer. It is clear that photographs, like other forms of qualitative data are not neutral and that the interpretive processes involved with working with

photographs are complex requiring researchers to be continually reflective (Denzin & Lincoln, 2008). Qualitative researchers therefore need to ask whether, when and how photographs are useful in research and when it is or is not appropriate to gather visual or photographic data. Photographs in qualitative research may be used as data or as a means for eliciting data (Mulvihill, 2013).

### **The Scope of Photography in Qualitative Research**

In qualitative research, visual methods or photography can be used as a means for stimulating conversations or interviews or they can be used as data for analysis. Photographs allow for a foundation from which conversational interviews can start. They also allow for a less hierarchical relationship between the researcher and participant. Photo novella or picture stories are some terms used when referring to photography in qualitative research. Hurworth (2003) includes terms such as photo-interviewing, photo-elicitation and reflexive photography as well as photovoice to refer to photographs or images that accompany text or voice. The researcher - participant interaction is essential to the process of photovoice or photo novella. Hurworth (2003) points out that a "key component of the photo novella process is dialogue where participants show their photographs and talk about their significance and meaning. This grounding of the images in real experience is the key and makes the photographs infinitely more valuable than a set of images created by outsiders. This process also invites the participants to take the lead in the inquiry." (Burke & Evans, 2011). Participatory methods in qualitative research often rely on participants' decision making regarding data production even if the initial questions are researcher initiated.

### **Participatory Research Methods in Qualitative Research**

Participatory Action Research (PAR) Methods are advocated as important for "the advancement of science and for the improvement of human welfare" (Whyte, 1991, p.8). PAR involves the participation of traditional research 'subjects' as researchers in the process of inquiry. Participation may involve collaboration in designing the research, collecting data and in some cases, working together on the analysis. In qualitative research methods,

PAR is considered a democratizing practice of social inquiry. Photography is one of the most commonly used ways in which participants have gathered data in participatory action research. Such research projects are usually conducted with people who do not typically have a voice in society and photographs are used to provide a visual voice. For example, Caroline Wang's (1999) photovoice research was an example of an important methodological development that capitalized on the ease of new ETs related to photography. Her research represented a type of grassroots policy making where people with cameras expressed their viewpoint on issues by taking photographs. In similar uses of photovoice research, school children usually having little say in school policy making, used photographs to identify issues of safety and security (Mitchell, 2009).

#### **Photovoice as a Tool for Creative Qualitative Inquiry**

Perhaps one of the most important developments in ETs is the appearance of the prosumer (Bruns, 2008); consumers who also produce what they consume. Qualitative research, traditionally relies on two major methods of data collection: observations and interviews. With the advent of ETs, we are continuing to expand the ways we can gather, analyze and display qualitative data for research. Photovoice (Wang, 1999; Wang, 2001) is one of the areas seeing a resurgence as an interesting way to use still pictures as data. When the photos are produced by the participants in the study they become a tool by which qualitative researchers can facilitate the data gathering process to reflect the voices of participants in an authentic way. Participants are usually given a camera and asked to record moments, spaces or pictures that are important to them within a given context. For example, a student in one of the author's courses asked his sixth grade students to record spaces in school that they felt strong emotions towards. He then had them label the photographs and finally interviewed them on their interpretations of the photographs and what meaning they made of them. This is an example of one way to do photovoice. Another way is to let the participants self tape themselves and what they consider valuable and voice their analyses and interpretations of their surroundings thereby making sense

of the world around them. Since photovoice research is often a collaborative process, it is important to clarify what photographs can be used for the research project, in what ways and who will make the final decision regarding such use. With regard to such photovoice projects, we argue that it is important for the researcher to reflect on the presence and absence of photographic data, and the result of the choices made on the project. In addition to photovoice, researchers may use photographs for any number of photo-elicitation purposes.

#### **Photo-Elicitation as a Method or Tool for Creative Qualitative Inquiry**

Photo-elicitation, a visual narrative method (Rose, 2006) was first described by John Collier (1957) as a variation on open ended interviewing. Open ended interview methods involve exchanges that are initiated and guided by the interviewer but grant the interviewee space for interpretations. In photo-elicitation, this process is stimulated by photographs. Photographs may be taken by the researcher in the process of research who might be accompanied by key participants who might suggest what to photograph (Pink, 2006) or they may be images that the researcher considers pertinent to the world of participants (Harper & Faccioli, 2000). They may also be photographs that the interviewees themselves have taken or selected for the specific aims of the interview in an approach that is referred to as auto-driven photo-elicitation or 'reflexive photography' (Clark, 1999).

#### **Reflexive Photography as a Tool for Visual/Creative Qualitative Inquiry**

Reflexive photography, (Harper, 1988) a form of photo-elicitation, uses photographs to enhance participants' engagement in the interview. However, rather than being presented with photographs taken by the researchers, similar to photovoice research, the participants in reflexive photography are encouraged to elaborate and narrate the meaning of the photographs that they produce themselves. This is also known as 'autodriving' in market research where the participant responds to research questions that are driven by stimuli drawn from the photographs themselves. Interviews based on photographs taken, selected and interpreted by the

participants allow respondents to have increased voice and authority in interpreting their own lives, social contexts and in addition, help them to make the familiar unfamiliar since photographs allow participants to view their lives from a different vantage point. Harrington and Schibik (2003), for example, conducted a research project with first year college students that used reflexive photography. First year college students were asked to take photographs of their experiences of college in the first six weeks. They were then interviewed individually through photo-elicitation techniques and then in focus groups. The researchers found specific and concrete examples of first year experiences of college not found by general survey methods. Reflexive photography by the researcher can lead to the production of photo Journals.

#### **Photo Journals as a Reflective Process in Visual Qualitative Inquiry**

Photo journals can be used as a way to reflect on the process of qualitative research or as a way to document the journey of the research process. They can supplement field diaries, serve as chronological documentation, a trigger for memories of particular days in the research process that are not always written down. They can help with reflection on presence and absence in photographic images. Recently, the authors have begun a project collecting photographs of "workspaces" and of "cultural events." In the process, we have discovered that photo journals documenting how our thinking and analyses progress in the project helps us to reflect further and understand the theories and lenses we are using to frame our research. Photo journals are continuing to evolve with the advancements of ETs. For example, Onenote (<http://office.microsoft.com/en-us/onenote/>), Capture Notes App (<http://capturenotes.com/>), and Evernote App (<http://evernote.com/>) are useful to tools to help create visual, audio and text Journals.

#### **Pedagogical Prompts for Critical Reflection in Visual/Creative Qualitative Inquiry**

Although we are making a case for visual images to be part of Creative Qualitative Inquiry, we are aware that it is not an easy task. Elizabeth Chaplain (2006) points out that images are "polysemic, their meanings float." However, it is our

contention that we need to embrace the challenge to bring critical pedagogy and critical thinking together with creative spaces for inquiry. As Christina Pedersen (2008) argues, since images can be variously interpreted, they operate as a democratic space. However, for a democratic space to function effectively, it also needs to be a critically reflective space. In other words, it is essential that researchers are self-aware. In order to facilitate a critical reflection regarding research decisions, below is a series of pedagogical prompts to engage visual qualitative researchers.

- What will photographs add to the research data?
- What types of photographs should be considered?
- Should the photographs be researcher driven or participant driven?
- Who should choose what photographs are relevant for the research?

In examining the photographs, the following prompts are useful for reflection

- Who took the photograph?
- Did the participant take the photograph or was the participant the subject of the photograph?
- Do these photographs come under the category of 'found' photographs or 'research process' photographs?
- Do the photographs belong to a particular genre?
- How can the photographs be categorized: for example-thematically, by participant, genre such as family photographs or events or chronologically.

While the photograph is an important part of the data collection process the original photographs or copies (digital or print versions) may or may not be handed over to the researcher. In such cases, it is important for the researcher to consider the following

- How and when during the research or interview process were photographs shared with the researcher?
- Why was the photograph kept?

Notes on the exchanges and the context of the stories shared become part of the analysis the researcher must engage in and is as important as the photograph itself. In

analyzing and learning about the use of photographs in qualitative research, it is important to keep in mind that not all photographs can be treated as similar types of data. How and why the data (i.e., photographs) are created makes a difference in the various meanings that can be derived.

### Generating Meaningful Narratives Collaboratively with Images

ETs have made possible a wider range of ways to facilitate multimodal data display that include photographs. A simple powerpoint can incorporate photographs and text in addition to voice as a way to create a narrative. Prezi a presentation software (Somlai-Fischer, Halacsy, & Arvai, 2009), found at the website, <http://prezi.com> is another educational technology tool that can be used for multimodal data display and is especially suited to displaying results of photovoice research. Students in a course on Gender and Education, shared the results of research on Reading Gender in different popular culture genres through a Prezi that incorporated photographs and voices of youth who discussed stereotypical gender portrayals and gender role/rule breaking in literature, fairy tales, picture books and teen zines. These voices along with those of the researchers and parents of the young children allowed a fuller picture to emerge than would have been possible with a typical paper or research report.

Another ET that can be used to teach or practice visual qualitative research is the website Pinterest (<http://about.pinterest.com/basics/>) which serves as a large shareable bulletin board. Such bulletin boards are especially useful for collaborative research involving photographs as well as a way to arrange data by grouping or categorizing photographs into several genres. A presentation initiative devised in Tokyo in 2003 that combines photographs or visual imagery with speech is the 'Pechakucha' presentation mode (<http://www.pechakucha.org/>). It combines twenty slides shown for twenty seconds each and the structure encourages concise presentations. It frames narratives in particular ways as it contains them by enforced limits on size, time and dimension. The recent advent of TED Talks (<http://www.ted.com>) is another model for forms of data display, taking advantage of the well-lit,

live audience taping, offers a visual staging of first-person narratives delivered by speakers who often mix sound, large screen visuals, and strong vocal presence of the speaker.

### Conclusion: Toward a Pedagogy of the Visual

Wim Wenders argues that "the most political decision you make is where you direct peoples' eyes" (Grosvenor 2007, p. 622). In a world that is increasingly using and sharing images as a means of communication, it is imperative that we begin to examine how photographs combined with texts operate as persuasive discourses. We argue that it is important for qualitative researchers to examine and reflect on visual narratives and visual data to better understand how pictorial truth-claims operate in diverse contexts. Since images are not neutral and are influenced by the broader socio-cultural contexts in which they appear, it is important as Schwartz (1989) points out, for researchers who use photographs as data or data generators. To have some notion of how viewers treat and understand photographic images, whether those viewers are informants or researchers (p.119). We consider this one of the most compelling reasons to adopt a pedagogy of the visual where we equip students to understand and critically analyze a rich, multi-modal world. By asking students to create photo narratives, we encourage them in the practice of critical inquiry while providing space for creativity.

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