Photo-Objects

On the Materiality of Photographs and Photo Archives in the Humanities and Sciences

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On the Materiality of Photographs and Photo Archives in the Humanities and Sciences

Julia Bärnighausen, Costanza Caraffa, Stefanie Klamm, Franka Schneider, and Petra Wodtke (eds.)

Max Planck Research Library for the History and Development of Knowledge Studies 12

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Chapter 10

Finding Photography: Dialogues between Anthropology and Conservation

Haidy Geismar and Pip Laurenson

"Bob was made redundant in the end, and he became a postman." Catherine Yass in an interview with Geismar and Laurenson, May 12, 2015

Introduction

This paper explores how contemporary art photography is entangled within precarious networks of skills, labor, and materials, many of which are rapidly becoming obsolete. Our research argues for making networks of production more visible for conservation practice within the museum, even if photo-objects are still typically displayed in contemporary art museums as authored by a single artist, without making any of these networks visible. This turn towards the social network within conservation raises many important questions about the responsibility of the museum to preserve ecologies that support and enable artistic production as well as the artworks themselves.

This piece reflects an idiosyncratic and long-term conversation between the authors that draws on a wide range of different methodologies and knowledge-making practices. The authors come from two different disciplines. Pip Laurenson has a background in conservation, was Head of Time-based Media Conservation at Tate from 1996 to 2010 and currently works developing, leading, and supporting research within the museum as Head of Collection Care Research. Haidy Geismar is a social anthropologist, trained in the Material Culture Research section of the Anthropology Department at University College London. Working in Europe, North America, and the Pacific, with a particular focus on historic photographs, she tracks collections as material and social, and now increasingly digital, networks that create new ways of understanding concepts such as the past, property, tradition, and creativity. Our working partnership and intellectual collaboration draws questions of collections care and conservation into dialogue with academic interests in materiality and uses this as a springboard to advance thinking in both of our fields, bleeding into the practitioner fields of both art conservation and photo processing.

Despite our differences, we both situate this research within what has come to be called the material turn: the movement of a variety of different disciplines towards materials and materiality as ways of understanding key concepts and epistemologies. With regard to photographs, this has entailed a shift from understanding photographs as immaterial images that produce their own meanings to an enhanced awareness that photographs are things in the

¹ Pip Laurenson also holds a chair as Professor of Art, Collection and Care at the University of Maastricht within the Maastricht Centre for Arts and Culture, Conservation and Heritage.

² For example, Geismar 2015.

world that circulate in and out of different contexts, accruing social value and meaning. Not only are these values and meanings coproduced by photographs, they are often reflexively incorporated back into the photo-object itself, through the reproduction of canonical genres, through inscription, framing devices, and through other material processes and practices such as exchange, reprinting, and conservation.³

In this essay, we hope to extend this understanding within an expanded interdisciplinary field, exploring some of the assumptions about the photo-object that emerge within the field of fine art conservation. We do this both to explore the conceptual framework that we are working within, but also with a view to influencing photographic conservation practice in the future using the tools of anthropology. Conservation practice is often perceived as being exclusively materials focused, understanding objects as composites of materials. However, contemporary art conservation also links materials science—an understanding of how materials respond to, and change, in their environment over time—to the disciplinary thinking drawn together in the contemporary art museum (and marketplace). This brings a number of philosophical and conceptual concerns to this focus on materials—for instance, very particular questions about authorship, artistic creativity, and authenticity.⁴ Within the modernist epistemologies that still dominate contemporary art museums, it is usually the artist who is granted the authority to articulate the form and meaning of their work and the association between materials and intention within contemporary art conservation. This may be done in relation to a positioning of the artist within an established form of practice which prioritizes the idea of artist's intention, as is prominently the case with conceptual art or instruction works, for example.

Anthropologists have conventionally been less interested in decoding or discovering the intentions of specific photographers, and have rather focused on understanding photographs in broader social and cultural contexts, tracing how these contexts compose value, and allow for the circulation of images in specific ways. Anthropological epistemologies of the photo object focus more on the ways in which objects move in the world, and have also tended to look more at how materiality (the social experience, or understanding, of material culture), rather than materials, play an important role in the social production of meaning. Several methods have been developed to facilitate this perspective – from fine-grained ethnographic exploration, through to the tracking of process using the method of *Chaine Operatoire* (or operational sequence).⁵

Anthropology and conservation as they have been constituted within the material turn can thus be understood to embody alternatively focused epistemologies of photography as an object in the world. We gloss them here as "material culture without materials" and "objects without producers" to highlight some of the blind spots that have been traditionally in-built into these disciplinary perspectives. Here, through a focus on a single case study—a contemporary photographic artwork and the questions it has generated for the artist, their production networks, and conservators working at Tate—we work to build a bridge between these different epistemological positions. In particular, we had hoped that an anthropological perspective could help open up the materials focus of conservation which often concentrates on singular images or collections, to understand how they are located within a specific cultural system. We also started out with an expectation that conservation, with its traditional

³ See, for example, Edwards 2001; Edwards and Hart 2004.

⁴ See, for example, Wharton 2015; Fiske 2009; Buskirk 2003; Laurenson 2006.

⁵ See, for example, Coupaye 2009.

focus on the object as a material practice and process that needs to be maintained and stabilized, could help anthropologists understand the role of specific materials, the processes that produce them, and the knowledge required to understand how materials construct meaning and value. However, what we both discovered is something of a blind spot in both of our disciplines regarding the process of craft, or making, in commercial or industrial processes that are all too often perceived as automatic, or are blackboxed as both material and knowledge domains. What we explore here is the complicity of different making practices and knowledge fields on defining, and recognizing, the contemporary art photograph as an object.

Material culture without materials

The material turn of the social sciences and humanities in recent decades has pushed objects, artefacts, things, material culture, to take center stage in our understanding and interpretation of the production of social relations and culture (Geismar 2006; Henare, Holbraad, and Wastell 2007; Hicks 2010). This renewed attention to objects across the social sciences and humanities may be seen as part of a broader turn towards interests in interpretation but was also, in part, a reaction to the domination of language as the primary interpretive frame. The material turn asks how objects can produce meaning or knowledge, not just as symbols or signs of meaning held elsewhere, but in their own right: not simply as representations of ideas, but as part of them. Moving beyond semiotics and structuralism, and using paradigms such as a renewed Materialism and Actor-Network Theory, seminal volumes such as Miller's *Material Culture and Mass Consumption* (1986), Appadurai's *Social Life of Things* (1986), Brown's "Thing Theory" (2001), Gell's *Art and Agency* (1998), and Henare et al's *Thinking Through Things* (2007) have all sought to develop an analytic language with which to describe the significance of things, without recourse to theories of signification drawn from language alone.

Much of this literature is interested in the capacity of material culture to act in the world, whether theorized in terms of agency (Gell 1998), actants (Latour 1996), or vibrant matter (Bennett 2010). However, within this renewed attention to material culture lies a lacuna—a frequent failure to focus on the actual materials and processes from which things are made. If the material turn insisted on the role of objects in producing meaning, it may also generally be seen to promote a shift from production to consumption. Within many paradigmatic studies of "material culture" objects are somehow a priori—as if their life begins after their making.⁷

Rather than a return to a focus on "modes of production," recent critiques and extensions of material culture studies have advocated a return to the intersections of materials and making as a way of understanding the resonance, and affectivity, of things. Ingold (2007) argues that much of material culture studies effaces materials in favor of an ideational and abstract social understanding of objects and suggests we return to a preoccupation with the stuff from which things are made. His solution to this, however, is not to turn to materials science but to phenomenology and to ideas about skill and making that draw human knowledge and the material world through generative acts of creation (2013). In a recent volume,

⁶ This is not traditionally the case for the conservation of objects produced by artisan photographic processes.

⁷ The effect might act as a critique of the recent widespread adoption of the notion of biography for understanding an artwork within conservation as developed in Vall et al. 2011.

The Social Life of Materials (2015), Drazin and Küchler argue for a perspective on materials, not as "the raw stuff from which people would be able to shape cultural and social life" but as a social element, embedded within culture as much as within nature (Drazin 2015a, xvii). Thus, "an anthropology of materials explores moments of manifest transformation between form and substance and their sociocultural implications" (Drazin 2015b, 27).

The anthropology and phenomenology of materials is drawn increasingly into dialogue with theories of affect in which materiality is perceived as an embodied response, or engagement, with materials. Shapiro (2015) and Liboiron (2016), for instance, both explore the (often toxic) ways in which chemicals and plastics penetrate human bodies and use this interpenetration to re-theorize the boundaries of the social and the natural. Shapiro's account of formaldehyde's "chemosphere" and Liboiron's account of plastic pollution bring phenomenology, materials science, and politics together.

Accounts that focus on the photo object as part of broader networks of both meaning and materials therefore present a view of the photo object as neither image nor object, but rather as a network linking people and practice to material form creating image worlds. Pinney's account of the coming of photography to India (1997), Poole's discussion of photographic practices in the Andes (1997) and Strassler's account of Indonesian photography (2010) all explore photographic practices, and images, within specific social, cultural, and political environments, in which the photo objects themselves play vital roles. Edwards's seminal work, *Raw Histories* (2001) encouraged a shift of perspective away from the singular image to locate photographs in archival and museum contexts. Her later book, *The Camera as Historian* (2012), expanded this perspective to understand the social and political milieu within which images were made, and then circulated.

Interpretive shifts between understanding photographs either as objects or as images, in terms of iconography or affect, have informed understandings of photography since it was first invented. The emergence of photographic technologies in the nineteenth century produced intensive discussion about the inherent reproducibility of the medium and simultaneously raised questions about the paradoxical immateriality of the photographic image. At the same time, technologies such as the daguerreotype were also understood to irrevocably inscribe singular moments into unique material artefacts (Wright 2004). However, there is only a small body of literature within anthropology that accounts for the production of the photo object in material terms, tracing the process of making the image from start to finish, and unpacking the intersections between photographic technologies and the social practices of photography. Broadly speaking, this epistemological foundation for the photo object understands value and meaning of photographic images as artefacts that become social once they have been made, rather than including the sociotechnical processes through which they came to being. In focusing on these processes, we address meaning making in photography from a completely different angle to the approaches outlined above. Rather than looking at the indexical ways in which the subject of photography enters the image and creates its meaning, here we look at how materials, and the processes they necessitate, also participate in the process of creating meaning for the photo object.

Objects without producers (but with artists)

The primary focus of conservation, and conservation training, is on the material object and preventing, slowing, or treating deterioration and damage. Yet contemporary conservation

practice also recognizes the need to broaden its focus away from the traditional subject of conservation, namely a unique singular material object fixed at a particular moment. Many forms of contemporary artistic practice do not produce artworks that conform to the traditional conservation object. For the contemporary art conservator, when constructing an account of what is important to preserve about a work, the views of the artist and the notion of artist's intent act as a touchstone.⁸

Despite intensive scrutiny and critique (e.g. Krauss 1986), a modernist definition of the artist is still central to the contemporary art museum and contemporary art conservation and the people and skills who have worked for the artist in the production of the work remain largely invisible. Conservation theory and practice play an important part in shaping both the artist as a stable subject in the museum and the works created. A greater acknowledgement of a social field underpinning these practices might serve to challenge both of these categories (namely, the artist and the artwork) and their stability. We therefore refer to "Objects without producers" to highlight how those involved in the making of a work are rendered invisible in the way in which art is presented, and conserved, traditionally in the museum, and how acknowledgement of these networks of people and skills might be at odds with common preconceptions of artistic authorship and an object's authenticity.

Photography is an interesting subject to draw out the complex ways in which the artist and the artist's intention underscore contemporary conservation practice. Within the traditions of connoisseurship for photography, which are still the standard reference points for conservation and curatorial practices in the museum, there are a number of categories that serve to confer value on any particular photographic object. For example, higher market value is given to a print that is classified as a "vintage" print—defined as a print that is made no more than five years after the in-camera image has been created. Greater value may also be assigned to a print that is made from the original negative or a print that has been overseen and approved, perhaps also signed, by the artist. Museum curators and conservators have to navigate these values when collecting and exhibiting photography. Major figures within the field of photographic conservation have noted that these traditions are under pressure and there is a diminishing value assigned to the unique original in art photography, often with reference made to shifting relationships to the material, triggered by the use of photography by conceptual artists in the 1960s and 1970s (see Kennedy, Reiss, and Sanderson 2016; Stigter 2016; Marchesi 2014). While later prints of historic works are common within the market and in the museum, it is only now, when photographs made and collected within a fine art context in the 1970s, 1980s, and 1990s, are showing signs of deterioration that is at odds with the artist's intended aesthetic, that the photographic conservation community has begun to publicly debate reprinting as a potential strategy for conserving a work in the art museum (Marchesi 2014; Ackerman et al. 2016).

In terms of materials, the values that underpin photographic conservation are largely derived from practices developed for works of art on paper. Drawing on practices originating from the conservation of works of art on paper, reprinting remains controversial as a conservation strategy; what is less controversial is the practice of acquiring a backup print

⁸ Wharton 2007; Gale et al. 2009; Laurenson 2009.

⁹ The vanguard of conservation explores the unfolding nature of many contemporary artistic practices and its impact on conservation practice. See, for example, Clark and Barger 2016.

to reduce the necessity of reprinting and providing a reference, ¹⁰ supporting the view that once the work enters a collection, it is considered fixed. The significance of this transition point in the life of an artwork also reinforces the sense that these works exist a priori and serves to separate the work from the time and conditions of its making.

Underneath the modernist myth of the artwork produced by the singular vision and genius of an intent artist are complex networks of people, skills, and materials. The relevance of this observation for conservation is centered on the need to understand the viability of these networks should they need to be called upon to reprint a work. What we aim to do in our broader research project is to better understand the nature of commercial photographic processes and their capacity for replication and how this feeds into the value and meaning of contemporary art photography. Understanding contemporary photographic processes as skilled craft rather than a depersonalised industrial process highlights the precarity of the networks on which a particular working practice might depend, and allows us to unpack the complex stakes that are built into the use of reprinting as a conservation strategy.

The recent opening up of photographic conservation to consider reprinting and replication highlights the dual imperatives to preserve both the image itself and the artist's relationship to it, tempered by tensions between the perceived temporal nature of these images as endlessly contemporary and the increased obsolescence and instability of the materials used to create them. Regardless of the outcome of debates and decisions about the ontology of a particular work and the ethics of replication, we find that for images made only twenty years ago, materials are no longer available, companies have closed, and the skills and knowledge embodied in the technology are lost or no longer valued.

The correlation between the ontological status of works of art and notions of reproducibility is not confined to the conservation of contemporary photography. A recent study of conservation decision-making related to Sol LeWitt's wall drawings *Wall Drawing #450* and *Wall Drawing #493* at the Carnegie Museum of Art in Pittsburg by Renée van de Vall (Vall 2015) has shown how theoretical assumptions about the nature of a work of art are challenged by the detailed understanding of their making, a challenge that impacts decisions related to the conservation of the work. In her paper, van de Vall cites Kirk Pillow (2003) who, through examining the accounts of those producing the drawings alongside the changing attitudes of the artist over time, argues that a LeWitt wall drawing can be understood as *both* allographic and autographic. Using Goodman's distinction, Pillow argues that a work such as Sol LeWitt's *Wall Drawing #493*, 1986 is allographic through the relationship of the work to its score and autographic in its specific instantiation "which depends on the historically specific rendering choices of their draftsman" (Goodman 1968, Pillow 2003 cited in Vall 2015, 372). In van de Vall's account, the public conservation discussion conducted via a list-serve failed to consider the impact of the collaborative practice of making, on the

¹⁰ When the title to a photographic artwork is transferred to the museum, it has become standard practice in some museums to acquire, as part of the acquisition of the work, two prints that have been created at the same time, enabling one to be placed in cold storage, see Kennedy, Reiss, and Sanderson 2016.

¹¹ How success in reprinting within conservation is judged is complex, given that a contemporary art photograph may be considered for reprinting because the colors have shifted considerably, consequently problematizing traditional notions of "matching" a new print with the "original."

¹² Conducted on a list serve for the conservation community, Chantal Bernicky Cons DistList August 4, 2008, http://cool.conservation-us.org/byform/mailing-lists/cdl/2008/0878.html, accessed August 14, 2018 (including Mark Clarke, Berit Moller, and Jonathan Kemp).

status and nature of the wall drawing. We would suggest that this is partly due to a blind spot regarding the process of making in relation to how contemporary art is viewed.

It may be argued that a focus on the object as material and on the social object are two different epistemologies—which cannot productively be linked in a single account. When we turn to a practice such as conservation, however, it becomes evident how the social life and value of completed images, and the processes that bring them into being, are not only inextricably linked but shape how art photographs live in the museum. Our research question is whether this expanded socio-material context meshes with a perspective that focuses in more depth on the materials and practices of photography, as well as asking how to bring this expansive approach to the technical work and disciplinary perspectives of conservation.

Contemporary art photography

Within both anthropology and conservation, photography is understood to be a series of techniques and materials that come together to create particular effects and that are dependent upon complex social networks and many different kinds of embodied skills. However, the object brought into being in each of these fields is very different. We have begun to ask whether it is important for conservation practice to fully understand these networks, skills, and materials, and how such an understanding impacts possible conservation strategies. Although conservation is traditionally seen as a discipline requiring expert knowledge about how objects have been made, when we examine the industrial or commercial processes and skills involved, we find that the knowledge and understanding is often superficial. Unlike the standard process of acquiring other forms of expertise within conservation training, there are currently few opportunities for conservators to learn these commercial or industrial processes first hand.¹³

More generally, commercial photographic practices since the 1970s, including digital practices, are not well understood; they tend to be considered only in terms of their inputs and outputs. These practices are perceived as somehow mechanized or automatic, unskilled and not craft-like. While technical art history has traditionally studied materials, processes, and studio practice, ¹⁴ the networks of individuals involved in the commercial processes that underpin many forms of contemporary art in general, and contemporary photography in particular, remain largely invisible. ¹⁵ Although we suggest this is partly to do with a narrow view of skill in relation to art making, it is also the case that the networks of contemporary art production are often rendered invisible by the politics of the art world, which constructs very particular, and often hierarchical, divisions of labor and recognition of identities. In the context of our project, contemporary art photography also throws up a number of conceptual and methodological challenges to our desire to emphasize "making" because many

¹³ Similarly, technical art history, as the interface between conservation science and art history, and for traditional artworks an area where conservation and conservation science links materials and processes of art making and meaning, has not been developed for contemporary art practice.

¹⁴ For example, Currie and Allart 2012; Dubois 2009.

¹⁵ There are contemporary art conservation projects which do touch on making and the networks of skill that embody contemporary artistic practice. However, these do not represent in-depth studies expressly focused on understanding the networks of skilled people underpinning a particular artist's practice but rather may be touched upon as part of a filmed interview with the artist as in the project videos for the Getty Conservation Institute's interview with the artist Peter Alexander as part of their project LA Art, https://www.youtube.com/watch?v=DDvVl9mNXNQ, accessed February 9, 2017.



Fig. 1: Corridors (Chaplaincy), Catherine Yass, 1994, (T07065), Tate © Catherine Yass.

materials used are either obsolete or in decline, drawn as they were from the fast-moving world of commercial photographic production. In the rest of this essay we unpack how entangled processes of making, social relations of production, and the nature of materials are to constituting an epistemology of the photo-object.

Corridors

In the remainder of this essay, we describe our project which has focused to date on a single series of artworks, *Corridors*, 1994 by Catherine Yass (see Figs. 1–4, Figs. 8–11 below, and all side by side in Hyperimage (first series, second series)). This work was chosen as a pilot of a larger project to explore the networks of materials and making that underpin contemporary art photography in the collections of Tate. ¹⁶ In what follows, we present some of the conceptual issues that emerged around *Corridors* from the vantage point of the engagement between Tate's conservation team and the artist over a number of years, drawing out the implications of this for our understanding of its meaning, as well as its future in the museum.

¹⁶ The Tate holds the national collection of British art from 1500 to the present day, and international modern and contemporary art within the UK. It comprises four galleries: Tate Modern and Tate Britain in London, Tate St. Ives, and Tate Liverpool.



Fig. 2: Corridors (Kitchen), Catherine Yass, 1994, (T07066), Tate © Catherine Yass.

In 1994, Catherine Yass was commissioned by the Public Art Development Trust to make a series of images for a psychiatric hospital in South West London that had been built in the nineteenth century. Responding to the use of photography in research into mental illness in the nineteenth century, the photographs used in *Corridors* were originally intended as backgrounds to portraits of people who either currently worked or were being treated in the hospital (Adams and Hilty 2000). However, Yass became uncomfortable with photographing those who had little or no choice regarding their presence within the hospital and became increasingly interested in the images of these empty spaces and how they swallowed up the identity of those within them. Yass also began to engage with how the architecture of the hospital was depicted in archival photographs, with an emphasis on the central human gaze, mirrored in the lighting of the architecture running down the center of the ceilings of the corridors suggesting ideas of salvation. She therefore decided to focus on creating the images of the corridors and these in-between spaces.

In preparation for a presentation at a conference in 2016 on the conservation of industrial materials in art, we came to understand *Corridors* in terms of its technical production—a perspective few people would have from viewing the artwork on display.¹⁷ This series of works by Yass were created using her own distinctive process. Yass used a four- by five-

 $^{^{17}\} https://graycenter.uchicago.edu/events/symposium-conserving-industrial-materials-and-processes-in-art, accessed May 27, 2017.$

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Fig. 3: Corridors (Daffodil 1), Catherine Yass, 1994, (T07067), Tate © Catherine Yass.

inch plate camera loaded with a double-sided dark slide.¹⁸ On one side of the dark slide is a sheet of Velvia color reversal film "correctly" loaded, with the emulsion side facing the lens, and on the other side of the dark slide is a sheet of Velvia color reversal film loaded "incorrectly," namely, with the emulsion side facing away from the lens.¹⁹ From this Yass created two exposures, as closely identical as possible. Taking these two images, she processed the correctly loaded film using the E6²⁰ process to obtain a positive and processed the incorrectly loaded film using the C41,²¹ which is designed for processing negatives. This provides the distinctive visual effects we see in the *Corridors* series.

Yass created the final image by sandwiching these two layers of color transparency, producing the unusual coloring and halo effects (see Fig. 5). Using an enlarger, and working in the dark, this was then projected onto the Cibachrome²² color transparency material that had been carefully taped to the wall. The enlarger used at CPL (Colour Processing Labora-

¹⁸ A double dark slide is a film holder that holds a sheet of film at each side. To expose the light sensitive emulsion, you literally slide the dark cover away.

¹⁹ FujiChrome Velvia RVP four- x five- inch color reversal film was available from 1990–2005. There was a change in composition and it was bought back into production on a new base in 2009 as Velvia 50 (RVP50), see Wikipedia entry on Velvia: https://en.wikipedia.org/wiki/Velvia, accessed May 27, 2017. Yass considered the properties of the original Velvia RVP so important to her work that she bought up the UK supplies when it went out of production (Personal communication with P. Laurenson via email on May 29, 2017).

²⁰ The E6 process is a chromogenic photographic process for developing color reversal or positive film.

²¹ C41 is a chromogenic photographic process for color negative film.

²² Renamed as Ilfrachrome in 1992 but colloquially still known by its previous name of Cibachrome.



Fig. 4: Corridors (Daffodil 2), Catherine Yass, 1994, (T07068), Tate © Catherine Yass.

tories, Edenbridge) where Yass printed the *Corridors* series not only had autofocus but also had computer control of the color of the light, making it possible to adjust the colors in the image by very small increments. The transparent Cibachrome material, CC.F7, considered an expensive photographic material, was only produced between 1992 and 2012 (Pénichon 2013) with the end of its production signaling the point when the network and infrastructure underpinning the making of these works rapidly fell apart.²³ In a message to customers posted on a message board in 2011, the manufacturer of Cibachrome, Ilford, announced the end of production for this material, citing the cost of silver as one of the major causes.²⁴ The material has a polyester base and is made up of multiple layers of light sensitive silver salts and azo dye (Pénichon 2013). The eight works in the *Corridors* series are presented as individual light boxes, made up of white painted wooden boxes in which fluorescent lamps are used to light the transparency from the back. The transparency is placed on a piece of opal Perspex and held in place by a standard white painted wooden molding that creates a frame. The surfaces of the transparencies are unprotected and extremely fragile, marking and scratching easily.

When *Corridors* was acquired, the acquisition process initiated a series of conversations between the artist and conservators about how the works were made and whether the images could be reprinted, what the museum should hold to ensure the series could be dis-

²³ Personal communication with the print manager at CPL, Brian Burt.

²⁴ Message from Ilfrachrome to customers in 2011.



Fig. 5: The sandwich of two layers of transparency used in the production of *Daffodil 2*, photograph taken in Catherine Yass's studio © Tate.

played in the future, and how the works might be displayed. At the time of acquisition, time-based media conservation was the responsible conservation section for color display transparency light boxes, in part due to the perception that the skills for dealing with artworks that had to be "plugged in" lay in time-based media conservation rather than paper conservation, the traditional domain of photographs. This meant that initial conversations about this form of conservation were influenced by current time-based media conservation practice: namely, the idea that the future reproducibility of a work might be facilitated by the collection of a "master" image from which the work could be reprinted, should the need arise. Therefore, coincidentally, discussions about reproduction begun with Yass earlier than would have been common in the photograph or paper conservation studios within museums.

Within time-based media conservation at that time, in the 1990s, conservators had been working hard to establish conservation strategies for video artworks for which it was accepted that there was no single or original object and that the artwork depended, at any given time, on technologies that were by their nature going to change rapidly, and become obsolete. Conservation workflows were explicitly devised to manage obsolescence and changes in technologies. Another factor in understanding the conservation context in which these color display transparency light boxes were received is the standard procedures that were in place for film and slide-based artworks where the technologies require new film prints

or sets of slides to be produced each time a work is shown due to their degradation during the process of exhibiting them. The engagement of time-based media conservation with the making of these works should therefore be understood against a backdrop where, in many cases, understanding these processes and networks is driven by a pragmatic need to engage with the community that the museum depends on for the continued display of a group of works in its collections. The desire to develop an in-depth understanding of industrial and commercial processes has developed over time with the realization that a greater understanding of the networks, skills, materials, and processes involved in making these works impacts how conservation views these photo objects and the judgements and decisions made about their conservation. Here we may be able to learn a great deal from the traditions of technical art history. This also raises questions about the relationship of conservation and the museum to the fragile networks of skills that are critical to these artistic practices.

Drawing on this context, in 1996 discussions with Yass about the conservation of *Corridors* focused on the possibility of creating a digital master so that the museum could potentially hold something that could be used to reprint the work at a later date, should that prove necessary and desirable, and a number of tests were carried out with this agenda in mind. In fact, because *Corridors* was printed from intricately constructed "sandwiches" of two transparencies that were used by the artist as a master to create the editions of work, the original plan to produce a scan which might act as a master was problematic due to the technical challenges associated with attempting to capture the properties of the delicate multilayered object. Explorations of the potential to create a digital master were at the time complicated by questions as to whether a scan of the "sandwich" could possibly capture the effects and successfully replicate the work if it was printed from directly. This dilemma cuts to the heart of how *Corridors* is understood as a photo object: is it a product of a complex process that is engaged with different kinds of processing technologies, or is it a visual effect that can be achieved in a number of interchangeable ways? Is it a unique physical object or a reproducible image?

In retrospect, this idea that a digital file could easily provide the potential to reprint the work at a later date seems naive. It was, however, driven by a desire to develop a strategy in the face of insufficient information about how the works might age over time. There was concern about both the color stability of the work and also the vulnerability of the surfaces. Although the materials and processes which produced these works have subsequently become obsolete, there was an enduring belief that they would be replaced by something aesthetically equivalent. Today Yass uses Duratrans instead of Cibachrome and there is an unresolved question central to art conservation practice as to the aesthetic impact of the shift in materials and processes in the construction of her light boxes.

²⁵ Corridors is an editioned work. The full set of eight images was sold as an edition of two, (Yass also created a edition of four which only included four of the corridor images) and so it would not have been appropriate for her to provide the "sandwich" as part of the acquisition of the work to Tate.

²⁶ Tests were carried out to scan the "positive and negative sandwich." However, nothing conclusive was determined about either the light sensitivity of the work or the feasibility of creating a digital scan and successfully printing a replica. Also in 2003, work was carried out on the color monitoring of *Corridors* in an attempt to understand more about their light stability. In 2011, Kate Jennings (now Kate Lewis) carried out additional research to look at the light boxes in more detail in collaboration with the photographic conservator Sylvie Pénichon (Jennings and Pénichon 2011).



Fig. 6: A Kodak camera advertisement published in the first issue of *The Photographic Herald and Amateur Sportsman*, November 1889, Wikimedia Commons.

Obsolescence, precarity, making, and materials

Yass's interest in exploring different ways to reprint *Corridors* was also indicative of an artist who was experimenting with how her technique might develop once the analogue technologies she had been using were no longer available. At that point in time, the experiments and questions of conservation aligned with those of the artists, both driven by the emerging needs of their different practices.

With a work like *Corridors*, the process and skill involved in its making are largely invisible, both to the museum visitor and to those more intimately engaged with its care and conservation. Popular experiences, since Kodak "did the rest" (see Fig. 6), have distanced many people from knowledge of processing techniques. In terms of meaning making, interpretive work on photographs has tended to concentrate on the final image as an index of a decisive moment or idea. *Corridors* has many layers of technical processing that are difficult to disentangle, even for photographic conservators (see Fig. 7).²⁷

Since *Corridors* was acquired, the processes underpinning the image have become obsolete and although Yass continues to make color display transparency light boxes, she now depends more on digital processing undertaken in the lab than on the handwork that she used to carry out in her studio. Today she relies on different networks of skilled practitioners and materials. The alignment of the positive and negative images is achieved digitally and is

²⁷ Whereas for conservators who are dealing with film- or slide-based works it is necessary to understand and be able to activate a network that can replicate slides or prints, there has not traditionally been any need within the standard display of photographic works to engage on this level. For instance, Joel Snyder has recounted how his exercise in reprinting from the original negatives of the photographer Eugène Atget, using recreated traditional techniques of Albumen printing, was greeted with ambivalence by some within the world of photography connoisseurship, even as his prints (presented as original Atgets) were collected by museums such as the MoMA and the V&A, http://collections.vam.ac.uk/name/joel-snyder-chicago-albumen-works/A38251/, accessed August 14, 2018, see also http://www.albumenworks.com/traditional_printing/, accessed January 7, 2018. The comment about ambivalence comes from a personal communication with Joel Snyder, dated November 19, 2016, in which he spoke anecdotally about how much he was criticized for this project.



Fig. 7: Tate Photographic Conservator Laurence Martin and Haidy Geismar discuss Chaplaincy, part of the *Corridors* series at Tate's Collection Centre © Tate.

now undertaken at different companies including one in East London that describes itself as a "high-end retouching house" with a website that references fashion studios.

When we visited Catherine in 2015, we discussed the process involved in creating the "sandwiches":

I think I spent so long dusting between the things because, if you blow them up, you, obviously, just get massive dust in between. Once you've got the dust out and you've laid them down, you're trying to overlay them really carefully, so I used to sit, at that light table, and it would take maybe three hours, and then I'd hold it down, by the tape, come back at it, probably have another three hours at it. I think my eyes had really gone; I used to just spend hours just looking through a magnifying glass. Then you'd find that you had lined it up, and the dust had got in, and you'd have to take it all apart. It was really difficult, but I kind of masochistically enjoyed it, in some way, but I think it's because it demanded such concentration. If you just let slip, for a second, you've lost all of those hours of work, because it's just relying on very fine positioning. I had to cut down—I had to cut the tape into really thin slithers, and had lots of little tabs of it along the table, and then you'd have to lay them down, in such a way that they didn't go into the image. (Catherine Yass, interview with Geismar and Laurenson, May 12, 2015)

In 2015, it became clear that producing the "sandwiches" relied on an extremely intensive process that had been developed by the artist over many years, and also on collaboration with printers who understood both the process and the effects that Yass was trying to achieve:

There was a very amazing man, called Bob Keech. You had to get on the train, go to the countryside, with your negs in your bag. You'd go there for a really intense day of tests, and you had to get it done. (Catherine Yass, interview with Geismar and Laurenson, May 12, 2015)

The degree to which these networks are dependent on industrial processes, despite having a significant artisan quality, mean that it is difficult, if not impossible, to replicate the skills and knowledge embodied in a technique that is no longer ubiquitous. Often the subtle, or not so subtle, differences in properties such as the size and texture of the paper and the dye structure and the opacity of the backing and photochemical sensitivity become important considerations to many artists when considering the future of their artworks as they imagine the life of their work after it has been collected. Interviewing Catherine Yass, specifically about the stages of the process, changed how Laurenson viewed the light boxes, reinforcing their uniqueness as material objects mirrored in the way in which Catherine Yass had created them in one focused moment of making:

I never liked to come back and do reprints, because it was never the same, and I couldn't afford to do a lot. If I was working in a series, I would just make two editions, one as a series and one set of individuals, so I'd just make two prints then and there. (Catherine Yass, interview with Geismar and Laurenson, May 12, 2015)

This sense of the moment in which the work was finalized supports the foregrounding of these works as unique objects. ²⁸ In viewing the works again, examining their very vulnerable matt surfaces which are not covered by glass or perspex when they are displayed, and seeing the areas of scratches and abrasion and viewing the small areas of dust or the eyelash left in the "sandwich" and caught in the printing process also served to reinforce the singularity and uniqueness of these objects.

Those involved in the production of *Corridors* have expressed a strong feeling that as the materials they work with have become obsolete, so too have the associated skills. For example, in a recent interview for this project the ex-print manager from the now closed company which printed *Corridors*, CPL in Edenbridge, remarked: "those skills don't count for anything now." The obsolescence of materials is sharply imprinted in people's understanding of their own practice and knowledge base as also becoming redundant.

Concluding remarks

The ongoing discussions over the conservation of *Corridors* draws our attention to how the understanding of the photo object continually oscillates between the photo as a singular artefact, the photograph as a performative event that manifests itself at a particular moment on

²⁸ As we have seen in the case of Sol Le Witt's Wall drawings, even with "instruction pieces" where the value of the specific material instantiation is reduced, its value does not evaporate within the biography of the work. As Kirk Pillow and Renée van de Vall have shown, it is possible for a work to share ontological characteristics between the autographic and allographic where different simultaneous or successive executions each provide a unique instantiation of a work (Pillow 2003 and Vall 2015).

a particular media, and the photograph as a realization of the artist's intent. How can we reconcile the questions around the social meaning of an image with the social issues raised by the materials and processes used to construct it? How are these connected? Conservation translates these conversations into a technical challenge—how to protect, preserve, possibly reproduce, and present this photo-object in order to meet the requirements and obligations of the museum. However, in this paper, we argue that this technical challenge is also epistemological—the work of conserving and preserving requires a definition of the object that includes knowledge and expertise about the technical and other processes of making but also understands this in relation to the wider context of the museum and the artist's practice. Our focus on materials and making has expanded our understanding of the technical processes of photography in terms of both knowledge and skill and their entanglement with the broader processes of obsolescence and social change. This potentially extends the remit of conservation into much broader networks and social worlds.

All of this highlights that photographic processing should not be seen as a mere technical issue, not necessarily completely separate from art historical and anthropological understandings of photograpy. As quoted on the Tate's website, Yass provides the following explanation of the Corridors series: "The negative image makes bright areas blue, so bright or transparent areas get blocked by the blue. The final picture is produced by overlaying the positive and blue negative images and printing from that. I think of the space between positive and negative images as a gap." (Quoted in Manchester 2002 from Yass et al. 2000, 81) Yass has described this gap as "an empty space left for the viewer to fall into [resulting in] no limit to prevent the viewer from being pulled right in and being pushed out again" (Quoted in Manchester 2002 from Yass et al. 2000, 84). This empty space is more than just a visual or surface image, it is an effect produced by the technical work of layering and printing from layers of transparency, or as Yass describes it "if the subject or the camera moved between the two exposures, there will be a little gap where both positive and negative failed to register, so it is a temporal gap between the exposures. For me it is where something escaped the all-seeing camera."²⁹ It is this sense of emptiness, and this picture of empty space that creates the meaning of the image—the empty gaps within institutional spaces (here corridors) that serve as a backdrop for the people who inhabit these spaces, and directly contribute to the production of meaning and context for the image. There is an uncanny alignment between the site and the process that work together to produce meaning and resonance in this image.

Understanding *Corridors* in technical, material and social terms requires an expanded practice of conservation that recognizes that photographic processes are linked to particular moments in time and are embedded within particular networks of skill and expertise. This view unravels our conventional definition of the photo object. The moment of creation was recounted as a moment at the intersection of viability (understood as the technical and commercial constraints in which those producing the work were operating) and the ambition or persistence of the vision of the artist.³⁰ From the artist's retelling of the making of *Corridors*, it became clear that it is now impossible to technically reproduce the event of

²⁹ Yass, personal communication dated May 29, 2017. Yass also recounts how she was told that another reason for the gap is that the negative C41 process temperature is marginally higher than the positive E6 process. This very slightly shrinks the film.

³⁰ We would like to acknowledge the input of Professor Harro van Lente of Maastricht University in the development of this point.



Figure 8: *Corridors (Ash)*, Catherine Yass, 1994, (T07069), Tate © Catherine Yass.



Figure 9: Corridors (Modern Team Base), Catherine Yass, 1994, (T07070), Tate © Catherine Yass

printing *Corridors*. At the same time, utilizing other techniques, such as scanning and digital processing, we may still be able to recreate the image. There is however more than one kind of politics to this—in prioritizing the image as an index of the artist's intention, digital scanning and printing can efface the labor and expertise that went before it in the form of earlier processing techniques. If we do not unpack the studio work and labor that goes into digital processing, we run the risk of conservation practice deliberately maintaining a separation between the work and the conditions of its production—and we believe that there are implications for how images then go on to be interpreted and understood when they are put on display. We argue here that this context, in the case of this image, is important in coproducing the meaning of the photograph. There are two kinds of indexicality at play here in making this image—the indexicality of the hospital, and its infrastructure of care, and the indexicality of the materials and the care and skills that these require.

Understanding how *Corridors* was originally produced from the vantage point of conservation can lead us to an ethical epistemology as well as to the capacity for re-creation. This ethics need not unravel the value system in the museum; it is the labor associated with the creation of the "sandwiches," and the printing of the work that substantiates the work as a performative event, and reinforces the singularity of the authentic artwork, made at this moment and at this time.



Figure 10: *Corridors (Personnel)*, Catherine Yass, 1994, (T07071), Tate © Catherine Yass.



Figure 11: *Corridors (Jubilee)*, Catherine Yass, 1994, (T07072), Tate © Catherine Yass.

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- Fig. 3: Corridors (Daffodil 1), Catherine Yass, 1994, Cibachrome transparency on a light box, 890 x 725 x 140 mm, Tate, T07067 © Catherine Yass.
- Fig. 4: Corridors (Daffodil 2), Catherine Yass, 1994, Cibachrome transparency on a light box, 890 x 725 x 140 mm, Tate, T07068 © Catherine Yass.
- Fig. 5: The "sandwich" of two layers of transparency used in the production of Daffodil 2, photograph taken in Catherine Yass's studio, Pip Laurenson, April 25, 2017, digital image, Tate © Tate.
- Fig. 6: A Kodak camera advertisement published in the first issue of *The Photographic Herald and Amateur Sportsman*, November 1889, unknown artist. Wikimedia Commons.
- Fig. 7: Tate Photographic Conservator Laurence Martin and Haidy Geismar discuss Chaplaincy, part of the *Corridors* series at Tate's Collection Centre, Pip Laurenson, November 8, 2016, digital image, Tate © Tate.

- Fig. 8: Corridors (Ash), Catherine Yass, 1994, Cibachrome transparency on a light box, 890 x 725 x 140 mm, Tate, T07069 © Catherine Yass.
- Fig. 9: Corridors (Modern Team Base), Catherine Yass, 1994, Cibachrome transparency on a light box, 890 x 725 x 140 mm, Tate, T07070 © Catherine Yass.
- Fig. 10: Corridors (Personnel), Catherine Yass, 1994, Cibachrome transparency on a light box, 890 x 725 x 140 mm, Tate, T07071 © Catherine Yass.
- Fig. 11: Corridors (Jubilee), Catherine Yass, 1994, Cibachrome transparency on a light box, 890 x 725 x 140 mm, Tate, T07072 © Catherine Yass.

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