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WORTH A THOUSAND WORDS: PHOTOGRAPHS AS A NOVEL METHODOLOGICAL TOOL IN STRATEGIC MANAGEMENT

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ABSTRACT

Purpose – *The purpose of this chapter is to review and categorize how photographs have been used in management research and to provide strategic management researchers with suggestions about how to use photographs to enhance their qualitative research methodologies.*

Methodology/approach – *We develop a typology of photographic uses in management research by reviewing several scholarly journals.*

Findings – *We identify two dimensions that differentiate how photographs have been used in management journals. First, photographs can be used to illustrate scenes from a field setting or they can be interpreted as data. Second, the role of field participants can be one of active collaboration or no involvement in the photographic aspect of the qualitative research project. For instance, field subjects can collaborate in research by aiding in the photo-documentation process and/or aiding in the photo-elicitation process. Choosing which of our four identified photographic approaches represents a*

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critical decision for qualitative researchers interested in incorporating photographs in their research.

Practical implications – *We suggest ideas for strategic management researchers related to use of photographs in their research. Also, we describe how specific strategic management research projects can be approached with photography, which we argue can lead to enhanced theoretical contributions.*

Originality/value of paper – *To date, little has been written in the strategic management field about the use of photography. This chapter provides a succinct review of photographic methods in management research. Moreover, this chapter provides suggestions for how strategy researchers, study participants, and interested readers of management research could benefit from incorporating photographs into research accounts.*

Keywords: general review; photographs; photo-elicitation; qualitative methods

The strategic management discipline is relatively young as a field of academic study (Nag, Hambrick, & Chen, 2007; Pfeffer, 1993), especially as compared to other social sciences such as economics, anthropology, psychology, and sociology. The strategy field has incorporated theories and borrowed research methodologies from disciplines in the hard and social sciences (McKiernan, 1996), but traditionally, research in strategic management has been dominated by quantitative approaches (Ketchen, Boyd, & Bergh, 2008). More recently, however, a growing body of qualitative studies (Bartunek, Rynes, & Ireland, 2006) and growing interest in content analysis indicate that strategy researchers are becoming interested in other research methods (Short, Broberg, Cogliser, & Brigham, 2010). Interestingly, despite the cross-fertilization of methodological approaches, an inclusion of visuals – specifically photographs in qualitative research – has had minimal use. The paucity of research using visual imagery is surprising because other disciplines have leveraged photographs for some time. For example, the sociology discipline has at least one peer-reviewed academic journal – *Visual Studies* – in which photographs play a prominent role. Likewise, the anthropology discipline has a long tradition of using photographs in field studies (Bateson & Mead, 1942; Stasz, 1979). To wit, we are surprised that photographs have yet to be incorporated as a salient dimension of qualitative research in strategic management.

In this chapter, we begin by reviewing key features of the use of photographs from sociology and anthropology. Next, we identify recent studies in management and organization journals that have utilized photographs – a process we compare to finding needles in a haystack. Based on this literature review, we identify two discriminating dimensions in the way that photographs have been used. We then develop four approaches for using photographs in strategic management research. We suggest ways of introducing photographic methods in management research and argue that incorporating this methodological tool offers researchers an array of benefits. Finally, we provide examples of photographic use from one of our research projects.

PHOTOGRAPHIC ELEMENTS IN SOCIOLOGY AND ANTHROPOLOGY RESEARCH

In the sociological and anthropological disciplines, photographic research methods involve two processes – photo-documentation and photo-elicitation (Buchanan, 2001; Parker, 2009; Warren, 2002). *Photo-documentation* refers to the collection of photographs as a means of recording aspects of the research setting (Banks, 2007; Collier & Collier, 1986; Harper, 1988). This aspect of photographic research is not limited to any particular element of the research setting and can involve multiple aspects of the research setting including individuals, physical setting, and changes in the physical setting over time.

Within the photo-documentation process, we have identified two general means of collecting photographs: *primary* and *secondary* collection. Primary collection of photographs involves either the researcher(s) or study participants taking photographs at the time of the study in the research setting. Secondary collection involves scanning archival resources (e.g., organizational documents, popular press accounts, and historical documents) for photographs produced by individuals not associated with the research project. Each collection technique has associated costs and benefits that should be considered with regard to the research questions to be answered. For example, primary collection provides the researcher with considerable control over which photographic data are obtained because the researcher can direct what is photographed. In addition, photographs are able to capture details that a fatigued field researcher may miss, thus facilitating subsequent analysis. As a final example, researchers engaged in primary collection have insight into why a particular photograph was framed as it was or what it was

intended to capture, which is not always the case when relying on secondary sources (Parker, 2009). However, data collection of this type can involve considerable expense, such as the financial cost of cameras, developing the photographs, and software needed for viewing and editing the photographs. These economic costs have rapidly decreased but the method still requires a substantial investment of the researcher's time to take photos and organize digital photographic files. Furthermore, special permissions may be required for using photo-documentation and particular care must be taken when collecting photographs of human subjects.

Secondary collection avoids some of the expense associated with personally taking photographs, and this approach can facilitate longitudinal study if photographs are available. Researchers can scan press releases, annual reports, and prior research for photographs related to the themes of their study. The downside of secondary collection is that a researcher is dependent on the photographs that are available; the researcher loses control over what data are collected and how the data are generated. As well, the researcher may need to negotiate use or reproduction rights with the photograph's owner. Finally, as mentioned above, any researcher using secondary sources has less insight into what, how, and why particular elements were photographed. As some photographs can be highly staged – or manipulated – care must be taken to ensure the legitimacy of the photographic content (Guthey & Jackson, 2005).

The second process used by anthropologists and sociologists related to photography in research is *photo-elicitation* (Collier & Collier, 1986). This involves using photographs for their representative value as objects of interpretation (Banks, 2007; Buchanan, 2001; Harper, 1998; Wagner, 1979; Winston, 1998). Photo-elicitation is the process by which photographs are viewed by the researcher and/or study participant in order to prompt memories or interpretations including values, beliefs, and meanings (Parker, 2009). Hence, photo-elicitation is less interested in the physical elements captured in the photograph and more interested in how beliefs and intentions are manifested in the photograph and how the photographs can elicit meanings during subsequent discussions with research subjects, as well as why the photographers chose to take the picture.

Photo-elicitation can take many forms and involves both primary and secondary sources (see Parker, 2009 for a review). As with any research process, photo-elicitation has strengths and weaknesses. The obvious strength of this approach is that it can provoke discussion of research subjects' tacit knowledge. Another benefit is the information gathered during interviews in which photographs are the focal objects of discussion. This approach relieves

some stress on research participants by relocating the focus from the individual to the photograph (Warren, 2002). Warren (2002) also points out a significant limitation to this process in that "interviewing with images assumes either that the meaning is wholly contained within the image, with the respondent being required to extract it; or that the photograph is only a prompt, eliciting comment 'contained within' the respondent" (p. 239). She suggests that a more realistic understanding of photo-elicitation acknowledges that any meaning extracted is a "joint effort" of both the photograph's meaning and the participant's interpretation.

Given the rich elaboration of photographic use within the sociology and anthropology traditions and the strategic management field's close connections to these disciplines, we expected to find some use of photographs in strategic management research, but we were disappointed as we describe below.

PHOTOGRAPHS IN MANAGEMENT RESEARCH: FINDING NEEDLES IN A HAYSTACK

In order to identify the use of photography in management research, and because we were particularly interested in photographs used in empirical research on business organizations, we looked for articles that contained photographs in the research process description or in the published paper. We chose the period of 1990–2010 to parallel the growth of qualitative methods (Aguinis, Pierce, Bosco, & Muslin (2009)) and affordable digital photography. We began by searching for photographs (i.e., the truncated search term "photo*" in article text) in management journals that publish empirical research. We conducted broad searches on the term "photo*" in the text of an article and a journal name with "business," "manage*," "organiz*," "administrat*," "strateg*," "entrepren*," or "plan*." Using the EBSCO Business Source Premier database, we reviewed these search terms for our specified period in many management journals, including:

> *Academy of Management Journal, Administrative Science Quarterly, Strategic Management Journal, Organization Science, Journal of Management Studies, Organization Studies, British Journal of Management, Journal of Management, Journal of Management Inquiry, Journal of Management Studies, Journal of International Business Studies, Entrepreneurship Theory and Practice, Journal of Business Venturing, Journal of Small Business Management, Journal of Business Research, Management Science, Journal of Organizational Behavior, Organizational Dynamics, Long Range Planning, Business Strategy Journal, Scandinavian Journal of Management, Organization, Strategy Organization, and Qualitative Research in Organizations and Management.*

We also looked for photographs in the *Advances in Strategic Management* series by undertaking a page-by-page review of all 21 issues published since this series began.

We initially identified over 50 articles from this effort. We then removed articles that picked up on articles on the photographic industry as well as any articles that were simple photograph displays. For instance, the *Journal of Management Inquiry* published a series of photographs between 2001 and 2002 that were taken by management authors (e.g., Adler, 2001). Finally, we removed other articles that included stock photographs of advertising (Munir & Phillips, 2005) and articles in which no methods were identified (e.g., Rippin, 2006). Several academic friends who were aware of our project suggested other sources, such as book chapters, that we may have missed (Dougherty & Kunda, 1990; Molloy & Whittington, 2005).

What remained from our search was a handful of articles that described or contained photographs used in an empirical research project. Some of these articles focused specifically on the methodology of using photographs (i.e., Guthey & Jackson, 2005; Warren, 2008), which led us to original research in online organization journals (Warren, 2002). From these efforts, we identified articles that used photographs in the research or publication of empirical research. We refer to these articles as "needles in a haystack" because our final list contains only 10 articles: Barry and Rerup (2006), Buchanan (2001), Dougherty and Kunda (1990), Guthey and Jackson (2005), Molloy and Whittington (2005), Smith (2002), Sood and Pattinson (2006), Venkatraman and Nelson (2008), Warren (2002), and Widener (2007). In addition, we reviewed four individual studies that used photographs and were summarized in a book chapter (Felstead, Jewson, & Walters, 2004). We recognize that we may have missed some articles, but our goal was to find a representative group of articles to show the different uses of photographs in management and organizational research.

After a close reading of the articles we had collected, we began to identify dimensions that differentiated among our group of articles. Both authors came up with a list of discriminating features, many of which overlapped. We honed in on two ways in which the photographs were used – as illustration for the reader or as a component of the data collection used for analysis. We also identified the degree of collaboration with field participants – close or arms length, if at all. With these two dimensions – collaboration and use of photographs in research – we constructed a table in which we could "see" how photographs had been used. From this table, we identify how topics in strategic management might be studied or augmented using photographic approaches in empirical research.

TYPOLOGY OF PHOTOGRAPHIC USE IN MANAGEMENT RESEARCH

Our identification of the two discriminating dimensions allowed us to categorize all of the articles we found. From this categorization, we examined common elements across the research methodologies of the studies located within a particular cell. Below we describe the facets of our typology in more detail and identify four approaches to using photographs in management research. The description of these combinations is followed by descriptions of the empirical studies from which they were derived.

Illustration vs. Interpretation

Our literature review suggests that organizational researchers who employ photographs as part of their research methodology leverage the photographs in one of two ways. First, some researchers use photographs as a means of observation through which they hope to capture some aspect of organizational reality. This type of photo-documentation typically involves taking pictures of elements in the organizational environment with the intent to use pictures to illustrate organizational facets per se. In this way, photographs can be used to depict internal organizational elements such as work space configurations and environmental conditions as well as organizational functions such as tracking product movements along an assembly line or document flows related to administrative activities. The essential element in this type of photo-documentation is the researcher's intent to capture some characteristic of the organization in as objective a fashion as possible. These photographs are then leveraged to provide illustrations that can augment narrative accounts or used to bolster research materials (e.g., field notes).

The second way photographs are leveraged in organizational research is as a vehicle for capturing meaning. This type of photo-documentation is less concerned about the nominal elements of the photograph itself (e.g., the juxtaposition of desks in an office space) and more concerned with the interpretations of the elements of a photograph that lead to insights about the organizational meanings attributed to the elements. In this way, photographs provide insights into organizational processes such as identity formation, sensemaking, and decision-making. This use of photographs can assess organizational phenomena such as climate, culture, and organizational identity. For this type of photo-documentation, the intent of the

researcher is to use the photographs to prompt the researcher and/or research subjects to elaborate on organizational interpretations and beliefs.

No Collaboration vs. Collaboration

Researchers differ in how they approach collaboration with study participants. Some researchers do not involve research participants (i.e., organizational members) at all. This type of research typically takes the form of archival analysis wherein the researcher can pull photographs from various media (e.g., popular press accounts and annual reports) and analyze them without any direct contact with organizational members. Alternatively, the researcher can also choose to take photographs without soliciting input from participants, thus negating the need for collaboration. In fact, in some instances, the researcher who plays the role of the photographer can provide a buffer between themselves and the study participants by emphasizing their role as an outside observer (e.g., Widener, 2007). Finally, for some researchers, collaboration is not an issue because they choose to leverage the use of photographs as a reflexive activity of their own work (e.g., Smith, 2002). In this situation, the researchers can use photographs to augment their field notes, to prompt their recall, or to provide illustration for the research project.

When researchers choose to collaborate with participants, they have several options. Some research designs involve participants taking photographs (i.e., photo-documentation) as a means of demonstrating what the participants find particularly relevant in the research situation. This is generally accomplished in two ways. First, the researcher can allow the participants to take photographs of anything as long as it relates to the research project in some way. This allows the participant to dictate the content of the photographs and provides a means through which the researcher can identify important organizational aspects without overtly influencing the participant. Moreover, allowing participants free reign to photograph whatever they choose also taps into the photographer's intentions, motives, beliefs, etc., in a way that interviewing alone cannot (Warren, 2002).

An alternative means of collaboration involves providing guidelines for the participants to follow. The degree to which the researcher chooses to provide criteria for what should be photographed can focus the data collection and help guide the participant toward organizational elements of interest. In this

situation, the participant still has some flexibility in regard to which specific elements they photograph and how they photograph them, but the researcher exerts a greater degree of control. The context of organizational life is vast; without direction, participants could provide a range of photographic material that would be more or less related to the research questions of interest.

Although we discuss these approaches as two different options, they are probably best conceived as two ends of a continuum. On one end of the spectrum, the participant would have almost complete autonomy in what content they capture and how they choose to capture it, while on the other end the researcher could provide an extensive set of instructions that limit the content to be captured. Moving from one extreme to the other involves one party or the other losing a measure of control. Decisions about the amount of control that either party enjoys should be based on the research questions to be addressed.

The other aspect of collaboration between researcher and participant involves methods of photo-elicitation (Buchanan, 2001; Parker, 2009). As mentioned, photo-elicitation is the process through which researchers and participants use photographs to elicit meaning about the elements represented in the photograph. As with photo-documentation, several avenues are available as far as research design is concerned. First, the researcher can choose to analyze photographs without the help of study participants or organizational members. This can be accomplished by examining archival photographs (e.g., annual reports and popular press) or by leveraging the aforementioned photo-documentation methods. Once the photographs are obtained, the researcher can analyze the photographs at his or her discretion.

Perhaps a more popular approach, however, involves photo-elicitation, wherein the researcher presents photographs to study participants and then engages in a dialogue aimed at discerning the deeper meanings of the content. This form of photo-elicitation requires that photographs are introduced during an interview with the intent of spurring discussion with the study participant. The photographs can be photos taken by the study participant, photos taken by the researcher, or archival photos. This information can be valuable in its own right to the extent that it sheds light on the attitudes, beliefs, and interpretations of the participant. Furthermore, this process can be valuable in that it directs the interview in novel directions as the researcher and participant mutually discover surprising insights during their focus on the photograph. In other words, photo-elicitation techniques can add both content and process to the interview experience.

Typology

In Table 1, we present a typology that incorporates researcher intentions (i.e., photographs as illustration vs. photographs as objects of interpretation) and collaboration with study participants (i.e., with help vs. without help). Below we describe the various combinations of researcher use of photographs and collaboration and provide examples of empirical work that employ photographic research methods in the specified manner.

The studies in Cell 1 represent situations in which photographs are leveraged for their meaning (i.e., as objects of interpretation) and involve collaboration with study participants. Researchers in this mode are not concerned with capturing objective elements in the organizational environment; instead, they are looking for the meaning inherent in the photograph. Collaboration can take many forms in the studies in this cell in that the photo-documentation, and interpretation duties can be the responsibility of the researcher or the participants. Cell 2 includes studies in which the researcher intends to capture some element of the research setting at face value. Researchers in this mode are interested in photographs for their illustrative or recording value. Collaboration in this cell, as in Cell 1, can take many forms depending on how study participants are leveraged in the photo-documentation process. The studies in Cell 3 represent situations in which photographs are leveraged for their interpretive value, but the researchers did not collaborate with study participants. Researchers pursuing this strategy will typically be interested in symbolic value and meaning or change over time

Table 1. Typology of Photographic Use and Participant Collaboration.

	Interpretation of Photos	Photos as Illustrations
Collaboration with study participants	**Cell 1** Venkatraman and Nelson (2008); Warren (2002); Felstead et al. (2004– Studies 3 and 4)	**Cell 2** Buchanan (2001)
No collaboration	**Cell 3** Dougherty and Kunda (1990); Guthey and Jackson (2005); Molloy and Whittington (2005); Felstead et al. (2004– Study 1)	**Cell 4** Barry and Rerup (2006); Smith (2002); Sood and Pattinson (2006); Widener (2007); Felstead et al. (2004 – Study 2)

and will choose to elicit that meaning without consulting study participants. This methodology often takes the form of archival analysis using popular press accounts and publicly available organizational documents. Finally, Cell 4 includes studies that demonstrate photographs as leveraged for their illustrative value without collaboration with study participants. Generally, the researcher might be interested in using photographs to depict organizational reality to augment field notes, jog researcher memory of the field setting, track physical changes over time, or provide illustration for their audience.

Empirical Examples

As mentioned, Cell 1 of our typology describes a research methodology in which photographs are used to elicit meaning, and researchers collaborate with study participants (i.e., organizational members). Our review of the literature provided two examples for this type of photographic research. First, Warren (2002) advocates for the use of photographic techniques in organizational research and provides an example of the methodology in her examination of organizational aesthetics. As part of her ethnographic exploration of a website design department of a global technology firm, she employs photographs as a tool that organizational members can use to describe to her how it feels to work in their firm. Warren argues that the aesthetic aspects of an organization are difficult to capture and that a methodology beyond typical interviews is necessary to explore this aspect of organizational life. She describes how, at the outset of the study, many participants were eager to show her different elements and aspects of the organization. Instead of imposing her own views and biases by collecting photographs of these things herself, she realized that an alternative would be to provide the participants with a camera and capture their interpretations of what, how, and why they chose to photograph the different elements. To that end, she solicited the help of organizational members by providing them with a digital camera and asking them to take photographs representative of their work environment. Warren and the study participants then discussed these photographs.

These discussions led to several insights concerning the participants' aesthetic experience within the organization. Moreover, with respect to the photographic methodology employed, these discussions led to insights about the integration of photographs and interviews. Warren notes several unintentional effects of incorporating photography. First, she states that not only did she enjoy employing this methodology but the participants also

ned to enjoy taking the photographs, which facilitated unexpected interest
ne study. Second, she argues that the photographs add to the verbal data
providing affective content that would be difficult to verbalize. Finally,
rren (2002) argues that neither the verbal component nor the photographs
inate the study; rather, their "symbiotic" effect provides the ultimate
e because neither "words nor the images would be adequate alone"
238). The photographic aspect of Warren's work augments her contri-
on to aesthetic organizational research.

more recent example of collaborative photo-elicitation comes from
katraman and Nelson (2008), who examine how consumers create perso-
meaningful interactions with retailers. They argue that consumers
sform the facade retailers provide in their shops to influence consumer
avior. The authors scheduled two meetings with the study participants.
initial meeting was used to collect demographic information, explain the
y and the photographic portion of the study, and put study participants at
. They instructed the participants to take photographs that illustrated
experience in the store and assured them that all their photographs
ld be useful photographs in the study. The participants were given a
osable camera and told that they could take any number of photographs
wished (up to the 24 exposures on the disposable camera). The authors
ited permission for the participants to take photographs at a local
bucks store in Beijing.

ne second meeting was held within three days of the Starbucks visit and
lved interviews employing photo-elicitation methods. During the inter-
, the authors presented the photographs one at a time to study parti-
nts in the order in which the subjects took the photos. The researchers
d questions such as, "Describe this photograph to me" and "What do you
ere" so as to minimize biasing the participants' answers. The interviews
recorded and became the main source of data analyzed in this research.
n author examined the transcripts for meaningful elements (e.g., themes,
es, and interpretations). The authors then came together to discuss their
vidual findings and negotiate disagreements. Finally, two independent
es examined the final categorization scheme, which provided material
ement calculations.

ne authors argue that photo-elicitation methods were essential to their
y in that this procedure

> cits rich descriptions of the physical layout and emotional reactions to the [retail space]
> facilitating deep dives by the informants or helping them go below conscious, surface-
> vel observations to connect to deeper, submerged feelings, symbols, myths, and
> etaphors. (Venkatraman & Nelson, 2008, p. 1013)

As benefits, they cite the relatively cheap and efficient data collection process and the productive interview protocol. The authors also mention that although the procedure was successful, requiring participants to take pictures might have altered their experience somewhat in so far as individuals are not accustomed to systematically taking photographs during trips to a retail shop. However, in general, the authors argue that similar photographic methods have extraordinary potential for providing insight into business and organizational processes.

In Cell 2, our typology includes photographic approaches in which the author intends to capture some element of organizational or research setting reality. This can take many forms, such as photographs of physical change and organizational processes whether they are intended to bolster field notes or provide illustration. Furthermore, in this cell we see a researcher who engages in collaboration with study participants. Buchanan (2001) provides an example of leveraging photographs as an ancillary tool in a multi-method exploration of organizational processes. Buchanan suggests that incorporating photographs as one element in a multi-method research agenda provides a common context and mitigates some issues concerning variability in interpretation.

As an example of approaching organizational research with photographs, Buchanan (2001) examines a process reengineering project in a National Health Service hospital. He used photographs to document different aspects of the in-patient process in concert with archival document research, in-depth interviews, surveys, and on-site inspections. Specifically, he took photographs of each stage of the in-patient process. These photographs were then transformed into a slide show for hospital administrators and employees. Those individuals who attended the slide show presentations were asked to provide feedback about any accuracy or omissions in the process as well as suggestions for improving the process. This feedback was incorporated into written accounts and ultimately into the final report presented to the hospital committee in charge of implementing reengineering initiatives. Beyond providing additional information vital to mapping the in-patient procedure process, Buchanan argues that the use of photographs broadened staff awareness and assuaged uncertainty and suspicion, thus encouraging participation and supporting accuracy.

In Cell 3, we present examples of empirical research that employs photographs for their interpretive value. In these cases, however, the researchers do not enlist the aid of study participants. Rather, the researchers take their own photographs or use publicly available documents (e.g., annual reports and public press accounts) that contain photographs. Molloy and

Whittington (2005) provide an example of the first approach in their study of reorganization processes at eight firms. They utilize the ability of photographs to capture aspects of organizational reality so that they can "freeze moments" during a planning event related to a significant reorganization (Molloy & Whittington, 2005, p. 498). They found that photographs can be used to emphasize mundane elements of the organizational setting that might be overlooked and therefore difficult to recall and discuss. They also point out that photographs, in part, offset some of the cost associated with the deep immersion typically required of ethnographic studies. These cost savings are a result of the time savings from facilitating collecting, analyzing, and writing purely narrative accounts across multiple organizations.

For those researchers interested in using publicly available documents, the favored source of photographs is annual reports. Annual reports provide fertile ground for analysis in that they are available for a large number of organizations, are published yearly, and are subject to scrutiny by a large number of stakeholders (e.g., corporate shareholders, regulators, employees, and competitors). More importantly, beyond the financial and strategic information provided in these documents, it is widely held that these documents are the conduit by which organizational decision makers attempt to convey the personality or philosophy of the organization (Anderson & Imperia, 1992). To wit, organizational researchers have looked to the photographs embedded in annual reports as a means of documenting a range of organizational phenomena.

Dougherty and Kunda (1990) examine photographs from annual reports in order to study whether the theories of consumers that emerge in the photographs are the result of public relations style or unique cultural artifacts. Their results suggest unique theories of consumers among their sample organizations, as evidenced by consistent depictions of consumers in the photographs contained in their annual reports. In this case, the researchers provide evidence to suggest that the use of photographs in corporate annual reports not only demonstrate consistent and systematic patterns but also provide a means of differentiating between organizations by eliciting tacit organizational perspectives.

Another example of noncollaborative interpretation of photographs is provided by Guthey and Jackson (2005), who examine the nature of CEO portraits with respect to the "authenticity paradox" (p. 1057). The authenticity paradox arises from the staged nature of CEO portraits in that, although the portrait is intended to demonstrate some aspect of organizational identity, the artificial nature of the portrait makes the legitimacy of the claims suspect. The authors conclude that the staged nature of such

photographs does require scrutiny; however, they emphasize that the use of photography is an underappreciated tool for examining organizations. In addition, they argue that certain aspects of organizational research (e.g., corporate image, organizational identity, and leadership) cannot afford to continue to overlook the importance of visual media in organizational communications.

Finally, in Cell 4, we see an approach through which researchers use photographs intended to capture some aspect of reality, and the photographs are obtained without collaborating with study participants. Several empirical works have utilized photographs in this manner. For example, Smith (2002) includes photographs of notes, figures, and office space to illustrate and bolster her narrative concerning the sensemaking processes associated with her qualitative data analysis. Smith's use of photographs augments her descriptions of her sensemaking processes with the process data she collected as a graduate student. The combination of narrative and photographic records provides insight into the extensive work required to make sense of imposing amounts of raw, qualitative data. Likewise, Sood and Pattinson (2006) use photographs to facilitate longitudinal analysis of the development of "brainports" (p. 701), which they define as knowledge and commerce centers. They collected archival photographs of seaports in Sydney, Australia and Kuala Lumpur, Malaysia then combined them with photographs of the current landscape. These photographs provide illustration of the changes in the port cities over time and provide support for the descriptions of the brainport concept as it manifests across these two cities.

Other examples of leveraging photographs for illustrative purposes include Barry and Rerup (2006), who examine aesthetic considerations of organizational design by examining the Learning Lab Denmark. The Learning Lab Denmark is a research institute that has been keenly interested in its own aesthetic design and provided a suitable focal organization to support comparison with constructivist designs. The authors use analogical reasoning to discern elements of organizational design necessary to be aesthetically appealing. Photographs are leveraged in the work by providing examples of the artistic elements that were used for the aesthetic appeal of the organization. Additionally, Widener (2007) explores the conflict between resistance groups and the oil industry in Ecuador through a photographic essay. Widener used photographs to augment field notes taken over a four-year period. Beyond their support of the narrative, Widener's photographs and the process of collecting them served other purposes. For example, she argues that possessing photographs might be used as currency to be exchanged with various groups for future access to the research setting. In addition, Widener

surmises that by assuming the role of photographer she was able to distance herself from the other groups involved in the conflict. The camera acted as a buffer and provided her with evidence as a third party observer; hence, not only did she not collaborate with study participants but the process of photo-documentation was instrumental in articulating the boundary between researcher and participant.

These studies arrayed in the cells in Table 1 provide examples of researchers' use of photography. Next we identify how a research team's use of photography evolved over time through more experience with the process and outcomes of photographic efforts. Examination of this group of studies, accompanied by the authors' insights, provides a unique opportunity to examine the evolution of photographic techniques for the research team. As described below, the emergent nature of the use of photographs for this group was based on unforeseen results that ultimately led to novel insights and augmented theory exploration and development.

EVOLUTION OF PHOTOGRAPH USE IN A RESEARCH TEAM

Felstead et al. (2004) recount their use of photographs across four studies that examine professionals who work from home and mobile workers who routinely conduct work as they travel. The use of photographs in their research shows a trajectory over time through our table, beginning in Cell 4 and moving through Cell 3 to Cell 1. They note an "unfolding awareness of ... the roles played by images, interviews and interpretations in each study ... as time went on, visual methods increased in salience" (Felstead et al., 2004, p. 106). We briefly present the evolutionary path taken in their four studies.

Felstead et al.'s (2004) initial study of professional work at home was based on 72 interviews with managerial and professional employees who work from home. After each interview was completed, the researcher asked permission to take photographs of the home worker's office. Photographs were not presented as an intrinsic part of their data analysis at this stage; rather, the photographs were used for illustration of existing theoretical categories of home offices. The photographs were printed before the interview texts arrived because of the lag in transcription time. As these researchers inspected the 254 photographs of 72 workplaces, they saw that instead of the home offices illustrating dimensions of an existing classification, the photographs provided

evidence and details of a more refined classification scheme. The researchers began to interpret "anomalous images," which led to a "refinement of the categories" from existing theoretical models (Felstead et al., 2004, p. 107).

The intention in this study was to use photographs as a record of all the research sites. Their project began in Cell 4, where photographs were intended to be illustrative without collaboration from field participants beyond having them consent to having their home office photographed. The interviewees did not identify what should be photographed; instead the researcher decided the shots of each office. Additionally, the interviewees were not asked to interpret or comment on the photographs. The researchers found that "the photographs contained more information about socio-spatial boundaries in the home than ever could have been captured by interview ... careful scrutiny of photographs revealed aspects of domestic interiors that respondents were likely to take for granted or even seek to hide" (Felstead et al., 2004, p. 109). Their photographs were interpreted for new theoretical insights. Their project was intended to be in Cell 4 – photographs as illustrative – but the researchers realized the value of interpreting the photographs, and the methodology that emerged was more in line with the Cell 3 – photographs for interpretation – approach.

In another project on mobile workers (referred to as Study 2), Felstead et al. (2004) used photographs similarly to the above study on home office, and the intended use of photographs was in keeping with Cell 4. The researchers took photographs in an ad hoc fashion in order to have a reliable and accessible picture of the various places that these workers traveled to each day. As well, they noted that their photographs "allowed the research team to see the something of the texture of the working lives" of these mobile workers (Felstead et al., 2004, p. 110). The interpretation rested on the interviews with these workers and photographs "functioned primarily as illustrations to respondents' words" (Felstead et al., 2004, p. 110). Hence, this study used photographs in a manner consistent with Cell 4 (illustrative/noncollaborative); the photographs provided a common understanding among the researchers based on their illustrative value.

In the first two studies, the intention was to supplement interviews with photographs (Cell 4), but in the case of the home offices, the photographs took on a primary role, allowing for interpretations and theoretical contributions (Cell 3). As these two research projects advanced, the researchers' use of photographs changed in that photographs were incorporated into the research design. In Study 3, the researchers took a more collaborative approach with the mobile workers. They gave the workers cameras and specific directions about the types of photographs to take during their daily life. After reviewing

the photographs and creating questions to ask about the photographs, the researchers conducted extensive interviews with the workers. Their intent was to "bring the words and images of respondents into a productive dialogue with one another" (Felstead et al., 2004, p. 111). This photo-elicitation approach added significant new understanding about mobile workers to the study, especially in terms of the tacit knowledge that allowed them to function in spite of their nomadic work life. The photographs also led to stories, myths, histories, and anecdotes that the researchers believed would not have been evoked in a traditional interview. They also noted several issues related to their data collection such as the incidence of respondents forgetting to take photographs, the difficulty of discerning elapsed time between photographs, the notable absence of the research subject in the photographs, and the staged nature of some of the photographs. The researchers stated that "images, interviews and interpretation all played a major role in the research process, informing each other and driving the research process forward through interaction" (Felstead et al., 2004, p. 113), which is consistent with Cell 1 of our typology.

In Study 4, the researchers focused on workers without permanent offices. Felstead et al. (2004) adopted the same methodology as the prior study in that the subjects were given cameras and instructions on which photographs to take. When the researchers developed the film, they found that the subjects had taken what they believed to be trivial photographs. During subsequent interviews, the researchers asked probing questions about each photo, but this approach was found to be less revealing than placing all photographs on the table and asking broadly about their working lives. At this point in the interviews, Felstead et al. (2004) noted that "the images [from the group of photographs] triggered off rich verbal reflections on working in collective offices" (p. 114). The photographs were incorporated into the verbal transcripts to create a photo-script, which led to theoretical insights. This study is in keeping with Cell 1 but provides an interesting variant on photo-elicitation in that the researchers joined images and text into one transcript that they labeled a photo-script; other scholars have called this an image/text (Warren, 2002). This photo-script "created a new synthesis ... [that] proved very useful in disseminating [the] research results" (Felstead et al., 2004, p. 114).

These studies by the Felstead research team show a variety of approaches to photographs in research, beginning with photographs that were designed to illustrate what the researcher was seeing (the intent of Study 1 and the realized use of photographs in Study 2), but for Study 1, the photographs became the main data source that was interpreted to lead to theoretical

contributions. In Studies 3 and 4, the researchers used a photo-elicitation approach in keeping with Cell 1, but provided a variant in terms of the creation of a photograph script in Study 4. Over time, the researchers' use of photographs became more central to the research design as well as the data collection and analysis. This progression across our table of cells may reflect a learning process for strategic management researchers who are new to photographic research. These studies provide no evidence of Cell 2, but later in this chapter we identify how strategic management researchers can consider a time line interviewing approach with photographs. This may be a stepping stone or intermediate project toward movement to Cell 1, but limited data exists beyond Felstead et al. (2004) about researcher learning paths with photographs. We now turn our attention to ideas for use of photographs by strategic management researchers.

USING PHOTOGRAPHS IN STRATEGIC MANAGEMENT RESEARCH: SOME SUGGESTIONS

In this section, we provide ideas for researchers about how to approach the inclusion of photographs in future research. We use our typology to organize advice to strategy researchers, and our advice is summarized in Table 2. In each cell, we consider topics in the strategic management discipline that might be enhanced by inclusion of photographs in future research. We also provide tangible advice and pros and cons related to the use of photographs for each cell. Similar to Felstead et al.'s (2004) use of photographs over time, we start in Cell 4, then discuss Cell 3 followed by Cell 2, and end with a discussion of strategy research using photographs in Cell 1.

Cell 4: Noncollaborative, Illustrative Photographs in Strategic Management Research

In Cell 4, photographs are primarily used to illustrate the findings from a research project. In this cell, photographs are not analyzed or interpreted for their intrinsic meaning. Rather, they are used to bring to life models created from fieldwork or existing theories. Several areas in strategic management research may benefit from this use of photographs including strategic change processes, organizational identity, and culture.

Strategy researchers who are approaching a strategic change process should consider using photographs as a part of their method. Historical

Table 2. Suggested Strategic Management Research Using Photographs.

	Interpretation of Photos	Photos as Illustrations
Collaboration with study participants	**Cell 1** A photo-elicitation study about how strategy is understood in an organization. Photos are made by a wide cross section of members of an organization and then interviewed to understand the meaning of the photos. These photos and interviews could be compiled into a photo script, analyzed, and compared to the stated strategy of top management. Study participants, such as top managers, could be interviewed about stock photos of team decision-making processes and how these photos relate to their team processes.	**Cell 2** Time line with photos to use during field interviews about a change process (to aid study participant's recollection of events). Researcher can take photos of organizational configurations that may exemplify the power relationships and processes uncovered from interviews. Study participants take photos (or suggest photos to researchers) of activities related to the research focus; these photos could be used to illustrate findings from field interviews.
No collaboration	**Cell 3** Analyze photos in annual reports for changes in leadership, commitment to status quo, strategic emphasis, or identity over time. Photos that capture events in an organization are later analyzed for details of the events. For instance, a researcher could capture board meetings or executive planning sessions; these photos could be analyzed later in conjunction with a study on TMT–board interactions or strategic planning processes.	**Cell 4** Photos from annual reports (or other historic or stock photos) are incorporated in the manuscript to reflect findings from qualitative field study. Documented changes to workplace such as historic photos of headquarters space (e.g., portraits on walls) or work settings over time illustrating cultural change.

Table 2. (*Continued*)

Interpretation of Photos	Photos as Illustrations
Analyze documented changes over time to a workplace such as historic photos of headquarters space (e.g., portraits on walls) or work settings over time to identify cultural change.	Researcher photos of objects mentioned in interviews about culture or an organization's identity.

photographs can provide a window into seeing change more vividly. For instance, Pitcher and Smith (2001) identified how the change in CEO (and resulting different personality of the new CEO) affected firm strategy, top management team dynamics, and firm performance. The artistic CEO was replaced with a technocratic CEO who drove out goals of growth with retrenchment and diversification with refocusing. These changes over three time periods could have been further illustrated by photographs from the company's annual report; for instance, the colors used in the annual reports, profile of the CEO (e.g., clothes, posture, and demeanor), inclusion or exclusion of photographs of other employees, and photographs of subsidiaries could have documented the changes noted from interview and archival data. Photographs could have provided a visible mapping of the three eras of top management. These photographs could have helped readers of the published article to see, perhaps more clearly, the key points about each era.

We also can imagine well-known studies of strategic change over time, such as Chiles, Meyer, and Hench's (2004) study of the growth of Branson, MO, and Dutton & Dukerich's (1991) study of the New York Port Authority's image change, could have been enhanced by photograph illustrations of their findings. Chiles et al. (2004) mention in their article that artifacts such as photographs and many documents were reviewed from the Branson museum, but do not elaborate on the degree to which the photographs were utilized in their analysis. We can imagine how changes and forces that they identified from their rich case study could be traced through the physical changes in this area captured in historic photographs.

Another area of strategic management research that may benefit from using photographs to illustrate findings is research on culture and organizational identity. Stiles (2004) argued that organizational identity research is an appropriate application of photographs, but he could not find one instance of

photographs in this research stream. Stiles (2004, p. 127) stated that "given the qualitative power that such images convey, why are academics ... so reluctant to embrace the pictorial forms as a means of understanding their worlds"? Organizational identity seems to be a ripe area for exploration with photos. We can imagine a photo-elicitation study in which subjects across many levels in a company are asked to photograph images that best represent their organization. These images could be discussed with the research team to tease out what are commonly understood aspects of the organization's identity.

Photographs documenting physical changes to artifacts in the workplace over time may reflect the findings from research in the area of culture. For instance, Biggart's (1977) study on the U.S. Post Office identified how symbols can be changed to reflect the reorganization process and new identity. During the study period, the Post Office's image changed dramatically from a colonial rider to the eagle, and colors were updated from drab green to red white and blue. Inclusion of photographs of the old and new symbols could have provided the reader with further connection to Biggart's analysis of the situation. We can imagine that photographs of the physical space of organizations – taken by the researchers or in archival records such as annual reports or historic archives – can illustrate models and findings from intensive field studies.

Another example of where visuals might have enhanced or illustrated a study's findings is Edmondson's (2004) work on psychological safety in different nurse settings. The differences in nursing stations were vividly described in her article, but having photographs to analyze and illustrate the dirty scrubs, messy desks, and informal meetings with nurses during the day may have reinforced Edmondson's key findings (derived primarily from observations and interviews) about differences in unit characteristics associated with the nurses' perceived ability to speak up. These are just two studies that provide a vivid description of an organization or organizational unit that might have been further imagined by the reader if photographs were included.

These studies provide obvious examples of how photographs could add value but researchers must take into account certain considerations in using photographs in the aforementioned ways. Some organizations allow researcher access only if the organization or organizational unit is disguised (e.g., Edmondson, 2004; Pitcher & Smith, 2001). Reproduction of photographs by researchers in these settings would be difficult because of concerns over identification of the setting; however, these photographs could still be used by the researcher or research team as a vivid reminder of key takeaways while analyzing interview data or writing up results. Another issue in the use of

photographs in this research is obtaining permission to reproduce archival photographs. Obtaining these permissions can be complicated; for instance, locating the person who is holding the rights to the photographs can be difficult. It may even be costly if the owner of the photograph demands payment for reproduction. These costs must be weighed against the benefits of creating photographs to illustrate findings, one of which is the ability to create a vivid and memorable image in the mind of the reader of the academic article or book. Qualitative studies have been characterized as dense; having photographs to illustrate and guide readers might allow for easier retrieval and memorable study findings. Inclusion of photographs in a published paper may lead the reader to see different elements that might have been overlooked in a solely textual presentation of a study.

Probably the most important concern related to using photographs is the need to identify the context of a photo, especially in historic photographs. This is a concern expressed in both anthropology and sociology visual literatures (Banks, 2007; Becker, 1995; Prosser & Schwartz, 1998). Researchers should document their field research setting and photographic process; they should keep a detailed journal of what and why they took photographs, and perhaps their emotional reactions to the photographic setting. This context may be reported in abbreviated form in an article's methodology. Ignoring this critical information could lead to confusion about why the photograph is being integrated into the text. Furthermore, it could lead to difficulties for individuals attempting to leverage the research in subsequent projects. These difficulties, however, can be minimized by including detailed descriptions of context either in the narrative, footnotes, or appendices. Paying attention to the inclusion of this material will go a long way in maximizing the value of adding photographs.

Cell 3: Photographs as Interpretation Without Collaboration

Photographs in Cell 3 are open to interpretation alongside text from interviews or archival records and can inform the findings and theoretical contributions. Areas of strategy that could benefit from this use of photographs are numerous, but researchers using content analysis of texts such as CEO letters to shareholders and researchers using a strategy-as-practice lens might particularly benefit from inclusion of photographs as data.

Content analysis is a growing methodology used in strategic management (Short & Palmer, 2008). Many studies have analyzed the text in CEO letters to shareholders to further understanding of entrepreneurial orientation

(Short et al., 2010) and commitment to status quo (McClelland, Liang, & Barker, 2010). Instead of using text alone, we suggest analyzing photographs included in annual reports in conjunction with the text in the report. In the management discipline, only a few researchers have analyzed annual report photographs (e.g., Dougherty & Kunda, 1990), but this has been a rich and growing area in the accounting discipline (Preston, Wright, & Young, 1996; Warren, 2005), where annual report photographs are analyzed to discern the global orientation of the firm (Preston & Young, 2000), branding (Davison, 2007), stakeholder emphasis (Chwastiak & Young, 2003), and managerial ideology (Prasad & Mir, 2002). The emphasis in many of these accounting studies is the photography as opposed to the text in an annual report. We suggest that strategic management researchers include photograph analysis in conjunction with text analysis from annual reports. For instance, in the McClelland et al.'s (2010) study cited above, we can imagine that features of photographs in the report over time could also signal commitment to the status quo; the use of texts and photographs could provide a source of convergence and promote confidence in findings. In these ways, including photographs has the potential to add new insights into a text-only approach.

Another area that could incorporate photographs is the emerging strategy-as-practice orientation. Strategy-as-practice researchers focus on actors and their actions related to forming strategy in organizations. Molloy and Whittington (2005) leveraged photographs to analyze the minutiae of situations that they might otherwise have missed. We can imagine that these researchers who have access to organizations and their strategy-making processes could take photographs in their role as participant observer. These photographs could be taken to illustrate an emerging model (in keeping with Cell 4), but the researcher should consider whether the details and images in the photographs might contain further insights or elaboration of an emerging model from field notes.

Again the issue with the above uses of photographs is the need to understand the context of the photographs; making the context specific is critical during interpretation of the photographs. Interpreting the photograph can be aided by qualitative software (e.g., QDA Miner), which can handle coding of articles in a systematic fashion through existing categorization from theory or through inductive development of dimensions in the photographs. A particular challenge with using photographs in annual reports is if the annual report is only available in microform or microfilm format. The black and white photographs may be very grainy and dark, thus making analysis of photographs in the report difficult if not impossible. Another stumbling block

for analysis of photographs in strategic management research may be reviewers' skepticism of the systematic nature of photograph analysis. These concerns can be overcome in time by use of qualitative software to analyze photographs, meticulous documentation of the process, and rich description of the photographic analysis process in the methodology section of papers – as well as by increasing the number of publications with photographs that are associated with theoretical contributions.

Cell 2: Photographs as Illustrative and Part of Field Collaborative

Strategic management researchers can use photographs for illustration while leveraging participant collaboration. This might be helpful to researchers who study detailed organizational processes over time such as market expansion or new product innovation.

Most studies of change processes benefit from detailed tracking of a process through a firm, which is elicited through either retrospective interviews or ethnographic research. Many times a time line is constructed in interviews to remind an interviewee of the series of events surrounding a strategic process. For instance, in research on the internationalization process, Smith and Zeithaml (1999) used a time line of events to anchor comments about the process and key decisions and turning points. We can imagine that this time line could be augmented by photographs, such that pictures of a key acquisition, change in CEO, or international partner appear as a photo on a time line to trigger memories of the process.

For product innovation, if a researcher has access to an organization, photographs can be used to keep a visual record of what the researcher is seeing unfold. For instance, in innovation research, cameras could be given to key organizational members important to the process; Dougherty and Bowman (1995) have identified that there are critical middle managers who play important roles in innovative processes. The researcher can ask these linchpin managers to take pictures during a specified time frame of meetings outside his or her department. Likewise, the researcher could trail these managers and take photographs of important activities related to bringing new products to market. Either way – whether the middle manager or the researcher takes the photographs – these visual images might augment emerging findings from interview data. In this research approach, the photographs would not be interpreted per se, but would form a visual portrayal of the processes that would be helpful to convey findings.

Thus, this approach to the use of photographs requires that researchers provide directions for what to photograph and how to photograph it – at certain points in each day of what they find interesting, particular elements, number of photographs, etc. Consideration must be given to how broad or narrow to make the instructions, when to give out the cameras, and when to give photographs back at end of a project. Another shortcoming of participant photo-documentation is that it would be likely that the participant would not be captured in the photograph. If the researcher takes photographs, a different set of considerations emerge, an example of which is how to develop the appropriate level of trust and communication with the subject while balancing the needs of the study. Furthermore, consideration of what is not included in the photo and which photographs are not allowed can be as important as what is included.

Cell 1: Photographs Are Interpreted and Part of Field Collaborative

Probably the most advanced use of photographs among the four cells is in Cell 1, where many studies following a photo-elicitation approach would fall. Although many areas of strategic management could be enhanced by photo-elicitation approaches, we discuss three particular research areas where the use of photographs could further theory development: sensemaking about the strategic direction of the firm, top management decision-making processes, and ambidexterity in practice. We propose that photo-elicitation might be used to explore these three strategic management areas.

Strategy exists only in the minds of interested parties (Mintzberg, 1987), so shaping the understanding of the strategic direction of an organization requires attention, top management effort, and sustained communication, or what Gioia and Chittipeddi (1991) called a sensegiving process. Strategic management researchers discriminate between intended and realized strategy, which parallels sensegiving by top managers and sensemaking by lower level employees; however, research on the connection or disconnection between what is communicated or intended by management and the resulting understanding by organizational participants is an underexplored research area. Photo-elicitation could provide a way to assess organizational members' understanding of the strategic direction; for instance, a cross section of employees from different departments and levels are given a disposable camera and specific instructions to capture a set number of photos to reflect how they understand the strategic thrust of their organization. Then, after the photos are developed, the researcher interviews each organizational member about his or her understanding of their organization's strategy. A photo-script could be created in which key photos and comments are placed in juxtaposition in a document. This document can be further analyzed by a researcher using a qualitative software program that can analyze photos (e.g., QDA Miner). The analysis of the photo-scripts can be both deductive and inductive: deductive in comparing previous stipulated intended strategic elements gleaned from interviews with the CEO and top managers and inductive in identifying new features outside the stated strategy. This photo-elicitation approach will require the support of management, but the return to management for this intrusion can be a report on the alignment of strategy and perhaps emerging new areas within the organization. It is a time-consuming process, but one that promises rich contributions to our understanding of sensemaking of strategy within an organization.

Another active area of strategic management research involves top management team strategic decision-making processes. Unfortunately, this area of research is hampered by problems of access to the upper echelon and the need for deep researcher immersion in the field. This area of strategy research would benefit from a photo-elicitation approach, though used in a different way than the above example. Because top executives are unlikely to have the time or inclination to pursue a photo protocol, the researcher may need to use stock photos of decision-making processes and query top managers to determine which photos resonate with their experiences. These photos could be staged by the researcher and related to existing theoretical insights from the literature or from the researcher's field experiences. These photos could include meetings of executives before the main decision-making meeting; heated red-faced, fist-pounding meetings; meetings with flip charts, handouts, and PowerPoint presentations; a meeting of the CEO with one close confidant; use of consultants, etc. The photos would exclude members of the organization to reduce the potential for personal loyalties that could bias a top manager's comments during a photo-elicitation interview. This interview about top management decision-making could lead to a photo-script, which can be analyzed in a qualitative software program. The photos in this case are used to elicit information to understand an organization's top management team decision-making approach. This is a less invasive approach to photo-elicitation, but we believe an effective one to use with top managers who probably do not have the time or inclination to take photos for a research study. The findings from the research should be of interest to the top executives as well as researchers who can provide new theoretical insights.

Finally, a photo-elicitation approach may provide new insights and tangible evidence of ambidexterity in organizations, which is defined in the

strategic management literature as the ongoing daily tension between efficiency concerns (exploitation) or building new capabilities (exploration) (Gibson & Birkinshaw, 2004). This area of research in strategic management has been investigated through surveys and some qualitative observation but remains an area in need of field-based insights (Raisch & Birkinshaw, 2008). We can imagine a research project in which a similar manufacturing unit across three or more cases is compared by the degree of ambidexterity in these units. A photo protocol could be set up to require a manufacturing manager to take photos at intervals when he or she is notified by the researcher, perhaps via text messaging. A photo could be taken by the manager with a few words added and transmitted by cell phone back to the researcher. After about a week, the researcher could sit down with the manager to talk about the photos and text. The intent of the conversations would be to categorize the photos as to whether the manager engaged in activities of exploitation or exploration. This would allow a more fine-grained understanding of these concepts and how a manager acts ambidextrously on a daily basis. Of course, this photo-elicitation approach would require company access and cooperation, but the feedback on different managerial approaches to daily activities may provide direction for managerial training and insights to corporate management. Overall, the photo-elicitation process as described above in Cell 1 can take many forms to tackle areas of strategic management in need of fresh theoretical insights. This cell requires the most researcher skill to obtain access to organizational members, conduct photo-elicitation interviews, and craft a photo-script for analysis. Organizations may allow researchers to conduct this type of research if the resulting insights are solid and convincing; having photos to share with upper management could make for a compelling presentation of results and perhaps facilitate further access to the firm.

USE OF PHOTOGRAPHS IN A RESEARCH PROJECT

Our interest in the use of photographs emerges from a field research project in which we explore the everyday sensegiving of values in the workplace. Similar to Schwartz (2001) in which espoused values were linked to manifestations of ethical behavior, we focus on how stated values are connected to daily activities as well as incorporating objects in our investigation. We chose a small and medium enterprise (SME) because of some unique qualities of this type of organization and the fact that most research on values has taken place in large organizations (Hammann, Habisch, & Pechlaner, 2009; Thompson & Smith, 1991). An SME offers fewer hierarchical layers between the owners

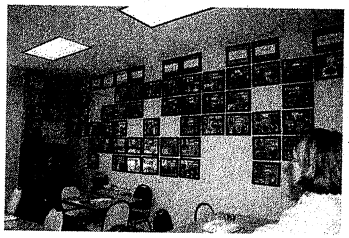
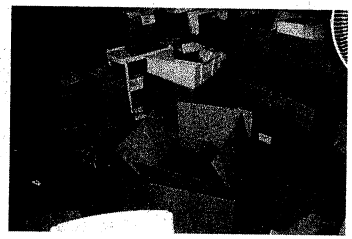
and lowest level workers providing a more direct link between top management initiatives and implementation. In addition, study of these organizations promotes a look at most, if not all, organizational functions due to the small size of these firms (less than 500 employees). The organization selected for our study is a U.S. apparel firm, the Marena Group in Lawrenceville, GA. This firm manufactures and sells postoperative compression garments and everyday shapewear. Marena produces domestically in the United States and has a growing global sales strategy. Our goal for this research was to cultivate an understanding of how values are practiced in everyday organizational life.

The methodology chosen for this study was a case study (Eisenhardt, 1989; Yin, 1984), which included observation, interviews (mostly taped), archival data, and photographs of activities and objects. The researchers did not begin the research with any preconceived ideas about how values might be manifested in the firm or what theoretical lens might apply to the findings. Researchers visited the facility four times over a year period during 2009 and 2010. On-site visitation comprised over 30 h of observation and about 12 h of audio-taped interviews. Although the research included observation, interviews, and photographs, we focus on one element of the methodology – the role of photographs in this project. Photographs we obtained during our visits provide examples of our typology. Examples of the photos for each cell of our typology are shown in Table 3 and are explained below.

We began the research by attending a daylong series of presentations by the Marena managers that provided an overview of their operations, operating philosophy, and history of the firm. During this daylong meeting, we took extensive pictures of the facility as we toured the building. We also took photographs of organizational elements that we identified as unusual from our experiences at other manufacturing plants. Many of our photographs from this initial immersion are related to the types of photographs in Cell 4. For instance, we took several photographs of a large number of employees dancing. Each day, at 2:30, all work stops for 15–20 min. During this time, many workers go to a room carved out of the manufacturing floor to dance. We did not analyze these photographs, but rather used these photographs to show to the rest of the research team to demonstrate the idiosyncrasy of the firm. (Later in the research, we tried to use the dancing photograph in a photo-elicitation approach in keeping with the approach in Cell 1, but, as we will discuss shortly, this photo-elicitation approach using a photograph of the employees dancing failed.)

In some photographs that were taken in the first visit, we decided to categorize the objects in the photographs so that we would not forget the details of what we saw in the hopes of subsequent interpretation. This

Table 3. Examples of Photos from Our Research Project.

	Interpretation of Photos	Photos as Illustrations
Collaboration with study participants	**Cell 1** 	**Cell 2** 
No collaboration	**Cell 3** 	**Cell 4** 

approach fits in Cell 3 of our typology. For instance, we took a photograph of the building foyer. This foyer contained details that, we believed, were important features (perhaps linked to) the conveyance of culture in this firm. We used QDA Miner qualitative software to capture details of this photography through an initial coding of objects in the foyer. In Fig. 1, objects in this photograph are tagged using the codes from the "physical objects" code list – such as books, plants, light, and art. We also added comments about each object (a yellow square rectangular shape on the code) – to indicate that the plant was an orchid, the books were free and pertained to spiritual matters, and the foyer was connected to both the sewing area and manager offices. However, this analysis of this photograph was preliminary and very basic. After our second visit in which we conducted in-depth interviews with the founders and managers, the foyer took on new meaning, with a closer connection to the culture of the organization. For instance, the foyer was filled with several orchids, but their significance was more than being "a plant" as we categorized them. Rather, the co-owner recounted stories of these orchids being delivered to the foyer in a near death state and

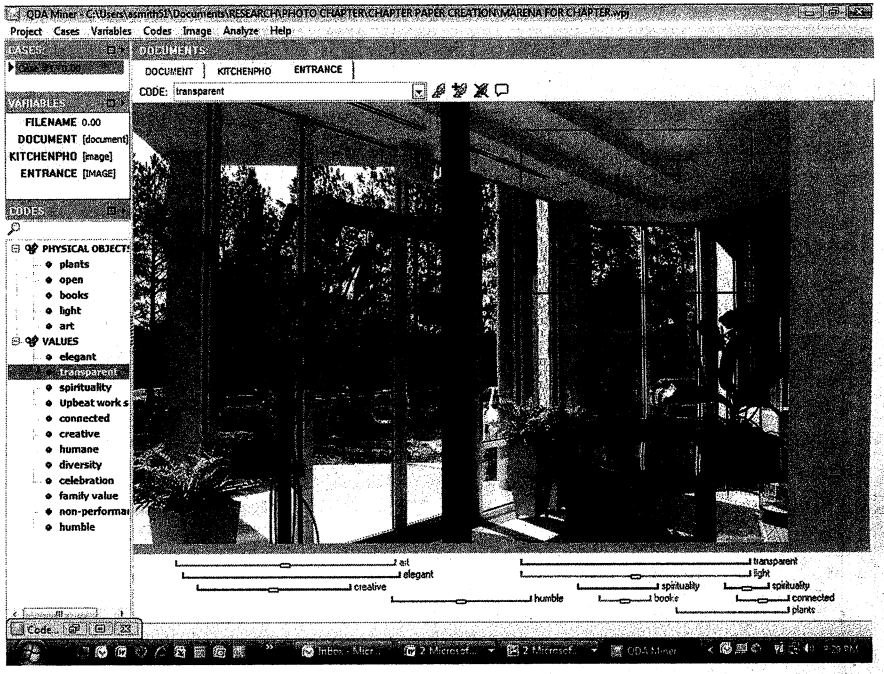


Fig. 1. Screen Shot of Photo Analysis (Cell 3): Foyer at Marena.

that they had all been extraordinarily revived. Another feature, which we noted in the initial coding, was that there was no company sign outside the building. During a subsequent interview, we discovered that the founders had designed the building to be light and airy, but they never got around to getting a sign out front. "It is really about what happens within these walls that matter," stated a manager in the firm. We added new codes to our original coding of objects that were closer to the espoused values of the founder/owners and seen in daily activities. These new codes, seen under the "values" code list, were added after in-depth interviews took place in which several elements in the foyer were discussed. The photograph of the foyer was not shown in any interviews, but the comments about elements of the foyer during our interviews and walking around the building were incorporated into the photograph analysis. The coding of the foyer includes codes for objects and values, seen in Fig. 1.

During our second visit to the field site, there were many in-depth interviews primarily with managers. During these interviews, study participants

would reference objects, and we would take photographs of these objects. This approach to photographs is in keeping with Cell 2 of our typology in that we did not analyze many of these photographs that were supplemental to the interviews, but the study participant had prompted us to the importance of the object. For instance, seen in Cell 2 of Table 3, we have a picture of a box that was in the shipping area. The lead designer had brought this box back to the shipping area while the researcher was interviewing the shipping clerk. The shipping clerk then explained that the box contained garments that had been worn in a Marena fashion show the previous week and were being donated to hospitals in Africa for burn or postoperative surgery patients. The box was photographed, and the interview continued to discuss other ways that the organization, specifically the founder/owners, gives back to the community. There were many examples of taking photographs during interviews in order to capture vividly what was being discussed. In Cell 2, the interviews were the main source of data, but the photos of objects, pointed out by study participants, provided vivid reminders of an important story or aspect of organizational life.

For our third field visit to the Marena field site, we planned to do a photo-elicitation with several, what we believed at the time to be, compelling photographs that were taken during the previous two visits. Selecting three photographs, we decided to ask what these photographs meant to the workers – if they could explain their importance to daily life at Marena. Instead, when the study participants were shown the photos of their dancing or other daily activities, they laughed and did not know what to say. It was their daily life, and they had a difficult time articulating what was the meaning of the activity. Despite several questions used to elicit photo-interpretation, none of the questions were successful in gaining much insight from the study participants.

Due to the surprising results of the photo-elicitation process, we decided to take a different approach and ask study participants about their photographs framed and hung in the lunchroom (see the Cell 1 photograph in Table 3). Every employee created a frame in which Marena management asked them to identify their country of origin and what was important in their lives; these frames are arrayed by the employee's birth month. When we were in the lunchroom (where most of the interviews with nonmanagers took place), we asked the employees to tell us about the frames, beginning with their particular frame. The discussion of these photographs led to a rich description of their life, in general, and their employment at Marena, in particular, and why they stayed with the organization. They explained how they put their frame together and that country differences were important to

the organization. Several mentioned that it reflected the diversity of the workforce. We used their comments about the photographs and analyzed the wall photographs as data. Their comments are reflected in the analyzed photographs that reflect organizational values, shown in blue in Fig. 2.

These examples also demonstrate the dynamic nature of photographic research. In some instances, we learned that our understanding of the photographs was incomplete (e.g., the initial foyer photograph), and subsequent interviews added to our understanding of a photography. The insights provided from the interpretation of the photographs led to new findings concerning the daily sensegiving of values. Photographs capturing aspects of the organizational environment were probably the most memorable – tied to stories or activities that were unusual. Yet, the dancing activity was not unusual for the study participants; they were perplexed about what to say about a photograph of this activity. Hence, the photographs' value was providing context for the research team and not necessarily for interpretation.

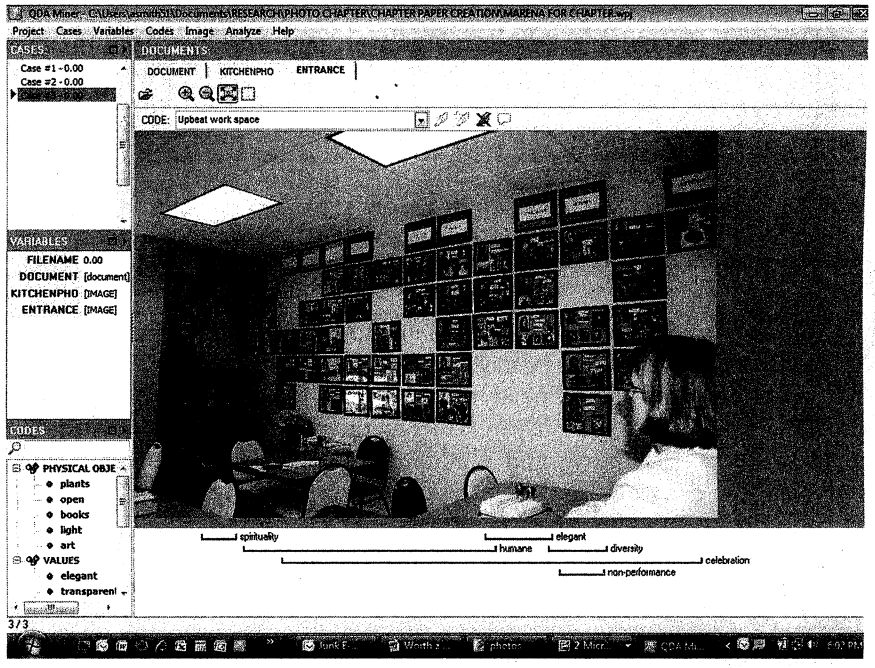


Fig. 2. Screen Shot of Photo Analysis (Cell 1): Photos on Wall of Lunchroom.

Taken together, our research experience provides many examples of the utilization of photographs across the four cells of our typology (see Felstead et al., 2004 above). All in all, the photographs taken at Marena could be accurately classified by our typology although their use changed over time. Hence, our own experience suggests that the use of photographs is somewhat malleable and may deviate from the original intention of the researcher. This should be seen as an advantage in that the methodology can facilitate data collection and interpretation as unforeseen elements arise during qualitative field investigations

CONCLUSIONS

Our chapter is predicated on the assumptions that photos can be a meaningful part of a research project, can provide new theoretical insights, and can be viewed as having intrinsic value to the published paper. We provide several examples of how photos have been and can be incorporated into research. Organizational research publications, in general, and strategic management research publications, in particular, have not been accustomed to facilitating photographs in print. However, that does not deny the fact that photographs can provide tangible benefits for the research team and the audience of these publications. Additionally, we have provided evidence that researchers are now at the cusp of incorporating photographs. As the number of researchers employing these techniques grows, we should see a resulting increase in their inclusion in journals, perhaps an initial growth of publications with photographs in online journals. As technology improves that facilitates the publication of photographic images, it is likely this trend will hasten.

Ultimately, we believe this underused methodology has tremendous potential for the field of strategic management. Most of this chapter has assumed that use of photographs is linked closely to field research, but photographs also allow researchers the ability to reflect on their research process, which can apply to both quantitative and qualitative researchers. Documenting the processes, key decisions, and even research team meetings might provide a lens into our research experience, pulling back the veil to reveal heretofore hidden nuances of strategic management research.

For those researchers curious about this methodology, if as yet unconvinced, we suggest that they take a camera into the field and begin to experiment. We have cited examples of how photographs have been used in the literature, and we make suggestions for future uses. However, we do not

claim that the information here is exhaustive or static. As with any practica research methodology, we fully expect this approach to grow with use and understanding. We are part of a visually oriented species (Guthey & Jackson 2005; Parker, 2009). The use of photographs in strategic management research need no longer be overlooked.

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