Using photographic methods in strategy as practice research

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Strategy as practice (SAP) research is focused on "the day-to-day work, activities and practices of strategists, with an interest in how this work socially accomplishes a wide range of individual and organizational outcomes" (SAP Interest Group, 2013: 1). Most SAP researchers select qualitative investigative methods to examine daily work, activities, and practices. Through qualitative methods, researchers understand the micro-level processes leading to strategic changes and organizational outcomes over time. Because most SAP methodological practices are "based on long case studies drawing on interview, observation, and documents (Vaara and Whittington, 2012)" (Rouleau, 2015: 462), researchers have called for innovative ways to study SAP topics (Abdallah, Basque, and Rouleau, 2017; Golsorkhi, Rouleau, Seidl, and Vaara, 2015). Since the last issue of this SAP series (Golsorkhi et al., 2015), video methods have increased in attention and use among SAP researchers (LeBaron, Jarzabkowski, Pratt, and Fetzer, 2018; Liu, Jarrett, and Rouleau, 2021). However, video methods' advancement in SAP research has bypassed another insightful approach remaining ripe for development and application: photographic methods. This is surprising given increased attention on photographic methods in management and organizational research (Meyer, Höllerer, Jancsary, and Van Leeuwen, 2013; Ray and Smith, 2012; Shortt and Warren, 2019).

Visual methods should be foundational to SAP research because strategy as practice is based on what people not only "say" but also "do" (Seidl and Whittington, 2014). However, there has been more focus on "sayings" (i.e., interviews) than "doings" (i.e., non-discursive strategizing aspects) (Jarzabkowski, Seidl, and Balogun, 2022). Rasche and Chia (2009: 714) argued that visual methods allow SAP researchers to get closer to the "situatedness of strategy practices ... than by relying primarily on ... interviews and questionnaires." Studying rituals and strategy making, van den Ende and van Marrewijk (2018: 454) found that visual data from the

field allowed them to analyze "behavior and materials in the greatest possible detail."

Furthermore, Bell and Davison (2013: 179) urged process and practice researchers to consider visual methods to capture the "complexity associated with organizational activities as they continually unfold." Thus, visual methods allow SAP researchers to capture daily activities at many levels of an organization and potentially "find patterns of strategic action that are often unobserved and neglected in traditional strategy research" (Jarzabkowski et al., 2022: 1546). As an established visual method, photographic approaches capture action at a point in time or across time through multiple images. We argue that rather than being superior or inferior to video methods, photographic methods provide different data associated with unique collection, analysis, and theoretical insights.

In this chapter, we respond to calls for more innovative methods in SAP research by building methodological foundations in photographic methods. We begin by discussing increasing interest in visuals in management and organizational research. Then we review photographic use in SAP research—identifying and discussing six SAP research projects in which photographs played a prominent role. Next, we develop and explain a framework to categorize photographic use in organizational research and discuss different systematic analysis approaches. We illustrate aspects of the framework in an empirical study. Finally, we discuss considerations in pursuing photographic methods in SAP research.

The visual turn in management and organizational research

Management and organizational researchers have conducted reviews and empirical investigations using visual methods, referred to as a "visual turn" (Bell and Davison, 2013; Davison, McLean, and Warren, 2012; Hassard, Burns, Hyde, and Burns, 2018; Höllerer et al., 2019; Meyer et al., 2013;). Interest in visual methods have gained popularity among qualitative

researchers to "generate insights into management and organizational life that have tended to be remain under-explored with the field" (Bell and Davison, 2013: 171-172). Visual methods are well suited to get close to organizational members' lived experiences and provide insights into "hidden, unspoken of or marginalized" aspects of organizational life (Slutskaya, Simpson, and Hughes, 2012: 17). Visual methods have been used to study tacit, hard-to-articulate, and non-discursive aspects of organizational life, such as organizational culture (Warren, 2002), work spaces and identities (Shortt, 2012; Shortt and Warren, 2019), and lived experiences of "dirty work" (Slutskaya et al., 2012). Although video and photographic approaches have grown within management and organizational studies, many researchers have argued that the visual methods have not met their full potential in organizational research (Davison et al., 2012; Langley, Bell, Bliese, LeBaron, and Gruber, 2023; Meyer et al., 2013).

Visual methods include video, photographic, drawing, and other visual data; each has its own challenges and deserves attention. We focus on photographic methods in SAP research. Specifically, we are interested in methods where photographs taken by researchers or participants address a research question for a specific project. These created photographs allow researchers to capture strategy processes in real time with the accompanying nuances from their field embeddedness. This way, researchers can focus their data collection and analysis on their specific research question—providing much more pertinent data that directly and intentionally speaks to the studied phenomenon. Thus archival photo methods, in which the photographer's intent and composition are less clear, is not addressed in this review.

Why consider photographic approaches in SAP research, particularly when video approaches also exist? Both video and photographic approaches benefit from digital cameras' use in daily life; therefore, generating images is feasible for researchers and participants.

Additionally, photographs and video approaches allow researchers close engagement with the field; heighten connection with organizational participants; and increase understanding of researchers' contexts.

Photographic methods provide unique benefits compared to video methods. First, photographic research offers less potential editing and curating than video research—making photographic methodologies more accessible to researchers and participants involved in image analysis. We recognize, however, that both approaches need further work to clarify data analysis strategies. Second, photographic methods are less intrusive than video methods in an organizational setting; organizations may be more open to allowing researchers to collect photos in their workplace (as Werle and Seidl, 2015, noted). Third, conveying research findings using photographic methods to researchers (e.g., refereed journal articles, academic conferences) and practitioners (e.g., trade publications, professional conferences) is more straightforward than using video methods and can be accessible to a wider audience. We believe benefits from photographic methods provide unique opportunities that have not been fully embraced in SAP research.

Photograph methods review in SAP Research

To identify how photographs have been used in SAP research, we conducted a Google Scholar search using the terms "strategy as practice" and photo*—including variant spellings. We reviewed over 400 citations from articles, book chapters, dissertations, and other reports. Most citations did not include photographs taken by participants or researchers but instead referenced photographs from social media, archival photographs, photocopiers or photo-related industries,

¹We recognize that online appendices can convey photographic and video findings in journal articles.

or photographic documents provided by an organization. Furthermore, in a few edited books, the terms "photo*" and "SAP" were found, but they were not in the same chapter.

We identified many reviews and methods articles encouraging photographic methods in SAP research (Abdallah et al., 2017; Jarzabkowski, Spee, and Smets, 2013; Jarzabkowski et al., 2015; Rasche and Chia, 2009; Ray and Smith, 2012; Shortt and Warren, 2019)—many with which we were already familiar. A few articles explained why photographs were not used or did not work out. For instance, Slutskaya et al. (2018) explained why their researcher-generated photographs failed in participant interviews, subsequently leading to a successful participant-generated video approach.

Of the remaining articles, we searched for studies in which photographic data were analyzed and used to develop theoretical findings. Many articles included photographs in their data collection but did not discuss analysis of the photographs or their connection to theoretical insights. In several cases, photographs were only a memory aid to field observations, were used to interview participants, or were only used to triangulate emergent findings from interview data or observational notes. Ultimately, we identified six studies analyzing photographs that helped generate theoretical insights. We briefly describe each study below.

We found two SAP dissertations robustly discussing photographic analysis and theoretical contributions (Hurst, 2022; Owen, 2022). In her thesis research about material agency with strategy-making, Owen (2022: 111) described how using photographs changed throughout her project:

Photographing the places, people and things that I saw during my research helped me to remember certain aspects of the *mise en scène* that might seem particularly important. As the project progressed, I started to think rather differently about the purpose and value of

the photographs I was taking, and of the role(s) they played in data analysis, insight and communication.

Owen (2022: 118) commented that photographs are never neutral in documenting a scene but rather are compositions that cannot be decoupled "from the varied means of its production, be they technical, political, socially-mandated, or aesthetically-driven or a combination of those factors amongst others." Her photographs and how she constructed them became central to narrative creation and the study's findings.

In his study of emotions and strategizing, Hurst (2022) used many data sources: observations, interviews, photographs, documents, and social media. Hurst reveals how he brought multiple data sources together into a daily composite in OneNote to keep a chronological log of field experiences and to record emerging insights. Annotated photographs were central to his findings' presentation.

We also identified four articles analyzing photographic data in novel ways to contribute to SAP research. First, in their multi-year ethnography, Comi and Whyte (2018) used observation, documents, interviews, and photographs to study visual artefacts and future-making. They stated, "[W]e strove to avoid reduction of visual data to verbal data (Boxenbaum et al., 2015)" (Comi and Whyte, 2018: 1061). Connecting other data with photographs allowed them to "see aspects that were not apparent from transcripts alone" (Comi and Whyte, 2018: 1064). They presented textual data alongside participants' images to build a case for future-making practices.

Second, Werle and Seidl (2015) undertook ethnographic observations, conducted interviews, collected documents, captured artefacts used in strategy meetings, and took over 300 photographs. While noting that multiple data sources provided "opportunities for triangulation"

(Werle and Seidl, 2015: S73), they described how photographs helped identify how artefacts changed over time.

Third, Bell and Vachhani (2020) studied craftwork practice through relational encounters and materiality. One of these researchers took over 500 photographs capturing processes and practices "to make connections between craft work encounters and the sensory information they generated" (Bell and Vachhani, 2020: 687). Photographs were central to their data analysis with interviews, field notes, and documents supplementing that analysis. They identified sensory traces and affective encounters in the images, which became central to their theorizing.

Fourth, Huang, Wright, and Middleton (2022) used photographs to capture whiteboards and flipcharts in a classroom activity related to artefacts and team learning experiences about strategy. The photographs were used as a data source to provide "a less restrictive and more accurate record of the material objects" and "detailed illustrations of the use of material objects and strategy tools ... involved in the team learning processes of doing strategy" (Huang et al., 2022: 41). They indicated that photographs, coupled with interviews, were used in their third data analysis to "verify and elaborate [their] emergent understanding of second-order relationships" (Huang et al., 2022: 44).

After reviewing these publications, we propose photo methods as an untapped approach that can advance SAP research. To make photo methods more accessible, we next provide a framework for ways to include photographs in organizational studies.

Photographic framework

In this section, we provide a framework that SAP and other researchers can use when considering how to incorporate created-photographs in their research projects. We identify two key considerations: (1) who creates the photographic images—researchers or participants and (2)

photographic data's role—primary or secondary—in the research design. We found that when photographs are mentioned as a data source in top journal publications, they usually play a secondary role (i.e., documenting, triangulating textual data), not an analytic component leading to theoretical insights. In some studies, such as the six found in our review, photographic data are treated the same as other data sources and are connected to theoretical insights.

Who is generating the photographs? In designing a study using photo methods, researchers must first decide who will take the photographs (Davison, 2010; Meyer et al, 2013; Ray and Smith, 2012). First, researchers can create photographs to document field experiences or use them during interviews. Ray and Smith (2012) noted that taking photographs early in field exploration can capture initial experiences, images, processes, and activities that stand out before becoming desensitized to the field's richness. Second, participants can create photographs and discuss them in an interview. For instance, photo-elicitation interviews allow participants to discuss photographs with a researcher (Collier and Collier, 1986; Slutskaya et al., 2012; Warren, 2002). In photovoice research (Wang and Burris, 1997), participants create the photographs and are involved during analysis and presentation of findings to their organization.

What role will photographs play in the research? Researchers must also consider whether photographic data will play a primary or secondary role in the analysis. In the six studies we reviewed earlier, photographs played a primary role—providing and systematically analyzing strong data, possibly in combination with textual data—to create theoretical insights.

Photographs can also play a secondary role to other data—usually textual data (Hansen et al., 2022). For instance, photographs play a secondary role in photo-elicitation studies when only the textual data are analyzed and the photographs used for discussion are discarded after the interviews (e.g., Cassell, Radcliffe, and Malik, 2020).

Considering these two dimensions—the photographs' creators and the photographs' role in research—we present a 2x2 framework (Table 1) to identify ways photographs can be used in a research project. We identify four empirical approaches in which photographs can enhance the study of strategy as practice. While we discuss the approaches in each quadrant as being distinct, we recognize the dividing lines are blurry because researchers can use photographs in unique ways throughout the research process (Pratt, Sonenshein, and Feldman, 2022). Table 1's first column represents the most common photographic approach—using photographs as supplementary data. The approaches in the second column are more advanced and represent instances when photographs are central to developing theoretical insights. In Table 1 below, each quadrant is labeled and described, beginning with the quadrants in the first column and moving to the second quadrant with more advanced applications. Photograph analysis approaches are also discussed.

Table 1 about here

Column 1: Photographs play a secondary role in a research project

Outside-in supportive approach: Researcher documentation in a field setting. In this quadrant, researchers capture visuals while in the field to document what they see. Whether or not these photographs are systematically analyzed and incorporated into the research findings, they can be used as a memory aid for researchers to provide vivid reminders of their field experiences. Researcher-generated photographs can signal a research project's trustworthiness (Lincoln and Guba, 2000), providing evidence that researchers spent significant time in the field and developed a rapport with organizational members.

In SAP research, researchers have documented the use of artefacts (i.e., objects in the field) during strategy-making processes, in keeping with a *practice* approach to photographs, which helps in understanding "objects to be employed in processes of strategizing" (Meyer et al, 2013: 511). For instance, Werle and Seidl (2015) documented an organization's strategy by taking photographs to capture the use of artefacts during the strategy-making process. The artefact photographs became central to their theoretical contribution of epistemic objects to the SAP literature. Huang et al. (2022: 41) noted that one author on their team "took photographs when elements in the empirical context struck him as theoretically salient in addressing the research question." Their photographs of whiteboard and flipcharts had a significant bearing on their findings.

In summary, this outside-in supportive approach highlights how photographs can be used to capture field experiences, track artefacts, support the research's trustworthiness, and/or reinforce emerging patterns from other data sources.

Inside-out supportive approach: Participant-generated photographs in photo-elicitation interviews. In this approach, researchers work with organizational members to generate images from a prompt tied to a research question. Photo-elicitation processes in management and organizational research have been extensively documented (Collier and Collier, 1986; Ray and Smith, 2012). Cassell et al. and colleagues (2020: 756) described their photo-elicitation approach: "The intention is to establish trust and rapport with the interviewee so that we can effectively explore their social reality and sensemaking around the concept of work-life balance." With this approach, workers may take photographs addressing the following question: What is it like to work in your organization? Researchers prepare participants to take photographs about a topic and teach them about responsible photography (Vince and Warren,

2012). Researchers then conduct interviews with participants using their images as a reference. Similar to most photo-elicitation studies, Cassell et al. (2020) discarded their participants' images and only coded the interview text.

Photo-elicitation has many benefits. First, researchers are able to obtain deeper and richer data than using interview prompts alone (Kjellstrand and Vince, 2020). Second, data generated from this technique are less affected by some biases associated with interview research (e.g., recall bias) because participants capture their actual activities and soon describe them to the researcher. Third, participants enjoy being involved in this data collection, giving them a stronger voice in the research process and more time to consider their interview "response" (versus the few seconds between an interview question and a participant's response).

In this quadrant, photographs are created by participants, are used to generate textual data through participant interviews, and are secondary to interview text. Similar to the outside-in quadrant, photographs can support emergent findings from textual data or triangulate findings.

Column 2: Photographs play a primary role in a research project

Outside-in integrated approach: Researcher-generated photographs playing a primary role in research design. In this approach, photographs are intrinsically included in the research design, systematically analyzed, and clearly connected to theoretical findings. These photographs not only signal the research's trustworthiness and highlight the researcher's embeddedness in the field but also facilitate analysis and theoretical findings contributing to the field.

Few management and organizational studies have used the outside-in integrated approach, but it holds significant potential for future SAP studies. With this approach, a researcher collects photographic data aligning with their research topic. The researcher negotiates with an organization to spend significant time observing strategic processes, as

depicted by Werle and Seidel's (2015) two-year organizational commitment and Comi and Whyte's (2018) multi-year investigation. Researchers then capture and analyze photographs to generate theoretical findings.

Buchanan (2001) described a research project that fits into this quadrant. Engaged in a hospital research project on process re-engineering that included many data sources (e.g., interviews), Buchanan (1997) followed organizational participants, took photographs of departments' processes, and documented those processes with memos. He incorporated the photographs into a PowerPoint presentation, which he showed to hospital staff to receive feedback and encourage organizational changes. Although his photographic analysis was not clearly explained, his study brought photographs front and center in the research project, contributing to theoretical insights related to process reengineering (Buchanan, 1997).

The outside-in integrated approach is promising for SAP research. By systematically analyzing their photographs, researchers can derive significant insights about strategizing processes and activities over time. In the example discussed below, we identify how strategy change can be tied to daily activities and physical space.

Inside-out integrated approach: Participant-created images playing a primary role in research design. This approach uses photographs created by research participants as primary data for analysis and theory building. In this more participatory approach, researchers and participants collaborate "to increase participants" voice" (Bell and Davison, 2013: 179). One type of inside-out integrated approach is photovoice with participants playing a primary role across the *entire* research project (Wang and Burris, 1997). Although mainly used in healthcare-related fields, photovoice has been adopted in other disciplines (e.g., sociology, leisure studies, marketing,

education) (Harper, 2012). Management and organizational research has not yet embraced this method.

In a photovoice project, participants are involved in collecting and analyzing data and sharing insights. This approach is especially well-suited to capture organizational members lower in the organizational hierarchy and to offer them a unique and powerful voice to share their daily activities and lived experiences. Through continual collaboration between researchers and participants, researchers can identify theoretical insights as well as promote organizational change. For instance, in an occupational health and safety study, Flum et al. (2010) used a photovoice approach to examine custodian safety in a large university. University and union leadership wanted to determine if a new program had sufficiently addressed health and safety issues. This photovoice project was designed "to give voice to workers on campus with the least social status and power, the custodians" (Flum et al., 2010: 1151). Research participants were told the photographs' purpose (i.e., to capture images of daily hazards) and were given a disposable camera (maximum of 25 images). Over two days, these workers took photographs and logged why each image was captured. Then the participants sorted similar images into themes, which were presented to other custodians for feedback. Insights from this study were transferred to those in power through a presentation report, which visually documented suggestions using the custodians' photographs. A year after the project, "a number of hazards identified through Photovoice had been corrected [and a] safety committee for custodians ha[d] been established" (Flum et al., 2010: 1156).

In this quadrant, we imagine SAP researchers working closely with organizational members to understand their daily lives, activities, and practices. The participant-generated photographs are not discarded but are systematically analyzed, with varying levels of participant

involvement. As a result, photographs in a study using this approach are central to the analysis. Findings are based on themes emerging from the photographs. Given the SAP research's focus on practice and closer collaboration with organizations for impact, this approach holds great promise.

Because photograph analysis is usually thinly described in research, we provide an overview of photographic data analysis approaches. We assume photographs contain theoretically relevant data that can be subjected to systematic analysis. In studies using archival photographs (e.g., media images, content, semiotic, and iconography), analyses are extensively discussed (Bock, Isermann, and Knieper, 2011; Meyer et al 2013). However, we discuss methods when a researcher intentionally collects photographs from a chosen field site to analyze and use them to build theory. Highlighting several decisions and approaches below, we recognize a need for more clarity and pragmatic guidance on photographic data analysis.

Systematically analyzing photographs

We highlight two main considerations when undertaking systematic photographic analysis that apply to both participant- and researcher-created photographs (Table 2). First, researchers must consider whether the analysis focuses on one image or a composite of images. Second, researchers must determine the extent to which other data—usually textual—is linked to the photograph(s). Researchers can use bricolage to move between the techniques that make the most sense for their project (Pratt et al., 2022).

<u>Single-image analysis</u>. First, researchers can analyze individual photographs—a common approach outside management and organizational research (Felstead, Jewson and Walters, 2004; Harper, 2012; Prosser and Schwartz, 1998). Harper (2012), a visual sociologist, described a process in which each image is analyzed for its visual components (i.e., details that might be

overlooked at a glance) and then for its sociological meaning. According to Harper (2012: 222), "Deconstructing photos takes some imagination and patience. There is much information waiting to be interpreted." With this approach, researchers create a narrative about each image.

According to Prosser and Schwartz (1998: 111), researchers need a lens to interpret a photograph such as a "social explanation or intellectual puzzle ... to be resolved." Both Harper and Prosser and Schwartz discuss connecting with a theoretical lens to make sense of an image.

Second, some photographs can be analyzed for their emotional effect on the viewer (Barthes, 1981). In their study, Bell and Vachhani (2020: 687) used Barthes' punctum approach to analyze their images. They found this approach useful for identifying objects that punctuated (i.e., stood out in) their reading of a photograph because they were linked to sensory or relational encounters. One of these authors immersed herself in the photograph to experience the sensation of being there in order to identify theoretical insights about craftwork.

Third, researchers can analyze photographs by coding at higher abstraction levels (Collier and Collier, 1986). Margolis and Rowe (2012) discussed an image-by-image analysis akin to textual grounded theory. Using an interpretivist approach, they described each photograph, coded each using appropriate categories (i.e., open coding), and used axial coding to construct broader categories across images. Then they used broader coding to uncover theoretical contributions (Margolis and Rowe, 2012). At each step of coding, the analysis broadens to more latent and theoretically relevant themes² (Collier and Collier, 1986).

There are many additional approaches to individual photograph analysis, but these three most closely resonate with SAP's interpretivist approach.

²The difference between manifest and latent image aspects are illustrated in Figures 1 and 2 found in Ray and Smith, 2012: 302, 303.

Composite photographic analysis. Shortt and Warren (2019) offered another approach to image analysis by examining photographs in aggregate rather than individually. Calling this process grounded visual pattern analysis (GVPA), they built on Collier's work to examine the "content and character' of images in visual research, asking the researcher to ... view images in their entirety... [and be] influence[d] by this final exposure to the whole" (Collier, 2001: 39, as cited in Shortt and Warren, 2019: 548-549). In their study, Shortt and Warren (2019: 544) invited hairdressers to take photographs "of places meaningful to them [that] said something about 'who they were." They objected to single image analysis in which "individual images are pulled apart in forensic detail in order to establish meaning based on the visual mode" (Shortt and Warren, 2019: 548). Instead, they grouped similar images as "thematic sets," relying on insights from their photo-elicitation interviews (Shortt and Warren, 2019: 547). Next, they organized their images by date and photographer. Then, they engaged in structured viewing through symbolic viewing (i.e., looking for what is communicated across the images) and compositional viewing (i.e., looking for the structural and stylistic components). Finally, the researchers contemplated how these composite analyses "help[ed] build conceptual contributions from photographic methods, above beyond purely empirical ones (Drew & Guillemin, 2014)" (Shortt and Warren, 2019: 552). Later in this chapter, we illustrate some of these analytical steps in our SAP-related example.

Connection to textual research data. In management and organizational research, it is a rare study to find photographs as the only data source. Instead, photographic data were a primary data source along with other data—usually interviews and observations. Implicit in the approaches presented above is an understanding of participants' comments (e.g., Shortt and Warren, 2019),

knowledge of the theoretical domain (e.g., Harper, 2012), and/or the research domain's theoretical domain (e.g., Collier and Collier, 1986).

Along with these implicit understandings, we propose several explicit connections between data sources during image data analysis. Felstead et al. (2004: 118) argued that "[w]ords and text, of researchers and respondents, colour the meanings attributed to images" and that "images can change the way interview transcripts are read and serve as a catalyst to theoretical reconceptualization." They cited Pink (2001: 96), who stated, "The purpose of [photographic] analysis is not to translate 'visual evidence' into verbal knowledge, but to explore the relationship between visual (and other) knowledge" (Felstead et al., 2004: 118). According to Collier and Collier (1986: 170), "The promise of systematic visual analysis is that it may provide a means of combining the different sources of intelligence in a responsible manner that overcomes our culture separation of the visual from written records." Acknowledging these views of the close connections between images and texts, we provide ideas below about those connections in data during analysis and in presentation to support theoretical contributions.

Among the many ways to connect visual and verbal data in research projects, we identify two approaches: grounded triangulation and composites.

Both participant- and researcher-created photographs have been used for pattern triangulation emerging from rigorous textual coding. In most computer-aided quality data analysis software, interview comments can be hyperlinked with an image—or part of an image—to reinforce the patterns emerging from interview coding (Ray and Smith, 2012). While in many articles triangulation is mentioned regarding how photographs are used in the analysis, the process undertaken to make these connections are rarely discussed overtly in articles. To make

this process transparent, researchers should ground connections between the images and text and clarify how these explicit connections support emerging findings.

Composite analysis involves juxtaposing images and text for comparison. In a composite analysis, the researcher describes each image with the pertinent text (e.g., researcher observation notes, interview comments) connected. The researcher then systematically analyzes the composite to identify patterns emerging from juxtaposed images and text. In his dissertation, Hurst described and provided a visual image of his OneNote screen he created for each field visit. He included "multiple images of hand-written notes, photos, transcripts, screenshots, etc.," resulting in 234 pages of integrated data (Hurst, 2022: 56). These composites along with a tool (Emotiongraph) that he created allowed him to connect verbal and photographic data to build evidence for his theoretical contributions.

We identify two ways that photographs have been included as a primary data source (compared to just decoration or an illustration) in publications: photo essays and side-by-side visual/verbal displays. First, in photo essays, images dominate the article. A photo essay usually begin with a short essay to position the photographic display that dominates the article. Readers can review patterns across the images based on the opening essay. Photo essays can be found in many disciplines, though only a few examples exist within management and organizational research. For instance, Maier (2005) provided a short photo essay about surviving his doctoral studies. In the journal *Organizations and Environment*, Meyler, Stimpson, and Cutchin (2007) provided a photo essay about the petrochemical industry's significant change to the Texas landscape. We can imagine this publication style in such publications as *Journal of Management Inquiry*, *Journal of Business Venturing Insights*, *Academy of Management Discoveries*, or other journals open to innovative article formats.

Second, building on our review, we identify in the findings sections various ways photographs were displayed. Werle and Seidl (2015) provided annotated photographs in their findings section, along with insights from their observations. Comi and Whyte (2018) juxtaposed an observation summary, interview or field note excerpts, and participant-created images. Huang et al. (2022) provided representative photographs to support textual data on material use. In these articles, photographs were not for entertainment, but were instead central to building a case for the findings.

Researcher-generated images with GVPA analysis

To illustrate how SAP research can benefit from using photographs, we provide an example from longitudinal research studying how daily activities and changes to space are connected to strategic changes. This study fits into the outside-in integrated approach whereby (a) researcher-generated photographs play a primary role and (b) a limited analysis uses the GVPA approach.

From 2010 to 2015, one researcher spent considerable time in a private, medium-size, family-owned company manufacturing medical garments. The relationship between the researcher and the company began with a serendipitous encounter in which one of the two owners discussed how many of their employees danced every day. After a 2009 visit to write a case study (with an honors student), the researcher began a research project in earnest in 2010 to capture daily activities and practices through photography, observations, and interviews. The initial focus was to understand how daily practices supported this firm's values and goals. The researcher made multiple visits, varying from one day to two weeks, for five years.

Subsequently, a private equity firm bought the company.

Upon entering the field in 2010, the researcher took photographs of surprising or unusual features in the manufacturing/sewing operation.³ The photographs included the kitchen breakroom that had a picture frame for each employee organized on the wall by their birthday month. Most employees decorated their frames with personal aspects of their life (e.g., country of origin, hobbies). Photographs also captured the Hilton-like plant bathrooms; the daily scramble to ship orders received on the same day; and, of course, the daily dancing. Managers and supervisors were interviewed.

During a long visit in 2010, the researcher tried to undertake a photo-elicitation project with the plant workers; however, given the number of non-English speakers and constraints on their time, this effort did not materialize. Instead, because the researcher was visible in the company and had developed a good rapport with many in the company, ⁴ employees identified and discussed an object or place of importance. For instance, one employee took the researcher to a bra-molding machine and explained that this machine, new to the company, removed seams that could rub a patient after surgery. When this machine was purchased, no one could operate it; she described how the founder trusted her to learn about and operate the machine. Throughout the visits, employees continued engaging with the researcher.

While several presentations and methods articles have leveraged this study's photographs, only recently did she begin systematically analyzing photographs using GVPA. The researcher-created photographs visually documented this firm's strategic reorientation from a family/employee-focused environment to a firm prepared to be sold to a private equity firm. Beginning in 2009, the firm experienced various strategic changes when one cofounder was

³The researcher spent many years in manufacturing before an academic career; this experience provided discernment in viewing features of this manufacturing company.

⁴Perhaps engendering trust, the researcher was visible and accessible—eating lunch with the workers, showing interest in their work, participating in dancing, engaging in chitchat, etc.

bought out, followed by a newly appointed chief operating officer. The remaining founder returned in late 2012 and focused on organizational efficiency. Increasing bureaucratization was visible in their operation from 2010 to 2013.

As part of a GVPA approach, image sets were created from the photographs. One set was related to dancing, the space for dancing, and other relevant components. As seen in Figure 1, the photographs were then organized chronologically from 2010 (on the left) to 2013 (on the right). Undertaking a structured symbolic viewing, CAQDAS was used to code the composite around the dancing space (i.e., wall behind the laser-cutting machine). Photos from one of the company's annual galas, where dancing played an integral part, was on the plant wall. Fast forward three years (on the right-hand side of the photo in Figure 1), and the dancing space had been dismantled to accommodate a faster and more accurate laser cutting machine to resolve a bottleneck in operations. A loud buzzer in 2013 (noted in coding) replaced a gentle bell (in 2010) to indicate breaks. We noted changes to clothing—from dancing attire and some workers in company polo shirts to uniforms, indicating rank (e.g., blue shirts for managers, green for supervisors). Where there was once a dance floor, in 2013 there were lines indicating where to walk on the floor and enhanced shelving and storage systems; a separate trailer was placed behind the building for Zumba dancing. When coding, the researcher added reflections (from observational notes, interviews, and reactions while coding) on the codes (i.e., yellow rectangle on coding in Figure 1). In Figure 2, these reflections were printed out with the codes and images to enable the researcher to step back and begin to see patterns.

Figures 1 and 2 about here

From this structured analysis of one photo image set in a larger project, the researcher noted in her photographs such patterns as more operational structuring (lines on floor, shelving), more light (not dancing in the dark), more uniform clothing, and fewer sewing operators. The photographs capture a company in which the whimsy of dancing and other employee-focused activities gave way to more bureaucratic and visibly efficient practices as the company moved toward a private equity sale. Understanding the practices of readying a company for sale is an area of SAP that is relatively underexplored.

Considerations

Using photographs in SAP research offers tremendous potential to engage deeply with organizational members, to capture rich data over time, and even to co-create knowledge with study participants (i.e., photovoice). In this chapter, we present multiple ways to incorporate photographs into SAP research. Table 1's first column highlights using photographs to capture impressions (researcher-created photographs) and to engage with organizational members (participant-created photographs) in order to triangulate findings from other data. The second column demonstrates how photographs allow researchers to deeply engage participants and encourage organizational change. We detail analytic approaches that can be used to not only analyze photographs as primary data in a research project, but also to knit photographic images as secondary data with other data sources.

Despite the benefits of incorporating photographs into a research project, researchers should note some considerations. Because photographing can be more invasive than conducting interviews or collecting documents, researchers must (a) justify their photographic approach to Institutional Review Boards and (b) train participants to consider who is included in an image, safeguard subject confidentiality, and negotiate photograph ownership if needed for publication

(Vince and Warren, 2012). Researchers must also work with organizations to obtain their support for more participant-involved approaches. In photographic research, researchers must earn trust from organizational members by deeply engaging with organizational leaders and participants.

Furthermore, because photographic methods are relatively novel in SAP and management and organizational research, researchers might encounter pushback from using and publishing images. However, we urge researchers using photo methods to clarify their image analysis and explain how patterns and theoretical insights emerged. Hopefully, this chapter provides information that helps legitimate photo methods in management and organizational research and that can be used to help assuage editors' and reviewers' concerns.

This chapter presents a framework and makes a case to adopt increased photographic approaches within SAP research. As the field makes methodological advancements (e.g., video methods), we seek to highlight photographs' potential for generating unique theoretical insights within organizations. We believe that including photographs will provide fresh insights and help us better understand strategy as practice.

References⁵

- Abdallah, C., Basque, J., and Rouleau, L. (2017), 'Designing strategy as practice research', In C. Cassell, C., Cunliffe, A.L., and Grandy, G. (eds.), *The Sage Handbook of Qualitative Business and Management Research Methods:* 328-344. Los Angeles, CA: Sage.
- Barthes, R. (1981), Camera Lucida: Reflections on Photography (1st American ed.). New York: Hill and Wang.
- Bell, E., and Davison, J. (2013), 'Visual management studies: Empirical and theoretical approaches.' *International Journal of Management Reviews*, 15/2: 167-184.
- *Bell, E., and Vachhani, S. J. (2020), 'Relational encounters and vital materiality in the practice of craft work', *Organization Studies*, 41/5: 681-701.
- Bock, A., Isermann, H., and Knieper, T. (2011), 'Quantitative content analysis of the visual', In E. Margolis, E. and Pauwels L. (eds.), *The Sage Handbook of Qualitative Business and Management Research Methods:* 265–282. London: Sage.
- Boxenbaum, E., Jones, C., Meyer, R., and Svejenova, S. (2015), 'The material and visual turn in organization theory: Objectifying and (re)acting to novel ideas', *Organization Studies*, 36: 133–138.
- Buchanan, D.A. (1997), 'The limits and opportunities of business process reengineering in a politicized organizational environment', *Human Relations*, 50/1: 51-72.
- Buchanan, D.A. (2001), 'The role of photography in organizational research', *Journal of Management Inquiry*, 10/2: 151-164.
- Cassell, C., Radcliffe, L., and Malik, F. (2020), 'Participant reflexivity in organizational research design', *Organizational Research Methods*, 23/4: 750-773.
- Collier, J., and Collier, M. (1986), *Visual Anthropology: Photography as a Research Method*. Albuquerque: University of New Mexico Press.
- Collier, M. (2001), 'Approaches to analysis in visual anthropology', In van Leeuwen, T., and Jewitt, C. (eds.), *Handbook of Visual Analysis*: 35-60. London: Sage.
- *Comi, A., and Whyte, J. (2018), 'Future making and visual artefacts: An ethnographic study of a design project', *Organization Studies*: 39/8: 1055-1083.
- Davison, J. (2010), '[In] visible [in] tangibles: Visual portraits of the business élite', *Accounting, Organizations and Society*, 35(2): 165-183.
- Davison, J., McLean, C., and Warren, S. (2012), 'Exploring the visual in organizations and management', *Qualitative Research in Organizations and Management*: 7(1): 5-15.

25

⁵The six articles with the asterisk (*) are reviewed within this chapter.

- Drew, S., and Guillemin, M. (2014), 'From photographs to findings: Visual meaning-making and interpretive engagement in the analysis of participant-generated images', *Visual Studies*: 29/1: 54-67.
- Felstead, A., Jewson, N., and Walters, S. (2004), 'Images, interviews and interpretations: Making connections in visual research', In Pole, C. (ed.), *Seeing is Believing? Approaches to Visual Research*: 105-122. Oxford: Elsevier Science.
- Flum, M. R., Siqueira, C. E., DeCaro, A., and Redway, S. (2010), 'Photovoice in the workplace: A participatory method to give voice to workers to identify health and safety hazards and promote workplace change', *American Journal of Industrial Medicine*, 53/11: 1150-1158.
- Golsorkhi, D., Rouleau, L., Seidl, D., and Vaara, E. (Eds.) (2015), *Cambridge Handbook of Strategy as Practice*. (2nd Ed.). Cambridge: Cambridge University Press.
- Hansen, H., Elias, S.R.S.T.A., Stevenson, A., Smith, A., Alexander, B., and Barros, M., (2022), 'Keeping qualitative research weird: Prevalent silences in interview-based research and practices to unsilence non-interview data, researchers, and context', Presentation at annual meeting of Academy of Management, Seattle, WA, Research Methods Division.
- Harper, D. (2012), Visual Sociology. New York: Routledge.
- Hassard, J., Burns, D., Hyde, P., and Burns, J. P. (2018), 'A visual turn for organizational ethnography: Embodying the subject in video-based research', *Organization Studies*, 39/10: 1403-1424.
- Höllerer, M., van Leeuwen, T., Jancsary, D., Meyer, R., Anderson, T. H., Vaara, E. (2019). *Visual and Multimodal Research in Organization and Management Studies*, London: Routledge.
- * Huang, P., Wright, A. L., and Middleton, S. (2022), 'How material objects shape student team learning processes', *Academy of Management Learning and Education*, 21/1, 35-60.
- * Hurst, M. J. (2022), We Get Them Running Through Walls: Crafting Emotion Work Through Strategizing. Doctoral Dissertation, University of Warwick.
- Jarzabkowski, P., Spee, A. P., and Smets, M. (2013), 'Material artifacts: Practices for doing strategy with 'stuff', *European Management Journal*, 31/1: 41-54.
- Jarzabkowski, P., Burke, G., and Spee, P. (2015), 'Constructing spaces for strategic work: A multimodal perspective', *British Journal of Management*, 26: S26-S47.
- Jarzabkowski, P., Seidl, D., and Balogun, J. (2022), 'From germination to propagation: Two decades of Strategy-as-Practice research and potential future directions', *Human Relations*, 75/8: 1533-1559.
- Kjellstrand I., and Vince R (2020), 'A trip down memory lane: How photograph insertion methods trigger emotional memory and enhance recall during interviews', In: Crook, T.R., Lê, J. and Smith, A.D. (eds.), *Advancing Methodological Thought and Practice*, (Vol. 12, pp. 39–53). Bingley, UK: Emerald Publishing.

- Langley, A., Bell, E., Bliese, P., LeBaron, C., and Gruber, M. (2023), 'From the editors: Opening up AMJ's research methods repertoire', *Academy of Management Journal*, 66/3: 711-719.
- LeBaron, C., Jarzabkowski, P., Pratt, M. G., and Fetzer, G. (2018), 'An introduction to video methods in organizational research', *Organizational Research Methods*, 21/2: 239-260.
- Lincoln, Y.S., and Guba, E.G. (1985), Naturalistic Inquiry. Beverly Hills, CA: Sage.
- Liu, F., Jarrett, M., and Rouleau, L. (2021). 'Doing video-ethnography research in top management teams', In Grosjean, S., and Matte, F. (eds.), *Organizational Video-Ethnography Revisited: Making Visible Material, Embodied and Sensory Practices*: 133-154. Gewerbestrasse: Switzer Springer International Publishing.
- Maier, J. (2005), 'Photo Essay: After Life---Survival of a Ph.D.' *Tamara: Journal for Critical Organization Inquiry*, 4/4: 88-116.
- Margolis, E., and Rowe, J. (2011), 'Methodological approaches to disclosing historical photographs', In Margolis, E. and Powels, L. (eds.), *The Sage Handbook of Visual Research Methods:* 337–358. London: Sage.
- Meyler, D., Stimpson, J. P., and Cutchin, M. P. (2007), 'Landscapes of risk: Texas City and the petrochemical industry', *Organization and Environment*, 20/2: 204-212.
- Meyer, R. E., Höllerer, M. A., Jancsary, D., and Van Leeuwen, T. (2013), 'The visual dimension in organizing, organization, and organization research: Core ideas, current developments, and promising avenues', *Academy of Management Annals*, 7/1: 489-555.
- * Owen, C. (2022), *The Stuff of Strategy: The Potential of the Material Turn in Strategy Studies*. Doctoral Dissertation, University of Glasgow.
- Pink, S. (2001), *Doing Visual Ethnography: Images, Media and Representation in Research*. London: Sage.
- Pratt, M. G., Sonenshein, S., and Feldman, M. S. (2022), 'Moving beyond templates: A bricolage approach to conducting trustworthy qualitative research', *Organizational Research Methods*, 25/2: 211-238.
- Prosser, J., and Schwartz, D. (1998), 'Photographs within the sociological research process', In Prosser, J. (ed.), *Image-Based Research: A Sourcebook for Qualitative Research*: 115-130. Bristol, PA: Falmer.
- Rasche, A., and Chia, R. (2009), 'Researching strategy practices: A genealogical social theory perspective', *Organization Studies*, 30/7: 713-734.
- Ray, J. L., and Smith, A. D. (2012), 'Using photographs to research organizations: Evidence, considerations, and application in a field study', *Organizational Research Methods*, 15/2: 288-315.
- Rouleau, L. (2015), 'Studying strategizing through biographical methods: Narratives of practices and life trajectories of practitioners', In Golsorkhi, D., Rouleau, L., Seidl, D., and Vaara,

- E. (eds.). *Cambridge Handbook of Strategy as Practice* (2nd ed.): 462–476). Cambridge, UK: Cambridge University Press.
- SAP Interest Group. (2013). Three Year Review Report Submitted to the Academy of Management DIGR Committee.

 https://higherlogicdownload.s3.amazonaws.com/AOM/b8658241-5115-4e29-8704-eb913192a55e/UploadedImages/SAP/Documents/SAPReviewReport_2013.pdf
- Seidl, D., and Whittington, R. (2014), 'Enlarging the strategy-as-practice research agenda: Towards taller and flatter ontologies', *Organization Studies*, 35/10: 1407-1421.
- Shortt, H. L., and Warren, S. K. (2019), 'Grounded visual pattern analysis: Photographs in organizational field studies', *Organizational Research Methods*, 22/2: 539-563.
- Shortt, H. (2012), Identityscapes of a hair salon: Work identities and the value of visual methods', *Sociological Research Online*, 17/2: 1-14.
- Slutskaya, N., Game, A. M., and Simpson, R. C. (2018), 'Better together: Examining the role of collaborative ethnographic documentary in organizational research', *Organizational Research Methods*, 21/2: 341-365.
- Slutskaya, N., Simpson, A., and Hughes, J. (2012), 'Lessons from photoelicitation: Encouraging working men to speak', *Qualitative Research in Organizations and Management*, 7/1: 16-33.
- Vaara, E., and Whittington, R. (2012), 'Strategy-as-practice: Taking social practices seriously', *Academy of Management Annals*, 6/1: 285-336.
- van den Ende, L., and van Marrewijk, A. (2018), 'The point of no return: Ritual performance and strategy making in project organizations', *Long Range Planning*, 51/3: 451-462.
- Vince, R., and Warren, S. (2012), 'Participatory visual methods', In Cassell, C. and Symon, G. (eds.), *The Practice of Qualitative Organizational Research: Core Methods and Current Challenges*: 275-296. London: Sage.
- Wang, C., and Burris, M. A. (1997), 'Photo-voice: Concept, methodology, and use for participatory needs assessment', *Health Education and Behavior*, 24/3: 369-387.
- Warren, S. (2002). 'Show me how it feels to work here': Using photography to research organizational aesthetics', *Theory and Politics in Organizations*, 2: 224-245.
- *Werle, F., and Seidl, D. (2015), 'The layered materiality of strategizing: Epistemic objects and the interplay between material artefacts in the exploration of strategic topics', *British Journal of Management*, 26: S67-S89.

Table 1
Photographic Framework

	Column 1: Photographic images as secondary data in project	Column 2: Photographic images play a primary role in project		
	OUTSIDE-IN SUPPORTIVE APPROACH	OUTSIDE-IN INTEGRATED APPROACH		
Researcher-led photography	Researcher-created images while in the field enhances trustworthiness of research project (i.e., time in field) and can triangulate findings from textual data (i.e., interview or field notes). Images might be used in publications to illustrate key findings, but images are not systematically analyzed.	Researcher-created images, which are primary data or equal to textual data, are systematically analyzed to develop theoretical insights.		
	INSIDE-OUT SUPPORTIVE APPROACH	INSIDE-OUT INTEGRATED APPROACH		
Participant-led photography	Participant-created photographs are used in photo- elicitation interviews, which provide deeper insights than a question-answer format. Interview text is privileged and systematically analyzed; images are not systematically analyzed and might be used as illustrations in a publication.	Participant-created images are analyzed with participant involvement leading to theoretical contributions and conveyance to organization or broader public display (i.e., photovoice).		

Table 2
Photographic Data Analysis Approaches⁶

Single or Multiple Analysis						
1. Single analysis	 a. Narrative created about image (Harper, 2012) b. Researcher's personal reactions to an image (Barthes' punctum, 1981) c. Grounded theory approach: image by image (Margolis and Rowe, 2011) 					
2. Composites	 Grounded Visual Pattern Analysis (Shortt and Warren, 2019) Dialogic – themes from observation and interviews Grouping according to themes Ordering of image sets (e.g., date, place, who created image) Structured viewing of image set Symbolic viewing – what the photographer is trying to communicate Compositional viewing - how photographs are composed Theorizing – connections to research questions, new contributions 					
Connections to Other D	Oata/Text in Project					
1. Intermediate processes	a. Triangulation - Hyperlinking image to textb. Multi-data composite view (OneNote, Hurst, 2022)					
2. Publication displays	a. Photo essay (see examples in text)b. Tables (Comi and Whyte, 2018)					

 $^{^{\}rm 6}$ These approaches can be conducted manually (Shortt and Warren, 2019) or with CAQDAS (Ray and Smith, 2012).

Figure 1

Dancing Image Set: Symbolic Structured Viewing, 2010-2013⁷



⁷ Earlier images are on the left and coded in red; 2012-13 images are located on the right and are coded in purple.

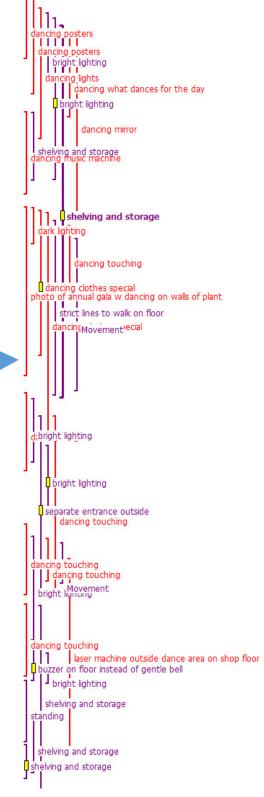


Figure 2

Codes, Image Excerpts, and Researcher Reflections

Category	Code	Case	Text ∇			Coder	Date	Words	% Words	Comment		
2010	dancing clothes special	2023-06-14_17-40-20	P			Admin	6/20/2023	36.4k	1.75%	REFLECTIONS: REFLECTIONS - the Clothes say a lot about the movement to bureaucratization — from diff (some in white LOGO pobs), stylish dressing or fancy dress (annual gala) to uniforms — blue form mana floor supervisors, and white polos for line workers — strictly adhered to.		
2012_13	shelving and storage	2023-06-14_17-40-20		b		Admin	6/20/2023	27.3k	1.31%	REFLECTIONS: REFLECTION: More straight lines, shelving, more tidy and linearly organized		
2012_13	bright lighting	2023-06-14_17-40-20		<u> </u>		Admin	6/20/2023	1.3k	0.06%	REFLECTIONS: REFLECTION: Lighting very different in 2010 to 2013 dark for dancing to flourescent		
2012_13	buzzer on floor instead of gentle bell	2023-06-14_17-40-20				Admin	6/20/2023	3.1k	0.15%	REFLECTIONS: REFLECTION: from soft bell and touching to LOUD buzzer and no touching.		
2012_13	bright lighting	2023-06-14_17-40-20		EDI		Admin	6/20/2023	101.2k	4.86%	REFLECTIONS: REFLECTION: From dark for dancing to bright lighting with flourescent lights		
2012_13	separate entrance outside	2023-06-14_17-40-20				Admin	6/20/2023	43.3k	2.08%	REFLECTIONS: REFLECTION Space for dancing together was hived off from main building. Have to go are Zumba space.	und back to enter	
2012_13	shelving and storage	2023-06-14_17-40-20				Admin	6/20/2023	1.9k	0.09%	REFLECTIONS: REFLECTION storage in 2010 was locker for each employee and haphazard storage under machine (boxes) whereas later in 2012_13 it was more organized, sharp corners,	er laser cutting	
2010	dancing touching	2023-06-14_17-40-20		S 1 30)		Admin	6/20/2023	2.8k	0.13%			
2010	dancing clothes special	2023-06-14_17-40-20				Admin	6/20/2023	130.0k	6.24%			
2010	photo of annual gala w dancing on walls of plant	2023-06-14_17-40-20				Admin	6/20/2023	52.2k	2.51%			
2010	dancing music machine	2023-06-14_17-40-20				Admin	6/20/2023	28.4k	1.36%			
2010	dark lighting	2023-06-14_17-40-20				Admin	6/20/2023	22.3k	1.07%			
2010	laser machine outside dance area on shop floor	2023-06-14_17-40-20				Admin	6/20/2023	122.6k	5.89%			
2010	dancing mirror	2023-06-14_17-40-20	5			Admin	6/20/2023	95.3k	4.58%			
2010	dancing what dances for the day	2023-06-14_17-40-20				Admin	6/20/2023	13.7k	0.66%			
2012_13	bright lighting	2023-06-14_17-40-20				Admin	6/20/2023	12.6k	0.61%			
2012_13	shelving and storage	2023-06-14_17-40-20				Admin	6/20/2023	26.1k	1.25%			
2012_13	shelving and storage	2023-06-14_17-40-20				Admin	6/20/2023	15.2k	0.73%			
2010	dark lighting	2023-06-14_17-40-20		THE WATER STREET		Admin	6/20/2023	67.2k	3.23%			
2010	Movement	2023-06-14_17-40-20				Admin	6/20/2023	4.4k	0.21%			
2012_13	bright lighting	2023-06-14_17-40-20		1 9/2		Admin	6/20/2023	52.4k	2.52%			
2012_13	bright lighting	2023-06-14_17-40-20				Admin	6/20/2023	19.8k	0.95%			
2012_13	standing	2023-06-14_17-40-20	4			Admin	6/20/2023	27.3k	1.31%			
2010	Movement	2023-06-14_17-40-20				Admin	6/20/2023	103.2k	4.95%			
2012_13	strict lines to walk on floor	2023-06-14_17-40-20	_			Admin	6/20/2023	91.2k	4.38%			
2010	dancing touching	2023-06-14_17-40-20					0.000.000	(0.0)	0.000		_	
2012_13	shelving and storage	2023-06-14_17-40-20		Comment							Va	
2010	dancing touching	2023-06-14_17-40-20				010000			OVERNATION OF THE PERSON OF TH			
2010	dancing touching	2023-06-14_17-40-20		REFLECTIONS: REFLECTIONS	5 - the Clothes say	a lot	t about	the m	novem	ent to bureaucratization from different colors,		
2010	dancing touching	2023-06-14_17-40-20		(some in white LOGO polos), stylish dressing or fancy dress (annual gala) to uniforms blue fomr managers, green for								
2010	dancing posters	2023-06-14_17-40-20		floor supervisors, and white	polos for line wor	kers	stric	tly ad	hered	to.		
2010	dancing posters	2023-06-14_17-40-20		DEEL ECTIONS: DEEL ECTION: More etrainht lines, chelving, more tidy and linearly organized								
2012_13	bright lighting	2023-06-14_17-40-20										
2010	dancing lights	2023-06-14_17-40-20	REFLECTIONS: REFLECTION: Lighting very different in 2010 to 2013 dark for dancing to flourescent									
				REFLECTIONS: REFLECTION:	from soft bell and	touc	hing to	LOUI	D buz	zer and no touching.	1	
				REFLECTIONS: REFLECTION:	From dark for dar	ncing	to brig	ht ligh	ting w	rith flourescent lights	1	
				REFLECTIONS: REFLECTION S Zumba space.	Space for dancing	g toge	ether w	/as hi	ved o	ff from main building. Have to go around back to enter	1	
				REFLECTIONS: REFLECTION machine (boxes) whereas late						ployee and haphazard storage under laser cutting larp corners,	1	