UNIVERSITY OF CALIFORNIA SAN DIEGO

Camera Cultures: Technosocial Theaters of the Photographic Event

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy

in

Art History, Theory, and Criticism with a Concentration in Art Practice

by

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2020

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University of California San Diego

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ABSTRACT OF THE DISSERTATION

Camera Cultures: Technosocial Theaters of the Photographic Event

by

Alexander Heathcote Kershaw

Doctor of Philosophy in Art History, Theory, and Criticism with a Concentration in Art Practice

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Professor Lesley Stern, Chair

This dissertation looks at what we can learn about photography by directing our attention to the moments in which it is made, that we cannot possibly ever know from studying the images produced in these same moments. What kinds of knowledge are produced *in Situ,* that are distinct from the knowledge produced by looking at images? In what ways do the presence of cameras make intersubjective experience and processes of recognition specific? What is the camera when it is not conceived primarily as a representational apparatus? To answer these questions, this project departs from standard approaches in photographic theory that typically conceptualize photography via the viewer's experience of images. Instead, I use an "on-the-ground" approach to witness the processes via

which images are made in “photographic events” across three sites in California. These case studies include Scripps Pier in San Diego and the Jaffe Laboratory for Underwater Imaging at Scripps Institute of Oceanography, the work of several police crime scene photography units in Sothern California and Yosemite National Park. Through an analysis of these sites where vernacular, scientific, artistic and commercial applications of photography converge, the purpose is to build a new vocabulary for the medium, reconstituted as a performative matrix of practices that are socially situated.

The images produced at these sites no longer take center-stage, but emerge as side effects of inter-subjective processes. Conceptualized as a theatrical mise-en-scène, these iterations of the “photographic event” situate photography as a less optical and more bodily technology. Furthermore, this notion of the event complicates the way the study of images typically distribute authorship to the photographer’s intention and instead I argue that we should see agency as vastly more distributed between human and non-human agents. At the same time, the camera is cast as a material thing that alters processes of social interaction and interpersonal recognition. Finally, the now hackneyed metaphor that draws an analogous relationship between photography and the gun is revised, so that photography’s connection with hunting is situated not via the ‘the kill,’ but though practices of trapping, decoy and poaching. In these ways, photography is dislodged from theories of agency versus automatism, the trace or the ‘reality’ effect and the gaze—and re-situated as a mode of non-representational thinking in the context of discourses including tourism studies, ethnography and material culture studies. Methodologically, in its attention to illuminating practice, ethnographic research exposes photography to a form of consideration that has not happened within the discipline of art theory.

INTRODUCTION

Rethinking Photography Through Practice

Is it possible to reconstitute photography as a medium whose primary ontology does not hinge on the image as experienced by a viewer? The scant appearance of studies that attempt to address this question, suggests that what at first seems like a simple question, might be more complicated. Nonetheless, this simple question forms the starting point of this dissertation's motivation, an impulse that seeks to try and find an alternative vocabulary for writing about photography—less from the vantage point of the image (whether it be conceived materially, ideologically or as a magical thing)—and more as a socially situated and performative practice. An emphasis on the images that result from photographing has become axiomatic in producing our sense of what photography is and what it is not. To my mind, this approaches photography "back-to-front," so to speak—where the actual 'doing' of photography is obscured behind the image. Instead, what is the nature of photography when approached as a study of the time and space in which images are made? What is photography when it is not conceived primarily as a technology of representation, or to put it another way, what is it that photography does in excess of producing images? What can we learn about photography by directing our attention to its incipient moments that we cannot immediately discern or possibly ever know from studying the images produced in these same moments? What kinds of knowledge are produced *in Situ,* that are distinct from the knowledge produced by looking at images? In what ways do the presence of cameras make intersubjective experience and processes or recognition specific? What responsibility does a study of the event have in reshaping how we think about photography?

As a means of addressing these questions, a mixed methodological approach is taken that uses ethnographic method and incorporates an essayistic approach for describing situations experienced during my research with formal visual analysis. Here, photography is approached as a phenomenon rather than an artefact, with a focus on the way cultures are produced and reproduced in the event

rather than how they are reflected in images. As a practice of sociability, I argue that oftentimes the motivations for taking photographs exceed its function as a technology of representation. Specifically, this project takes form around three distinct photographic environments in California—Scripps Pier in La Jolla (San Diego), several police photography units in Southern California and Yosemite National Park. I approach the writing up of these three case studies as a photographer as much as a scholar and illustrate two of the chapters with my own photographs. Given the scarcity of existing studies of photographic practice, I draw on a diverse array of evidence ranging from the empirical, to the anecdotal and the discursive—including interviews, participant observation and scholarly sources from an eclectic array of disciplines. Taken together, the dissertation's four chapters conceptualize photography as a dramaturgical performance, by studying the practices of photographers, their subjects and those who are witness to "photographic events." At its most basic, the photographic event is constituted in and produces the time and spaces that photographs are made and spans well beyond either side of the precise moments when the shutter release is pressed. The event is constituted through the intersection of at least three different entities—the camera, the photographer and the subject framed in view. This triad includes human and non-human entities interfacing with one another—a conglomeration that is further co-dependent on the spaces in which these images are produced. Studying photographic events involves the use of direct observation of people making images to examine the spatiotemporal and phenomenological qualities of the moments in which photographs are made. In each case, photography is untethered from its reliance on the optical as the primary mode of experience—not just as a technology modelled on human vision or analyzed via theories of visual representation—but recast as a more bodily technology. The images produced at these sites no longer take center-stage, but emerge as side effects of inter-subjective processes between not only humans, but animals and the landscape. As witnesses to these events we see how photography augments feelings of desire, empathy and an attunement to one's surroundings. In no way do I intend to suggest that the production of images can ever be taken as separate from their distribution and consumption,

though it is primarily their production that my study is focused. Overall, the purpose of this study is to enliven forms of expression in routine camera practices of the everyday (as well as the not so everyday), and to understand how these environments resonate and obtain their particular atmospheres. How do these photographic events take form and what is particular to photographic events as opposed to other types of events? At each of these sites, I study the recursive relationships between photography and the site's spatial morphology—the way that photographic performances unfold there and how these performances work to transform as well as conform to the space.

My choice to focus on the "photographic event" serves to complicate the way that photography, when taken as the study of images, typically distributes authorship to the photographer's intention. Instead I argue that we see agency as vastly more distributed between human and non-human agents, where the camera is cast as a material thing that alters processes of social interaction and interpersonal recognition—this is a concern for a technics of photography that sees camerawork as significant. Additionally, the now hackneyed metaphor that draws an analogous relationship between photography and the gun is revised, so that photography's connection with hunting is situated not via the 'the kill,' but though practices of trapping, decoy and camouflage. This operation challenges the way that photography's similarity to hunting is used as a form of critique and while still likening it to hunting, does not make recourse to the linguistic and psychoanalytic paring of photography and violence that we are accustomed. While each case study loiters in the present moment that images are made, what emerges across the three sites when photography is approached through the event is an inversion of the way the medium is traditionally associated with the past or with memory or even with sharing. Instead our attention is recalibrated by a medium that facilitates experiences that are mortgaged to the future.

For a long time, scholars of photography have made the argument that goes something along these lines: with the increasing role that images play in all aspects of our lives, visual literacy will surpass textural literacy as the primary cognitive tool necessary to be critically reflexive about our

lived experience.[1] As Alise Tifentale and Lev Manovich point out "to know how to communicate via photographs shared on social media is becoming a basic social skill."[2] This faculty is what Nicholas Mirzoeff identifies as integral to the "new majority," a young urban class who are "trying to understand the world they live in by taking and sharing visual images in extraordinary numbers."[3] From selfies to visual activism, he compares the phenomena to Jean-Louis Comolli's characterization of the advent of film as a "frenzy of the visible," noting that "Americans take more photographs every two minutes than were taken worldwide in the entire 19th century."[4] As such, our lived experience is not only increasingly augmented by having to machete through the daily whirlwind of images, but also by the ubiquity of having to witness other people take them, not to mention our own experience as individuals who are increasingly compelled to document our own lives. Thus, as we all become increasingly involved in image making practices, questions of production are now more pressing than ever to answer. For many of us, it is now impossible to imagine any single experience of public space that is not attended by being exposed to scenes of people taking photographs of themselves and others. In the blink of an eye, photography has metastasized from the exclusive preserve of gentlemen aristocrats, achieved mass-market commercialization alongside its place in the cannon of visual arts,

[1] For example, Walter Benjamin predicted that one's literacy will not be judged in relation to text but images. See: Walter Benjamin, "Little History of Photography," in *Selected Writings Volume 2, Part 2 1931-9134*, (Cambridge, Massachusetts: Belknap Press of Harvard University Press, 2005), 507-30. Not long before Benjamin, Franz Roh alluded to László Moholy-Nagy's claim that the illiteracy of the future will be an ignorance of photography when he says, "that not to be able to handle a camera will soon be looked upon as equal to illiteracy." Quoted in: Franz Roh, "Mechanism and Expression," In *Classic Essays on Photography*, edited by Alan Trachtenberg (New Haven, Connecticut: Leete's Island Books, 1980), 156.

[2] Lev Manovich and Alise Tifentale, "Competitive Photography and the Presentation of the Self," in *Exploring the Selfie: Historical, Theoretical, and Analytical Approaches to Digital Self-Photography*, eds. Jens Ruchatz Julia Eckel and Sabine Wirth (Bochum, Germany: Palgrave Macmillan, 2018), 170.

[3] Nicholas Mirzoeff, "In 2014 We Took 1tn Photos: Welcome to Our New Visual Culture," *The Guardian*, July 10, 2015. https://www.theguardian.com/books/2015/jul/10/2014-one-trillion-photos-welcome-new-visual-culture.

[4] Ibid.

while being made available as a technology for the working class. Estimates place the number of photographs taken in 2017 at 1.3 trillion, which is about four times the number taken in 2010.[5]

For those with the privilege of having easy access to technology, the novelty of the medium's democratization has largely worn off—it has become so habitually incorporated into our daily lives, that taking a picture is as routine as breathing or as the Spanish artist and writer Joan Fontcuberta puts it, "nowadays using a camera is a gesture as banal as scratching your ear."[6] According to Fontcuberta, with the advent of digital photography, "photographs are no longer taken to preserve memory, or to be kept. Instead, they are more like exclamations of vitality, extensions of our experiences that are transmitted, shared and then disappear, mentally and/or physically."[7] However, it did not take the advent of digital photography to produce this insight. The notion of photography as an activity so automated, won it comparisons with the routine pleasures of tourists whose experiences only ever barely scratch at the surface of the world. In her most popularized work, *On Photography*, Susan Sontag predicted the way cameras have made us all tourists of our own lives. Sontag scorns the activities of American and European tourists, who use the medium as a means of "certifying experience," where they "feel compelled to put the camera between themselves and whatever is remarkable that they encounter."[8] In fact, for Sontag the tourist becomes a figuration of the photographer writ large, when she likens art and professional photographers to the "supertourist," who is always on the move, collecting experience passively through a lens that places them as voyeurs

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[5] This massive increase is largely accounted for by the rise in smartphone purchases. Sales of dedicated digital cameras have drastically declined over the years, dropping from 121.5 million in 2010 to an estimated 13 million in the first half of 2016, according to the Camera and Imaging Products Association. See: Jeff Dunn, "The Latest iPhones Are Very Bad News for Digital Cameras," Business Insider, last modified September 9, 2016, accessed March 18, 2019, https://www.businessinsider.com/iphone-7-plus-digital-camera-sales-chart-2016-9.

[6] Joan Fontcuberta, *Pandora's Camera: Photography after Photography* (London: MACK, 2014), 26.

[7] Ibid., 27-28.

[8] Susan Sontag, *On Photography* (New York: Picador USA, 1977), 6.

outside situations, where the field of experience is reduced to an act of consumption and aesthetic reverence. Thus, Sontag regards photography at a skeptically curious distance—a medium she regards as a form of superficial realism, one that gives the "appearance of participation,"[9] an activity that is largely culturally automated. Sontag describes the impetus to photograph as a form of escapism, where dissatisfied with this world we try to manufacture another and in the process we patronize reality.[10] While it might have once seemed like a quirky affectation of the Japanese tourist in Jim Jarmusch's 1989 film *Mystery Train*, to photograph things as banal as the hotel room, such behavior is unlikely to raise an eyebrow today.[11] Our fascination with mapping our own quotidian practices via the camera is now firmly ensconced in the daily routine of social media posts, with over 100 million photos and videos being uploaded daily on Instagram alone.[12] As a counterpoint to the modern tendency of wanting to see oneself reproduced in images, for Walter Benjamin it was art photographers like Eugene Atget, who were an antidote to the mass commercialization of a medium that he saw in decline. Benjamin admired Atget's work for its Surrealist sensibility of estrangement—the way he chose not to focus on the most obvious places, but invested the forgotten and discarded with a sense of care and the sacred. In a somewhat surrealist maneuver of our own making (and one that would likely unsettle Benjamin), we have found a way to imbue the surprisingly ordinary with all the narcissism, vapid commercialization and sameness that irked Benjamin about modernity.

Without diminishing the validity of these insights that came about long before the phone camera, my own study seeks to challenge these caricatures of photography as an act that degrades and

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[9] Ibid., 10.

[10] Ibid., 80.

[11] Jim Jarmusch, *Mystery Train*, directed by Jim Jarmusch (1989, USA: The Criterion Collection, 2010), DVD.

[12] Salman Aslam, "Instagram by the Numbers: Stats, Demographics & Fun Facts," Omnicore, last modified January 6, 2019, accessed May 28, 2019, https://www.omnicoreagency.com/instagram-statistics/

separates us from lived experience. What these insights and criticisms of the medium foreshadow, is a way of rethinking photography that is more appropriate to its status as a digital, rather than analogue technology. With the understanding that analogue and digital are two representational technologies that are epistemologically very different, it is not surprising that the types of questions that are now being asked, place a greater emphasis on photography as a social, rather than aesthetic technology. With a radically truncated sense of any single image's shelf life and the fact that still and moving image technologies are incorporated into the same devices, it now makes sense that our understanding of photography's core tenants, (modeled on its status as an analogue technology) such as indexicality, the archive or the trace for example, now need to shift, if for no other reason than for the simple fact that images do not behave as they once did. As a means of extending the way Sontag captured our insatiable appetite to photograph, arguing that everything exists to end in a photograph, I argue that while this might well ring true, it can't be presumed anymore that the production of an image is central to the motivation for taking a photo in the first place. With the advent of the medium's massive dematerialization, the image has at once become more disposable and at the same time it has taken on the status of a radioactive isotope—a thing that endures in an unstable relationship to its own materiality—thus, experiencing a dwindling afterlife that is also potentially eternal.

Three Case Studies

Chapters Two, Three and Four each comprise a different case study, that together constitute a comparative study of three quite distinct photographic environments in California. Chapter One: *The Body, Authorship and Hunting in the Photographic Event: Situating the Dissertation,* serves as a preface by establishing common ground between each of the distinct case studies and outlining argument they make collectively. Following this, at each site we witness photographic events unfold in contexts where there is a complex weave of practices that span commercial, amateur, artistic and scientific applications of photography. For example, the more ubiquitous or quotidian practices of

amateur and tourist photographers are brought into contact with the more rarefied and specialized practices of marine scientists and police photographers. Thus, the study includes practices that are quite unskilled to those that are highly skilled, denoting practices where the camera is applied as a phenomenological tool, to more knowledge-based practices. On the whole, these photo activities fall outside the gamut of avant-garde practice, where typically the goal is to innovate pictorial standards while attempting to formulate some sort of political or critical statement. To speak of the practices studied here in terms of the image, the genres range from the snapshot, to fine art black and white photography for gallery display and to photographs as evidence destined for the state archive or the scientific database. Through these case studies, photography is brought into contact with a range of other phenomena that span leisure practices at the beach, to microscopic studies of plankton, wilderness experiences of the American west and the witnessing of violent crime. In each case, I connect multiple photo-practices that are simultaneously underway, operating side-by-side within the same site. While there are currents running through the three case studies that connect them, they are to be understood as three individual contributions, that respond to the same set of questions differently. Or rather, three ways of answering the same set of questions with a different emphasis. While each chapter makes its own individual argument—as different instantiations of the photographic event—they collectively produce a deeper sense of the photographic event broadly. The decision to organize the study this way preserves the singularity of each place, while responding to the fact that given their idiosyncrasies, it is problematic to make any generalized claim about the photographic event, that can apply equally across each site.

The event-like nature of photography is presented at its most dramaturgical in Chapter Two: *Scripting Photographic Theaters at Scripps.* This case study takes place at Scripps Beach La Jolla in San Diego, where photographic stages above and below the water are spatialized as a theatrical mise-en-scène. The chapter brings together the work two very different kinds of photography that converge at the Ellen Browning Memorial Pier, both a research facility run by Scripps Institute of

Oceanography and a site coopted by a variety of vernacular beachside photo practices. Specifically, it connects the work of scientists and engineers at the Jaffe Laboratory for Underwater Imaging, who build cameras for photographing plankton with the work of professional and amateur wedding, family and landscape photographers whose activities are centralized around the pier. This chapter argues that while the purpose of producing scientific evidence and personal snapshots are uniquely different, the photo practices of marine scientists and beachside photographers are more similar than we might first imagine. In each case, photography is practiced through an elaborate theatrical mise-en-scène that involves careful scripting and staging. In what constitute forms of "photographic touch," the medium is presented as a bodily technology. Here, the aspirations of both scientific and quotidian photo practices orientate photography on a continuum that traverses the rational to the libidinal, while working to produce photographic events that spectacularize witnessing. Whether in the laboratory or on the beach, camera innovations and adaptations emulate the properties of non-human animals as a means of generating more interactive forms of contact with their subjects. Furthering Erving Goffman's model of the theater as a means of preforming social analysis, the notion of what constitutes an actor is widened to include the role that non-human animals, material objects and atmospheric phenomena play in constituting photographic practice. In this context photo practices work in conjunction with the pier's affordances such that it comes to function like an elongated camera obscura. Thus, rather than analyzing the images produced, which claim status as forms of objective scientific or social fact, this chapter is orientated at how photography is performed as a means of conjuring futures that are still far from perfect.

Chapter Three: *The Camera as an 'Agent' in Police Photography* takes as its subject the work of crime scene and forensic photographers in Southern California, drawing on research and field work at police departments in San Diego, Santa Ana and Los Angeles. This chapter takes a different approach to studies on police photography by looking at the practices of police photographers from the studio to the crime scene, rather than focusing on the way images are mobilized in archival practices

of the state. In making this distinction between the camera and the filing cabinet, it is fitting that in this chapter the camera's agency in authoring photographic events is most fully developed. To be clear, this chapter is a study of photography through the lens of policing, rather than a study of policing through the lens of photography. As such, the camera is rendered as an apparatus that participates in events rather than an apparatus that is principally tethered to the photograph. Specifically, this chapter explores the variable status of the camera as both a "thing" that exceeds its function as a technology of representation as well as an "object" for transducing specific relational qualities as it interfaces between the photographer's ongoing relationship with their scenes and subjects. As a thing, the camera is presented as a "memory-thing," "body-thing" and "puzzle-thing," when it is not performing its 'intended' function as an apparatus for apprehending images. Alternatively, as an object, the camera is conceived as a "transducer," which serves as a model for conceptualizing the apparatus as a technology of affect. In this regard, the camera facilitates exploratory processes of photographic doubt, produces somatic effects on police photographers and their subjects and finally, affords police photographers the ability to manage empathy for the victims of crime they photograph. In cultivating doubt, the camera helps crime scene photographers find what they cannot see by not necessarily narrowing, but accentuating the differential between how the camera records a scene and the way the photographer experiences the scene. While cognizant of the role their images play as evidence in court and as storyboards that reconstruct the crime's narrative for detectives, police photographers are themselves unresolved over whether their work tells the story of the scene, the evidence or the crime. While we are familiar with the story of how the camera is used as a tool to realize the photographer's intentions, this chapter tells the less familiar story of the way photographs are produced via relays between decision and indecision. Cameras also produce somatic effects on police photographers and their subjects through their ongoing training with the apparatus that becomes habituated. Furthermore, as a kind of insulator the camera affords police photographers the ability to moderate empathy for the

victims and perpetrators of crime they photograph by enabling them to remain preoccupied with composition and exposure considerations during their documentation of the scene.

Chapter Four*: Yosemite: Photography as Landscape Maintenance*, takes place in North America's first State Park—a landscape that is quintessentially photogenic in the popular imagination and a place engineered as symbol of national identity through the work of pioneer photographers of the American West such as Carleton Watkins (who like John Muir), have been mythologized as the park's eternal saviors. Through fieldwork at the park's iconic tourist sites, the Ansel Adams Gallery and multi-day photographic tours run by the Yosemite Conservancy, this chapter bears witness to diverse photo practices whose participants run the gamut from committed fine art landscape photographers to tourists performing snapshots with cell phones.[13] Like the photographers that the protagonist Jack Gladney and his friend Murray Jay Siskind observe in Don DeLillo's *White Noise*, visitors to Yosemite are not there to *capture* the view, but instead they are there to *maintain* one. Conceptualized as a practice of "photo-maintenance," this chapter builds its argument across three parts that roughly correspond with three distinct practices of photography happening simultaneously. First, I attend to the photo practices of the average visitor at work within the heavily prescribed circuit of viewing platforms plotted throughout the park. Their itinerant practices work as a countermeasure to personalize the routine nature of experiencing Yosemite by road. Here, photography alleviates the homogenized nature of the experience, offering a modicum of autonomy in an encounter that is mostly coercive. Photographic pursuits generate a task list of views to be imaged that quickens one's experience, which is at odds with the overwhelming geological scale of the park's topography that works against this, demanding that the body and mind slow down to take it all in. Thus, the tension between slow geological time and rapid technological time finds expression in movements between

[13] Apart from the four million snap-happy visitors that descend into Yosemite Valley each year, National Park Services facilitate up to 50 commercial shoots annually and work with a myriad of official private concessionaires who run photo-themed education programs, guiding services and workshops.

tranquility and frustration in the visitor's experience. Second, I look at two less predictable seasonal photo-events known as "Moonbow" and "Firefall." These phenomena that attract 1,000s of photographers, work to unscript the heavily scripted nature that typically accompanies the visitor's experience. This extends to the role that animals such as black bear and mule deer play in providing a more spontaneous experience for photographers when impromptu photo-events (that I call "flash-photo-fires") spark up along the roadside. Third, I follow the activities of two unique photo-education programs, one run by the Ansel Adams Gallery and the other run by the Yosemite Conservancy. From short "Camera Walks" to multi-day photo-tours, these programs utilize the park as an educational resource for teaching amateurs and professional alike. As a participant of these tours, I address the ways in which the history of landscape photography in the park, particularly the work of Carleton Watkins and Ansel Adams, has worked to establish a precedent that bears heavily on the attitudes and approaches of contemporary photographers. By crafting a rather a diluted version of Group f/64's notion of "Pure Photography," the activities of these photographers serve as a counterpoint to the work of most visitors at the viewing platforms and show the way the medium can both accelerate one's passage through the park, but also prolong the experience of nature. While these three categories of photo practice are distinct, they share what I call "communal individualism," a term that captures the way that photography provides a means of personalizing an experience that happens in one of the most crowded tourist attractions on earth. This juxtaposition signals the ways that Yosemite is reproduced in cultural practices that are contradictory. For example, while promoting values of custodianship their practices also serve as a form of boosterism that encourages the very kinds of hyper-tourism that threaten the park's natural resources. While there is a bemusing irony to experiencing the spectacle of these events when photographers work against the grain of their own intended purposes, there is something more insidious at work under the surface. Here, contemporary practices echo the sentiments of late 19th century Gilded Age environmentalists, for whom the notion of preservation went hand in hand with the exploitation of nature's resources and where boosterism was not cause for concern as a

form of potential destruction, but a means of improving nature for human use. As the photographers of Yosemite today follow in the footsteps of the master photographers before them, they unwittingly reiterate forms of erasure that characterize these historical practices that enervate both a sense of the park's contemporary reality and its Native American history.

Background: Photography as the Photograph

As a means of locating my own study and addressing the challenges it faces from a historical perspective, it is valuable to understand why our conceptualization of photography has been overwhelmingly calibrated via the image. As a discipline that emerged in competition with other representational strategies which already held claim on reality, it has been through images and not through practice that photography's medium specificity has been etched out. There are many good reasons why photographs have served as the most natural candidate for configuring our sense of what photography is. As a starting point, our critical engagement with the medium began as consumers of images, long before we became producers of them. Experiences extraneous to one's own world were first consumed as images, in that, prior to what we know as the democratization of the medium, the availability of cheap images, first worked to democratize experience. This established a somewhat passive relationship between photography and experience, a binary that is still regularly invoked as criticism of the way taking pictures diminishes our experience of the world or even works to make us forget it. As has been well documented, in the late 19th century vision emerged as the dominant sense for verifying experience and organizing perception. In their study of the connections between vision and photography, John Urry and Jonas Larsen invoke Foucault's notion of the "unimpeded empire of the gaze," to characterize the "growing separation of the senses, especially of vision from touch, smell and hearing. [where] New technologies of the gaze began to be produced and circulated, including postcards, guidebooks, photographs, commodities, arcades, cafés, dioramas, mirrors, [and] plate-glass

windows."[14] With the collusion between photography and new possibilities for mass travel after 1840, the world began to be "conceived and grasped as if it were a picture."[15] Later, with the advent of Kodak, what was once the virtual democratization of experience, then became actualized. This moment is marked by a convergence between the possibility of being able to afford experiences that were previously only available through images and the availability of new technology that allowed us to document new experiences ourselves. In what Urry and Larsen term the "Kodakisation of photography,"[16] the 1880s saw Kodak essentially invent tourist photography by teaching people what to photograph. They scripted what was significant in terms of the everyday, nostalgia, family and memories; where the taking of images regardless of subject became a pleasurable activity in itself. Kodak promoted photography as *the* principal leisure activity, thus personalizing the technology and creating the desire for families to construct stories about their own lives. As scholars of snapshot photography have observed, the advent of the Box Brownie facilitated an engagement with photography that was more expressive, banal and routine. These engagements became a means of documenting the more phenomenological aspects of our lives, producing forms of situated and tacit knowledge that are quite distinct from concerns of knowledge production in the discourses of the fine arts that has almost exclusively focused on avant-garde practices. What this history serves to illustrate, is that the event-like nature of photography as a performative socio-cultural practice, long predates any sustained critical discourse that has systematically theorized it as such. While the more everyday nature of photography has been taken up in discourse on the snapshot, these studies have largely been deemed the poor cousin of art history. This point is made by Geoffrey Batchen who dubs these "boring" pictures as "art history's worst nightmare," for the fact that their conservative nature is at

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[14] John Urry and Jonas Larsen, *The Tourist Gaze 3.0* (London: SAGE Publications, 2011), 162.

[15] Ibid., 137.

[16] Ibid., 140.

odds with art history's emphasis on originality and innovation.[17] Judgement aside, the corpus of material on the snapshot is less concerned with the phenomenological nature of photographic practice and more interested in the image's status as cultural artefacts of the everyday, the archive and more recently as material things.

Photography's scientific applications have placed (and continue to place) a premium on the material manifestations of its processes. As a consequence, histories of photography (particularly Euro-American histories, which primarily constitute the corpus of what we have anyway) tend to begin in the 19th century with Daguerre, Niépce and Talbot's breakthroughs in permanently fixing the image rather than with the camera obscura or even earlier photo-like ways of seeing. [18] This works to foreclose potentially valuable lines of inquiry that were more pronounced in the medium's nascent stages. As a 'science' of the image, photography has proved itself as a medium that reveals what we cannot see while making us aware of the limitations of our own visual perception. By revealing micro and macro worlds previously imperceptible to human vision, the photography of 19th century science completely revolutionized human vision, resulting in a lack of faith in our own perceptive capabilities and a reliance on technically mediated vision.[19] Photography's ability to register wavelengths outside

[17] Geoffrey Batchen, "Snapshots: Art History and the Ethnographic Turn," *Photographies* 1, no. 2 (2008): 121-142, doi.org/10.1080/17540760802284398.

[18] A. Hyatt Mayor discusses the notion of a photographic eye prior to the 'invention' of photography. For Mayor, the eye that sees photographically has been in existence since the ancient Egyptians were experimenting with magnifiers. The milestone in the development of what he calls a photographic way of seeing today was the combination of Jan van Eyck's experiments with color effects on light and shade and Leon Battista Alberti's *On Painting.* See: A. Hyatt Mayor, "The Photographic Eye," *The Metropolitan Museum of Art Bulletin, New Series* 5, no. 1 (1946): 15-26, doi.org/10.2307/3257398.

[19] This enhanced fidelity of the camera that modernity put into practice with stills photography and cinema was characterized by Walter Benjamin as the optical unconscious. Just as psychoanalysis renders the instinctual unconscious, what is distinctive about the camera is its ability to capture an optical unconscious. For Benjamin this was not simply about what the image captures in an objective sense, but the ability of an image to teleport the viewer somewhere between technology and magic. Michael Taussig's reading of Benjamin's insight is that the camera confounded the subject and the object to the degree that the unconscious came to reside more in the object than in the subject. As a result, Taussig suggests that the notion of a more tactile optics was implicit in Benjamin's concept of the optical unconscious. This has important implications for my argument that we need to broaden the range of sensory categories we include when we think about what photography is. See: Benjamin,

the gamut of human vision and accumulate light over long periods of time to reveal distant nebula was applied in X-rays and astronomy.[20] Though it was not until the image was developed and then permanently fixed, that the invisible became visible. For this reason, the image has become the locus of perception while the making of photographs has been relegated to the position as the means necessary to achieve this impossible vision. In the soft sciences images were mobilized as 'neutral' records and tools of measurement in the disciplinary, voyeuristic and academic gazes associated with eugenics, the archiving of crime and deviance, as well as ethnology where they established colonial hierarchies of power and ethnicity. As optics improved it was applied in the stop motion experiments of Thomas Skaife, Eadweard Muybridge and Étienne-Jules Marey. Their work produced records of time that could not be reconciled with visual experience and applied in the sciences of time management and ergonomics.[21] Talbot's prediction that the camera would reveal activity where the eye could only see darkness has been far surpassed with digital sensors now capable of registering a dynamic range well beyond the capacities of human vision.[22]

Scholarship on photography has continued to promote the centrality of the image, in part through the considerable and impressive work invested in destabilizing and revising many of its

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"Little History of Photography," 512. Michael Taussig, "Tactility and Distraction," In *Rereading Cultural Anthropology*, edited by George E. Marcus (Durham: Duke University Press, 1992), 8-14.

[20] For a good coverage of this see: Corey Keller., ed, *Brought to Light: Photography and the Invisible, 1840-1900* (San Francisco: San Francisco Museum of Modern Art, 2008).

[21] Their motion studies exemplify just one way that the photographic event cannot be counted as separate from the photographic image. The very notion of an embodied event owes a debt the way that photographs greatly expanded our awareness of the range of phenomena that could possibly be studied. Our awareness of movement at such a micro scale, through infinitesimal divisions of time—the catalogue of sensations, gestures, expressions, and actions available to the researcher has greatly expanded.

[22] William Henry Fox Talbot, *The Pencil of Nature* (London: Longman, Brown, Green and Longmans, 1844). At the same time, it could be argued that the eye's instantaneous dynamic range of around 10-14 stops surpasses most digital cameras. However, this does not account for the use of algorithms that sandwich multiple and varied exposures into the same image. Interestingly, when we look at HDR photographs that get closer to the dynamic range of human vision they appear fake to us. In this regard the photographs we have been trained to read as 'realistic' have a much narrower dynamic range than our own vision.

historical claims to knowledge. As Karl Marx noted, ideology is like the camera obscura, which turns the image of reality on its head.[23] As a corrective to this inversion of the real, a history and theory more properly suited to photography's medium specificity emerged in the 1980s through the work of scholars like Victor Burgin, Alan Sekula, John Tagg and later Sarah Kember. Like Pierre Bourdieu's book length study of photography published in 1990, these scholars argued for a more socially situated approach to studying photography. Originating from quattrocento laws of perspective, photographs do not simply mirror nature, but are ideological artefacts that are always coded.[24] For example, Tagg's historical approach to photography (grounded in his reading of Althusser and Foucault), studies the ways photography acquired certain representational characteristics in the framework of state apparatuses. Tagg argues that the photograph's status as evidence-like or documentary-like, are not properties indigenous to the medium, but tropes manufactured and mobilized in systems of production, administration and power. While constructivist positions like Tagg's mark a schism in photographic theory between readings that foreground the social as opposed to the technical (like Vilém Flusser) where the apparatus is emphasized, scant acknowledgement is awarded to the significance of the event. These critical theories of photography have not only interrogated the social traffic of images in their distribution and consumption, but also worked back in time from the image to theorize creative processes, such as Elizabeth Edwards' work on the way photographs perform the past.[25] A canon of

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[23] Karl Marx and Friedrich Engels, *The German Ideology* (New York: Prometheus Books, [1846] 1998), 42.

[24] See: Pierre Bourdieu and Luc Boltanski et al., *Photography: A Middle-Brow Art* (Stanford: California Stanford University Press, 1990); Victor Burgin, ed. *Thinking Photography*. London: Macmillan, 1982; Sarah Kember, *Virtual Anxiety: Photography, New Technologies and Subjectivity (the Critical Image)*. Manchester: Manchester University Press, 1998; Allan Sekula, *Photography against the Grain: Essays and Photo Work.* Halifax: Nova Scotia College of Art and Design, 1984; and John Tagg, *The Burden of Representation: Essays on Photographies and Histories.* Amherst: University of Massachusetts Press, 1988.

[25] See: Elizabeth Edwards, *Raw Histories: Photographs, Anthropology and Museums* (Oxford: Berg Publishers, 2001). Also see: Elizabeth Edwards, "Photography and the Performance of History," *Kronos* 27, no. November (2001): 15-29, http://www.jstor.org/stable/41056667.

discourse has coalesced around the image in what we have come to know as theories of agency/automatism, trace and the 'reality' effect, the rhetoric of vision and the gaze—for example, André Bazin on truth and the image, Susan Sontag on traces of reality in images or Roland Barthes on the referential quality of images.[26] Scholarship like theirs on the enigmatic differentials between signifier and signified has produced theorizations related authority, authenticity and the index—where the image is always inexorably central to inquiry. It is however inappropriate to take these scholars to task, seeing it has never been their mandate to write about creative processes via direct access to it. Though, in terms of what remains to be done, the simple explanation is that the choice not place oneself before the event has a purely practical dimension—it is vastly less convenient and more resource heavy than accessing the outcomes of creative process.

Moreover, as still images transmogrified into moving images, cinema became a more natural candidate for theorizations related to time and movement, whereas photographic theory has preferred the instant to frame its conceptualizations. However, even though we see *imaging* in motion rather than *images* in motion, given the temporal nature of an event that is contingent on the camera apparatus, the photographic event has a resonance with film theory—a connection that I make recourse to in individual chapters. Although this connection still remains at arm's length, seeing that in its consideration of time, motion and affect; cinematic theory has also lingered on the image, particularly its effect on the viewer. For example, Rosalind Krauss has suggested that the fragmentary nature of our subjectivities results from becoming disembodied spectators through our immersion in the

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[26] See: Andre Bazin, "The Ontology of the Photographic Image," in *Classic Essays on Photography*, ed. Alan Trachtenberg (New Haven, Connecticut: Leete's Island Books, [1945] 1967), 237-44; Sontag, *On Photography*; and Roland Barthes, *Camera Lucida: Reflections on Photography* (New York: Hill and Wang, 1981). In the context of arguing what makes photography distinctive as a representational technology, Barthes distinguishes between the "optionally real thing" and the "necessarily real thing." The "photographic referent" is not the optionally real thing that an image or sign refers to but the "necessarily real thing" that is put before the lens. Unlike painting, photography can never feign the real thing, for Barthes "I can never deny that the real thing has been there." In this example the syntax that Barthes builds is for a reality approached via the image, it is the photograph's fidelity to reality that defines photography as a representational technology. I would not deny that this is a photographic reality, though it is a different reality to the one that I analyze here.

disconnected surge of images.[27] Christian Metz's semiotic approach to the visual has pointed to the way bodily experience is suppressed in the cinema.[28] Jean-Louis Baudry's analysis of the cinematic apparatus revealed the undesirable ways in which the viewer's subjectivity is constituted through the concealment of its technical base which produces an ideological effect rather than a knowledge effect, thus keeping the viewer at a distance from their true reality and closer to the world of dreams and hallucinations.[29] While more recent theorists like Vivian Sobchack have revised this psychoanalytic approach into a more phenomenological one (in order to argue for a more embodied and mobile viewing subject), this analysis has remained located in the time in which images are experienced rather than produced.[30]

While these studies have identified the image's surface as the site of an absent present, the resurrection of the past's sense of presence is largely achieved through the archaeological work of the historian's analytical processes. However, rather than lamenting the potentially thin or obscured presence of reality in images, how might we discover photography differently by looking toward the event of the image's initial inscription? To use the same Saussurean terms that have informed a great deal of visual theory, this is an effort to recuperate something of the signified that seems to have slipped free from the signifier. Thus, rather than seeing the image counterpoised to practice as either an enigma or anathema of reality, photographic practice is studied as the means through which worlds are created. This approach is marked by an emphasis on a mobile and embodied subject rather than

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[27] Rosalind E. Krauss, *The Optical Unconscious* (Cambridge, Massachusetts: MIT Press, 1994).

[28] Christian Metz, *The Imaginary Signifier: Psychoanalysis and the Cinema* (Bloomington: Indiana University Press, 1982).

[29] Jean-Louis Baudry, "Ideological Effects of the Basic Cinematographic Apparatus," in *Narrative, Apparatus, Ideology*, ed. Philip Rosen (New York: Columbia University Press, [1970] 1986), 286-98; and Jean-Louis Baudry, "The Apparatus: Metapsychological Approaches to the Impression of Reality in the Cinema," in *Narrative, Apparatus, Ideology*, ed. Philip Rosen (New York: Columbia University Press, [1975] 1986), 299-318.

[30] Vivian Carol Sobchack, *Carnal Thoughts: Embodiment and Moving Image Culture* (California: University of California Press, 2004).

one immobilized through the seeing eye as a witness to images. Scholarly focus on representation has certainly displaced our attention from the site of practice. By bringing production into the spotlight, my goal is to open a space where practice is given the chance to speak back to the images that have largely served as its substitute, rather than continue to practice a salvage operation on the photographic event as resuscitated via the image.

Photography as Post-representational Practice

My approach in the dissertation is most broadly characterized within the context of what can be described as post-representational. This term however, is somewhat of a misnomer as it does not designate any singular cannon of academic discourse, but is rather a catch-all term for an unruly constellation of approaches, each with their own specific historical circumstances, that have emerged over the last couple of decades. Approaches within this spectrum include: Actor Network Theory, Non-representational Theory, New Materialism, Affect Theory, Material Culture Studies and Performance Studies. If there even is such a thing as the post-representational, then it is marked by a shift away from the linguistic and the textual (in its disavowal of structuralism and post structuralism), toward the affective, where greater emphasis is placed on the sensory, the bodily and the material. It emphasizes experience, embodiment and downplays the symbolic, while giving credence to non-human agency to study socio-cultural phenomena as not apprehended in representations. This is significant to my own study in terms of emphasizing the multi-sensorial dimension of photographic events as a means of displacing photography's traditional reliance on vision. For example, my study relates to Melissa Gregg and Gregory Seigworth's understanding of Affect Theory as a study of the "forces of encounter" between humans, landscapes and non-humans.[31] To show that we are colonized

[31] Melissa Gregg and Gregory J. Seigworth, ed., *The Affect Theory Reader* (Durham, NC Duke University Press, 2010), 3.

by more than human worlds in ways that cannot be easily accounted for, my study has affinities with Affect Theory's recalibration of the human as not always occupying the central lens when approaching one's object and field of study. Furthermore, an attention to "minuscule or molecular events of the unnoticed,"[32] as well as addressing our 'lower' order senses, also connects my study of everyday and routine photographic practices with Affect Theory.

It would take more than an entire monograph in itself to chart the connections between these fields, so I shall save myself the embarrassment of attempting a clumsily truncated version of this here, an operation that would only serve to flatten out their unique qualities. What however, is important to point out, is that in different ways, each of these fields (with the exception of Non-representational Theory), have been used to remodel practices of photography. While to date, a contribution that exclusively addresses photographic practice that is of monograph scale remains to be written, there are plenty of journal articles and book chapters covering subjects ranging from tourist photography, the camera apparatus, the selfie and technosocial image networks. For example, Karen Barad's theory of intra-action, which is exemplary of New Materialist thought, has been applied by Lisa Cartwright and Andy Rice in their study of "viewfinderless" cameras (such as GoPro's action camera).[33] They use Barad's distinction between "intra-acting" and "interacting" to stress the responsibility for action is distributed between the internal mechanics of cameras as well as camera/body interactions, rather than being the responsibility of any one individual thing. By framing cameras without viewfinders in this way, it helps the authors challenge conventions that situate photography as a primarily ocular activity connected to the gaze and instead reveal it to be a phenomenological, sensory and tactile process of doing that can account for the body's role in

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[32] Ibid., 2.

[33] Lisa Cartwright and Andy D. Rice, "My Hero: A Media Archaeology of Tiny Viewfinderless Cameras as Technologies of Intra-Subjective Action," *The Scholar & Feminist Online: Barnard Center for Research on Women*, no. 13.3-14.1 (2016). http://sfonline.barnard.edu/traversing-technologies/.

photography. Similarly, Katie Warfield takes Barad's theory of "agential realism" to rethink selfie use among young women to argue that the images they produce cannot be read as texts that are separate from the technologies that capture and the bodies that produce them.[34] While my dissertation sits comfortably in this milieu, I do not claim that it is exemplary of any one of these individual disciplinary protocols. Given that there is no firmly established cannon or pre-formulated theories that does justice to the different practices of my subjects, my own approach borrows from several of these disciplines. Thus, rather than use any of these models as the primary blueprint via which my sites are unpacked, I have instead begun from my experience of these sites to locate theory appropriate for helping to understand what is happening there. This marks a responsibility not only to my own critical analysis, but to the subjects of these sites, that are given the necessary headroom so we can get closer to understanding how they themselves understand their own photographic practices. Thus, my approach is marked more by an attitude that is attuned to understanding how culture is *produced* rather than *reflected*. As a result, it is important that practice ground theory and where appropriate addresses how practices work to abstract and complicate theory.

My attention to the embodied and theatrical dimension of photography takes its cues from the influence that the performative turn in critical theory and practice has had in the field of tourism and travel studies, in particular, studies of tourist photography. In the field of tourism studies, photography is mostly used as a lens through which to study a cultural practice. However, my decision to use a comparative approach is driven by the desire to draw attention to my subject, which is photographic practice itself, more than the social and cultural activities of one specific group that are illuminated when we turn our attention to their relationship with photography. In other words, my project presents a study of photography through the lens of different social practices more than a study of a particular

[34] Katie Warfield, "Making the Cut: An Agential Realist Examination of Selfies and Touch," *Social Media + Society* April (2016), https://doi.org/10.1177/2056305116641706.

social formation or cultural phenomenon through the lens of photography. Nevertheless, I share their impetus to find alternative solutions for writing about photographic practice, for the same reason that in their field the visual has been prioritized over all the other senses, a paradigm that has been hard to shake for the simple fact that sightseeing is fundamental to the tourist experience.[35]

The tensions related to revising the emphasis of vision as the primary sense for structing approaches in Tourism Studies plays out most fully in the dissertation's final chapter on Yosemite. As Dean MacCannell argues, although travel writing has been underway since the ancient Greeks, a sustained body of academic scholarship only began since the mid 1970s. The first phase of scholarship according to MacCannell, (that connects with my take on the coercive nature of viewing at Yosemite), looked critically at the structures responsible for organizing tourist experiences in order to address the negative consequences of tourism on local communities.[36] Difference was central to the majority of studies that looked at power inequalities, commodification of 'authentic' culture and the production of otherness. In this vein, early literature sees photography as an exemplary tourist practice, a literature dominated by a visual paradigm that caricatures the tourist as an obedient and unthinking automaton, who does as they are told. This is a vision of the camera wielding traveler as a dupe, one with little autonomy over their own experiences. As a means of capturing the superficial nature of this experience, the orthodox position is that with the "Kodakisation" of photography and new technologies of mobility such as the train, car and boat; photography was produced and consumed in personal narratives of family and travel, where the tourist gaze was transformed the into the tourist glance.[37] There are various tourist glances, that capture sights in passing from the railway carriage,

[35] See for example this recent volume that continues to make a case for the significance of "vision at the expense of the other senses," while also acknowledging this position is quite tenuous these days: Garth Lean, Russell Staiff, and Emma Waterton, eds., *Travel and Representation: Past, Present, Future* (New York: Berghahn Books, 2017), 9.

[36] Dean MacCannell, *The Ethics of Sightseeing* (Berkeley: University of California Press, 2011).

[37] This growing separation of the sense of vision from the other senses has a much longer evolution in the context of changing notions of travel not as a scholarly pursuit of discourse engaged via the ear, but a feast of

through the car's windshield, the steamship porthole or the camera's viewfinder.[38] John Urry and Jonas Larsen chart the historical circumstances related to the collusion between photography and the new possibilities for mass travel after 1840 when the world began to be "conceived and grasped as if it were a picture."[39] They argue that when vision emerged as the dominate sense for verifying perception and organizing experience, tourism and photography became inextricably bound up in structuring how we imagine and represent the world.[40]

It is however my attention to the more improvisational engagements with the camera that qualify as post-representational in approach—an approach that connects with the second phase in Tourism Studies scholarship that emerged in the 1990s in the context of the postmodern turn. This took a more celebratory approach, where the structural and political was swapped out for a social-psychological approach that saw the field more as a form of entertainment studies. Michael Haldrup, Jonas Larsen and Nancy Van House for example, have used the photographic practices of tourists as a frame for recasting the traditional model of the tourist. Their more recent studies have conceptualized tourist sites as stages for dramaturgical performances, where much more than just visual consumption is at work. These approaches include the way tourists use cameras at specific sites, stranger/local photographic interactions and digital file-sharing networks. Rather than a passive spectator whose actions follow a premeditated script (a view held by more orthodox tourist studies literature), the camera-wielding tourist is conceived of as an individual immersed in encounters with other humans and non-humans acting out expressive choreographies. Larsen argues that "photographing is absent

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visual consumption for the eye—as Judith Adler puts it the actions of people in these performances are subject to "historical construction and stylistic constraint." See: Judith Adler, "Origins of Sightseeing," *Annals of Tourism Research* 16, no. 1 (1989): 8.

[38] Urry and Larsen, *The Tourist Gaze 3.0*.

[39] Ibid., 137.

[40] Ibid.

from most theory and research that jumps straight from photography to photographs. They go directly to the representational worlds of photographs and skip over their production, movement and circulation. The diverse hybrid practices and flows of photography are rendered invisible."[41] From Larsen's perspective, tourism is less about consuming places and views and more about producing and performing social relations such as intimacy and solidarity, where tourist photography does not mirror reality but produces realities.[42]

As I explain in more detail later, my three sites work together to make the case for a more distributed sense of authorship as a corrective to the way that it is most typically ascribed to the photographer. As such, my debt to Actor-Network Theory (ANT) and Material Culture Studies is obvious. The relevance of ANT as a model for Material Culture Studies is its accommodation of the fact that intersubjectivity is never exclusively human or social but tied up with the non-human in processes where bodies and technologies are always imbricated. ANT shows us that agency is achieved through relational exchanges between humans and non-humans, where technology can't be isolated from embodied practices. Through the lens of ANT, the study of material culture has a bearing on photography not only in relation to its distinction between objects and things, but for the way it advocates a more complex connectivity between humans and non-humans by broadening the scope of the possible ontologies and agents to be considered. In different ways Alfred Gell, Paul Graves-Brown, Carl Knappett and Bruno Latour have all suggested the way agency is distributed and co-dependent.[43] Perhaps most famously, Latour has challenged the modernist supposition that we exist

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[41] Jonas Larsen, "Practices and Flows of Digital Photography: An Ethnographic Framework," *Mobilities* 3, no. 1 (2008), 143.

[42] Jonas Larsen, "Families Seen Sightseeing: Performativity of Tourist Photography," *Space & Culture* 8, no. 4 (2005): 416-34, https://doi.org/10.1177/1206331205279354.

[43] See: Alfred Gell, *Art and Agency: An Anthropological Theory* (Oxford: Clarendon Press, 1998); Paul Graves-Brown, ed., *Matter, Materiality and Modern Culture* (London: Routledge, 2000); Carl Knappett, *Thinking through Material Culture* (Philadelphia: University of Pennsylvania Press, 2005); Bruno Latour, *We Have Never Been Modern* (Cambridge, Massachusetts: Harvard University Press, 1993).

in an empirical and objectified relation to the world unlike ‘non-modern’ cultures. Latour challenges the hubris of our own thinking, that often places human agency center-stage. He criticizes the binary distinctions we make between humans and non-humans with regards to the attribution of agency as well as distinctions between the animate and the inanimate. Instead, Latour prefers a messy network of impure forms (actors) that are constantly being modified, replaced and rearranged.[44] Latour’s recognition of the non-human connects with Affect Theory for the way it points to the potential for considering the agency of the camera as a technology of affect. Bruno Latour suggests such a possibility when he traces the development of Kodak’s first camera to suggest that one of the most productive ways to account for the reciprocal relation between technology and society is to follow innovations.[45] Latour traces Kodak’s history as an example of one such innovation where the now all too familiar narrative of the company’s market domination was not necessarily a clear cut matter of simple causation, but a complex reciprocal network of human and non-human "actants," enmeshed in processes of co-evolution and co-production. In this process, “the new amateurs and Eastman's camera co-produced each other. We see neither resistance to, nor opening of, nor acceptance of, nor refusal of technical progress. Instead we see millions of people, held by an innovation that they themselves hold.”[46] While the eventual release of their box-brownie camera secured Kodak a monopoly in 1899, a series of successive innovations up to this point reveal a variety of other variables revealing that domination is an effect rather than a cause. For Latour, this innovation reveals “a highly unstable and negotiated situation in which domination is not yet exerted,”[47] while exposing the enigmatic variables

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[44] Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005).

[45] Bruno Latour, "Technology Is Society Made Durable," in *Sociology of Monsters: Essays on Power, Technology and Domination,* ed. John Law (London; New York: Routledge, 1991), 103-32.

[46] Ibid., 117.

[47] Ibid., 129.

of sociotechnical relations that so often elude social theory. In my third chapter on police photography where I focus on the camera's agency, Latour's example serves as cautionary—while it might be possible to contemplate the affordances cameras present to their users, it is important not to forget that camera apparatuses and camera users are entangled in processes where they co-produce each other.

While studies of photographic practice have not exclusively taken up Non-representational Theory (NRT) as a model, this field has a strong affinity with ANT and Material Culture Studies for the way it argues that objects and things are not just extensions of bodily capacities but essential elements in the performative matrix of events, making thought and action possible. NRT aims to give a "better sense of the ways that practices need objects against which to react."[48] NRT emerged out of British human geography, largely through the work of Nigel Thrift, who coined the term in the mid-1990s. Thrift emphasizes the human body as a "tool-being,"[49] where the body cannot be counted separately from the world of things that we have co-evolved with. This argument signals the possibilities for considering the ways in which the requirements of tools like the camera have produced changes in our physiology. Unlike Latour's network of impure forms, Thrift suggests that proximity be substituted for distribution as a way of mapping practices with multiple rather than singular centers.[50] His suggestion is also significant in that it combines ethnography's mandate to practice close participant observation through intense dwelling with more recent practices of multi-scaled and multi-sited ethnography that have partly emerged as a response to the criticisms of limited scope that result from traditional fieldwork practices. To be more precise, NRT is not exactly non-representational but, "more-than-representational… to cope with our self-evidently more-than-human,

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[48] Nigel Thrift, *Non-Representational Theory: Space, Politics, Affect* (Oxon: Routledge, 2008), 20.

[49] Ibid., 10.

[50] This suggestion of Thrift's is motivated by criticisms that much of the scholarship that has subsequently taken up ANT gives little attention to actual on-the-ground practices that supposedly produce both humans and technology. For example, see: Olga Amsterdamska, "Surely You Are Joking, Monsieur Latour!," *Science, Technology & Human Values* 15, no. 4 (1990): 495-504.

more-than-textual, multisensual worlds."[51] Hayden Lomier defines the focus of NRT as one that, "falls on how life takes shape and gains expression in shared experiences, everyday routines, fleeting encounters, embodied movements, precognitive triggers, practical skills, affective intensities, enduring urges, unexceptional interactions, and sensuous dispositions."[52] Thrift has reiterated NRT's emphasis on "mundane practices, which shape the conduct of human beings towards others and themselves in particular sites."[53] Although the field has been criticized for not considering the way more macro forces of power and politics might determine practices, Thrift sees this procedure as part of a politics of the everyday, where what might otherwise be all too easily dismissed as background noise is amplified, enabling latent worlds to emerge at the forefront of our attention.[54]

In the field of photographic theory, it is currently not possible to speak of a post-representational discourse that is synchronous with my approach.[55] While there are a handful of contemporary scholars that strongly advocate the need to turn our attention to actual practices of photography, their approaches are more theoretical in nature, thus the event remains an abstraction. Examples include Paul Frosh's work on photography as a performance of representation and power,

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[51] Hayden Lorimer, "Cultural Geography: The Busyness of Being `More-Than-Representational'," *Progress in Human Geography* 29, no. 1 (2005), 83, https://doi.org/10.1191/0309132505ph531pr.

[52] Ibid.

[53] Nigel Thrift, *Spatial Formations* (London: SAGE Publications 1996), 12.

[54] Thrift makes reference here to Kim Fortun's acoustic metaphor that invokes the concept of signal to noise ratio in order to destabilize the categories of figure and ground in ethnographic research. Fortun argues that researchers should take note of what established systems of representation have discounted as noise. This parallels Thrift's visual metaphor where noise is substituted for background and signal substituted for foreground. See Kim Fortun, "Figuring out Ethnography," in *Fieldwork Is Not What It Used to Be: Learning Anthropology's Method in a Time of Transition*, eds. James D. Faubion and George E. Marcus (Ithaca: Cornell University Press, 2009), 167-83.

[55] Critical analysis of what is known as participatory photography is perhaps the closest thing we have—a growing corpus of scholarship that has emerged with the rise in popularity of socially engaged art criticism and the proliferation of art practice PhD programs. This literature generally consists of artists writing about their own community project that use photography as a means of engagement to empower the subaltern and is therefore tangential to this study. For a critical reading of this genre see: Tiffany Fairey, "Whose Pictures Are These? Re-Framing the Promise of Participatory Photography," Doctor of Philosophy, Goldsmiths, University of L

Ariella Azoulay's work on the politics of witnessing the photographic event and Vilém Flusser's emphasis on the gesture of photographing. However, their qualification as post-representational is based on their reconsideration of the photograph's ontological status that acknowledges the event, rather than experiencing the event. Another thread of scholarship applies Material Culture Studies quite literally to the photograph to award it a thing-like status and stresses the importance of understanding photographs as objects with distinctive physical properties as opposed to images.[56] In this vein, it is perhaps no coincidence that attempts to invigorate a sense of photography's materiality has occurred in the same moment in which we are witness to the medium's dematerialization.[57] Alternatively, and in line with Hayden Lomier's notion of the "more than representational," scholars such as W. T. J. Mitchell, Martin Jay, Christopher Pinney, Ron Burnett and Olu Oguibe have all made recourse to the image's status as a magical object to think beyond the discourse of how reality escapes representation or what components of reality exceed representation in images. Instead, via a reconsideration of images as 'things' that eclipse their ability to establish a verisimilitude with the 'real,' they conceptualize the image in terms of its agency to represent. Although their studies are firmly ensconced in the role of images, what they do share with my approach is bringing critical

[56] For an example of collected essays on this topic see: Elizabeth Edwards and Janice Hart, eds., *Photographs Objects Histories: On the Materiality of Images* (New York: Routledge, 2004). However, these articulations remain somewhat unsatisfying in that they are based on a rather literal interpretation of materiality as primarily a physical quality. In approaches like those taken in this edited volume materiality and immateriality are largely understood as independent categories. However, these categories are not separate realms but co-dependent in creating a sense of what the other one is. Even in our own very real engagements with matter in the world we only ever perceive part of what is there. Our perceptions of what we see are always completed by things that we cannot see but that we assume to be there. Thus, materiality should be defined in terms what it is not, as much as what it is. In this way it is important to consider materiality as a cognitive ideal or as having virtual qualities as much as a "real" physical thing. Given that we do not literally experience the "real" thing in photographs, its materiality is just as much about the authenticity of the viewers' cognitive and sensorial proximity to that thing experienced as representation.

[57] A dematerialization characterized by the almost total disappearance of chemical-print processes in favor of digital modes of display, innovation in fully automated cameras for lifelogging practices that follow us around without having to be held, and digital storage devices that eradicate the need for bulky archives.

attention to question vision's status as the 'noblest' of the senses.[58] Their approaches follow Michael Taussig's work on the magic of the signifier in *Mimesis and Alterity,* where he proposes that technologies of mimetic representation have a life of their own that can affect changes in reality itself beyond their purely representational properties.[59] Like Taussig, these scholars argue that representational theory was a starting point and not an end point to the study of representational phenomena. These scholars stress the more magical semblance photographs have *with* the real rather than their verisimilitude *to* the real. Harking back to Talbot's conception of the medium as a form of "natural magic" images are now cast adrift from what was already a questionable capacity to represent, enabling the latent powers rumbling underneath their surfaces the freedom to express themselves. For example, according to Mitchell, we have failed to endow images with "an idea of visuality adequate to their ontology," and as such, we should not equate images with the meanings humans invest in them.[60] In his topsy-turvy rendering of the ontological life-worlds of images Mitchell suggests, "if there are no images without objects (as material support or referential trigger), there are no objects without images."[61] Thus, he asks of images, "what sort of power they have to affect human emotions and behavior."[62] Mitchell acknowledges the problem of posing the question in this way, in that it involves the subjectivizing of images and the personification of inanimate objects—turning our attention toward practices like fetishism, idolatry and animism. He also acknowledges that those

[58] For an overview of the challenge of vision's status in post-modern thought see: Martin Jay, *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought* (Berkeley: University of California Press, 1993).

[59] Michael Taussig, *Mimesis and Alterity* (New York: Routledge, 1993).

[60] W. J. T. Mitchell, "What Do Pictures "Really" Want?," *October* 77 (1996): 82. https://doi.org/10.2307/778960.

[61] W. J. T. Mitchell, *What Do Pictures Want?: The Lives and Loves of Images* (Chicago: University of Chicago Press, 2005), 108.

[62] Mitchell, "What Do Pictures "Really" Want?," 71.

people who have been objectified by photography might more appropriately ask this question. Mitchell unravels himself from this quandary by suggesting that while it may be a ridiculous assumption, there is no denying that we do personify objects, so whether it is possible or not is the wrong question. Instead, we simply need to accept that we do it. He states, “my own position is that the subjetivized object in some form or other is an incurable symptom.”[63] Ultimately for Mitchell, the power of images is in their lack and not in their possession. Similarly, Martin Jay advocates for what he calls a magical nominalism in photography that accounts for the slippery and shifting thingness of images that transcend human naming and category.[64] Jay’s point is that if images can be understood as not representing a canon of universal forms or semiotic indexes, then they could perhaps correspond with their more magical qualities that resist them being named, indexed and generalized—leading to what he describes as a re-enchantment with the world. Ultimately though, while I share the sentiments of these scholars for trying to locate new ways for framing photography, my study does not reevaluate the medium through a reconsideration of the image, but rather through an attention to the specific times and technologies in which images are produced.

Ironically, contemporary studies that are closest to my own intentions, are perhaps the furthest away in terms of temperament. Currently, the overwhelming majority of new scholarship (at least in terms of quantity), that situates photography less as a specialized aesthetic craft and more as a sociotechnical practice, has emerged from the fields of social science, science and technology studies and human-computer interaction. It appears that given art theory’s preoccupation with originality, other fields have had to take up the slack of thinking through culture’s more ‘pedestrian’ practices. Studies in these fields capture a sense of a world made increasingly visual through digital technologies

[63] Ibid., 72.

[64] Martin Jay, "Magical Nominalism: Photography and the Re-Enchantment of the World, Culture, Theory and Critique," *Culture, Theory & Critique* 50, no. 2-3 (2009): 165-83. https://doi.org/10.1080/14735780903240117.

and algorithmic practices, though this is often clumsily performed by enacting a rudimentary form of visual semiotics that presents reductive conclusions on the nature of photography. The problem with these studies, at least from a humanities perspective and in terms of relevance to my own study, is that by and large “photographic-ness” is left out of the equation. Typically, these highly structured studies concentrate on subjects like the genre of the selfie, practices of image sharing on social media platforms and the social function of the cameraphone. Given that cameraphones are purportedly responsible for the massive downturn in sales of traditional camera systems, it is perhaps no surprise that their concerns have shifted from the realm of the photographic. Via image sharing platforms, photography is rendered as a new sociability practice that casts the medium as a tool for creating and maintaining social relationships, constructing personal and group memory, a form of activism, peer-based sharing of news and stories, self-presentation and authoring and the public disclosure of intimacy. From a social sciences perspective, socio-material relations are studied in processes where images are read as data, that to a large degree, is treated fairly transparently and serves to shine a clear light on their makers and audience’s intentions, where cause and effect style hypotheses are carefully laid out regarding the positive and negative affects these technological practices have on us.[65]

From a computer science approach, features such as camera angles, composition, age, gender, color and tonal properties of pixels, or sexual preference are extracted from the photographs and its metadata. Processed algorithmically, the images are typically mined from easily available datasets, where sometimes millions of images are ‘read’ for a single project and where it is often assumed that

[65] For example, studies of the selfie pay little to no attention to the history or context of the self-portrait as a genre. As an example of the performing the self through play and storytelling online see: Zizi Papacharissi, "Without You, I'm Nothing: Performances of the Self on Twitter," *International Journal of Communication* 6 (2012). As a digital daily practice used as a means of conferring well-being see: Liz Brewster and Andrew M. Cox, "The Daily Digital Practice as a Form of Self-Care: Using Photography for Everyday Well-Being," *Health*, no. April (2018). https://doi.org/10.1177/1363459318769465. Or the ways that using social media problematizes public and private boundaries see: Sonia Livingstone, "Taking Risky Opportunities in Youthful Content Creation: Teenagers’ Use of Social Networking Sites for Intimacy, Privacy and Self-Expression," *New Media & Society* 10, no. 3 (2008): 393–411. https://doi.org/10.1177/1461444808089415.

the ‘facts’ are already imbedded in code.[66] One example of this data mining approach is a project by researchers from the University of California Berkeley and Brown University who analyzed 37,921 images from high school photo yearbooks from different regions of the US, to produce facial composites for each decade of the last century until now.[67] At least technically, their goal to produce an average profile of a male and female for each decade, functions like an updated version of Francis Galton’s composite technique for producing an idealized image of the criminal type. Their purpose however, to identify a decade’s defining style and fashion trends across time is based on the spurious claim that “many details about our world are not captured in written records because they are too mundane or too abstract to describe in words. Fortunately, since the invention of the camera, an ever-increasing number of photographs capture much of this otherwise lost information.”[68] Beyond their neglect in recognizing the function of historians, they never address their assumption that the information they are looking for will be found in the average. While no short amount of work went into the mathematics for developing their “lip curvature metric,” that was used to track changes in smiling over time, this experiment concludes with the not so startling claim that over the course of the 20th century sitters began to smile in portraits. They claim that the potential value of the algorithm they developed to process the dataset, is that it “may be used together with weakly-supervised data-driven techniques to perform scalable historical analysis of large image corpora with minimal human effort.”[69] However, unlike Galton, who was not at all shy about the repressive role he envisioned the photograph playing, one senses a certain feigned naivety in studies like these—whereby, in omitting

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[66] See for example: Flávio Souza et al., "Dawn of the Selfie Era: The Whos, Wheres, and Hows of Selfies on Instagram," Paper presented at the ACM on Conference on Online Social Networks (COSN '15), Palo Alto, California, November 2-3, 2015.

[67] Shiry Ginosar, et al., "A Century of Portraits: A Visual Historical Record of American High School Yearbooks," IEEE International Conference on Computer Vision Workshop (ICCVW), Santiago, Chile, December 7-13, 2015, np.

[68] Ibid.

[69] Ibid

any substantial historical reference to the questionable practices they emulate, hints at their awareness that the most likely application for studies like theirs is its potential in technologies of law enforcement and computer applications for gauging users' emotional responses in ecommerce scenarios.[70]

From a social sciences viewpoint, often the purpose of these studies is to diagnose or seek proof of a particular cultural condition by concocting experiments in laboratory style conditions, sometimes in conjunction with computational methods. For example, Nancy Van House and Morgan Ames conducted a 10-month long study where they gave 70 people cameraphones and monitored their activity on their own Internet-linked uploading and sharing application. Their conclusion that "the cameraphone, especially when networked, may be seen as three different though related devices: a memory-capture device, a communicative device, and an expressive device," is unlikely to knock the socks off photography or media scholars for the way old insights are re-rehearsed without sufficient context.[71] Their study is typical of much of the work being done in this field that presents insights on the medium in a hermetically sealed vacuum, without adequately addressing, or often not even acknowledging, the significant prehistory these ideas have from a humanities perspective.[72] However, perhaps quite rightly, these approaches are absolved from any responsibility for situating these contemporary practices in the context of the medium's history, given that *users* are substituted for *photographers* and *big data* is substituted for the *archive*, a resource no longer experienced materially

[70] Their study on facial recognition is prime example of where the social sciences would likely benefit from taking a more interdisciplinary approach that acknowledges photographic history. For example, their conclusions resonate with the work of scholars like John Tagg and Allan Sekula who caution us to be vigilant in resisting future attempts to use photography as an instrument of social repression.

[71] Nancy A. Van House and Morgan Ames, "The Social Life of Cameraphone Images," unpublished paper from Workshop on Pervasive Image Capture and Sharing: New Social Practices and Implications for Technology, Tokyo, Japan, Seventh International Conference on Ubiquitous Computing, 2005, 9.

[72] For example, their notion of "distant closeness," which is the ability to survey the lives of others without direct interaction through cameraphone use, would potentially benefit from being situated in the rich history of writing on self/other relations as expressed via photography.

by the hand, but a task deferred to the computer for processing. However, as Alise Tifentale and Lev Manovich argue, “there was photography before mobile phones, and photography was shared socially before Instagram. While the new image-making technologies and image-sharing platforms, no doubt, change our definition of photography, much of what is being interpreted as ‘new’ has roots in photographic practices of earlier decades.”[73]

The types of studies mentioned above have their pre-history in one of the first comprehensive sociological analysis of photographic practice—Pierre Bourdieu’s *Photography: A Middle-brow Art*. Here Bourdieu makes a case for why amateur photo practices are a good candidate for sociological analysis. Bourdieu argues that they provide sociology with a valuable subject for looking at the way class groups work to establish standard practices and norms, as well as the relationship different classes have with one another. Photography is conceived differently by each class and different class formations set specific standards regarding what they value as subjects of the practice and how these subjects are to be interpreted in images. In other words, the habitus of a particular social class determines the way photography is practiced and understood as an aesthetics. Bourdieu analyses three classes—the peasantry, the working class and aesthetes/artists. For each of these distinct classes, what is photographed, how it is photographed and then judged, is largely, if not exclusively, determined by class values, social norms and the specific aesthetic ideals of each class. In short, photography enables us to analyze class relations. Even though Bourdieu reminds his readers that sociology as a practice should not ignore its anthropological mission to draw meaning from looking directly at lived experience, his own study accesses lived experience only second-hand via the image. This makes sense, given that if as he argues, photo practices are overwhelmingly predetermined by social values, being privy to the act of taking it would only confirm what we already know, or at least what can be confirmed as evidence in the photograph. There is little scope in his argument for the possibility that

[73] Tifentale and Manovich, "Competitive Photography," 167.

the process of making images plays a role in the actual formation of social values. However, to allow this would be problematic for his view that it is class values and norms which are the very things that are responsible for determining the photographic practices in the first place.

Criticisms aside, Bourdieu is clear that his interest in photography is not to study photography per se, but to use it as a means of studying class relations. Bourdieu's example serves to illustrate the difference in my approach is that instead of studying culture through the lens of photography I am studying photography through its cultural applications. While relevant, previous studies like Bourdieu's understand practice as the distribution, consumption and sharing of photographs, rather than how images themselves are made. Thus, in distinguishing my own approach from those in the social sciences, I prioritize looking at how culture is produced, transformed and maintained through photography rather than mobilizing photo practices as symptom of culture or using practices of photography as means of diagnosing culture though cause and effect relationships.

CHAPTER 1 — THE BODY, AUTHORSHIP AND HUNTING IN THE PHOTOGRAPHIC EVENT: SITUATING THE DISSERTATION

As a prelude to the individual case studies, this chapter serves as a background to the argument the chapters make collectively and presents an overview of the dissertation's shared themes. Overall, there are four principal concerns that connect the different photo practices of this dissertation—the event, the body, authorship and hunting. This chapter serves as a prelude to the case studies by connecting scholarship that situates photography within each of these four themes, as well as suggesting new connections with critical theory that sit outside the purview of existing studies on photography. Apart from critical theories and histories of photography this chapter considers work in disciplines including sociology, tourism studies, anthropology, performance studies, material culture studies and film theory.

While each chapter renders the photographic event differently, its temporal and spatial dimensions are emphasized and now untethered from the image, the event is likened to theater and sometimes film. Its purview can perhaps be best likened to the profilmic, but taken from multiple perspective rather than just that of the camera. Each time, the photographic event is presented as incorporating the ontologies of multiple actors (both human and non-human) who are simultaneously at work in co-producing the event. Their agency creates and is determined by a theatrical situation where the various actors are entwined in a "photographic fulcrum," where they take turns in occupying the axis point via which the performance is principally organized. Contributing to the authoring of this time as they produce, reproduce and resist representation—unlike the study of images—those things that typically escape our attention as edited out of a photographic sequence, now find their way back in when considered as part of the performance. In a way, this process is Brechtian, not by way of suggesting the performances are a form of radical theater or politics pitted against illusion, but for the way it reveals what he liked about theater rather than cinema, that is, an acting that shows itself as

acting, where that which lies beyond the edges of the frame in cinema is instead made available to the audience in theater.

The Photographic Event

Over the three case studies, we see photographic performances scripted on a scale that ranges from the thoroughly premeditated to more spontaneous forms of interaction. In some cases, photo practices work to colonize the sites in ways that alter their intended purpose, sometimes permanently and at other times for the briefest of encounters. Alternatively, photography exacerbates the way that our experience of landscape has been fabricated for us, while conversely working against the way viewing practices are largely premeditated. In each case study, the event encompasses photo practices taking place at a variety of different locations simultaneously. Sometimes photographers operate in close proximity—registering and responding to each other's activities—while at other times they are totally unaware of each other's presence. Thus, the work of the dissertation at each site involves bringing practices that are already spatially adjacent *to* one another into conversation *with* one another in ways that in practice they are not. For example, the work of multiple photo troupes operating at the beach around Scripps Pier are brought to bear on practices at the Jaffe Laboratory, who use the same pier for underwater microscopic photography of plankton. In the second chapter, the work of several police photo departments in Southern California are brought into conversation to render a more comprehensive picture of the camera's material thingness. At Yosemite, photo practices of day visitors whose work is closely tethered to the automobile are counterposed with more committed photographers who take multi-day photo tours in the park. Thus, my approach to rendering these sites can be described as kaleidoscopic for the way that the perspective from which it is being viewed is constantly shifting.

While there is little disagreement among scholars over what constitutes a photographic event, my study diverges by arguing that its bearing on our analysis of photography should be more literal

than mostly theoretical. In terms of a definition, the photographic event is simply that which unfolds before the camera in time and space. These days, our notion of the event tends to include the whole photographic production process, which is of longer term than its popular conception with modernist critics of photography, who drew on Herni Cartier-Bresson's notion of the decisive moment as that fraction of a second in which the image is captured. In updating Cartier-Bresson's notion, John Roberts refers to it as the "singular event," which in the context of social documentary "denotes the photographer's existential proximity to the world."[74] The importance of the event for me is precisely not for this reason—instead, the term evokes a vision of the medium where the apparatus, spectators, subjects and whatever other agents are involved, share their place with the photographer. Rather than is customary for the critic to assimilate the photographer's perspective, the event promises to free up the photographer, so they can now occupy multiple perspectives beyond that of the principal author. While this approach is enthusiastically advocated by contemporary scholars, the event is still defined in terms of the image, as that speculative thing gestured to beyond the edges of the frame. Even for scholars who might posture toward advocating a more literal proximity to the production process—as armchair anthropologists once did on behalf of the societies they purportedly studied—it would seem that photographic events continue to remain beyond our reach.

One such example of the elusive nature of the photographic event is Ariella Azoulay's compelling work on photography, that is explored through the case of the occupied Palestinian territories. Azoulay's claim for a political ontology of photography draws a distinction between the ontology of the photograph and the ontology of photography as a means destabilizing the way the photograph alone has generated discourses on photography.[75] For Azoulay, photography must be more than a theory of the image—instead it must take into account the event, which is suppressed in the

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[74] John Roberts, "Photography after the Photograph: Event, Archive, and the Non-Symbolic," *Oxford Art Journal* 32, no. 2 (2009): 283. http://www.jstor.org/stable/25650861.

[75] Ariella Azoulay, *Civil Imagination: A Political Ontology of Photography* (London: Verso, 2012).

ways regimes of power mobilize images. In addition, she insists that photographs are forged through the collective participation of multiple human subjects who interact with the camera, where no one agent can claim sovereign status alone. In the context of the Israeli-Palestinian conflict Azoulay distinguishes between the "event of photography" and the "photographed event" as a means of undermining the way sovereign democracies manipulate relationships between the indexical function of images and their status as 'representations.' Azoulay conceptualizes the event as having two different modes, one in relation to the camera and the other in relation to the photograph. While the photographed event is contingent upon the presence of a camera, the presence of a photograph (whether real or imagined) is necessary for the ongoing event of photography. Thus, while the photographed event refers to the actual moments that images are made, the event of photography, involves reimagining the meaning of photographs. Thus, her political ontology of photography, unfolds in the event of photography where a civil imagination reactivates latent traces of the photographed event suppressed in photographic archives. This prolongation of the actual moment in which images are made seeks to revoke the power to generate political discourse from the sovereignty of the photographer or their state-sponsored patron and instead place it in the hands of citizens. While Azoulay's acknowledgement of the event seems to have strong connections with my own approach, her theory does not germinate from the moments in which images are made. For all the significance she attributes to the photographed event it is not one experienced first-hand. Rather than a witnessing of or participation in the moments photographs are made, her theory is more accurately a theory of viewing that makes recourse to the "photographic event." This is useful in highlighting a distinction between what we can call the "actual event" and the "contemplated event," between the present tense of my photographic event which is mostly not contingent the image (that is, outside the immediate temporality of the event) and the past tense of the photographed event which can only be approached

via the image.[76]

Azoulay's distance from the "actual event" should come as little surprise, given that it is exactly the spectral presence of the event in images, (whether or not it is acknowledged that images are even able to register the event), that serves as the bedrock upon which photographic theory is entirely contingent. Thus, if we were to turn up at the party and acknowledge the elephant in the room as it were, far from pulling the rug out from underneath how we go about writing on photography, we would instead be left with nothing to write about. It is precisely the prolongation of this paradox— the rupture between the event and its referent (which Barthes refers to as the irreconcilable difference between the "corpus" and the "corps"), that fuels the necessary and highly productive anxiety that photographic theory and criticism runs on. As Thierry de Duve puts it, "with photography, we have indeed the paradox of an event that hangs on the wall."[77] His short essay, *Time Exposure and Snapshot: The Photograph as Paradox*, is exemplary of the ongoing role the photographic event continues to play in diagnosing perceptual attitudes toward the photograph. Specifically, he distinguishes the "snapshot" (which like the press photograph is more instantaneous) from the "time exposure" (which like the funerary portrait is monumental for the way time is calcified). While the snapshot is more "event-like," the time exposure is more "picture-like" given it has a more autonomous existence, that is less causally tethered to the event—"whereas the snapshot refers to the fluency of time without conveying it, the time exposure petrifies the time of the referent and denotes it as departed."[78] De Duve clarifies that while these two modes are in didactic opposition, the paradox is

[76] Azoulay acknowledges this shortcoming herself: "it is only fair to point out that the limitations with which I am concerned here characterize a certain type of discourse *about* photography, rather than characterizing the practice of photography itself whose actual activities deviated markedly from the rarefied practice conceptualized and presented as the corpus of photography." Or elsewhere in a stance that is contrary to the presentation of her own ideas: "the inaccessibility of the photograph... effectively eliminates the very possibility of discussing the event of photography." Ibid., 14 and 23.

[77] Thierry de Duve, "Time Exposure and Snapshot: The Photograph as Paradox," *October* 5 (Summer 1978): 113.

[78] Ibid., 116.

that they are both coextensive in every image—a claim he makes to ultimately diagnose the image as having the physiological profile of a manic depressive.

No less theoretically rigorous in approach, but more grounded in experience, are Christopher Pinney's thoughts on the event, which are informed though his fieldwork with small town photographic studios in India.[79] Pinney advocates for an indexical approach to conceptualizing photography that is attentive to the way traces of the "pro-filmic" (a term he borrows from film studies for the photographic event) resides in the image. He takes this approach to urge scholars to start constructing theories and histories of photography that challenge the hegemony of Euro-American traditions. As a self-confessed adherent of the indexical view of photography, where the "sticky referent" persists, Pinney distinguishes himself from the legacy of Foucault's bearing on photo theory that "denies the primacy of the referent," to dismiss the notion of images as traces of the real. Pinney is critical of the Euro-American tradition, which he sees as still under the spell of Foucauldian scholars like John Tagg, arguing instead that photography is not always tethered to the state as an "epiphenomenal reflection of discourse and power."[80] For Pinney, the value of the pro-filmic is that it works against flattening out the image as an ideological signifier. Instead, an acknowledgement of the event should work to develop a "world-system photography" that need not elide the 'peripheral' histories of photography which tend to emphasize the cultural dimensions of practice unlike Euro-American practices (what he calls the 'core' photographic history) that erase culture as problematic. In this endeavor, Pinney brings us back full circle to the ultimate discontinuity between event and its presence in images, when he reminds us of its significance for Roland Barthes and Walter Benjamin. I agree with Pinney that, Barthes' primary task in Camera Lucida is to get at photography's essence, (its

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[79] Christopher Pinney, *Camera Indica: The Social Life of Indian Photographs* (Chicago: University of Chicago Press, 1997).

[80] Christopher Pinney, "Seven Theses on Photography," *Thesis Eleven* 113, no. 1 (2012): 148. https://doi.org/10.1177/0725513612457864.

"noeme" as he calls it), which for him is the "that-has-been"[81] quality of the image, which as Pinney puts it, is expressed in Barthes' view that "the particularity of the corps cannot generate the corpus."[82] As Barthes puts it himself: "in the Photograph, the event is never transcended for the sake of something else: the Photograph always leads the corpus I need back to the body I see; it is the absolute Particular, the sovereign Contingency, matte and somehow stupid, the This (this photograph, and not Photography)."[83] Thus, the event that is presented in the photograph (the corps we are left with), is ontologically distinct and can never be fully reunited with the broader context of the corpus. At the same time though, it is precisely the event's residue that is Barthes' trapdoor to the event, that allows him to "discover the Operator," but "in reverse."[84] Ultimately, it is a misplaced project to take photographic history and theory to task for not accessing the event directly—even though it might claim as much, this is not what it set out to do. We can however, hold it responsible for a kind of exnomination (to adapt Barthes' term), whereby in lieu of offering no other alternative, image theory is about all we have to conceptualize the medium of photography, that is, until the event of the photograph no longer continues to masquerade for the photographic event.

The Photographic Event's Dramaturgical Nature

In my own study, the event is theatrical due to photographic practices being both scripted and staged, while also incorporating some quite unscripted spontaneous performances. My choice to situate the photographic event as a theatrical mise-en-scène follows Canadian-American sociologist Erving Goffman's model of using a dramaturgical frame for social analysis, as most comprehensively

[81] Barthes, *Camera Lucida*, 77.

[82] Pinney, "Seven Theses on Photography," 143.

[83] Barthes, *Camera Lucida*, 4.

[84] Ibid., 28.

laid out in *The Presentation of Self in Everyday Life*.[85] Goffman understood the dramaturgical frame as an alternative perspective to the existing sociological frames of the technical, political, structural and cultural. Goffman's use of the theater as a metaphor for sociological analysis was resuscitated in the 1990s in the field of Performance Studies through the work of scholars like Judith Butler who emphasized the ways gender is not only imaginatively, but coercively performed.[86] Butler borrows Goffman's notion of the theatrical nature of everyday experience, where subjectivity is more a matter of *doing* rather than *being*, and where identity is something performed rather than innate. Butler extends Goffman's notion that performances are neither fully "sincere" or totally "contrived" along the lines of gendered identities, to argue that that genders are "neither true nor false, neither real nor apparent."[87] However, Butler also cautions that "the reduction of performativity to performance would be a mistake,"[88] a view opposed to Goffman for the figuration of a 'social actor' that wields less agency in their capacity for self-fashioning via their choice of setting, costume, props, audience, etc.; and instead presents a self that is more fully constituted in social discourse. Following suit, studies of photography ranging from the paparazzi to the selfie, from colonial photography to social documentary and tourism have adapted Goffman's dramaturgical frame as a means of highlighting the performative dimension of the medium; where subjectivities are conferred through image making processes that never unfold independently, but require a stage, an audience and the participation of other actors. For example, the notion of theatrical staging and dramaturgical performance is now

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[85] Erving Goffman, *The Presentation of Self in Everyday Life* (New York: Anchor Books, 1959).

[86] Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* (New York: Routledge, 1990).

[87] Judith Butler, "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory." *Theatre Journal* 40, no. 4 (1988): 528. https://doi.org/10.2307/3207893.

[88] Judith Butler, *Bodies That Matter: On the Discursive Limits of 'Sex'* (New York: Routledge, 1993), 234.

accepted as an orthodox way of analyzing tourist behaviors that coopt sites photographically.[89] Scholars of tourism and leisure studies argue that tourism is like theater for the way both practices typically take place in bounded spaces where there is a symbolic framework; and because performances are heavily managed via scripts that can be conformed to, transformed and transgressed.[90] This is captured in the cultural geographer Mike Crang's distinction between reconsidering what we once thought of as behaviors that were "preformed" as now "performed."[91] As Crang points out in his study of tourist photography, "images are not something that appear over and against reality, but parts of practices through which people work to establish realities."[92] Echoing Bourdieu's claim that the 'natural' is a cultural code that has to be performed before it can be represented as real,[93] Crang argues that we need to emphasize the corporality of experience that he argues is lost in most visual theory. However, while much of the contemporary scholarship in this vein is largely preoccupied by asking to what degree the actions of tourists are scripted/non-scripted or predetermined/improvised, my position is that it is not so much a question of how scripted or unscripted their actions are (as clearly it is both), but more that the camera is used to ameliorate or even circumvent the heavily scripted conventions of performing photography. [94] Thus, while

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[89] See for example: Jørgen Ole Bærenholdt, Michael Haldrup, Jonas Larsen, and John Urry. *Performing Tourist Places* (London: Routledge, 2004); and Simon Coleman and Mike Crang, ed. *Tourism: Between Place and Performance*. Oxford: Berghahn Books, 2002.

[90] Bærenholdt, Haldrup, Larsen, and Urry. *Performing Tourist Places*, 51.

[91] Mike Crang, "Picturing Practices: Research through the Tourist Gaze," *Progress in Human Geography* 21, no. 3 (1997): 359-73.

[92] Ibid., 362.

[93] Bourdieu and Boltanski, *Photography: A Middle-Brow Art*, 166.

[94] This debate in the field of tourism studies parallels the perennial agency versus automatism debate in photographic theory. Specifically, the peripatetic behavior of moving quickly between viewing platforms to take pictures exemplifies a form of agency that is portrayed as automatic or unthinking in orthodox critiques of mass tourism. This behavior is seen as the antithesis of genuinely experiencing a place, where substantive and engaged forms of contemplation are obfuscated via the camera. As a barrier that intervenes between perception and experience, the camera's technological program ensures a brief and distracted form of engagement. For an example of this perspective, see Daniel Boorstin's critique of the phony and contrived nature of tourist

photographic events are culturally scripted, they are not predetermined. Seen in this way, the camera induces forms of spontaneous and experimental staging between individuals and as such photo-performances are never entirely scripted but open to improvisational deviations from the script.

Returning to Goffman, his notion of a "front" that is cultivated via "setting," "appearance" and "manner," is relevant for the premeditated and intentional way that photography is used to construct narratives of the self. In studies of photography, Goffman's work is used to argue that image making practices are a performative socio-psychological process that plays a role in configuring the emerging subjectivity of the photographer. In these studies, Goffman's concepts of "frontstage" and "backstage" as well as "impression management" are variously applied. One example is Alex Gillespie's study of tourist photography in Ladakh, which Goffman's theory of self-preservation is used to argue that the tourist's experience of the reverse gaze of the cultural Other is not (as is often assumed), empathetic in nature, but a product of the disparaging way that tourists characterize the behavior of other tourists.[95] To put it another way, Gillespie's argument is that although tourists think they feel the reverse gaze of the Other as an act of resistance or a disdain for not wanting to be photographed, it is actually their own anxiety that is felt, whereby their own disparaging views of the photo practices of other tourists are mistakenly attributed to the gaze of the Other. It is perhaps surprising that Goffman has been so useful to thinking through photography, given that the photographer is nowhere to be found in his studies of social interaction. He does briefly make mention of the photographer in passing, as a "technical personnel," who he likens to performing "servant-like roles," for the reason that they are a

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photographers that works to Other local populations. Daniel J. Boorstin, *The Image: A Guide to Pseudo-Events in America* (New York: Harper & Row, 1964). Conversely, John Taylor, in his study of English society and its relationship to the landscape, sees photo practices as a matter of degree when he pits the authenticity of travelers who gaze in contemplation against the vapid behavior of tourists and trippers whose interactions are more superficial. John Taylor, *A Dream of England: Landscape, Photography and the Tourist's Imagination* (Manchester: Manchester University Press, 1994), 14.

[95] Alex Gillespie, "Tourist Photography and the Reverse Gaze," *Ethos* 34, no. 3 (2006): 343-66. https://doi.org/10.1525/eth.2006.34.3.343.

category of person who is treated as though they were not there. Photographers are like broadcasting technicians and secret police "who play a technical role during important ceremonies but who are not, in a sense, treated as if present."[96] Goffman's photographer then, is not only invisible in frontstage situations, but also absent from the backstage where "the camera is not focused,"[97] allowing actors to relax, knowing they are not under scrutiny and where impression management need not be maintained. This characterizes a vision of photography in line with its institutional function, long before its widespread use as an everyday digital technology. Thus, there is the latitude for studies of photography like my own to complicate his findings, where for example, a camera that is now more pervasive in both frontstage and backstage regions, works to place any strict delineation between private and public space on shaky ground.

The Photo-Body

Another motivation connecting each chapter is the presentation of photography as a medium that is bodily, where the camera is engaged as a *sensing* technology more than a *seeing* technology. As a corporeal technology photography is cast as a dynamic multi-sensorial exchange, incorporating touch, gesture, expression, suggestion, movement and exertion—a photographic "somatography"[98]—that describes the way the event is produced by and inscribed through bodies in establishing the theatrical mise en scène.

In different practices across the three case studies we see the way anxious bodies prepare themselves before the camera in settings that are both intimate and highly spectacularized. As subjects

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[96] Goffman, *The Presentation of Self in Everyday Life*, 96.

[97] Ibid., 72.

[98] The American pragmatist philosopher Richard Shusterman who founded the field of somaesthetics in the mid 1990s, suggests that photography is a good candidate for studies that wish to foreground bodily perception and performance. See: Richard Shusterman, "Photography as Performative Process," *The Journal of Aesthetics and Art Criticism* 70, no. 1 (2012): 67-77. http://www.jstor.org/stable/42635857.

as well as photographers imitate other bodies—whether real or imagined—they are made conscious of their own, thus revealing the more introspective procedures of proprioception and mimesis in contexts where images are communally authored. Furthermore, we witness the way bodies are paradoxically venerated and subjugated in these practices. For example, in the work of police photography, victims that are subject to the camera's gaze draw on habituated responses like smiling that work against the grain of rendering them 'victims.' At Scripps Pier in practices of gendered bodily production at the beach, individuals are at once honored as highly desirable but also unwittingly reduced to sexualized objects. At Yosemite we witness the way photography involves obligations as the body is work at the park's viewing platforms, where individuals personalize the practice by trying to snatch back some modicum of autonomy in the context of a highly commodified wilderness experience. The photo-body is perhaps at its most visceral in the chapter on police photography during crime scene photography of homicide. Quite differently, the body is emphasized at the beach in the photo performances between photographers and their subjects in forms of "photographic touch," where the body is offered up as sexually available and where the camera serves as an acknowledgement of the subject's demand to be desired—as a tool of seduction and as an affirmation that provokes intimate contact. These choreographies also enable the possibility to transform encounters intimately when the camera is used as a tool of seduction, like when photographers submit to their subjects as they genuflect under the guise of getting a lower camera angle. In response to the historical separation of the body and the camera, the hand is reconfigured in its relationship to photography for the chapter that takes place at Scripps Pier. Here, Jules Jaffe, the director of the Jaffee Laboratory of Underwater Imaging, speaks of his romantic vision for giving cameras hands. This characterizes his impetus to develop new *in Situ* imaging technology in order to capture "more than images," where inspiration is taken from the imaging technologies of non-human animals to help build the next generation of underwater microscopic cameras that can not only record, but manipulate their environments in real time.

In opposition to those who would argue that the potential for artistic expression was forever

diminished as a result of the camera's mechanical nature, Franz Roh invokes Lessing's notion of "Raphael without hands" as a model for the photographer.[99] Roh is referring to Lessing's 1772 play, *Emilia Galotti*, where the painter Conti says "ha! What a pity that we do not paint directly with our eyes! How much is lost on the long path from the eye, through the arm, into the brush!... Or do you think... that Raphael would not have been the greatest artistic genius had he unfortunately been born without hands?"[100] Roh draws on Conti's attitude that reflects a Neoplatonic view of art, a God-like vision of creation that happens through a pure spiritual conception, without being burdened by the material world. For Roh, who was part of the New Photography movement of the 1920s and author of Foto-auge (Photo-eye), photography's aesthetic does not rely on the artist hand, instead the camera is a tool that can more reliably render the creator's inner thoughts when it is unencumbered by the more unreliable human technology of the hand. This example reflects the way photography has been conceptualized as a technology quite separate from the body, especially in the context of a trajectory like the one presented by Roh, where camera operators are set to achieve "increasingly complex results while the handling of the apparatus becomes more and more simple."[101] Roh's sentiments are shared by his North American counterparts who arguably won the medium its most decisive victory in the battle to establish itself as independent from other modes of visual representation. Following developments from the work of the Photo-Secessionists to Straight Photography, West Coast photographers such as Edward Weston and members of Group f/64 (who are addressed in the chapter on Yosemite), developed their brand of Pure Photography. This more unadulterated aesthetic they argued, established a medium specificity that distinguished itself from the handcrafted aesthetics of

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[99] Roh, "Mechanism and Expression."

[100] Tanehisa Otabe, "Raphael without Hands: The Idea of the Inner Form and Its Transformations," *JTLA: Journal of the Faculty of Letters, the University of Tokyo, Aesthetics* 34 (2009): 58. From Gotthold Ephraim Lessing, *Sämtliche Werke*, eds. Karl Lachmann and Franz Muncker, (Stuttgart, Reprint: 1979).

[101] Roh, "Mechanism and Expression," 183.

East Coast pictorialism, where the direct traces of the hand could be palpably felt. Writing in 1943 Edward Weston argues that photography's efforts to establish its own medium specificity have been hampered by its adherence to imitating painterly traditions which have set a "false standard."[102] Instead the "trademark of the photograph" is a process that "cannot be duplicated by any work of the human hand."[103] Like Weston, Ansel Adams used lager film formats requiring cameras to be bound to the tripod as a means of distinguishing fine art photography from the handheld aesthetics of the medium's vernacular applications. However, it remains quite ironic that almost 50 years earlier Alfred Stieglitz, revised his earlier dismissal of the newly available "hand camera," as synonymous with shoddy camera work and instead advocated for its use among professional photographers.[104]

Contrary to Roh's notion that as camera technology became simpler it became less bodily, the phenomenon of the action camera demonstrates quite the reverse—a condition that Lisa Cartwright and Andy Rice describe "viewfinderlessness."[105] The authors argue that cameras without viewfinders, like the GoPro, challenge conventions that situate photography as a primarily ocular activity connected to the gaze and instead reveal it to be a phenomenological, sensory and tactile process of doing that can account for the body's role in photography. In their theory of "viewfinderlesness," seeing becomes partial or fragmented and places greater emphasis on the camera-body's movement through space, that is marked by a disjuncture between viewing and recording. Although I don't address the camera practices of surfers in the next chapter that takes place at Scripps Beach, Cartwright and Rice's ideas resonate with their practices where action cameras are suctioned, harnessed and telescoped in an

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[102] Edward Weston, "Seeing Photographically," in *Classic Essays on Photography*, ed. Alan Trachtenberg (New Haven, Connecticut: Leete's Island Books, [1943] 1980), 174.

[103] Weston, "Seeing Photographically," 172.

[104] Alfred Stieglitz, "The Hand Camera: Its Present Importance," in *Photographic Theory: An Historical Anthology*, ed. Andrew E. Hershberger (West Sussex, UK: Wiley Blackwell, [1896] 2014), 91-94.

[105] Cartwright and Rice, "My Hero."

endless array of configurations. These devices augment the body's experience of space—as it becomes more deliberate when the body takes on the role of its own camera stabilization system, becoming a kind of cinematographic apparatus in its own right. Like my own study, their study is motivated by a desire to reposition photography away from the eye to understand it as a tool for experiencing the world through a recursive relationship between the camera and body.

Thinking of photography in terms of the body also acknowledges the bearing that sound, (or the perceived lack thereof), has in the construction of photographic events. One element that is distinctive about photographic events is their ludic nature. This is not only a result of the photo-games that participants play, but the way that witnessing these situations in public space is often bemusing for spectators. Like the silent film there is latitude for improvisation. This is handled through a choreography that the audience experiences as overly expressive, where there is a hyperbolic treatment of gestures and facial expressions, where to put is simply, people look comically stupid. As Mary Ann Doane noticed of the silent film, "the absent voice re-emerges in the gestures and the contortions of the face—it is spread over the body of the actor."[106] Here, Doane turns the image/sound hierarchy of cinematic construction around, arguing that sound (voice in particular) is the more potent axis in terms of the way the film is given meaning and is spatialized. In keeping with apparatus theory, the use of sound generates a "presence" that conceals the apparatus and narrows the distance between the image and its representation, that works to manufacture the hallucination of reality. However, in the absence of sound, Doane argues that the stylized gestures of the silent cinema are a compensation for the lack of a unifying soundscape. Thus, like the silent film, the photographic image which is void of sound, must also rely more heavily on the use of bodily expression—where gesture is amplified as a form of compensation to establish the necessary meaning of the performer's action. Photography though, is at

[106] Mary Ann Doane, "The Voice in Cinema: The Articulation of Body and Space," in *Narrative, Apparatus, Ideology: A Film Theory Reader*, ed. by Philip Rosen (New York: Columbia University Press, [1980] 1986), 335.

a further disadvantage, as recourse to the event is further stymied as a result of experiencing only the cross-section of a gesture, movement or expression. However, when performances are experienced as collapsed into the still image, we don't necessarily register the subject's expressions as over the top, as the image without motion has a habit of muting or sublating their expressiveness. This is why, when experienced as a witness to photographic events, the subject's bodily movements and gestures seem overwrought and hyperbolic.

Without wanting to unnecessarily flatten out the differences between photography and film, theorizations of the cinematic apparatus that present a symbiotic relationship between the camera and the body are relevant for studying photographic events—especially now when the camera apparatus increasingly integrates both still and video functions. Jean Rouch and Gilles Deluze have both written about the interdependent relationship between the body, movement and the camera. In *Cinema 1*, Gilles Deleuze develops a notion of the camera as thinking machine with reference to the work of Buster Keaton as well as Dziga Vertov's concept of the Kino-Eye.[107] Similarly, Rouch draws on Vertov in his discussion of the "cine-trance," which he describes as the intimate improvisational reciprocity between movements of the camera operators' body.[108] Although Deleuze analyzes the cinematic affect the film has on the viewer, rather than the film's production, his argument that the camera's point of view is responsible for generating the movement of a scene as much as the actor, is still relevant for a study that articulates the relationship between the body and the camera as fluid. It is clear the bearing Vertov had on Deleuze's ideas surrounding movement in this first-person description of the camera:

> I am the cine-eye, I am the mechanical eye, I am the machine that shows you the

[107] Gilles Deleuze, *Cinema 1: The Movement-Image* (Minneapolis: University of Minnesota Press, [1983] 1986).

[108] Jean Rouch, *Cine-Ethnography* (Minneapolis: University of Minnesota Press, 2003), 38-39.

> world as only a machine can see it. From now on, I will be liberated from immobility. I am in perpetual movement. I draw near to things, I move myself away from them, I enter into them, I travel toward the snout of a racing horse. I move through crowds at top speed, I precede soldiers on attack, I take off with airplanes, I flip over on my back, I fall down and stand back up as bodies fall down and stand back up.[109]

Although Vertov's emphasis is on the camera-eye, given the significance he attributes to *doing* more than *looking*, it might just as well be a camera-body that constitutes the "I" in his vision of this new cinematic mobility. It is also worth mentioning that between the different takes that Vertov describes here, his body was intimately connected to his camera, especially seeing that its motor was powered by a hand crank. This is the picture that Rouch paints of Vertov, when he situates his work as a precursor of Cinéma Vérité, where operator and apparatus merge more closely to capture slices of "improvised life," a form of documentation executed as if "without awareness."[110] The development of lightweight 16mm cameras, that were never intended for documentary film applications, were adapted by Rouch for such purposes because they enabled him to enter into a more fluid and responsive relationship with his subjects:

> For me then, the only way to film is to walk with the camera, taking it where it is most effective and improvising another type of ballet with it, trying to make it as alive as the people it is filming. I consider this dynamic improvisation to be a first synthesis of Vertov's cine-eye and Flaherty's participating camera. I often compare it to the improvisation of the bullfighter in front of the bull. Here, as there, nothing is known in advance; the smoothness of a faena is just like the harmony of a traveling shot that articulates perfectly with the movements of those being filmed.[111]

Here, Rouch describes his preference for handheld filmmaking, where unencumbered from the tripod (to which Vertov's camera was permanently bound), the camera operator is free to engage in a kind of

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[109] Dziga Vertov, *Kino-Eye: The Writings of Dziga Vertov,* translated by Kevin O'Brien, ed. Annette Michelson (Berkeley: University of California Press, 1984), 17.

[110] Rouch, *Cine-Ethnography*, 33.

[111] Rouch, *Cine-Ethnography*, 38-39.

dance and where they can improvise to give the recorded footage a liveliness that enables greater intimacy with their subject. However, Rouch did not believe that one could simply pick up a camera and achieve these results straight away, instead "it is a matter of training, mastering reflexes as would a gymnast."[112] As an extension to this notion, it has struck me when watching certain people photograph, that it is sometimes clear the ways in which the training they have received in other disciplines, influences the way they use their bodies to operate the camera to stage the photographic event. For example, Holly Ireland who regularly uses Scripps Pier as a location for her commercial portrait work, also worked as a Broadway dancer for 15 years. Her training as a dancer is evident in the way she moves her body, where the "setting up of the shot relates to the choreography of dance."[113] Holly adapts her dance training by incorporating the camera into the movements of her body as a means of communicating with her subjects while arranging them for the camera. My analysis of the way that camerawork is incorporated into the bodily habitus of photographers is most thoroughly addressed in the third chapter on police photography, where like we saw in the example of the action camera, the standard 35mm camera is the apparatus deployed in constituting the camera-body.

With the advent of increasingly lightweight and heavily automated action cameras, (that now makes Rouch's excitement about the lightweight nature of the 16mm film camera hard to imagine), our attention to the body has come full circle to much earlier sentiments expressed during the medium's emergent stage, when it was commonly understood as a technology that physically impacted the body. Examples range from expeditionary and war photographers of the mid to late 19th century, who schlepped around a cumbersome entourage of camera and developing equipment, to the clientele of portrait studios who were strapped down and clamped into restrictive brace equipment

[112] Ibid., 39.

[113] Holly Ireland, "Interview with Holly Ireland," by Alex Kershaw, unpublished, June 22, 2015.

during exposures that lasted several minutes. At the same time however, since its inception photography has been disassociated from the body, often through comparisons to the then dominant modes of visual representation like painting and drawing, as something quite effortless that did not require the hand. As the photo theorist Joan Fontcuberta notes of the historical sentiments that accompanied the medium's invention, "for the first time an image was not created in the body (or with the body) but outside of the body."[114] These views are more than familiar to us in Charles Baudelaire's caricature of the medium as mechanical, soulless and repetitive—quite unlike the spiritual and magical characteristics of the traditional arts.[115] Subsequent theorizations of the medium, that rendered the photographer as having just about as much agency as a photobooth, persisted well into the 20th century. For example, the work of conservative scholars like Roger Scruton continued to perpetuate the notion of photography as automatic art, one that lacks the ability for intentional modes of representation like painting, which worked to further diminish an understanding of the medium as being bodily.[116] More recent scholarly perspectives however, such as the work of Richard Shusterman and Vilem Flusser, have called for an analysis that acknowledges the somatic, performative and gestural nature of photography. Although only theoretically applied to actual practices of photography, Shusterman identifies the medium as one that is ready for what he calls a "somaesthetic" framework, an approach that forms the central principal of his pragmatist philosophy. Like Flusser, this acknowledges the role of the body in creating what Shusterman calls "photographic situations."[117] Given the way that historical criticisms of the medium used the camera's automatic nature to establish

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[114] Fontcuberta, *Pandora's Camera*, 184.

[115] Charles Baudelaire, "The Modern Public and Photography," in *Classic Essays on Photography*, ed. Alan Trachtenberg (New Haven, Connecticut: Leete's Island Books, [1859] 1980), 83-89.

[116] Roger Scruton, "The Eye of the Camera," in *The Aesthetic Understanding* (London: Carcanet New Press, 1983), 102-36. Also see: Roger Scruton, "Photography and Representation," *Critical Inquiry* 7, no. 3 (1981): 577-603.

[117] Shusterman, "Photography as Performative Process."

it as less than bodily, Flusser is interesting, in that while he emphasizes the automaticity of cameras, this does not diminish what he sees as the gestural nature of photography. For Flusser, in the context of a post-industrial society, the increasingly automatic nature of the photographic apparatuses increasingly works to enervate human intention. However, rather than seeing this as a one-way street, we can see Flusser's configuration of the medium as bodily, because what he wants to emphasize is the battle between apparatus and operator where "in the act of photography the camera does the will of the photographer but the photographer has to will what the camera can do," in a process where the "photographer and camera merge into one indivisible function."[118] Thus for Flusser, the camera is in possession of the photographer and the photographer is in possession of the camera. These sentiments resonate with Nigel Thrift's argument that the body can't be counted separately from the world of things that we have co-evolved with and that have subsequently produced changes in our physiology. Thrifts focus on gesture, imitation and suggestion is part of how he sees the approach of Non-Representational Theory being humanist without taking the human subject as center stage. In terms of acknowledging the significance of the body in its interaction with things, Thrift argues:

> I do not want to count the body as separate from the thing world. Indeed, I think it could be argued that the human body is what it is because of its unparalleled ability to co-evolve with things, taking them in and adding them to different parts of the biological body to produce something which, if we could but see it, would resemble a constantly evolving distribution of different hybrids with different reaches.[119]

The coalescence of body and tool that Thrift describes here, resonates with the notion of a camera-body discussed earlier and acknowledges the importance of incorporating this into our understanding of photography.

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[118] Vilém Flusser, *Towards a Philosophy of Photography* (London: Reaktion Books, 2000), 35.

[119] Thrift, *Non-Representational Theory*, 10.

Ultimately, in this study, the photo-body is offered up as an antidote to the way theories of the gaze have primarily defined the relationship between subject and object as quite unidirectional. Even though theories of the reverse gaze have been presented to counteract a typically all-powerful male flaneur by suggesting that the subject's reversed gaze contributes to an evolving formation of the photographer's subjectivity, these studies still struggle to account for the full range of sensations at play in camerawork.[120] The gaze seems to make more sense as a frame when the analysis is centered on images because it is something that can be deduced or reconstructed by looking at photographs. Thus, a primary motivation for emphasizing the body's contribution to producing photographic events is to suggest that theories of the gaze are not entirely capable of doing justice to thick descriptions of photographic practice. By expanding the range of sensory registers to be considered as 'photographic,' my motivation is to open up forms of corporeal knowledge suppressed in the traditional tendency to view photography as primarily a practice of looking.

Redistributing Photographic Authorship

As a third framework for connecting each case study, I rework the way that authorship is typically ascribed in studies of photography. Most broadly, this way of conceptualizing the event is

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[120] For example, Jane Collins and Catherine Lutz's analysis of the National Geographic photograph as an intersection of gazes presents a typology of the gaze that enables the viewer to imagine a number of different identities for themselves and for those pictured. While Collins and Lutz contextualize their own analysis within the framework of the gaze (developing theories of Lacan and Foucault) they are critical of theorizations of the gaze that treat it more simply as a formal element in art and photography, where universalizing tendencies tend to equate the gaze as male and lack historical, social, and class nuances, without properly accounting for historical and cultural meaning. However, as an acknowledgement of the limitations of their own study, the authors concede, "whether categories of people have actually looked at the camera more readily and openly is another matter." The reason this must remain another matter for them is because they cannot determine if the frequency of looking directly at the camera (a trope they attribute to the lower class and the subaltern) is something that happens at the time images are taken or more an effect of photo editing. Jane Collins and Catherine Lutz, "The Photograph as an Intersection of Gazes: The Example of National Geographic," in *Visualizing Theory: Selected Essays from V.A.R. 1990-1994*, ed. Lucien Taylor (New York: Routledge, 1994), 371. Also, for a critique of the use of the reversed gaze as a cinematic trope see: Paula Amad, "Visual Riposte: Looking Back at the Return of the Gaze as Postcolonial Theory's Gift to Film Studies," *Cinema Journal* 52, no. 3 (2013): 49-74. https://doi.org/10.1353/cj.2013.0015.

consistent with what can be described as the ontological turn or the influence of post/non-human agency in academia. Unlike images, which are usually evaluated with respect to the photographer's intentions, in this study, the photographic event is presented as including the ontological perspectives of multiple actors (both human and non-human) that simultaneously work together and share authorship. The climate, topography, landscapes and animals of Yosemite and Scripps Pier are significant counterparts in the production of images. This presents the possibility of imagining a world that belongs not only to human beings as well as the potential for conceiving a landscape that is aware of being photographed. For example, at the Jaffee Laboratory for Underwater Imaging, the design principals for the next generation of microscopic cameras is influenced by the imaging and propulsion systems of non-human aquatic species like jellyfish. This approach is contrary to how Barthes conceptualizes agency in his tripartite classification of the "Operator," the "Spectator," and the "Target," terms that refer to the photographer, the viewer of the photograph, and the photograph's subject.[121] This configuration ascribes intentionality to the photographer, who wills their subject into being by marking them. Instead, in Chapter Three the camera is cast as the primary 'agent' responsible for transducing affects on police photographers and their subjects that shape the ways that photographs are authored. Across the three case studies we see the camera engaged as a tool of suggestion—a proposal, a prompt, an incentive and a provocation. The chapters on Scripps and Yosemite reveal how the flow of authorship is reversible, where the photographer becomes the target of the subject's desire to be authored. Furthermore, the viewer is now not only a spectator, but becomes fluid as they also share the role of photographer and subject. From animals to landscape—as a technology for photographic exposure and printing designed to maximize the analogue film's ability to represent the landscape, it could be argued that the Zone System was inspired by the changeability in quality and quantity of sunlight. Developed by Ansel Adams and Fred Archer, the Zone System is a response to

[121] Barthes, *Camera Lucida*, 9.

the challenges that the landscape presents to photography, where the subject brightness range of naturally reflected light exceeds the latitude of analogue film's ability to render it. More than other genres of photography, landscape photographers consider their work as a fairly individual pursuit, though it's worth pointing out that even if images are presented as being individually authored, they are produced in situations that are decidedly communal.

Photo practices at Scripps Pier and Yosemite constitute what I call "communal individualism," where individual photographers produce their own images in a highly socialized and collaborative process. This term also characterizes the independent spirit of trying to take a unique image of phenomena like "Scripps Henge," "Firefall" or "Moonbow," three annually recurring photographic events that attract hordes of photographers to produce highly communal imaging contexts. Participation in these events and programs resonate with Kevin Markwell's argument that photography functions not only to help photographers make sense of their new environment as they transition from the "looking at" of a spectator to an "involvement in" as a "participant," but to strengthen social bonds and forge a sense of identity among the group as they use the medium to collectively show appreciation for significant cultural sites.[122] In these contexts, I contend that the practice of photography becomes sport-like, in that, while mass attention is focused on the same event that is collaboratively authored, individuals work to counteract the potentially mundane repetition of all producing the 'same' image as they play the game of trying to achieve variability and distinctiveness in their own imaging making practices.

As a framework for hammering out what a more distributed sense of authorship looks like, each case study invokes theoretical and/or practice-based models as a loose prototype for testing out connections between the different configurations of authors at each site and how the event is staged. In

[122] Kevin W. Markwell, "Dimensions of Photography in a Nature-Based Tour," *Annals of Tourism Research* 24, no. 1 (1997): 131-55, https://doi.org/http://dx.doi.org/10.1016/S0160-7383(96)00053-9.

Chapter Two for example, Karen Barad's notion of "intra-acting" is used to frame the way that photographic events happening simultaneously at the beach work to contribute to a more distributed sense of authorship.[123] The chapter on police photography extends Tim Ingold's model of the transducer, by emphasizing the technicity of the camera apparatus. [124] Specifically, as a tool, the camera is used to modulate the photographer's experience of their subjects, working as an "insulator" that affords a means of regulating empathy with suspects and victims of crime by inducing a form of non-literal blindness. At Yosemite, I argue that semiprofessional photographers who attend photo education programs run through the Yosemite Conservancy practice a diluted form of Group f/64's "pure photography" that operates at the scale of the individual, rather than addressing a wider audience. In the way that the goals of these camera workshops articulate photographic seeing, where they connote a certain watered-down Southern Californian spirituality, there is also a Deleuzian sensibility to their goal of using photo practice to try and register sensation independent of concepts. While each chapter accounts for the camera's agency in different ways, overall we see the apparatus taking on roles where it performs functions in addition to its use as a technology of representation. The notion of a camera as an author is most thoroughly developed in the third chapter on police photography where its status as a material thing is harnessed by photographers to modulate their empathetic connection with their subject(s). While this argument does not preclude the ability of the camera to capture conscious experience or to implement and order our perceptions, it instead affords the camera the ability to affect and re-order our consciousness.

This argument is similar to the case that Gilles Deleuze makes for the cinematographic apparatus, which helps us see the thing-like status of the camera. In his two books on cinema, Deleuze

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[123] As presented in: Karen Barad, *Meeting the Universe Halfway: Quantum Physics & the Entanglement of Matter & Meaning* (Durham. N.C.: Duke University Press, 2007).

[124] As presented in: Tim Ingold, *Making: Anthropology, Archaeology, Art and Architecture* (Oxon: Routledge, 2013).

radicalizes Henri Bergson's ideas on the effect of moving images. Bergson's notion of the "contrivance of the cinematograph,"[125] a medium he saw as completely unlike our natural perception, is extended by Deleuze to argue that what makes cinema most cinematic, is when it does not try to replicate human vision, both perspectivally and as a form of consciousness. Specifically, Deleuze analyzes how camera movement, editing and framing is used to produce a new psycho-mechanical means of making visible the spatiotemporal qualities of our world. By generating consciousness that is independent of a single subjectivity, Deleuze argues that these cinematic devices have the power to take us back to the affects from which our synthesized concepts have emerged. Deleuze's ideas resonate with my own study for the way he disassociates viewing from human vision, arguing for a mode of 'seeing' that is not attached to the human eye, but rather a "percept," which characterizes the reception of data that is not located in a single subject. In *Cinema 1: The Movement-Image*, Deleuze looks at early cinema to argue that the camera shot has the ability to free images from a single observer.[126] In this way, the camera shot possesses a consciousness that is independent of a single subjectivity, it "decomposes and recomposes" with its own autonomous locomotion to think inhuman.[127] Here Deleuze collapses the difference between the movement-image and matter, to characterize an "in-itself" quality of the image as matter. Recalling the distinction he made earlier in *A Thousand Plateaus*, Deleuze writes, "this is not mechanism, it is machinism,"[128] where machinism is the innovative self-organization of material systems as opposed to the anesthetized, routine and repetitive nature of mechanism. Admittedly, Deleuze's ideas are tangential to my own study seeing

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[125] Henri Bergson, *Creative Evolution,* translated by Arthur Mitchell (New York: The Modern Library, [1907] 1944), 322. Discussed in: Gilles Deleuze, "Theses on Movement: First Commentary on Bergson," chap. 1 in *Cinema 1: The Movement-Image*, [1983] 1986, 1-11.

[126] Deleuze, *Cinema 1*.

[127] Ibid., 23.

[128] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (London: Continuum, 2004), 59.

that he is speaking about the affect of images on the viewer produced by a camera (among other cinematic devices), rather than the affect of the camera on the operator and participants of the photographic event. However, his perspective is useful as a means of contextualizing my own argument (which I see as situated adjacent to Deleuze's), for the proposition that the camera apparatus is capable of altering human perception and consciousness, whether willfully encouraged, harnessed creatively or enacted without consent—here the camera is not just a tool that we implement to order our perception, it is a device that re-orders us.

It is worth clarifying that our current academic infatuation with an expanded sense of agency, including object-oriented ontologies, is more accurately a *return* rather than a *turn* to a more distributed notion of causation and authorship—a position that scholars tell us has been systematically obliterated under late capitalism. Historically the camera has always been understood to possess an agency independent and in contradistinction to its human operators, because of its capacity to see what human vision cannot. Based in part on his awareness of the existence of wavelengths outside the visible spectrum, Henry Fox Talbot predicted "the eye of the camera would see plainly where the human eye would find nothing but darkness,"[129] a prophesy that has become even more real with the medium's digitization. *The Pencil of Nature* —Talbot's title for his 1844 photographically illustrated book—has regularly been appropriated to misconstrue his views on the medium, by suggesting that it was technology itself that was responsible for autonomously rendering scenes from nature as if by tracing it. Instead, for Talbot, agency was not an either/or situation, a view commonly encapsulated in the agency/automatism binary. These views oversimplify Talbot's conception of photography, which understood authorship to be co-dependent on the agency of nature, where for example, the energy of light was necessary to burn itself into the sliver salt emulsions of his photogenic drawings. As Talbot comments, "now light, where it exists, can exert an action, and in certain circumstances, does exert

[129] Talbot, *The Pencil of Nature*, 30.

one sufficient to cause changes in material bodies."[130] His perseverance in surpassing Thomas Wedgewood and Humphrey Davy's frustration of never succeeding in permanently fixing the shadows created by solar light and then applying this to the camera obscura, schooled Talbot in the necessity of having an intense light source to create exposures with acceptably high fidelity. So much so that he remarks, it was the "brilliant summer of 1835," where the light was uncharacteristically strong, that inspired him to renew his experiments and enabled him to shorten "the time necessary for obtaining an image with the Camera Obscura on a bright day to ten minutes."[131] Moreover, Talbot saw the movement toward his invention of the calotype as progressing along a "path so deeply hidden among nature's secrets,"[132] suggesting that, just like the images captured in his "mousetrap" camera, the discovery of photography was always something already latent in nature. Talbot was not alone in these sentiments, his French counterpart Nicéphore Niépce, in true Greek Revivalist spirit honored the agency of the sun by naming his version of Talbot's photogenic drawings heliographs. First used to copying engravings, Heliography was an invention contingent upon "spontaneous reproduction, by the action of light."[133] In the original contract signed between *Niépce and* Louis *Daguerre,* it mentions *Niépce's* experiments to try "to fix the images which nature offers, without the assistance of the draughtsman." Furthermore, in a short text accompanying the *Daguerre*otype's official announcement Daguerre concludes, "the daguerreotype is not an instrument which serves to draw nature; but a chemical and physical process which gives her the power to reproduce herself."[134] Certainly, their

[130] Ibid., 4.

[131] Ibid., 9.

[132] Ibid., 5.

[133] Joseph Nicéphore Niépce, *Notice Sur L'Heliography* (Austin, Texas: MS. Gernsheim Collection, Harry Ranson Center, University of Texas, 1827).

[134] Louis-Jacques-Mandé Daguerre, "Daguerréotype," In *Classic Essays on Photography*, ed. Alan Trachtenberg (New Haven, Connecticut: Leete's Island Books, [1839] 1967).

collective denial of human agency was tempered by Western empiricism's belief that knowledge should be based on disinterested observation rather than opinion, thus confirming an 18th century proposition that the retinal image is totally independent of the subject's thoughts and feelings. Nonetheless, it is significant to note that all three of photography's primary inventors stressed nature's role as the principal author, as a technology of automatic writing given birth to through nature.

Photography as Hunting: But Not as We Know It

The final framework that connects each of my case studies is the analogous relationship between hunting and photography—a metaphor that for good reason has been consistently applied to frame the medium. While there is no doubt that photographing is a predatory act and that photographs distill the power imbalances between authors and subjects, my intention here is to locate more nuanced ways of connecting these two practices that move beyond equating the process of 'shooting' with the acquisition of 'prey,' or more generally invoking the comparison as a form of critique rather than a platform for deeper analysis. The relationship between camera and the gun, can be understood broadly as constituting various practices of hunting beyond the immediacy of the kill where subjects (recalling their designation as the "target" in Barthes' taxonomy) are sublimated into objects. Unlike most contemporary scholars, writing in 1859, Oliver Wendall Holmes, saw the relationship between hunting and photography in more positive terms. In his paper on stereography (the then fashionable leisure activity of the elite), Holmes predicted a world where the image has greater status than the object it represents:

> There is only one Coliseum or Pantheon; but how many millions of potential negatives have they shed – representatives of billions of pictures – since they were erected! Matter in large masses must always be fixed and dear; form is cheap and transportable. We have got the fruit of creation now and need not trouble ourselves with the core. Every conceivable object of Nature and Art will soon scale of its

> surfaces for us. We will hunt all curious, beautiful grand objects, as they hunt the cattle in South America, for their skins, and leave their carcasses as of little worth.[135]

The ability of stereoscopy to enliven an experience of the world in three dimensions and his prediction that the camera will facilitate the extraction of forms that "will have to be classified and arranged in vast libraries,"[136] presents a vision of the dematerialized world to come, where surfaces win out over substance. Art Historian John Plunkett, tells us that these views are reflective of a certain colonial grandiosity that comes "from a deep-seated western desire to erode the gap between the viewing subject and non-local object, particularly as the device gained success during a period marked by globalization."[137] The analogy that Holmes invokes here is of a particular kind, that of the trophy hunt—perhaps the most stereotypical rendition of the sport and one that most hunters would distinguish as killing rather than hunting. Nonetheless, it serves to acknowledge not so much the act of shooting, but the paradoxical nature of a sport that both honors and cheapens the object of its desire. 72 years later, Walter Benjamin returned to the notion of photography as a form of waste via the metaphor of the spent animal carcass. Benjamin suggests that the modern craze for self-portraiture and images of one's loved ones, points to the need for a discussion of photography not in relation to its aesthetic, but in terms of its social function. He is however, somewhat dismissive of its use by the masses, "the amateur who returns home with great piles of artistic shots is in fact no more appealing a figure than the hunter who comes back with quantities of game that is useless to anyone but the merchant."[138] For Benjamin, it is not just that the modern pleasure of seeing oneself reproduced is vapid, but that the uncritical practice of snapshot photography constitutes a form of illiteracy.

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135 Oliver Wendall Holmes, "The Stereoscope and the Stereograph," in *Photographic Theory: An Historical Anthology*, ed. Andrew E. Hershberger (West Sussex, UK: Wiley Blackwell, [1859] 2014), 71.

136 Ibid., 71.

137 John Plunkett, "'Feeling Seeing': Touch, Vision and the Stereoscope," *History of Photography* 37, no. 4 (2013): 396, https://doi.org/10.1080/03087298.2013.785718.

138 Benjamin, "Little History of Photography," 522-23.

Seen from a different perspective, it is the habitual use of violent language by photographers and scholars alike who connect photographic processes with hunting, that for Aphrodite Désirée Navab limits our potential to imagine photography as something that is more reciprocal in nature. Navab argues that we need to revise the violent language of photography by choosing words that more closely characterize the actual photographic processes that its practitioners are engaged, in order to account for the ways that photography involves collaboration and mutual recognition.[139] While I agree with Navab's criticisms that more humanist applications of the medium are unsuited to the well-established violent lexicon at our disposal for analyzing the medium, it would be a mistake to dispense with such a rich framework for the simple reason that just because hunting is violent, this does not mean hunting is only violent. A refrain from José Ortega Gasset's philosophical treatise on hunting that I have heard transliterated in many different versions by animal hunters, reads "one does not hunt in order to kill; on the contrary, one kills in order to have hunted."[140] Therefore, rather than arguing that photography is not hunting-like, when it clearly is, an alternative approach to the one Navab suggests involves not only paying closer attention to photographic processes, but developing a richer understanding of hunting as a means of finding new pathways of presenting photographic practices. However, in all fairness it takes two to tango, so to speak—in the sense that it is of little surprise the way critical theory has applied the hunting metaphor given the very one-dimensional nature of photographic representations that hunters have given us. Vernacular images of hunting tend to prove a successful day's hunt and are arranged in the traditional trophy shot style tableaux, where the hunter rises proudly above their carrion. This trope disproportionately emphasizes the product rather than the process of hunting. Lighthearted in nature, they evoke qualities of "mockery, parodic camaraderie, and

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[139] Aphrodite Désirée Navab, "Re-Picturing Photography: A Language in the Making," *Journal of Aesthetic Education* 35, no. 1 (Spring 2001): 69-84.

[140] José Ortega y Gasset, *Meditations on Hunting* (Belgrade: MT Wilderness Adventures Press, [1972] 2007).

black humor"[141] that disrespect the animal. Rarely do the hunter's snapshots capture the whole story—that is, their ambivalence over whether what they are doing is right or wrong or their moral questioning that unfolds in protracted moments following the kill where conflicting emotions of excitement and regret are mixed together.

Romanticizing of the moment of the kill in hunting is what Henri Cartier-Bresson's notion of the "Decisive Moment" is to photography. This concept is exemplary of our narrow perspective of the medium with respect to its similarities to hunting—a concept where the event is reduced into a single image—and one that works directly against my proposal to use the photographic event as a means of untethering the medium from the image. For Cartier-Bresson, the "Decisive Moment" occurs when the unfolding event coordinates itself in perfect formal harmony within the photographer's viewfinder—a fleeting instant where the essence of social and political reality is distilled.[142] The telos inherent (though partially obscured) in this concept is the selection of *an* image that is then mobilized as *the* quintessential representation among others. Cartier-Bresson likens this process to the act of stalking one's prey, "I prowled the streets all day, feeling very strung-up and ready to pounce, determined to 'trap' life, to preserve life in the act of living. Above all, I craved to seize the whole essence in the confines of one single photograph, of some situation that was in the process of unrolling itself before my very eyes."[143] However, what Cartier-Bresson's concept does not account for is the role indecision plays in this process, where the photographer's intentions and attention shifts from moment to moment. When Cartier-Bresson likens his camera to a sketchbook that "questions and decides

[141] Jay Mechling, "Picturing Hunting," *Western Folklore* 63, no. 1/2 (2004): 52. http://www.jstor.org/stable/25474667.

[142] In his own words the Decisive Moment is the "the simultaneous recognition, in a fraction of a second, of the significance of an event as well as of a precise organization of forms which give that event its proper expression." Henri Cartier-Bresson, *The Decisive Moment* (New York: Simon and Schuster; Éditions Verve of Paris, 1952), 14.

[143] Ibid., 2.

simultaneously,"[144] this additional insight more accurately characterizes the way both hunting and photography can be understood as practices that involve the relay between decision and indecision. Even if we accept the notion of a decisive moment, this may not be consciously registered by the photographer at the time of shooting. This is evidenced by the importance many photographers place on editing in the postproduction stage, where it is still not clear if anything valuable has been captured. In my own study, as a model for police crime scene photography, I propose the "indecisive juncture" as a substitute for the "decisive moment" to account for the way that indecision and doubt play a large part in the police photographer's experience of the crime scene. This accords with Flusser's proposal that the gesture of photographing is characterized by a phenomenological doubt, because photography has a quantum nature, in the sense the 'final' shot is a consequence of the total activity of taking multiple images.[145] Of course, police photography's more obvious connection with hunting is its shared purpose of being in pursuit of a subject that one intends to apprehend or immobilize. Like most police forces in North America, Southern California shares in a dark history of systemic racial discrimination. Coupled with the increasing militarization of policing generally, that continues to disproportionately target 'minorities,' such as Black and Latinx communities, policing has come to symbolize the bravado of the callous hunter who sets out to target an 'inferior species' as though it were some natural right. Unsurprisingly, this reality is a sticky point for police photographers, who on the whole, respond to this topic by dispassionately disassociating themselves from the practice of policing. Instead, they tend to identify themselves as photographers first and police second and sometimes more emphatically as being quite separate from police.

Further to the notion of doubt, the practices at my sites connect with hunting through the use of the lure, the decoy, the trap and poaching as metaphors. However, more than just metaphors, these

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[144] Ibid.

[145] Flusser, *Towards a Philosophy of Photography*.

hunting practices are more literally adapted and incorporated into photo practices. For example, at Scripps Beach, photographers strap prosthetic animal "lens buddies" to their cameras to bait the attention of children or at Yosemite, photographers are deployed as decoys to lure other photographer away from animals. Trapping is another hunting practice adopted by the photographers at my sites. For example, the Jaffe Laboratory's purpose-built microscopic camera for photographing plankton works on the same principals as a baitless trap, snatching images of these creatures as the unwittingly pass into view. Unlike hunting however, photo-trapping is more a practice of catch and release, where the firing of the shutter not only marks the point of capture but also of release. However, like hunting, the trap makes us see that most of the effort that goes into photography involves a game of waiting patiently—as a prelude to *the* 'decisive' moment. This is the inverse of an active pursuit where the agency of the hunter-photographer is emphasized. Instead, without forgetting to acknowledge the trapper's ingenuity, the process is also contingent on the cunning of the animal who can outsmart it. Thus, what both the lure and the trap acknowledge about the photographic event is that most of what goes into making images is the prelude or the buildup to the final shot. This vision of photo-hunting, as the deferral of action, accords with Vilem Flusser vision of the camera apparatus as a "thing that lies in wait or in readiness for something."[146] Pointing out that the Latin word apparatus has its etymology in the meaning "to prepare," Flusser writes: "the photographic apparatus lies in wait for photography; it sharpens its teeth in readiness. This readiness to spring into action on the part of apparatuses, their similarity to wild animals, is something to grasp hold of in the attempt to define the term etymologically."[147] Flusser, renders the apparatus in this way to challenge the notion of intentionality, by arguing that while the apparatus functions as a function of the photographer's intentionality, this desire can only function as a function of the cameras very specific and somewhat

[146] Ibid., 21.

[147] Ibid., 22.

limited program of representational possibilities. Thus, like the hunter, the photographer must be patient while using the camera, negotiating the changing context of their surroundings, where they adapt and alter their strategy each time in the hope of attaining the subject/object of their desire.

Further to my argument for the suitability of the hunting metaphor, criticisms like those of Navab, do not acknowledge the way the optical, material and procedural technologies of guns and cameras developed in tandem. There is simply no getting around the gun and hunting as a necessary, (if even sometimes all too convenient), framework for critical analysis. One example of the kind of language that Navab would like us to dispense with is the term "snapshot," that Matthew Brower points out was first applied to photography by Sir John Herschel in 1860 and originates from the hunter's gesture of quickly snapping the gun to their shoulder prior to discharging a shot taken in a hurry with little time to aim.[148] Brower makes the point that what we call wildlife photography today, began as a practice of "camera hunting" in North America in the 1890s. Brower traces a forgotten moment in photographic history where the camera was substituted for the gun in practices that were quite literally considered a form of hunting. Following the work of photographer-hunters such as George Shiras, Allan Grant Wallihan and George Bird Grinnell, Brower demonstrates how they borrowed hunting techniques such as blind-hunting, set-gun hunting, jacklighting and dog hunting in order to obtain images of animals at close range. Although difficult to read as images of wild animals in this way today, photographers historically thought of their images as hunting trophies—as images of individual prowess—marked by a process of significant effort to establish close contact with the animal. Writing about the connection between guns, cameras and violence in the period of New Imperialism in Africa, Paul Landu notes that their analogous relationship is not just a matter of

[148] Matthew Brower, *Developing Animals: Wildlife and Early American Photography* (Minneapolis: University of Minnesota Press, 2011), 81.

language—their chemistry and componentry evolved in lockstep.[149] For example, innovations in dry-plate cameras were modeled explicitly on the mechanism of the Colt revolver and later the Kodak camera used the same types of chemicals in their cartridges as breech-loading guns. No stranger to sports hunting, George Eastman was inspired by gun technology in an effort to reduce the bulky nature of camera equipment (when in 1881), in a collaboration with William Walker, he adopted manufacturing methods used by gun makers in the United Sates that enabled the use of interchangeable parts. This connection was made explicit in their advertisements for their Pocket Kodak, that appealed to the public in the vocabulary of the pocket revolver enabling "two barrelsful"[150] (12 shots). Ultimately for Landu, the purpose of charting the historical overlaps between the gun and the camera serves to conceptualize the role of photography in the work of modern colonial rule in Africa that "followed several paradigms central to hunting."[151] Following the example of photography, cinema cameras borrowed their design technology from machine guns, starting with Étienne-Jules Marey's chronophotographic gun. Developed in 1882, the device's trigger automated a revolving disk that was first used to photograph birds in flight, an animal no stranger to the hunter's scope. Writing about the use of later iterations of this technology in early cinema, where science and spectacle merged to objectify the cultural Other, Paula Amad notes of French anthropological filmmaking: "colonized bodies were indeed filmed as entomological or zoological specimens."[152]

These literal connections between the camera and the gun, that have been coupled with fairly stereotypical views of hunting practice, go a long way in accounting for the metaphor's limited scope to date. They do however, concur with Jose Ortega y Gasset's view that in order for hunting to be

[149] Paul S. Landau, *Images and Empires: Visuality in Colonial and Postcolonial Africa* (Berkeley: University of California Press, 2002).

[150] Ibid., 149.

[151] Ibid.

[152] Amad, "Visual Riposte," 49.

fundamentally hunting, it is essential that one party be subordinate, where "hunting is what an animal does to take possession, dead or alive, of some other being that belongs to a species basically inferior to its own."[153] Thus, is most often the consensus, not only of its application in regimes of colonial imperialism, but as a more general condition of the medium and its practitioners' intentions. Sontag's views are exemplary in this regard for the ironic and metaphoric connections made between the camera and gun. Sontag likens photographers to having the detached curiosity of sexual voyeurs and hunters, where "there is something predatory in the act of taking a picture. To photograph people is to violate them… Just as the camera is a sublimation of the gun, to photograph someone is a sublimated murder."[154] This notion of the callous and indifferent photographer-hunter, is linked to the perennial metaphor of the photograph as a window onto the world, a metaphor that works to justify the photographer's right to invade privacy. As noted by American photographer and art historian Max Kozloff:

> If the lore of photographer is ever relayed out in detail, it would contain innumerable tales of sneaky reconnoitres or ruses or fractious invasions of alien turf, taboos brutalised, and pictures won or lost. The military vocabulary is appropriate because the photographers themselves have told us how much they feel on campaign in areas where resistance to their prowling is naturally to be expected. Asking though, what they're searching for, we have to say that it is not to take part in any action, but to record it. So, at the climactic moment this aggressive individual, the photographer, reverts to passive observer and sticks to the role even if the extremity of the event begs him for assistance.[155]

Further to Kozloff's perspective as a practitioner, in a more oblique way, Barthes connects hunting to photography via the oft-cited notion that photography is intrinsically connected to death.

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[153] Ortega y Gasset, *Meditations on Hunting*, 57.

[154] Sontag, *On Photography*, 10.

[155] Max Kozloff, *Photography and Fascination* (New Hampshire: Addison House, 1979), l3.

Phenomenologically the medium evokes death in the process of being photographed, where Barthes feels a "micro version of death," [156] that embalms him. Further to this, in every photograph the viewer experiences a "return of the dead,"[157] a paradoxical and enigmatic quality that conjures an absence-as-presence, whereby in reanimating the past, it renders into living that which is now dead.

This sketch of the connections between photography and hunting is not so much a framework that I seek to challenge, but to further contribute to through my case studies. Indeed, my departure from the perspectives outlined here has as much to do with my focus on the event, as it does with the fact that the status of individuals involved in photographic events at my sites is more often than not adjacent, rather than asymmetrical (notwithstanding the exception of certain types of othering involved with police photography). Furthermore, it is not entirely the fault of photographic scholarship for prioritizing a quite singular perspective in how it frames photography's connection with hunting. Orthodox literatures on hunting have historically prioritized the drama of the heroic chase, that reaches eventual climax in the kill as superior to other much 'simpler' forms of hunting technology such as the trap, as well as other connections that move beyond linguistic and psychoanalytic frames.

Apart from the connections already mentioned, at Yosemite the figuration of photographer-hunter is evident through a contemporary version of camera hunting. Here, photography as it is in hunting—draws individuals closer to the lifeworld of non-human animals and nature in paradoxical ways; makes use of handicaps; and in terms of its moral validation, invokes the rhetoric of conservation. Operating much like a hunting guide service, there are a plethora of photographic outfitters, both run by private individuals and small companies that lend their services to photographers who want to capture park animals through the lens, such as coyotes, mule deer, black bears, woodpeckers and more elusive species such as spotted owls, bighorn sheep, bobcats and

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[156] Barthes, *Camera Lucida*, 14.

[157] Ibid., 9.

mountain lions. Less premeditated experiences of animals in the park that happen when motorists spot animals from the window of their cars, spark no less fervor turning into events known as “bear jams,” when hundreds of people abandon their cars to follow animals through the park with their cameras. Although conceived by practitioners as a form of wildlife photography, this constitutes a form of contemporary camera hunting, though in less literal terms than the techniques that pioneering camera hunters of the late 19th century adapted from hunting practices.

Like hunters, photographers establish a paradoxical relationship with the animals they seek out, because although the practice provides genuine opportunities to experience the lifeworld of another species (that they claim they have great affection for), this authenticity is negated by the animal being treated as a commodity or as a novelty. This expresses a nostalgic view that cheapens their connection—albeit in less finite terms for photographers than for hunters. Brower distinguishes himself from scholars like James Elkins and Jonathan Burt who argue that the rhetoric of wildlife photography places animals as distance via an ideological separation of human and non-human. Similarly, John Berger in *Why Look at Animals*, conceptualizes animals as separate to humans, wherein wildlife photography gives the viewer access to place they are no longer a part of and where the presence of even the photographer has vanished. For Berger, the photograph functions as a surrogate for real nature that humans can no longer access and is evidence of our nostalgic concept of the animal as a figure that is free, unlike the way we see our own lives in late capitalism. Thus, photographs of animals, act as a substitute for our loss of direct contact with them. While this may well be true of those consuming images at a distance, views such as Berger’s obscure image making practices where the animal is brought up close and personal, and thus as Brower concludes, there is a need to “understand wildlife photography as producing a social relation with animals.”[158] The role of animals in producing human subjectivity (at least historically) is acknowledged by Akira Mizuta

[158] Brower, *Developing Animals*, 17.

Lippit who develops Berger's view by arguing that as animals took on a less direct and tactile relationship with humans in modernity they became spectral.[159] As we lost contact with animals, which once served to generate human ontology, their spectral presence established our dehumanized ontology. As real experiences with animals dwindled from the 19th century onwards, they took on a new life in technological media such as photography and cinema, where they were not only preserved in crypt-like fashion, but worked to enliven technology: "although animals have always haunted the topology of human subjectivity, the nature of the animal has shifted in the modern era from a metaphysic to a phantasm; from a body to an image; from a living voice to a technical echo."[160] This being the case, the work of contemporary photographer-hunters constitute a primordial figure, who in feeling this loss, seek to establish more concrete physical connections and reciprocal relationships with animals. Thus, by way of reaching a middle ground between these opposing views, it is my contention that in photographing animals (as it is with killing animals), the photographer-hunter honors their intimate connection by way of mourning its loss.[161] Further to the primordial nature of the photographer-hunter, both figures understand themselves as entering a past world that expresses an antimodernist worldview. Hunters see themselves as reenacting a historical tradition that is evocative of a nature religion where the hunter is teleported into an imaginary past, a quality that sociologist Jan Dizard refers to as the "hunting reverie."[162] This quasi-spiritual nature of landscape photography is addressed in Chapter Two in the seasonal photo-phenomena of Scrips Henge as well as in Chapter 4

[159] Akira Mizuta Lippit, *Electric Animal: Toward a Rhetoric of Wildlife* (Minneapolis: University of Minnesota Press, 2000).

[160] Ibid., 21.

[161] As Lippit says: contact with animals turns human beings into others, effecting a metamorphosis. Animality is, in this sense, a kind of seduction, a magnetic force or gaze that brings humanity to the threshold of its subjectivity. Ibid., 51.

[162] Jan Dizard, *Going Wild: Hunting, Animal Rights, and the Contested Meaning of Nature* (Amherst: University of Massachusetts Press, 1994).

during Firefall and Moonbow in Yosemite. Speaking to the primordial nature of the photographer-hunter in a different way, by emulating the work of famous landscape photographers before them, Yosemite photographers envision an image of the park void of any whiff of modernity. Looking around the walls of the Ansel Adams Gallery at the work of the current generation of fine-art Yosemite photographers, one wonders how it is that all the humans and cars somehow magically vanished.

It is important to acknowledge however, that Yosemite's iconic status resonates more as a destination for landscape photography than it does as a destination for wildlife photography. Nonetheless, photographers give chase to elusive seasonal phenomena in the park such as Moonbow and Firefall with the dedication of animal hunters, who as they become more experienced tend to purposefully increase the difficulty of making a successful kill. By choosing subjects so challenging to photograph, photographers employ a form of the handicap as practiced by hunters to level the playing field. As already mentioned, while Gasset contends that "hunting is the free play of an inferior species in the face of a superior species,"[163] he also points out that it is necessary to counteract this, by way of developing handicaps to put the animal on a more equal footing:

> As the weapon became more and more effective, man imposed more and more limitations on himself as the animal's rival in order to leave it free to practice its wily defenses, in order to avoid making the prey and the hunter excessively unequal, as if passing beyond a certain limit in that relationship might annihilate the essential character of the hunt, transforming it into pure killing and destruction.[164]

However, rather than choosing a different tool such as swapping out the gun for the crossbow, it is in their selection of the particular species of subject that they used to make the task more challenging.

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[163] Ortega y Gasset, *Meditations on Hunting*, 111.

[164] Ibid., 53.

Last of all, like hunters who model themselves on conservationists as a justification for their exploits, photographers and park administration promote photography in Yosemite as a form of environmental activism and conservation. While it may not be an appropriate justification for taking the life of an animal, hunters are not wrong when they claim they have played a large role in enabling wilderness preservation in North America. According to the U.S. Fish and Wildlife service, hunters and anglers are "the backbone of wildlife conservation,"[165] a claim supported by the fact that revenue generated from license and tag fees as well as an excise tax on firearms, ammunition and other related equipment provides 59 percent of the funding for state wildlife agencies, most of which is used for wildlife management and conservation projects.[166] This compares with a meager four percent that the U.S. Fish and Wildlife Service generates itself and just three percent from park entry fees. To put it simply (as hunters like to do), the North American Model of Wildlife Conservation could not function without them. Today's Yosemite photographers make recourse to a different set of facts for a similar claim with respect to role photography purportedly played in having the park awarded its status as a federal preserve. As the legend goes, it was Senator John Conness, who used Carleton Watkins' images to lobby President Abraham Lincoln, who struck by their beauty, placed Yosemite under federal protection in 1864. This set a precedent to help pave the way for what became the US National Park System. This story is regularly recounted for park visitors whether it be during a free "Camera Walk" thought through the valley by Ansel Adams Gallery staff or by a park ranger delivering their daily sunset tour at Glacier Point. In these settings and others, visiting photographers are encouraged to model themselves on a lineage of expeditionary and environmentalist photographers that followed Watkins, including George Fiske and of course the park's primary mascot, second only to John

[165] U.S. Fish and Wildlife Service, "Hunters as Conservationists," 2018, accessed May 24, 2019, https://www.fws.gov/refuges/hunting/hunters-as-conservationists/.

[166] The Federal Aid in Wildlife Restoration Act or the Pittman-Robertson Act as it is more commonly known, requires that states use their revenues from hunting license fees for wildlife management.

Muir—Ansel Adams. Furthermore, the revenue raised by photography education programs managed by the Yosemite Conservancy and other concessionaries is funneled back into preservation efforts in the park. Monies aside, the claim that contemporary photographers need to promote the park is as dubious as the hunter's justification of using their 'status' as conservationist for killing—with over four million visitors a year, Yosemite is hardly in need of further advertising given the environmental stress these excessive visitation numbers place on the park's ecology. Of course, the complementary relationship between boosterism and conservation long predates our current situation. It was no coincidence that the birth of the North American conservation movement came about when many species were under threat of extinction during America's rapid westward expansion that brought with it market hunting, trapping and invasive species. The enormous loss of game animals and wild habitats toward the end of the 19th century motivated hunters to support conservation efforts. As an avid hunter and the founder of the National Wildlife Refuge System, as well as introducing hunting license fees, Theodore Roosevelt, along with others like Yosemite's most famous booster John Muir, worked to establish the American conservation movement. Brower points out that although it did not dissuade Roosevelt from his passion for big game hunting, he was inspired by Allen Grant Wallihan's photographs of game species to make a case for the significance of camera hunting. For Roosevelt, camera hunting offered a possible solution to the pressures of population increase and the effects of industrialization:

> It is in the interest of all of us to see that there is ample and real protection for our game as for our woodlands. A true democracy, really alive to its opportunities, will insist upon such game protection, for it is in the interest of our people as a whole. More and more, as it becomes necessary to preserve the game, let us hope that the camera will largely supplant the rifle.[167]

[167] As quoted in: Brower, *Developing Animals*, 58.

While not for the reasons that Roosevelt suggests, his predictions ring true. As the numbers of hunters dwindle each year, those taking up the sport of photography increases exponentially. However, as the recent National Public Radio (NPR) story "Decline in Hunters Threatens How U.S. Pays For Conservation" reports, there might be little left for photographers to photograph if the US does not find a replacement revenue source. As NPR reveals: a recent panel charged with making recommendations for new funding sources concludes, "without a change in the way we finance fish and wildlife conservation, we can expect the list of federally threatened and endangered species to grow from nearly 1,600 species today to perhaps thousands more in the future."[168] Although Roosevelt stopped short of suggesting a similar system of licensing fees for photographers, given the way hunting and photography are historically and technologically entwined, it is not hard to imagine a future where photographers might be asked to take up the slack in place of hunters, transitioning from their more symbolic forms of activism to provide more concrete financial solutions.

Conclusion

Thinking through photography's relationship with the body, authorship and hunting via the photographic event recasts the medium through the time in which images are created rather than from the viewer's experience of images. The value of reorienting our approach is that it opens up new possibilities for thinking about photography when we are no longer held to ransom by our obsession with the image. My hope is that in turn this might point to new ways for thinking about images, that is, once photographic practices are given the opportunity to speak back. Of course, the fact that these photographic events are concealed by images should come as no surprise given that photographs replace events more than they represent or signify them. Nonetheless, when apprehended by the magic

[168] Nathan Rott, "Decline in Hunters Threatens How U.S. Pays for Conservation," *National Public Radio*, March 20, 2018, https://www.npr.org/2018/03/20/593001800/decline-in-hunters-threatens-how-u-s-pays-for-conservation.

of photographs, in what has been characterized as their 'reality effect,' we cannot help but try to taste something of that original encounter. In this process though, the immanence of the photographic event is replaced by our desire for the photograph to function as an index. While there is no doubt that these exchanges leave their imprint on photographs, it is not the impression of an easily identifiable fingerprint but something far more indeterminate. While photographic events may be only marginally available to us in images it should not mean that we give up on the original encounter. Thus, rather than working backwards from the image, there is great potential for future scholarship that chooses to work forward from the event—as it is here in the times and places where images are made that the little-known phantoms of photography might be found.

CHAPTER 2 — SCRIPTING PHOTOGRAPHIC THEATERS AT SCRIPPS

Introduction

Like plankton, photographers become more energetic at the turning of the light. This is at least the case for commercial and amateur photographers at Scripps Beach, San Diego California. Although the sun sets according to a fairly predictable routine, the wildly varying qualities of spectral and diffuse light affect their behavioral patterns—whether you are plankton or human—atmospheric fluctuations in temperature or precipitation alter your movements. As far as humans go, it is inversely the warmer wavelengths of light, where photons are less energetic that activate photographers most. From yellow to orange to red—hues turn increasingly saturated during the golden hour as the sun descends—adding dimensionality to the earth's surface inch-by-inch, making rocks seem larger and waves shapelier. It is at this moment, each afternoon just before twilight when photographers at Scripps Pier become most active. As photographers descend onto the beach to witness the sun dip behind the Pacific Ocean, plankton ascend into the upper layers of the water column to feed. As they ascend, they are photographed by the Scripps Plankton Camera (SPC), a set of microscopic underwater camera units fastened to the pier, that were built by the Jaffe Laboratory for Underwater Imaging, a research facility at Scripps Institute of Oceanography (SIO). While their access to discrete portions of the electromagnetic spectrum differs, photographers, like plankton and many species of fish and bird, are crepuscular animals who prefer to 'feed' around twilight. During day's passage into night, these liminal animals emerge in greater numbers before sunset, occupying a time that has no single name for itself, before retreating at dusk. For us humans, living lives that we are told are wholly out of sync with the earth's circadian rhythms, photography draws us into more 'animal' like contracts with nature.

This chapter brings together camera practices that span scientific, commercial and amateur applications to study photographic events happening in and out of the water. Scripps Pier is analyzed

as the site of this chapter, where the work of scientists and beachside photographers are brought together to reveal the ways these distinctive practices are actually more similar than we might first imagine. Given that their practices remain largely hidden from one another, that which constitutes figure and ground is never entirely stable and serves as a means of rendering the site from a variety of angles. Taken together, the practices of beachside photographers adapt the intended function of this working scientific pier by putting it to use as a pleasure pier for a variety of photographic applications. However, while photographers engage in creative adaptations of the pier's unintended architectural affordances, the sustained use of this pier as a research facility by SIO reminds us of the beach's pre-modern status as a place of work, long before its widespread domestication as a principal site for contemporary leisure practices.

Following Erving Goffman's use of theater as a model for analyzing the way identities are produced for self and others, the photographic event is spatialized as a dramaturgical performance for its use of staging and scripting practices.[169] Here, both terrestrial and aquatic environments are co-opted as stages for performing iterative photo practices that range from producing gendered and commodified bodies to time sequences for plotting 'objective' records of plankton distribution. The Jaffe Laboratory's use of *in Situ* microscopy has a theatrical dimension as does the way the beach is co-opted as a stage where individual photo troupes simultaneously perform idealized versions of family life. In these processes, different scales of intimacy are witnessed, especially given that adjacent to these practices, the medium is also harnessed for producing a more highly sexualized body that expresses itself as desirable and demands to be desired. In what constitute forms of "photographic touch," the medium is presented as a bodily technology. Here, the aspirations of scientific and quotidian photo practices orientate photography between the rational and the libidinal and include

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[169] Goffman, *The Presentation of Self in Everyday Life*.

impulses such as “giving camera’s hands”[170] in the words of marine oceanographer Jules Jaffe (the laboratories’ namesake and director). In the way that the Jaffe Laboratory partly models itself on a 19th century approach to science (that emphasizes greater public participation), and in the way that cameras sanction looking at the beach that might otherwise be clandestine, the photographic event is one that encourages a form of spectacularized witnessing.

Furthering Goffman’s model of the theater, the notion of what constitutes an actor is widened here to include the role that non-human animals and material objects play in authoring photographic practice. At both the Jaffe Laboratory and the beach, innovations in camera design emulate the properties of non-human animals, as a means of generating more interactive forms of contact with their subjects. While I do not fully ascribe to Goffman’s characterization of the individual as an unscrupulous actor primarily concerned with their own self-preservation, his concepts of “back stage” and “front stage” influence a consideration of the way photographic practice reveals the tenuous nature of there being any stable boundary between private and public space. As cameras are pulled out and pointed at things on the beach and as people get tangled up in each other’s images, any strict delineation between public and private space is rendered fuzzy. Among others, Roland Barthes drew a historical connection between photography and theater via the way Louis Daguerre used it for his panorama theater at the Place du Château.[171] Further, Barthes argued that the camera obscura evokes the three arts of the stage—perspective painting, the diorama and photography. Though, most significantly for Barthes, photography is theater-like because of its connection with death, where “photography is a kind of primitive theater, a kind of *Tableau Vivant*, a figuration of the motionless and made-up face beneath which we see the dead.”[172] Here, Barthes likens the way actors brought their

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[170] Jules Jaffe, "Interview with Jules Jaffe," by Alex Kershaw, *Scripps Institute of Oceanography*, unpublished, May 30, 2016.

[171] Barthes, *Camera Lucida*.

[172] Ibid., 32.

audiences into contact with the community of the dead, to the way the illusory capacity of the photograph enables us to experience that which is now past.

However, through an analysis of photographic performances at Scripps, we witness the ways in which lives are expressed and constituted through a photography that is very much of the living and oriented not to the past, but to the future. As mostly naked bodies in swimsuits grow into images and as millions of images of plankton wait dormant in digital archives—while images might inadvertently capture the present—their true purpose is to conjure the future. This chapter concludes with analysis of an event called "Scripps Henge," perhaps the penultimate example of how the pier is adapted by photographers from a working pier into a pleasure pier. For this event, where hundreds of photographers assemble under the pier twice a year to capture the setting sun as it passes squarely through the aperture of the pier's tunnel-like frame, photography reveals itself as a social process more than a technology of representation.

A Working Research Turned Pleasure Pier

The work of amateur and professional photographers operating in the shadows cast by Scripps Pier transforms what was intended as a working pier into a pleasure pier. This adapts the pier's function in line with how the pier as an archetype has traditionally served as an infrastructural component responsible for modernizing the beach as a domesticated space zoned for leisure practices. At the same time however, the presence of Scripps Institute of Oceanography (SIO), whose campus occupies the landscape adjacent to the pier, ensures that the total transformation of this patch of Californian coastline into a commodified zone for servicing pleasure seekers of the sun and the sand remains unlikely. As far as your garden variety beach pier goes, Scripps is atypical. It is closed to the public, which presents a challenge to beachgoers who are prevented from accessing its upper deck, where they otherwise might walk out over the water to soak up the views its vantage offers. Instead, access is exclusively reserved for employees and students of SIO to conduct their experiments and

research activities. So, while scientists occupy the deck, tweaking and monitoring instruments that measure salinity and atmospheric pressure or hoisting ocean-craft into the water, clusters of photographers (largely oblivious to these activities), busy themselves with shoots ranging from seascapes, to wedding and swimsuit photography and more impromptu forms of snapshot photography. As a measure of its popularity, most online photo guides consistently rank Scripps Pier as the most Instagrammable spot in San Diego.[173] Without fail, every day just before twilight, a congregation of photographers gather underneath and around the pier clicking away with their cameras as day passes into night.[174]

However, as far as intentions go, non-scientific applications of photography were not envisioned as part of the Pier's original permit. The Scripps Plankton Camera, (discussed in detail later), is just one of countless instruments fastened to what is one of the world's oldest and largest research piers. It has been measuring and sampling atmospheric conditions and water properties since it was built in 1916.[175] Scripps Pier is essentially a research facility that is shared by different

[173] For example, Local Adventurer is one such websites that list Scripps Pier as the "number one" Instagrammable spot in San Diego. See: Local Adventurer, "Most Popular Instagram Spots in San Diego," 2017, accessed September 12, 2018, https://localadventurer.com/best-instagram-spots-in-san-diego/. On Frankie Foto's website, San Diegan amateur photographer Frank McKenna tells us "my favorite spot in all of San Diego is Scripps Pier. Not only do you have the fantastic sunsets and the huge pier but there are loads of great shots to be taken of people and wildlife here. When you look around everything is a shot and everything is bathed in a beautiful golden glow. If you can get to Scripps on a day when the tide is low, the receding water just glistens on the sand and reflects everything like a mirror. This is the absolute best place in San Diego to take pictures." Frank McKenna, "15 Best Spots to Photograph San Diego," *Frankie Foto*, 2012, accessed July 25, 2012, http://blog.frankiefoto.com/2012/07/15-best-spots-to-photograph-san-diego/.

[174] Although one could argue that the entire beach is a theater, the pier is where the atmosphere of the beach is most noticeably altered by photo activities. Thus, the pier and its immediate vicinity constitute a kind of micro-climate where the precipitation of photo activities accumulates more densely than in the rest of the beach and then incrementally dissipates the further one moves away from the pier.

[175] Officially re-named the Ellen Browning Scripps Memorial Pier in 1987, when it was rebuilt, it takes its current namesake from SIO's first major philanthropic donor who fronted the money for the pier's original construction in 1916. It was built just over a decade after the SIO was established in 1903. The original intention for the pier continues today for launching boats, housing measuring instruments (the first being a tide gauge), and to ensure the research facilities and aquarium have a fresh supply of seawater on tap. See: Scripps Institution of Oceanography, *Ellen Browning Scripps Memorial Pier, March 26, 1987* (La Jolla, California: Scripps Institution of Oceanography, 1987).

departments at SIO, whose various laboratories populate the landscape immediately behind the beach and extend toward the University of California which SIO joined when the San Diego campus opened in 1960.[176] Mounted adjacent to the SPC are CTD-Fluorimeters managed by the Southern California Costal Ocean Observing System, for measuring hydrographic information like pressure, temperature, conductivity and chlorophyll fluorescence. As part of the Shores Station Program (which SIO established in 1916), the pier participates in a network of nine shoreline stations along the coast of California measuring sea surface temperature and salinity. The Scripps Pier temperature time series is the longest on the Pacific Rim and one of the oldest ocean time series.[177] Additionally, the pier supplies fresh seawater to several SIO research facilities on the Scripps campus, including the Birch Aquarium, all of which form a radius around the pier extending inland from the beach. Three pumps housed at the end of the pier draw 1.8 million gallons of fresh seawater each day, that is filtered and then funneled through a trench running the length of the pier's deck, which is delivered to storage tanks before being tapped to individual research laboratories across the University of California San Diego's (UCSD) campus.

In absence of being able to access the pier topside, photographers have made do with creative adaptations of the pier to suit their own needs. This is as much a creative strategy on the part of photographers, as it is a response to the affordances offered by the Pier's architectural elements. For example, the Pier's upper deck constitutes a traverse stage that it is performed underneath rather than upon. This inverted corridor is used to full effect by photographers who instruct their subjects to walk toward the camera as though performing on a catwalk. Photographers lead their brides and grooms

[176] However, SIO joined the University of California in 1912 prior to the establishment of the San Diego campus.

[177] As such, the pier's measurements are regularly used as a baseline for climate projections. Their statistics are used to measure change in the coastal Pacific Ocean, where for example, it "continues to contribute to our understanding of warming caused by El Niño conditions and global climate change." See: Scripps Institution of Oceanography, "Shore Stations Program," 2018, accessed October 17, 2018, https://scripps.ucsd.edu/programs/shorestations/.

into the elongated shadow cast by the Pier's deck to reenact a walk down the wedding aisle (fig. 1 and fig. 2) and with larger wedding entourages, the structure as a whole is appropriated as a nuptial canopy to sanctify photo-proceedings. The trench that moves seawater along the Pier's deck has an outlet to prevent overflow by discharging a steady shoot of water off the side of the pier. This is appropriated by swimsuit models who imagine showering themselves under a waterfall for a quick photo (fig. 3) and by photographers who use the water as a filter to shoot through or freeze its flow into vertical stalactites by using a fast shutter speed in order to anchor a composition focused on smaller details inhabiting the background (fig. 4). The vertical and horizontal lines of the pier provide a framing device to help orient camera movements. Conforming with the rectangular nature of the camera's imaging ratio, the pier helps level the axis of the camera's tilt and thus anchor compositions. Although the daylight side of twilight is the most popular time to photograph at the pier, afternoon light here presents a challenge to photographic work, as it is difficult to include the ocean in one's shot without the distraction of the sun shining directly into the camera lens as it descends toward the horizon. In order to avoid their images getting washed out by the anomalies of internally refracted light, photographers use the tunnel-like nature of the pier as makeshift lens hood and the pylons as cutters for blocking the sun. It is not until sunset, when the differential between highlight areas outside and shadow areas underneath the pier is compressed, that an 'acceptable' exposure can be made. With the sun out of the picture, sunset reflects off the upper atmosphere onto wet sand, doubling the bandwidth of color into a Turneresque tornado of crimson hues (fig. 5), a desirable quality evidenced by the vastly fewer number of photographers present on overcast days. While the sun's path through the atmosphere is similarly long at sunrise, it is the sunset air, heavier with particulates when this location is at its most brilliant. The pylons also serve as a means of anchoring hammocks that are strung between them in order to temporarily inhabit the pier for a photo gesture that is endlessly repeated on the #scrippspier hashtag on Instagram (fig. 6). At other moments, yogis form the subject of images where they use the pylons for balance when they invert themselves for a headstand pose. In many

ways, the subjects and the photographers of Scripps are like Michel de Certeau's walkers of the city engaged in spatial practices that involve tactics and forms of enunciation that appropriate the 'proper' purpose of the sites they utilize.[178] However, while these uses might subvert the intended purpose of the pier, they are not quite the tactical adaptations of disenfranchised communities that de Certeau had in mind, but merely extend its function as an addition to the "strategy" of its existing scientific operations.

Taken as a whole, the pier structures a view toward the sea by neatly framing a rectangle of water and sky created in the aperture of the tunnel formed by 88 pylons that support the weight of the pier's superstructure. Spanning intervals of roughly 10 feet, these reinforced concrete pillars constitute a repetition of proscenium arches that construct a viewpoint that frames the seascape as an object of contemplation, not unlike a Mark Rothko painting where in a play between flattened and deep space the water and sky leak into one another. As French historian Alain Corbin has noted, "the building of piers, promenades and domesticated beaches enabled the visual consumption of the otherwise wild, untamed and 'natural' sea."[179] As if an apology for not being able to access the upper deck, the view underneath this pier is similar in purpose to one of Haussmann's Parisian boulevards, where the tunnel organizes looking toward and orientates action before a scene—that during sunset—becomes one of dramatic climax. This is especially the case on two occasions each year called Scripps Henge, an event that attract hordes of photographers when the setting sun squares up perfectly within the pier's aperture. However, regardless of the day, this framing device can be thought of as a contemporary iteration that embodies the vestiges of a romantic 19th century sensibility where nature is conceived of as scenery through the building of houses that emulated cameras for framing the landscape.[180] Thus,

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[178] Michel de Certeau, *The Practice of Everyday Life* (Berkeley: University of California Press, 1984).

[179] Alain Corbin, *The Lure of the Sea: The Discovery of the Seaside in the Modern World 1750–1840* (Cambridge: Polity, 1992). Quoted in Larsen and Urry, *The Tourist Gaze 3.0,* 160.

[180] From the camera obscura to the home, Jonas Larsen and John Urry argue that we are hardwired to expect such views from architectures that frame an experience of nature. They argue that "by the mid-nineteenth

the framing of the scene via the pier anticipates, if not invites subsequent re-framing by photographers who capture the scene in their viewfinders.

Although this pier encourages leisure activities in a zone originally designated for scientific research, it also constitutes a form of resistance to the complete commodification of this patch of coastline. This reminds us that beaches were historically places of work before they were places of leisure. Though, it is worth qualifying this by noting that the commercial and military applications of research at SIO is quite different to how the beach as a work zone is most commonly historicized (and still manifests) as a strip of land dotted with fishing boats, where burley men haul in the day's catch.[181] While the beach has been utilized as a place of leisure for centuries, it was not until the establishment of the seaside resort and development of infrastructure in the 1850s that came along with this—boardwalks, kiosks, bathing regulations, changing huts and signs—that firmly established it as a site for the new, largely urban class of leisure seeker that "transformed the beach into a social space, a hybrid public domain."[182] A transformation of this sort is the case only a short walk south of the Scripps Pier at La Jolla Shores, which developed the land adjacent to the beach with amenities like

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century houses were being built with regard to their 'prospects' as though they were a kind of 'camera.'" See: Jonas Larsen and John Urry, "Vision and Photography," in *The Tourist Gaze 3.0* (London: SAGE Publications, 2011), 159. This idea is cited as originating from Nicholas Abercrombie & Brian Longhurst, *Audiences: A Sociological Theory of Performance and Imagination.* London: Sage Publications, 1998, 79. Elsewhere Larsen argues that hotels in Bornholm (a Danish island in the Baltic Sea) were constructed to emulate the views framed by cameras as though they were a painted picture. See: Jonas Larsen, "Picturing Bornholm: The Production and Consumption of a Tourist Island through Picturing Practices," *Scandinavian Journal of Hospitality and Tourism* 6, no. 2 (2006): 75–94.

[181] For example, see Bærenholdt, Haldrup, Larsen, and Urry's account of the fishing hamlet of Torup Strand on the Danish North Sea coast. Unlike beaches nearby, Torup Strand, which is the largest active site for in-shore fishing in Denmark, is relatively free of tourist infrastructure. Nevertheless, like the example of Scrips, the authors argue that the beach is a leisure site, that is culturally and materially produced by the activities of tourists who co-opt this marginal space as a stage for dramaturgical performances. Meanings that are historically inscribed in the beach organize how tourists envision the beach as a site for leisure practices. At Torup Strand, the working fishermen and their boats are treated as props or visual objects to be contemplated rather than interacted with. Bærenholdt, Jørgen Ole, Michael Haldrup, Jonas Larsen, and John Urry, "Staging the Beach," Chap. 4 in *Performing Tourist Places* (London: Routledge, 2004), 49-68.

[182] Nicolá Goc, "Snapshot Photography and a Gendered Poetics of the Beach, 1900-1920s," in *Travel and Representation*, eds. Russell Staiff, Garth Lean, and Emma Waterton (United States: Berghahn, 2017), 159.

toilets, playgrounds, restaurants and barbeque facilities. However, the SIO campus that orbits Scripps Pier remains a force of resistance to any such change.

Nevertheless, the unintended affordances of Scripps Pier encourage creative adaptations of its architecture by photographers and thus helps establish the basic framework for co-opting this site as a theatrical stage. Not only a material framework for anchoring bodies, props and camera movements, the pier is an origin point from which photographic troupes spread out to occupy the surrounding beachscape. When the areas adjacent to the pier are considered, the non-purpose-built traverse stage, constitutes a more hybrid stage that combines like elements of several different staging types. For example, a thrust stage is formed where the pier intersects the beach (and if you include the ocean), then a theater in the round is formed. In all, the unchanging material structure of Scripps Pier precipitates the development of photographic troupes, like the way that flotsam and jetsam suspended in the ocean provide a seeding ground for the formation of new fish colonies and other marine life.

Staging Photo Theaters at Scripps—On the Sand and Underwater

Like our beachside photographers, there is a theatrical dimension to how photography is practiced at the Jaffe Lab, given that it too is both staged and scripted. As an example of the Pier's function as a research facility, the Scripps Plankton Camera (SPC), is a quite different example of the structure's disposition for supporting the work of photographers—in this case quite literally. Hidden from the pier's terrestrial photographers, a quite different type of photographic theater is in session in the photonic zone of the water column, 996 feet from the shoreline and submersed 20 feet below the water's surface. Here, the Jaffe Laboratory for Underwater Imaging, has strapped two watertight black plastic tubes, that each house their own compact computer and underwater microscope, to the pier's pylon for studying plankton (fig. 7 and 8).[183] Writ large, the ultimate goal of this camera system is to

[183] The SCP system is one of several imaging devices built by the Jaffe Laboratory. Various other specialized systems include a microbathymetric laser system, as well as an omnidirectional camera for recording

understand more about animals that we still know surprisingly little about, animals that form the basis of the marine food chain and are vital to producing about 50 percent of the earth's oxygen. By recording the procession of these "little guys"[184] as Jules Jaffe likes to call them, they are able to map the frequency and distribution of different species and their blooms (fig. 9).

In terms of staging, the SPC system is theatrical for the way the scientific laboratory has been relocated to the ocean in what is known as *in Situ* imaging. Jaffe's commitment to studying animals in their own habitats via underwater imaging systems is advertised and perhaps best evidenced by the number plate of his smart red convertible, that reads "*in Situ.*"[185] In keeping with the promise of Victorian science (when knowledge of plankton's existence was first proven with cameras), this plankton camera is a valuable prosthetic—a means of revealing that which is not possible for human eyes alone to perceive.[186] The interest in studying plankton at SIO dates back to 1919 when biologist Winfred Allen collected phytoplankton samples and zoologist C. O. Esterly made analysis of

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the radiometric light field in the open ocean; and a combined acoustic and optical sonar system for studying zooplankton distributions. They have also built the Benthic Underwater Microscope, a more portable diver operated system which made the first real time studies in the ocean of marine organisms. Using focusable LEDs that strobe fast enough to freeze the motion of particles, the device documented phenomena of coral bleaching and feeding, that was studied at micromillimeter scale. See: Andrew D. Mullen, Tali Treibitz, Paul L. D. Roberts, Emily L. A. Kelly, Rael Horwitz, Jennifer E. Smith, and Jules S. Jaffe, "Underwater Microscopy for *in Situ* Studies of Benthic Ecosystems," *Nature Communications* 7 (2016): 1-9.

[184] Jaffe, "Interview with Jules Jaffe."

[185] Jaffe's commitment to *in Situ* imaging began at Woods Hole Oceanographic Institution where he worked with Dr. Robert Ballard on improving the ARGO underwater video imaging system to be more adaptive in its search. Specifically, they developed a system so they could see what the underwater camera system was seeing in real time. Jaffe believes the ability for real time imaging lead them to the discovery of the Titanic. His experience working on the ARGO system inspired him to try and develop a future generation of oceanic robots, which would involve having to "design sensor systems that utilize both light and sound so that they can 'see.'" Jules Jaffe, "To Sea and to See: That Is the Answer," *Methods in Oceanography* 15-16 (2016): 6.

[186] As Corey Keller notes of the coupling of photography and microscopy, "the photograph no longer represented or even approximated the experience of the observer, but instead constituted the only visual record of an otherwise imperceptible subject." See: Corey Keller, "Sight Unseen: Picturing the Invisible," in Brought to Light: Photography and the Invisible, 1840-1900, ed. Corey Keller (San Francisco: San Francisco Museum of Modern Art, 2008): 33.

zooplankton.[187] However, unlike these earlier methods, plankton are not captured, filtered and then brought back to the lab for analysis. This rough handling process damages the fragile structures of these microscopic species and often results in the total loss of individual species from the water samples when transported back to the lab. First developed in 1816, the humble plankton net (a device used to determine species and cell density for a given water source), remains till this day, the most common method scientists use to study them. Instead, the SPC records whatever plankton drifts into its field of view without requiring the use of filters, pumps, or nets that are still common in less sophisticated imaging systems. This invention has enabled the Jaffe Laboratory to confirm the presence of some of the more delicate gelatinous creatures in this part of the Pacific, that might have well slipped by had more traditional methods of collection been used. Also, apart from a high and continuous sampling frequency, another advantage of *in Situ* microscopy is that it does not overly interfere with the way different species interact with one another. This philosophy of what is known as *in Situ* imaging serves as a guiding principal and romantic vision for the variety of other optical imaging systems the lab designs and produces to record ocean life in their original place.

Furthermore, the SPC system is theatrical for the way it adapts the 19th century operating theater as a model for disseminating images, where scientific knowledge is spectacularized and shared with the scientific fraternity in real time. While it requires a small team of divers to deploy and periodically scrub the device clean of sea scunge, the camera system is controlled remotely from computers tethered via ethernet cables that run the length of the pier to the Jaffe Lab located on SIO's campus. Zooplankton and larger phytoplankton (measuring between 10s of microns up to 10s of millimeters) are the camera's target species. They are captured while performing their daily diurnal vertical migration (the largest single daily migration in terms of biomass), where each day plankton ascend into the upper layers of the water column at around dusk and then and descend to the lower

[187] Allen devised standard collection methods for plankton involving filtering the contents of water samples and invented a closing bottle for capturing plankton called the Allen bottle.

levels during the day. The system performs real-time object detection and image processing to capture roughly eight images per second, that are dispatched to the SIO server where one image is published online every two minutes.[188] This amounts to anywhere between thousands to hundreds of thousands of images daily, and produces an estimated 50 million images per year depending on the state of the plankton population. Sharing this data as a form of 'knowledge' by collecting witnesses is exemplary of what historian Jennifer Tucker has described as the photograph's role in creating "eye witness" accounts of scientific phenomena that helped establish the evidentiary nature of photography in the Victorian era by garnering public interest and support for science.[189] Witnessing as a method for establishing the virtue of photographs as evidence is especially important for microscopic subjects that are undetectable to human vision, which "imposed special problems of corroboration because it revealed to the eye completely unfamiliar images."[190] However, by disseminating these images of plankton to the public via their website, the Jaffe Laboratory plays into the cultural appeal of the invisible that scientific photography has taken advantage of since the late 19th century.[191] However, unlike scientists of that time who tended to distance themselves from commercial interests, the Jaffe

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[188] These images are available to the public at http://spc.ucsd.edu/viewer/spcview.html?preset=spc2big. The images are transferred in real-time to a webserver that can be browsed and be searched using simple parameters like date, size and aspect ratio.

[189] Tucker writers about the about the connections between science, audiences and the culture of photographic display in 19th century Victorian Science. Her book studies not only the production, but the reception of scientific photos to show the way that contexts of photographic viewing and display were essential to not only challenging but consolidating scientists' validity and public confidence where, "photographs were used to buttress as well as to challenge dominant images of science and scientific authority." Jennifer Tucker, *Nature Exposed: Photography as Eyewitness in Victorian Science* (Baltimore: Johns Hopkins University Press, 2005), 233.

[190] Ibid., 159.

[191] While no longer having to rely on public lecture, exhibition and periodicals alone, it is worth noting that the context of their website as the platform for display may not be as quotidian a context as the sources Tucker points to in Victorian Britain such as newspapers and magazines. Also, the motivations for public display are different to a time when science felt it necessary to garner public confidence for their expertise to ameliorate cultural anxiety surrounding scientific experimentation and the public's discomfort with science's perceived secretiveness.

Laboratory's ethos for publicly sharing their images of plankton is not entirely altruistic, but serves as a means of promoting their invention commercially. The lab has for example, been commissioned to modify their system for the NOAA South West Fisheries Science Center to study invertebrate populations in Sacramento river and estuary near San Francisco Bay. Furthermore, the purpose of enabling these images to be publicly witnessed helps to establish their evidentiary validity in a process of crowdsourcing, where other researchers in the field of oceanographic science are invited to lend a hand in making sense the massive amount of data they have collected. However, as Jaffee concedes, an area of "extreme concern,"[192] is that they need to "figure out how to process our 40 million, and ever increasing, pier-based plankton camera images to quantify what is there and how many of them [plankton] are there."[193] Hence is the blessing and curse of big-data for a laboratory that is yet to develop algorithms sophisticated enough to adequately make sense of the massive databank of images they have captured. Thus, more than trying to construct new publics via display it is a gesture of fraternalism that invites other scientists to testify to their discovery. While slowly building an image map of the seasonal dynamics of local plankton populations, (in the relatively short time the SPC has been operating since 2014), their modest findings include capturing episodic blooms of particularly fragile diatom chains and the discovery of a form of parasitism not previously known to exist in the Pacific Ocean.[194]

Resurfacing to dry land for now and turning our attention once more to the activities of our beachside photographers, it can be observed that simultaneity is another quality of their photographic stagecraft. As a photographic event, this phenomenon is constituted by a performative matrix of

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[192] Jaffe, "To Sea and to See," 19.

[193] Ibid., Although Jaffe does not focus on the issue in this paper, there are several recent publications focused on the challenges of classifying images of plankton. See for example: Haiyong Zheng, et al., "Automatic Plankton Image Classification Combining Multiple View Features Via Multiple Kernel Learning," *BMC Bioinformatics* 18, no. 16 (2017): 570.

[194] Mullen, Treibitz, Roberts, Kelly, Horwitz, Smith, and Jaffe. "Underwater Microscopy."

individual photo troupes that share and produce beach-space by instigating individual photographic moments as they perform for the camera. While different photo troupes might merge together from time to time there is no singular narrative. Instead, this stage expands and contracts over time as a conglomeration of different stages, each performing their own acts. Thus, the notion of *an* event, is a slippery proposition, in that there are individual events that exist within other events, that exist within others and so on, like a babushka doll. So, the photographic event here can be understood as either the happenings of a singular photographic troupe or collectively as the constellation of all events simultaneously underway at any given time. While it is the pier that initially attracts photographers, the space underneath is limited; and so as one troupe vacates their spot, another enters to take their place. On a busy day (at a rough count), there are between 20 to 35 photo troupes shooting all at once, arranged in a haphazard constellation around the pier. The beach however has no obviously raised platforms to separate actors from their audience or each other. Sometimes, watery patches of sand form small oases that turn blue when they reflect the sky above. These sanctuaries pop out of the surrounding greyish sand lending photographers a stage to separate their subjects from the background. Enveloped within these watery plateaus, subjects bleed into their own reflections above the sand like a marble wash, where they are released from the cumbersome gravity of our more terrestrial atmosphere. On low tides, rocks at the northern end of the beach (a short walk from the pier), are adapted as plinth-like platforms to raise actors. The sun occupies the flyspace of this theater as the only continuous light source. However, photographers augment this with camera mounted strobes and battery powered units mounted on light stands, that they haul down to the beach as a means of lifting their subjects out of the background. Once the sun has set, flashes of light pop off like tiny supernova in unpredictable constellations across the beach. Having previously served to fill shadows created by the sun, at night they become light sources in their own right by revealing alien forms in the landscape.

As a snapshot of this theater, April 30, 2018 is as good a day as any to characterize the range of activities experienced by panning one's head from the right to left—from looking toward Black's Beach in the north and turning toward La Jolla Shores in the south. On this day, a couple skip as directed along the shoreline toward camera (a mawkish routine that to some degree may be erased in editing); and in front of them a girl holding a change of clothes arrives, looks around, then makes a call to find her photographer. A pair of CH-53 Sea Stallion helicopters whip over the ocean from where a flimsy drone returns and is effortlessly lowered into the palm of its pilot's hand. People stop with their phones to photograph a couple practicing salsa. 14 relatives coordinated in pastel pallet of blue and beige lifted from a shopping catalogue, line up for their portrait. Under the pier a wedding photographer's assistant is sprayed with sandflies when he kicks a clump of seaweed house left as the photographer struggles to be heard over a lifeguard who hollers at swimmers through a megaphone. A hobbyist crouches down near a bird wrestling small crabs out of the sand to harass it with his camera. Adjacent to this, a man in "budgie smugglers" spreads his body weight over the palms of his hands pressed into the pylon. Conscious of the crowd staring at him, he gives an embarrassed look and retrieves some of the swimsuit fabric from out of his ass crack. Drawn south of the pier by the smell of sausages on the grill, a pregnant woman with a baby tucked under her arm is hit with several fires of a flash. Behind her, three young brothers race through the shallows tracked by an iPhone operated by their father. Our attention is turned back in the direction we began with the entry of two beach buggies that people gather around to watch a surf rescue. To celebrate her one-year old birthday (fig. 10) a couple plonk their daughter who is dressed in a blue and purple tutu on the sand, the plastic pearls strung around her neck are so long that they reach the sand. Adorned with a tiny paper crown, her parents crouch down at opposing 45-degree angles and sing her happy birthday while taking pictures. Such is the humdrum nature of the simultaneous photo moments that constitute the ebb and flow of one's attention around the pier.

While practiced simultaneously, the scale and duration of individual shoots that make up this photographic event vary significantly. For dog walkers strutting up and down the beach, images are dialed in on cell phones on the fly as they pause to poach the action underway in the photo shoots of others. For them, the pier marks a natural point on their exercise circuit to turn around. Quite differently, the semi-professional photographer is an industrious variant of the beachcomber. Intent on doing the rounds of the San Diego photo circuit which mandates at least one image of the pier, they also arrive with an open mind as to what they might be able to forage for with their cameras. Other photographers that have been hired to commemorate an event arrive with their assistants, props and well-planned choreographies. For example, when it comes to children both living and unborn, props like a tiny pair of shoes are matched with costumes such as bespoke maternity gowns adapted for beachwear that filter the sun through diaphanous material while trailing effortlessly through shallow water. Props such as surfers, joggers, games of catch, swimmers and clusters of sunbathers with umbrellas help lend a sense of authenticity to the production of leisure at the beach. Overall, there is a large degree of spatiotemporal variability with the multiple clusters of photo troupes operating simultaneously. Moving outward from the pier, the placement of individual photo troupes is both *ad hoc* and at other times more discernibly deliberate. The number of people and their placement in each cluster is always changing—especially for portrait work—where different combinations of subjects are arranged as photographers make sure they get adequate coverage.[195] Not only are people swapping in and out of individual troupes, but typically for most amateur portraiture work, troupes move around the space trying out several different positions. Furthermore, while some photo shoots last hours, others last only seconds; and so, the exact same constellations of photo troupes never persist for very long. Thus overall, the event is constituted in and by a plurality of diverse moments produced by

[195] Disregarding variables of placement, basic combinatorics tells us that with five people to choose from as subjects, there is a total of 31 possible groupings. While photographers do not keep a checklist that charts their coverage of these variables, it does explain why some shoots of small groups take a long time.

several distinct photographic groups that at times intersect and overlap. These clusters of photographers constitute a constellation of itinerant troupes moving between different locations underneath and around the pier, who collectively, day by day, produce an ongoing photographic event at Scripps Pier.

Given their spatial proximity and the motley crew of audience members, we can think of this as a type of vaudeville. Like street theater there is little control over set design, where non-actors are incorporated who cannot address all the audience members simultaneously. Additionally, like the carnivalesque it is syncretic for the way it brings together unlike elements as well as the ability to encourage social unity. However, from an anthropological point of view, it is quite unlike the carnival as a reversal ritual where social roles and mores are temporarily suspended. While on the surface it might seem like a space of freedom, these beach performances do not have the loose laws of the carnival nor the radical political nature of street theater. Instead, we mostly experience a version of the world right way up, where the status quo is maintained rather than disrupted and where social institutions of the family and marriage are firmly upheld. Although it does not possess the same nature of reversal or protest as the carnivalesque, it does sometimes hint at constituting a form of protest, however this protest really only exists within the space of an existing status quo. At the same time, it is carnival-like in the way the sacred institutions of marriage and the family are entwined with the profanity of overtly sexualized bodies and also for the way that humor is combined with the grotesque. As a counterpoint then, in the ways that bodies are displayed, this theater can be considered as a form of the grotesque as Mikhail Bhatkin had thought about it in terms of his work on Francois Rabelais.[196] While we are witness to the body beautiful, it is perhaps not one elevated or abstracted to the noble, but degraded for the way base human anatomy is displayed to induce sexual desire. Even though the audience does participate in the photographic event at Scripps, Bakhtin's warning that it is a mistake

[196] Mikhail Bakhtin, *Rabelais and His World* (Bloomington: Indiana University Press, 2009).

to equate the Medieval carnival with its modern iteration as Mardi Gras, brings to light the tension between this event as potentially culturally transformative and this event as spectacle.

Performing Scripts at Scripps

The photo events staged at Scripps, both on the beach and at the Jaffee Laboratory are theatrical for the way they rely on scripts to produce and manage images. Although in its early stages and still imperfect, the algorithms developed to process images produced by the SPC attempt to automatically extract regions of interest using software that essentially runs a facial recognition system for plankton (fig. 11). Here, species of plankton are differentiated from other particles suspended in the water to minimize the interference or noise of unwanted artefacts that are not their target species. The images produced by the SPC can be thought of as a kind of language that is awaiting translation, where each image of a single plankton forms an individual character of a cryptic alphabet that is assembled in chronological order. First though, I will address the ways photo practices on the beach constitute a form of scripting—iterative practices that produce idealized versions of family life that tend to efface the notion of the individual. This is counterposed with forms of gendered bodily production where the individual takes center stage, in performances that both perpetuate gendered stereotypes and illicit desire. Taken together, different scales of intimacy are practiced through photography at Scripps—from the banal to the titillating and from the prudish to the salacious. This squares up with how Canadian sociologist Rob Shields sees the beach as a marginal and hybrid space where the division between the rational and the libidinal plays out.[197] Shields argues that in order for

[197] Rob Shields, *Places on the Margin: Alternative Geographies of Modernity* (London: Routledge, 1991). Shields provides a diligent accounting of the socio-cultural context these transitions at the beach played out within. His analysis unfolds in the context of British society during the transitional times of the late 19th and early 20th century where the clash between personal liberty and social morality was brought to the fore. He cites other cultural factors responsible for Brighton's transformation such as the advent of the mass holiday and the way Brighton became a popular provincial capital for social life and as a center for fashion. Brighton acquired a liminal status as a dirty weekend getaway in the 1920s and 30s as distinct from the industrial areas of the city and the Arcadian vision of the countryside.

the beach to have become so iconic in the Western imagination since the 1850s, it first had to be coded and constructed as a site of leisure, where according to Bærenholdt et al., "the intangible border zone between land and sea was transformed into a stage, a playground, a site for edification, sexual gratification or simply easy living."[198] Thus, while the beach developed as a site of leisure by constructing it as an antidote to everyday urban experience as a place of respite where family values were practiced, it also developed concurrently as a site of hedonism—a place that is morally corrupting. At Scripps, this hybrid character of the beach is constituted by a curious mix of repeated hegemonic familial photo practices that happen adjacent to more libidinal individual heterogeneous photo practices which sexualize the body by emphasizing its individual material form more than its symbolic function as part of the family unit.

Performing Scripps at Scripps—Homogeneous Familial Practices

Scripps Pier has evolved as a place for performing amateur and commercial genres of photography such as maternity, wedding and engagement, prom night, graduation, childbirth and the family portrait. While these constitute different iterations and stages of 'the' family, they have also been naturalized as standard genres of photography—as photo-scripts—by being repeatedly produced over and over again. French sociologist Pierre Bourdieu's analysis of photography gives us a way of thinking about the recursive relationship between the meaning of images and practice when he says, "the social uses of photography... define the social meaning of photography at the same time as they are defined by it."[199] Bourdieu argues that photographs are not transparent or objective records of reality, but instead they are only realistic in the sense that they reproduce what we have constructed as

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[198] Bærenholdt, Haldrup, Larsen, and John Urry, "Staging the Beach," 51.

[199] Bourdieu and Boltanski, *Photography: A Middle-Brow Art*, 73.

socially accepted representations of reality.[200] He characterizes photography as a “middle brow art” because like jazz and cinema, it occupies a space between highbrow culture (legitimate arts like painting and sculpture) and lowbrow culture (non-legitimate forms like fashion and sport). In this middle position photographic practitioners operate as “simple consumers,” where amateur photo practice is governed by strict conventions.[201] However further to Bourdieu’s ideas, photo-scripting is not simply a matter of rendering the family ideologically through its articulation in the image, but a matter of using the medium of photography to rehearse the family unit—conceived biologically and institutionally—as a primary means for producing it in the first place. Framed in this way, it is not so much about the way the habitus of a particular social class determines how photography is practiced and understood as an aesthetics as Bourdieu argued, but more an emphasis on the way making images reproduces and maintains habitus.

At Scripps Pier the perpetual rehearsing of conventional familial scripts re-inscribes them as archetypes, where ideal notions of the family are expressed in the production of images. Stories of happiness, love, commitment and togetherness are written into scripts in order to be performed for the camera, which brings familiar bodies into close contact. For example, large family groups are instructed by professional photographers to perform individual gestures collectively—whether it be the metachronal rhythm of successive hands thrown into the air, star jumps or formations of interlocked arms (fig. 12). Couples share the weight of their newborns by each clinching one tiny hand, so the child levitates a few inches off the sand as though it were a sacred thing not quite ready to

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[200] Bourdieu’s interest in photography departed from more orthodox approaches that tried to establish medium specificity via the latent nature of reality in images. Instead he believed that amateur photo practices provide sociology with a valuable subject for looking at the way class groups work to establish standard practices and norms, as well as the relationship different classes have with one another.

[201] Writing of these strict conventions Bourdieu says, "it appears that there is nothing more regulated and conventional than photographic practice and amateur photographs: in the occasions which give rise to photography, such as the objects, places and people photographed or the very composition of the pictures, everything seems to obey implicit canons which are very generally imposed and which informed amateurs or aesthetes notice as such." Ibid., 7.

connect to the earth. Then for their next shot the couple rotates to lean over their child and disappear into one another through a kiss that draws their eyelids shut. In performances coded with modes of desexualized contact like holding hands, embracing, light touch and eye contact; the individual is inscribed as part of a coherent and singular social body through socially unifying experiences. For example, siblings are laid out before the camera and caught squirming in and out of poses as they are directed to kiss each other on the cheek. In configurations where a sibling is about to be born, kids kiss their mom's tummy and are then directed to use their ear as though it were a stethoscope listening for signs of life. The notion of family however is not always conceived in terms of its biological affinities. University students in graduation sashes—some holding clusters of white helium balloons—form queues at the side of the pier creating a revolving photo-carousel as they take turns photographing each other. Another kind of ascension is celebrated for a young boy's first communion (fig. 13). Dressed in red and white robes with a crucifix around his neck, his hands proudly bound by rosary beads into a gesture of prayer, he stands solemnly before his father who controls a drone that buzzes in front of the boy's face.

Although framing these phenomena via the gaze risks perpetuating the significance of the image over practice, scholars in the field of tourism studies concur with these sentiments in their writing on the way tourists co-opt sites of leisure as stages for performing idealized versions of family life.[202] As Jørgen Ole Bærenholdt et al. argue, "in accordance with the late modem cultural code that tenderness and intimacy epitomize blissful family life, so families act out tenderness and intimacy for the camera and one another. Indeed, where the 'family gaze' holds sway, nothing appears more natural than producing moments of tenderness and intimacy."[203] First developed in a paper by Michael Haldrup and Jonas Larsen, the concept of the "family-gaze" is concerned with the "extraordinary

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[202] Bærenholdt, Haldrup, Larsen, and Urry. *Performing Tourist Places*.

[203] Ibid., 96.

ordinariness" of how tourists constitute and perform “familyness” through themes of success, unity and love in order to manufacture an ideal vision of family life.[204] To be fair though, Haldrup and Larsen’s notion of the gaze understands that the photo practices of tourists don’t simply mirror reality, but construct new realities by transforming places and facilitating acts of familial recognition in the actual taking of images. Such is photography’s role in constructing fictions of ‘the’ family, where “images are thus never simple records of ‘real’ family life, but are shot through, consciously and unconsciously, with desires, fantasies and ideals of family life.”[205] These authors distinguish their approach from conventional renderings of tourist photography that critique it as a static and disembodied practice that consumes places commodified by the tourist industry as visual spectacle. Instead, photography is an interactive and embodied encounter where images do not simply reflect intimacy and solidarity, but where photography produces social relations by constructing desired visions of family unity. In terms of the beach, its relaxed and intimate nature is borrowed as a setting for this process; and while the history of particular beach sites and the way the beach is spatially organized does much to influence behavior and set the tone for how people imagine the beach, these behaviors are only produced through repeated leisure performances being enacted.[206]

So, photography provides the means to produce “familyness” by offering an opportunity for presenting it publicly. This can only be constructed though, if their beachside audience acknowledges what they are indeed seeing are visions of family life. As a result, there is a limited repertoire of scripts that are performed. While there might be small deviations to planned choreographies taken from a set of reliable standards, improvisation typically only has breathing space in-between sets of premeditated maneuvers where authorship is shared by photographers and their subjects. However, it is not so much

[204] Michael Haldrup and Jonas Larsen, "The Family Gaze," *Tourist Studies* 3, no. 23 (2003): 23-45.

[205] Bærenholdt, Haldrup, Larsen, and Urry. *Performing Tourist Places*, 71.

[206] Ibid.

that people prefer producing banal images that are averse to forms of creativity that deviate from routine scripts. Instead, in order to produce an original image that typifies *their own* version of family life rather than an *exemplary* version, is contrary to the point of the exercise in the first place. As Bourdieu argues, the values inherent in what is being rehearsed in what he terms “ordinary practice” (that is, amateur photographic practices rather than academic or artistic practices) continually reproduce our own culturally accepted vision of reality which conforms to our "social definition of the objective vision of the world."[207] While mindful that not all photo participants at Scripps are cut from the same cloth, their practices are exemplary of what Bourdieu recognized about the way the working class evaluate photographs in terms of their functionality for the viewer and the legibility of their intention rather than, as he put it, their appeal to Kantian notions of universal beauty.[208] Instead, “the conventionality of attitudes towards photography appears to refer to the style of social relations favored by a society which is both stratified and static and in which family and 'home' are more real than particular individuals, who are primarily defined by their family connections."[209] Thus, for Bourdieu the family portrait constitutes an extreme form of one’s relation to others, because conservative values set the tone of images that efface the individual in an effort to conjure the family group. At Scripps, while there might be latitude for innovation, difference is constituted more as a

[207] For example, in “ordinary practice” a vision of the 'real' is instantiated that conforms rather than destabilizes traditional laws of perspective where abstraction is suppressed. Bourdieu and Boltanski, *Photography: A Middle-Brow Art*, 75.

[208] Further, the ability for the aesthete to claim a transformative agency in relation to what is signified is the very thing the working-class distain because of their attachment to the subject as the primary arbiter of function, which must be not be mystified. However, as a clarification, I would not suggest that Bourdieu’s characterization of the distain the working class have for the way the artistic/intellectual class use photography is a motivating factor for them adhering to orthodox photo scripts. Of this tendency he is quite adamant: “the picture of a meaningless object is refused with such force, and the systematic distortion of the given object, and of the human face in particular, provokes such a feeling of outrage, because abstracting reinterpretation is seen as a technique of exclusion and an attempt at mystification, but also and particularly a gratuitous attack on the thing represented." Ibid., 94.

[209] Ibid., 83.

degree of subtle variation within how existing scripts are already acted out. For example, variation manifests itself in wedding photography as the difference between following and leading. Photographic historian Lili Corbus Bezner identifies this as a distinction between photographers that specialize in more candid or photojournalistic type images and those that produce more formal images.[210] Though as Bezner points out, these two approaches match the different registers of the wedding itself—formal shots for the more dignified moments and candid shots to reflect the frivolity of more relaxed moments of the wedding. Further to this, it is also an artefact of the way performing the script of marriage unfolds in front of the camera. At Scripps, in between the photographer's heavy-handed directions, the bride and groom engage in casual conversation or quiet whispers, if nothing more than to placate the embarrassment that comes with performing such mannered actions in formal attire entirely unsuited to the laid-back nature of the beach. A side effect of their more casual interactions is to produce intimate encounters in the context of a situation that feels like the antithesis of intimacy, which then works to direct the photographer's attention. Thus, while there is haphazardness to the way subjects and photographers share the role of director, they take turns in leading and following photo-scripts.

Scripting the Future Perfect

At the same time, reading these practices from a strictly macro-sociological perspective that tries to locate a rationale for the behavior of photographers and their subjects, does not tell the whole story. It is worth pausing to note the frustration Roland Barthes expressed regarding the lack of literature on hand to help him articulate the more personal ontology he yearned for in his relationship with the photograph. Narrating his internal monologue in response to viewing vernacular photography

[210] Lili Corbus Bezner, "Divine Detritus: An Analysis of American Wedding Photography," *Studies in Popular Culture* 18, no. 2 (1996): 19-33.

Barthes says, “what you are seeing here and what makes you suffer belongs to the category ‘Amateur Photographs,’ dealt with by a team of sociologists; [as] nothing but the trace of a social protocol of integration, intended to reassert the Family."[211] I too suspect the participants and photographers at Scripps would feel the same way that Barthes did about the type of analysis, such as the one I have performed on them; and want to “dismiss such sociological commentary” to seek better explanations by becoming “primitive, without culture.”[212] Approached differently, in a way that does not enervate photo-participants of their own agency, photographic practice does not simply *document* the ideal family but works to *conjure* and *maintain* it with the knowledge that it will always remain just that—an ideal. What is perhaps extra-ordinary about witnessing the production of these images is that the intimacy we see being performed is rare outside the act of photography. These photo practices are admittedly banal and saccharine when read as homogenous scripts reiterated over and over again, where the only substantial difference from photo to photo is the people who appear in them. However, this should not underestimate the importance these shared rituals have for individuals and families who experience these photo events in the singular, where photography works to consolidate the individual in the family, in a way that prefigures their actual consolidation in any real sense. As a means of conjuring futures in posing, “people present themselves as an idealized future memory.”[213] As Mike Crang points out, the advantage of looking at how photographs are made is an opportunity to witness how photo performances engage in “projecting a sense of meaning over life and colonizing the future” where “each act is in effect mortgaged to the future.”[214] In one iteration of performing maternity at Scripps, expectant mothers are photographed holding an ultrasound image of their child *in*

[211] Barthes, *Camera Lucida*, 7.

[212] Ibid.

[213] Bærenholdt, Haldrup, Larsen, and Urry. *Performing Tourist Places*, 96.

[214] Ibid.

utero over their belly (fig. 14). Here the photographic index is appropriated as not only evidence of their pregnancy, but as a prop in their performance where it functions as a talisman for a successful birth. This practice is reminiscent of the role photography plays in Olu Oguibe's study of African photographic practices in Ako and Yorba cultures. For example, the Yorba of the old Oyo Empire used photography to memorialize a child who died at birth, when her or his twin survived.[215] An image was made of the deceased twin by photographing the surviving twin who appears as a differing double in the photographic memorial. Their illusionistic use of the medium was designed "not to concede transparency or indexicality to the photographic image, but instead to recognize, underline, and utilize its nature as chimera."[216] While certainly less difficult than resurrecting a dead sibling, like the example at Scripps, the material image plays a role in social process as a result of its semblance with the real and its ability to invoke the future. As a technology that invades the body to provide verifiable proximity to the thing it represents—the x-ray is contradictory in its use as a form of fertility magic, where it is used to gently coax the child from the mother's womb. In other words, the materiality of the image is used to try and satisfy an intention that lies beyond its material capacities. What this example makes clear in a very literal sense is that photographs do not simply record an event, but that they can become incorporated into the event in order to reconfigure the way that space and time unfold in their relationship to the subject.

Scripting and Staging Plankton—A Theater of Objectivity at SIO

The Jaffe Laboratory is not only engaged in forms of scripting to capture images, but also as a means of postulating the significance of their discoveries publicly. Like the iterative photo performances of our families, the SPC produces images that are not only orientated toward the future,

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[215] Olu Oguibe*, The Culture Game*. Minneapolis (University of Minnesota Press, 2004).

[216] Ibid., 86.

but embody a sense of idealism for the way that 'objective' scripts are theatrically performed in the name of scientific discovery. Without unnecessarily rehashing western philosophical distinctions between subjective experience and the 'objective,' it is worth noting, as Jennifer Tucker reminds us, that while photography was harnessed by science due to its 'objectivity,' it is more accurately a "social photographic eye."[217] As a form of seeing that is culturally conditioned, Tucker's study of 19th century scientific photography shows that contrary to the sense of authority that mechanical reproductions carried, there was little consensus as to photography's "epistemic virtue."[218] The objectivity of what philosopher Vilém Flusser calls "indicative images"[219] (images of science that connote truth), was an objectivity still tethered to subjective disagreements about judgement, experience, expertise and interpretive skill.[220] Today, where there is much less amateur participation in the 'science' of empirical observation, the endorsement of the scientific expert matters now perhaps more than ever. In terms of the SPC, there are a variety of challenges the system faces related to the *in Situ* methodology it uses for capture and classification, that threaten the reliability of their data. Absent from all the literature that the Jaffe Laboratory has published on the SPC, is any analysis on how accurate their sampling methods are or how their processes of collection might actually disrupt the natural behaviors of plankton. In other words, no accounting is made of the way in which the plankton are photographed affects the data the laboratory derives from their experiments. It is likely that the alterations made to their natural habitat in order to photograph the plankton, disrupts their environment to the degree that it changes the very behavior they are trying to study. For example, Jaffe acknowledges that the LED illumination necessary to isolate the plankton from the background and freeze their motion, may well

[217] Jennifer Tucker, "The Social Photographic Eye," in *Brought to Light: Photography and the Invisible, 1840-1900,* ed. Corey Keller (San Francisco: San Francisco Museum of Modern Art, 2008), 37-49.

[218] Ibid.

[219] Flusser, *Towards a Philosophy of Photography*.

[220] Tucker, *Nature Exposed.*

alter their natural behavior.[221] It is possible this additional illumination may attract some species and deter others and the resistance moving water experiences when it comes into contact with the camera alters the plankton's trajectories. These variables are problematic in that they cannot really be measured because they cannot be observed in the first place. Such quandaries of measurement form the subject of American theorist Karen Barad's critique of the way science fails to adequately account for the uncertainties surrounding the way the agencies of observation affect the object being studied, where observation is taken "to be the benign facilitator of discovery, a transparent lens passively gazing at the world."[222] Barad uses Niels Bohr's philosophical approach to quantum physics to advance her own theory of "intra-action" to argue that "the object and the measuring agencies emerge from, rather than precede, the intra-action that produces them."[223] Specifically, Barad models a thought experiment, that is much like the setup of the SPC, where a particle is measured by a flash-camera system mounted on a tripod in a dark room. Barad uses the example to show that there is no precise way of accounting for the effect that the photons leaving the camera's flash have on the subject on their way to the photographic plate where the image is recorded—a journey where, as Jaffe tells us, photons can be "absorbed, refracted, reflected, scattered, and depolarized among other phenomena."[224] The point Barad makes is not that these variables should be taken into account—but quite the reverse—that because we can't separate the object being measured from the apparatus that measures it, interactions can only be properly accounted for if the measuring device is treated as an object of study. Further to the problems of measurement, the SPC camera only samples an infinitesimal cube of the waterbody at a fixed depth. As such, it is unknown how closely the results recorded in this small cross

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[221] Jaffe, "Interview with Jules Jaffe."

[222] Barad, *Meeting the Universe Halfway*, 97.

[223] Ibid., 128.

[224] Jules S. Jaffe, "Underwater Optical Imaging: The Past, the Present, and the Prospects," *IEEE Journal of Oceanic Engineering* 40, no. 3 (2015): 685.

section match what is happening at different depths and thus there is no real guarantee that this data can be reliably extrapolated at larger scales.[225]

Given the most pressing concern for the laboratory is one inherent to the nature of wrangling big data, their most promising discovery is yet to be made, one that will remain dormant until the Jaffe Laboratory figures out more sophisticated methods for analyzing and comparing the images. As we saw with the example of family photography, there is a sense of photography as a practice that is mortgaged to the future. Apart from the sheer volume of data, extracting information from the images is a challenge given that individual species can look quite different depending on what angle they are photographed. Furthermore, the SPC system struggles to differentiate between individual species of plankton that look alike, as well as inorganic particles like sand grains and organic detritus like kelp.[226] Given that manual classification is impractical, "automated annotation methods are now considered to

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[225] To be fair, while these difficulties are not addressed in terms of analyzing the validity of data the SPC produces, they are certainly variables accounted for with respect to how imaging systems are designed at the Jaffe Lab. Although calculated theoretically, the lab undertakes modelling the how photons are scattered and attenuated as they move through water, to better understand the camera's environment. Jaffe has stated that modelling the ways in which types of light interact to produce the image can be used to help inform the build of different camera systems, especially in terms of how the light source and the camera are configured in relation to one another in order to maximize resolution. For example, by using complex mathematical and computational modelling it was discovered that a narrow light source and narrow optical receiver system was the most favorable for maximizing resolution.

[226] These are only a few of the challenges that plankton present to machine learning algorithms. For example, plankton typically materialize in large blooms where one species is dominant, a problem for recognition systems which are mostly calibrated with even species distribution in mind. See: William Chapman, Emal Fatima, William Jenkins, Steven Tien and Shawheen Tosifian, *Impact of Skewed Distributions on an Automated Plankton Classifier,* University of California San Diego (ECE228 Machine Learning for Physical Applications: 2018). Currently the Jaffe Lab is developing an automated system that is capable of differentiating between individual species for archiving and labeling the millions of images currently waiting in a big black hole. The research of Eric Orenstein, (a graduate student at the Jaffe Lab) and UCSD electrical engineer Dr. Nuno Vasconcelos, is using convolutional neural networks and "zero-shot" object categorization methods for developing improved annotation and taxonomy systems. See: E. C. Orenstein, P. M. Morgado, E. Peacock, H. M. Sosik, and J. S. Jaffe, "Mining Big Data Sets of Plankton Images: A Zero-Shot Learning Approach to Retrieve Labels without Training Data," paper presented at the Ocean Sciences Meeting, 2016. Other solutions include taking into account fluctuating environmental considerations like wave activity which effects the amount of sand gains suspended in the water to filter data during times of increased turbulence. See: Andrew Barton, *J - Machine Learning for Marine Plankton. Ece191-Engineering Group Design Project Fall 2017,* Scripps Institute of Oceanography (University of California San Diego: 2017).

be the bottleneck between collection and interpretation."[227] As a data set, it is really not so much what any individual image might reveal, but what discernible patterns the images as a whole might reveal when species distribution and diversity are plotted with respect to other variables such as season, temperature and salinity. Thus, the role of the camera as a representational technology to verify evidence of plankton works less like photography and more like photogrammetry—where the photographic series serves as a measuring tool. As a form of scripting then, their plankton archive constitutes an enigmatic pictograph (fig. 15), a contemporary hieroglyphic awaiting the expertise of proper translation, where the image is a byproduct of recording the present in order to predict the future.

Unlike alphabetized scripts, pictographs tend to be more readily conceptualized as a form of visual art. In lieu of being able to extrapolate significant science from the archive, attention to the more aesthetic properties of SPC images acts as placeholder while their 'true' scientific value is being established. As an example, at the 2015 symposium *Using 3D Imaging to Shed Light on the Unseen Beauty Beneath the Sea*, Jules Jaffe co-presented with Elizabeth Stringer, an undergraduate art and biology major who worked as a research assistant for the Jaffe Lab.[228] Specifically, Stringer helped Scripps PhD student Christian Briseño-Avena sort and categorize zooplankton using images taken from the O-Cam, another of their *in Situ* camera systems that uses the same fundamental technology as the SPC.[229] While operating the camera Stringer took screen shots of Zooplankton, that she adapted as the basis for an exhibition of her own photographs, which sought to capture the moment when a

[227] Orenstein, Morgado, Peacock, Sosik, and Jaffe. "Mining Big Data Sets of Plankton Images."

[228] Christian Briseño-Avena, Peter Franks, Jules Jaffe, and Elizabeth Stringer, "Using 3d Imaging to Shed Light on the Unseen Beauty beneath the Sea," Geisel Library, San Diego, University of California San Diego, April 20, 2015.

[229] Christian Briseño-Avena, "Fine-Scale Spatial and Temporal Plankton Distributions in the Southern California Bight: Lessons from in Situ Microscopes and Broadband Echosounders," PhD, University of California, San Diego, 2015.

"researcher or viewer confronts an aesthetically beautiful image" that is more than just a "data point within a categorized counting system."[230] Her work continues the tradition of Victorian era microscopists who produced a form of biological art by pushing diatoms (a common form of marine phytoplankton) around on glass plates viewed under a microscope to create intricate kaleidoscopic patterns. What Stringer is proposing here is that on a purely formal level these images of Plankton address their audience in a quite moody theatrical tone—looking like a hero shot of an illuminated stage actor emerging from darkness, who in this case is extracted from their aqueous surroundings and presented on an ink black background as though it were night (fig. 16).[231] As plankton pass into view of the camera's ports they are photographed with the help of the LED strobe lights that are significantly brighter than the ambient light levels in the water. To freeze their motion, images are captured between 10 to 60 microseconds with the help of a generous blast of light provided by a darkfield white light illumination system, which also helps enhance the contrast of these transparent creatures.[232] Thus, as an artefact of recording only the plankton and not the other surrounding biomass, these images of plankton lend themselves to more inventive uses that according

[230] Brittany Hook, "Artistic Display Brings Zooplankton into Focus," *News and Events: The Geisel Library* (May 27, 2015), https://library.ucsd.edu/news-events/zooplankton/.

[231] The black background is an artefact of the challenges presented by trying to photograph a moving object at scales measuring between 10s of microns up to 10s of millimeters. Like the O-Cam, the SPC operates at a vastly reduced spatiotemporal scale—the camera's field of view is just 2.5mm x 2.0mm and has a radically sandwiched depth of field of around 20 micrometers.

[232] The use of flash systems for underwater photography is not uncommon. The first underwater portrait taken by Louis Boutan in 1893 used a rudimentary version of the flash consisting of an alcohol lamp in an oxygen-filled barrel and magnesium powder. Thanks to the pioneering work of the Henri Cartier-Bresson of scientific photography, Harold "Doc" Edgerton (the man who made milk drops famous), electronic flash was made commercially available. Edgerton invented the flash, by developing the electronic stroboscope from a lab instrument so that is synced with a high-speed motion-picture-camera, resulting in various commercial applications such as the strobe light. Interestingly, Edgerton's work on sonar, as well as deep-sea photography was inspirational to Jaffe, who became familiar with his work, when he began designing his own acoustic systems for underwater imaging, specifically, his invention of the side scan sonar to picture the sea floor. Jaffe sought to improve the fidelity of the images of existing sonar scan systems used to produce 3D images of the sea floor topography by making them less noisy.

to Jaffe are a form of aesthetic experience "that is non-technical but still highlights the beauty of the natural world."[233]

Performing Scripps at Scripps—Libidinal Practices of Desire and Gendered Bodily Production

The role of photography in showing appreciation for the aesthetically pleasing properties of living creatures is also at play in beachside photo performances, that in comparison to arty shots of plankton and familial photo practices are overtly sexual. Here, in what constitute forms of "photographic touch," the medium functions as a means of expressing desire and as a means to have oneself acknowledged as desirable. Contrary to the desexualized images of family life, the libidinal energies that already run rampant at the beach are greatly intensified through the way the camera scrutinizes bodies and as it sanctions the viewing practices of spectators. In this context, bodies are made vulnerable before the camera, while also facilitating a space for individuals to grow into images where they adopt personas that they project forward in time via virtual images. In her study of snapshot photography at the beach in the 1920s, Australian feminist scholar Nicolá Goc argues that while women publicly challenged social conventions, they were also conforming to gendered expectations that commodified their bodies.[234] In acts of defiance women exposed their bodies in public space to express a more modern female subject and even though these bodily acts defied gender norms, they were also inscriptions of modern disciplinary power. This tension between sexual freedom and the commodification of female bodies, asks for more than one approach to reading these practices. While critical theory might account for the ways in which photography constitutes a form of patriarchy in iterative practices of gendered bodily production where the female is constituted for the

[233] Briseño-Avena, Franks, Jaffe, and Stringer, "Using 3d Imaging to Shed Light."

[234] Goc, "Snapshot Photography."

male gaze, more descriptive accounts of individual examples augment these readings to account for the motivations as understood by individuals themselves.

As a means of situating individual practices, it should be acknowledged that the beach is already a theater chock-full of desire. When mixed bathing was introduced in the US in the late 19th century the beach was understood as already having a sexual component. Goc argues that after the 1920s the beach was further transformed into a pleasure domain where, "the sensuality of this new physical engagement with nature, aligned with the new practices of physical and social interaction between the sexes, spoke to a performative practice that rewrote the beach as an erotic and erogenous zone."[235] Like many beaches in SoCal, Scripps is a human farm where bodies are put out to ripen in the sun. Here, portraiture is not practiced the same as elsewhere, but infused with salt, sand and lots of flesh. Breasts bulge, butts splice and splodge out of swimwear and cocks rock as men and woman display themselves for one another in and out of images. You can feel yourself being sized up. You rehearse the game of looking without wanting to be seen looking any more than just a little. You pretend not to invite attention and then squirm when you get too much of a good thing. Intimate moments are witnessed when wedding day couples suck-face or when young teenagers that have never *really* been kissed, pose wantonly as more experienced versions of themselves. Muscle groups that have been diligently tweaked all week at the gym are now free to express themselves in ball games and frisbee. Like the instruments assembled on Scripps Pier, the mostly naked beach body becomes a surface open to sensation, a body not only touched by the eyes of strangers, but one brought into contact with sand, salt, sun and wind. People choke on wayward wafts of pressurized suntan lotion. Sand sticks to oily bodies and sometimes needs to be coaxed out of places you never invited it to enter. Couples canoodling and those embalmed in blankets are collected in images, as are those enjoying frottage out in the open. Making images suspends the body in activities usually spent in motion as hors

[235] Ibid., 170.

d'oeuvre for the eyes of spectators to taste. Strongmen cradle their children and hoist their partners toward the sky as though oblations (fig. 17). Gloved into wetsuits, gorgeous bodies wade into the scene from the water. Backs arch bringing chests forward, that balance on tippy toes curling into the sand. Shots emphasize anatomy over personality when groups of boys and girls line up to make a comedic address to the camera by titillating the crowd with their asses. People set up tripods and perform different dances for their camera as a means of luring strangers into their orbit. We tease each other and fantasize about the unspoken promises of others. The beach is an example of what Lefebvre calls abstract space, a space "specially allocated for the purpose of pleasure and physical gratification for modern city dwellers," where leisure is experienced as "the identification of sex and sexuality." [236] In these leisure spaces he argues, the body (especially the female body), is eroticized and commodified; and the routines of everyday life are ruptured by the "illusion of festivity,"[237] in a space purpose built to facilitate the full play of desires. Although, no longer constitutive of wayward behavior or youthful rebellion as it was at the turn of the century, the bodies of women and to a lesser degree the bodies of men are still articulated for the camera as desirable and sexually available (fig. 18).[238]

Photography amplifies the theater of desire that the beach already is by sanctioning looking, which in turn invites all beachgoers to participate as voyeurs. Photoshoots (regardless of scale) formalize and spectacularize the experience of witnessing scenes of people being sexually provocative,

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[236] Henri Lefebvre. *The Production of Space* (Oxford: Blackwell, 1991), 310.

[237] Ibid.

[238] In their pictorial history of the swimsuit Bosker and Lencek argue that during the 1920s scantily clad women in modern beach swimsuits gained a bawdy reputation and were compared with the chorus girls and the models in pornographic postcards. See: Gideon Bosker and Lena Lencek, *Making Waves: Swimsuits and the Undressing of America* (San Francisco Chronicle Books, 1989). Furthermore, Rob Shields argues that "for most Westerners in the late 20th century, it is no longer necessary to create marginal zones, such as the seaside was, for reckless enjoyment." Shields, *Places on the Margin*, 73. Shields argues that vestiges of the beach's circus like atmosphere that transformed it into a leisure zone for medicinal and curative bathing in the mid 19th century still pervades today. Although today, the almost naked body does not have to be ushered in under the guise of bathing as a rejuvenating practice, instead libidinal enjoyment happens openly rather than secretively.

making it ok to look at things that would otherwise be taboo for strangers to gawk at. In this process photography lures us into intimate moments in the lives of others. Whether or not the subject or the photographer consent to it, their activity invites the attention of strangers. This is especially the case when atypical bodies are put on display like those of bodybuilders or when added lighting equipment dramatizes the scene (fig. 19). On one occasion where these two elements came together, a pair of bodybuilders gleaned the attention of bystanders for a photoshoot at the side of the pier. In a session lasting over two hours, they performed a variety of extravagant poses—entwined in grips, swoons and holds that brought their bodies together as one. As if chiseled by Bernini from the same block of marble, they precisely articulated individual body parts into Baroque-like ensembles—scenes evocative of submission, ecstasy, domination and others that simulated sex acts (fig. 20). People gathered around to watch, and over time the principal photographer was joined by other photographers who were pulled away from their own shoots, as well as those passing by who stumbled on the spectacle. In situations like this, where additional photographers swoop in on scenes that are not of their own creation, most tend to lurk at the periphery in respect of the original photographer's authorial claim. However, some push the envelope in terms of their right to intervene and in some cases move directly in front of the original photographer's camera and obscure their view. On this occasion, one such female photographer inched in very close to the principal photographer and began shadowing his movements. At one point when he crouched down, she leaned over the top of him to take her shots. Frustrated by her incursions he stood up and purposefully knocked into her pushing her backward. In what can be called "photo-poaching," certain scenes like this create an infectious desire where an opportunistic spirit takes hold that emboldens other photographers to edge in and glean the fruits of another's labor.

In a different way, photoshoots invite spectators to witness the ways in which desire plays out between subjects and their photographers. Photography unfolds at the beach in practices of courtship, where couples agree to engage in acts that place them under added scrutiny by the camera and those

that gather to watch. Private desires are brought to the surface in suggestive exchanges of gesture and looking when women and men use cameras to sweet-talk their partners-to-be at the water's edge. During one particular courtship, the object of a man's affection inched backward and with the grace of a cat that had found its resting place, arched and then relaxed her back into the pier's pillar while pushing her hips forward. With her spine lending the pillar's vertical orientation, she slid one foot up to support her weight and then slipped her hands into each pocket. Spectators on the sideline became imaginary judges, awarding scores based on her ability to replicate a fashion magazine pose. In response, the man lowered his skinny frame to the ground to get a better angle of her and genuflected while raising his camera up as a gesture of proposal. Busying himself with the apparatus in this expectant moment of submission, the audience waited for her confirmation in the right kind of smile. Richard Schusterman's notion of a somaesthetic conception of photography, is attuned to the way bodily actions such as handling the camera work to win the confidence of subjects. He argues that the photographer's behavior is infectious and enables a "transfiguring intensity" to occur in the process of winning the subject's confidence as intimacy is generated between them.[239] Other examples of this process are at work at Scripps during shoots where couples re-enact the moment of their engagement. This particular scene is typical of the somewhat less graceful articulations of love's annunciation, where the camera is used as a time machine to revisit the original proposition in which couples feign surprise by holding dumb mouths aghast (fig. 21). It is also typical of the way that emotion performs as a key index of credibility when staging authenticity. However, while the effervescence of people's facial expressions and bodily gestures constitute a kitsch profusion that keeps spirits high—it also keeps people in motion and distracted from feeling uncomfortable from the added attention of spectators. To be fair though, the overwrought expressions we witness when watching participants make photographs are toned down when four-dimensional experience is flattened into the two-

[239] Shusterman, "Photography as Performative Process," 70.

dimensional image. In other words, when the photo extracts the decisive moment from the ongoing moment of a much longer choreography, expressions look far less hammed-up than while witnessing them firsthand.

A little farther from the pier where the beach ends, there are rocks that are sometimes used as plinths to feature beautiful creatures that beachcombers might be lucky enough to stumble upon. In one such scene, a young girl is photographed in a red silk evening dress, perhaps by her lover or her brother or her friend (fig. 22). Not knowing her relationship to the photographer makes looking all the more enticing as we are coaxed into games where we play in untangling—mothers from sisters, aunts, wives and girlfriends and fathers from brothers, uncles, husbands and boyfriends. The difficulty of this exercise nips at the heels of propriety. In this shoot, desire is modulated through the ways the photographer moves around her body—via his proximity and his distance and in the fullness of his silence. He switches from being dominant when he climbs onto the rock to shoot down and then reverent when he crouches beneath her in positions where he can see her underwear. Although more limited in the range of available body movements, her twists and turns orient her face to direct looks that touch at different pressure points on his body that moderate intensity. These looks make contact with what become invisible erogenous zones orbiting the two of them—his camera, the space over his shoulder, his eyes, the sand, his groin and her own body as she pinches at the fabric covering her thighs. The rhythm of these contact points is metered by an aperture that dilates, draws shut and opens again. As she slides her lips over to address the camera her eyes pass through the lens to call forward an image of elsewhere as if making love to another man.

In situations like these, photography provides a forum in which subjects express their craving to be acknowledged as desirable. In other moments, it is more the desire to be acknowledged as someone that even the subject is not quite sure they are or that they wish to be. In these circumstances spectators witness subjects growing into images, as they are made vulnerable by the added attention brought to their bodies. In experiencing the making of images, we are once again witness to the

nascent potentialities of portrait photography that Walter Benjamin lamented had disappeared with the advent of faster optics. Benjamin expressed a nostalgia for the way sitters used to confront the camera and photographer, in a process that, "caused the subject to focus his life in the moment rather than hurrying on past it; during the considerable period of the exposure, the subject (as it were) grew into the picture."[240] Instead, as a side effect of shorter exposure times, Benjamin sees the portrait situation as more stifling. A situation where the photographer now had to stimulate the aura of the sitter, resulting in the loss of a particular essence which more generally accompanied the mass commercialization of the medium. While the artefacts of prolonged duration may no longer be visible in images, it is very much a part of the way subjects prepare themselves before the camera at the beach as they move through different poses, arranging their bodies to enunciate different personas. This process is most pronounced in situations involving subjects whose bodies are in flux—teenagers caught between bodies—who are unsettled when it comes to projecting their personas with confidence. Oftentimes at Scripps, young bodies contort themselves into extrinsic poses that belong to another body—an awkward configuration that spectators imagine they have seen somewhere before. These are the scenes captured in the work of Dutch photographer Rineke Dijkstra's portraits of adolescents at the beach. Unlike the images that adolescents generally choose to share of themselves, as for example in figure 23, Dijkstra captures the more typical moments that fill the majority of time between the rare instances where subjects hit a sweet spot—where they are "vitally or authentically present,"[241] and where they *seem* put together with all the confidence they can only wish they had. At Scripps, boys and girls fumble and flounder before the camera as they arrange phantom limbs and organs into tentative configurations—body parts that don't yet feel like their own. In testing the attention of their patrons as well as spectators, photography provides a means of being acknowledged

[240] Benjamin, "Little History of Photography," 514.

[241] Shusterman, "Photography as Performative Process."

as individuals that are ripening into adults and as they see it, already deserve to be acknowledged as fully-fledged sexual objects.

While the above examples related to desire embody a sense of freedom in the way subjects express themselves, there is also a repressive component at work in what American theorist Judith Butler calls iterative and gendered forms of bodily production. In a similar fashion to the way that using the medium to conjure the ideal of "familyness" works to repress individual subjectivities, the medium is practiced paradoxically as something that both venerates and subjugates. Critical theory's application of Foucauldian discourse to problematize the repressive nature of photography has been well covered, and as such, while I acknowledge that what goes on at the beach is a primary candidate for this type of analysis, I shall not unnecessarily re-rehearse it here once again. Goc's study of snapshot photography at the beach in the 1920s is one such example and in this vein she remarks that the women "employed what Foucault called 'technologies of self' to put forward and police their 'selves' at the beach."[242] Thus, while women used photography at the beach to embrace new freedoms and to construct a more modern identity, they also objectified themselves in ways that reinforced patriarchy. Foucault's theories of modern power are central to Goc's analysis by underpinning the way the emerging entertainment and information industries refashioned women's conceptualization of their own bodies.[243] Her analysis of one image proceeds, "her costumed gestural form at one and the same time signifies her body both as docile and as a site of playful resistance."[244] This she argues, makes

[242] Goc, "Snapshot Photography," 182.

[243] Goc's use of Foucault follows Geoffrey Batchen's earlier work where he developed the term "photopower" to look at photography as a form of power. Batchen is critical of what he sees as John Tagg's one-dimensional use of Foucault to argue that photographs embody the ideologies of the institutions within which they circulate quite transparently. This is contrary to Foucault's understanding of modern power which "functions not only as a tool of the state apparatus but also as a network of circulating forces, an economy of relations such that "individuals are the vehicles of power, not its points of application.'" Geoffrey Batchen, *Burning with Desire: The Conception of Photography* (Cambridge, Massachusetts: The MIT Press, 1997), 188.

[244] Goc, "Snapshot Photography," 169.

sense in terms of the way Foucault characterized modern power as non-authoritarian, non-conspiratorial and non-orchestrated, but also a power that is hegemonic and normalizing—one that conforms to accepted archetypes of gendered dominance. Drawing on Griselda Pollock, Goc notes that after World War I, when women entered public space as they entered the labor force, they did not enjoy the invisibility afforded to men. While photography made women's presence more legible in public space, it operated in ways that worked against them. Furthermore, by invoking feminist interpretations of Foucault in the work of scholars like Sandra Lee Bartky, Judith Butler and Susan Bordo; Goc captures a sense of the pervasive influence of modern technologies and their effect on disciplining and self-disciplining the female body as it courts and performs for the desires inherent in the male gaze.

As salient as Goc's analysis is, the social mores women were challenging at the beach in the 1920s are not the same today. While the beach had a radical past as a site of resistance, today the practices we witness are more hegemonic than they are transgressive. Today's beach seems a less likely candidate for one of Rob Shield's "places on the margin."[245] Shields argues the beach is a "liminal time-out" where the clash between personal liberty and social morality was brought to the fore in the schism between the beach as a site for medicalized respite and as a libidinal pleasure zone. Unlike today's beach, Shield's identifies the beaches of the late 18th and early 19th century as liminal zones where the exposed body was rendered grotesque in its affront to Victorian moral standards. Given the La Jolla zip code, a neighborhood with one of highest median home prices in the United States, Scripps is about as establishment as it gets. Even in this context, the beach is no longer a site where sexually provocative behavior must be carried out in clandestine fashion.

[245] Shields, *Places on the Margin*.

As an extension of Goc's analysis, the scripting of both family and sexual desire at Scripps is also an example of the ascetic nature inherent to what Foucault called technologies of the self.[246] Although Foucault reminds us that while ascetic practices include the principals of self-discipline, self-restraint and even self-denial; they do not necessarily preclude eliminating one's desire for physical pleasures. Furthermore, while Goc applies Judith Butler to argue that photography is exemplary of the reiterative practices we use to construct identity, it is worth being cautious to not oversimplifying Butler's notion as though gender is something that can be easily commodified and consumed.[247] As Butler argues, gender is not stable or coherent and it is real only to the extent that it is performed; where "becoming gendered involves impersonating an ideal that nobody actually inhabits."[248] More than this, it is worth noting that rather than a dramaturgical frame, Butler uses a linguistic definition of performativity where the subject is not so much an agent that manipulates, but one whose identity is produced via the performances they engage in. However, the clarity of this operation is only made verifiable for Goc via her analysis of the archival photographs she analyzes, rather than in practices witnessed.[249] Thus, like the images that Goc retrieves from the shoebox to be dusted off and 'read,' whatever truth telling capacity we wish to ascribe photography is one that is done more effectively at a great distance from the moments that images are made. The purpose of making this distinction is not to undermine Goc's valuable insights, but as a caution that we don't

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[246] Michel Foucault, "Technologies of the Self." In *Technologies of the Self: A Seminar with Michel Foucault*, eds. Huck Gutman, Luther H. Martin, and Patrick H. Hutton (Amherst: University of Massachusetts Press, 1988), 16-49.

[247] As Butler says, "gender is the repeated stylization of the body, a set of repeated acts within a highly rigid regulatory frame that congeal over time to produce the appearance of substance, of a natural sort of being." Butler, *Gender Trouble*, 33.

[248] Liz Kotz, "The Body You Want: Liz Kotz Interviews Judith Butler," *Artforum* 31, no. 3 (1992), 85.

[249] Goc makes her analysis using four anonymous photographs from her personal archive as evidence.

flatten the practices of subjects and photographers at the beach by pretending that what we see in images is one and the same as what they are doing when they make them.

To be touched in the process of making photographs means to be fractured, to be split between a practice that seemingly engenders sexual freedoms in the process of soliciting desire, but at the same time it means to iterate and emulate orthodox representations that seem the complete inverse of freedom. In what constitute forms of "photographic touch," the medium functions as a means of expressing desire and as a means to have oneself acknowledged as desirable. In the pursuit of being acknowledged as desirable we expose ourselves in public places such as the beach and are made vulnerable. This occurs not just as a result of the way photography transforms strangers into spectators by sanctioning looking, but the added pressure subjects place on themselves in processes of proprioception. The perception of the position and movements of our own body is made palpable as we try and arrange ourselves into virtual images that are then envisioned again as viewed by an imagined audience. In testing out poses and expression we witness flashes of the virtual that are then whisked into bodily manifestations, which are then quickly sublated into the realm of the virtual again. This, coupled with the subject's knowledge that they do not have complete control over their representation in the image, is what caused Roland Barthes such anxiety, an alterity he felt before the camera as he tried to arrange his real self to coincide with this ideal self.[250] According to German art historian Hans Belting, we are actually quite accomplished at accessing our own cognitive stock—that is, an archive of virtual images that we draw on to assemble ourselves in the present.[251] Thus, given

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[250] Barthes describes this sentiment as follows: "what I want, in short, is that my (mobile) image, buffeted among a thousand shifting photographs, altering with situation and age, should always coincide with my (profound) "self"; but it is the contrary that must be said: "myself" never coincides with my image; for it is the image which is heavy, motionless, stubborn (which is why society sustains it), and "myself" which is light, divided, dispersed; like a bottle-imp, "myself" doesn't hold still, giggling in my jar: if only Photography could give me a neutral, anatomic body, a body which signifies nothing!" Barthes, *Camera Lucida*, 12.

[251] The phenomenon of virtual images and their relation to the body in the context of viewing images is well covered by Hans Belting. Instead of focusing on pictures as the material outcomes of various media such as painting, sculpture, and photography, Belting links pictures to our mental images which are produced through our bodies. The body is understood as a "living medium" that produces, perceives, or remembers images which

that posing is incorporeal as much as it is corporeal, there is also a virtual dimension to the photographic event where the present is seized as an opportunity to elicit desire from not only those assembled on the beach, but also a future audience. In the process of photo subjects soliciting the attention of audiences both real and imagined, we see them as authors, as much as, if not more, than their photographers. As Donna Haraway points out, "the technologies of visualization recall the important cultural practice of hunting with the camera and the deeply predatory nature of a photographic consciousness. Sex, sexuality, and reproduction are central actors in high-tech myth systems structuring our imaginations of personal and social possibility."[252] As all animals know, the beach (like any watering hole), is a dangerous place where predators loiter in anticipating the arrival of their prey. Thus, in addition to sanctioning looking as I have argued, what the example of photographic events at Scripps illustrates is that while the camera is predatory in nature, the game of hunting is invoked by subjects as much or if not more than the photographers who hunt them.

Cameras with Hands and Animal Cameras: Learning from Animals

Like our beachside humans who desire the spotlight, plankton are also phototactic creatures who perform risky maneuvers each day when they become more visible to predators as they ascend into the upper layers of the water column to feed. In terms of building the next generation of microscopic cameras, Jules Jaffe is committed to what he describes as "giving cameras hands."[253] Following the example of developments in the medical industry for preforming microscopic surgery remotely, Jaffe wants to develop *in Situ* camera systems that can not only sense their environments but

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are different from the images we encounter through handmade or technical pictures. See: Hans Belting, *An Anthropology of Images: Picture, Medium, Body* (Princeton: Princeton University Press, 2011).

[252] Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991, 169).

[253] Jaffe, "Interview with Jules Jaffe."

manipulate them, thus shifting from fixed systems like the SPC to more autonomous and mobile systems. As he says, although "we now have eyes, what we really want to have is hands in the ocean."[254] Such is his desire to perform interactive manipulations on plankton and other species that cannot be cultured in the lab, by being able to literally reach out and touch them. In order to develop these systems though, it is not humans that Jaffe has turned to for inspiration, but the innovative strategies that marine species have developed for adapting to life underwater. As Jaffe argues, nature has solved many of the problems associated with living underwater and as foreigners in this environment, humans can learn from marine animals to "better 'see' underwater."[255] In this endeavor, there is the potential to innovate camera design by looking at how animals developed adaptations for life underwater such as low light sensitivity, high visual acuity, sensing polarized light and cryptic strategies such as transparency and camouflage.[256] Jaffe uses the giant squid as an example of an animal that has developed adaptions for 'seeing' in aqueous environments where the sunlight does not penetrate as a strategy for predator evasion. His answer for why giant squid have the largest eyes in the ocean even though their habitat is completely without light is that the squid developed specialized 'eyes' as a strategy for detecting aerial bioluminescence at long distances when stimulated by their most significant predator—the sperm whale.[257] Another example is the Mantis shrimp who use linear polarizers. Like the polarizing filters screwed onto the camera lens, the Mantis shrimp uses polarization to increase the capacity to perceive contrast underwater. Taking heed of such aqueous technologies is necessary because since humans began to discover the ocean, we did it with an optical

[254] Ibid.

[255] Ibid.

[256] Jaffe, "Underwater Optical Imaging."

[257] Ibid., 690. Jaffe cites this theory as originating from: Dan-Eric Nilsson, Eric J. Warrant, Sönke Johnsen, Roger Hanlon, and Nadav Shashar, "A Unique Advantage for Giant Eyes in Giant Squid," *Current Biology* 22, no. 8 (2012): 683–88.

imaging system optimized for the terrestrial use that took little account of photonic propagation (the way that light travels through water). For example, knowing that unlike humans the cornea of marine animals is exposed to water, it makes complete sense that land-based camera optics are not going to work so well given the way refraction operates differently underwater—a phenomena evidenced by the fact that animals use different lenses to focus light on the retina than humans. Given that human's ability to see first developed underwater in marine animals—from rudimentary single light receptors to more complex systems before being adapted for human use—this research that involves learning from non-human animals to better see underwater taps into the very primordial imaging systems that gave birth to human vision.

The Jaffe Lab's most recent innovations that take inspiration from animals are marked by a transition that involves extending the reach of *in Situ* camera systems (such as the SPC) by developing robotic instruments or underwater autonomous vehicles (AUVs) as they are known. The development of these AUVs speak to the limitations of trying to use "multi-dimensional sampling in space–time varying environments,"[258] in order to render an increasingly detailed picture of what is happening underwater. Thus, The SPC occupies a middle point in the trajectory of Jaffe's work on plankton that began by augmenting one-dimensional scalar measurement in oceanographic science with more detailed data to then render two-dimensional 'pictures.' Jaffe's work on plankton at SIO began in 2006 by using raw data to make computer simulations of optical imaging and then developed into using acoustic systems where sonar was reflected off copepods to 'image' plankton. The Jaffe Lab's transition to 'real' optical imaging overcame the problem of being able to accurately confirm that the *things* their sonar devices were 'seeing' were indeed plankton and not something else.[259] To develop the AUVs, the lab is now integrating camera technology with more complex systems that take their

[258] Jaffe, "To Sea and to See."

[259] This work built on work previous done by the Visibility Laboratory at SIO.

inspiration from marine animals to provide a less invasive system for observation and recording.[260] Known as the field biomimetics, the term was coined by American biophysicist Otto Schmitt in the 1950s, to describe the imitation of natural models, systems or elements to solve human problems. In the field of bioinspired photonics (applications that use animals to develop new systems related to the particle properties of light), animals that deploy optical effects as part of their natural defensive systems and whose more hemispherical vision systems are engaged as a survival strategy, are providing a valuable starting point for scientists to develop new optical technologies.[261] For example, their "swarm" of Mini-Autonomous Underwater Explorers (M-AUE), comprises a network of floating sensors for sampling the ocean in three-dimensions that use buoyancy solutions inspired by fish with swim bladders and toothed whales. Programable to hold different depths that enables the collection of data at different depths in the ocean, the Jaffe Lab experimented with 16 independent vehicles that constituted an *in Situ* "distributed sensing system."[262] The M-AUEs were also used to measure the physical-biological properties of internal wave dynamics at submesoscale (that is, smaller flows of

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[260] Jaffe conceives of his work within the context of the ancient Euclideans, as someone who seeks to bring geometry into harmony through art and science. Furthermore, his interest in Platonic solids—shapes modeled on the natural world—informs his approach to designing cameras. Other labs at SIO are also engaged in the field of biomimetics, for example, researcher Annick Bay has been studying the way insects emit and reflect light. Specifically, she has been studying the Pamphobeteus antinous tarantula and the Photuris fireflies with the goal of improving the light extraction efficiencies of LEDs. Elsewhere, spiderwebs are being studied to develop next generation touch screens and the wings of the Morpho butterfly which are being studied at GE Global Research to develop better thermal imaging sensors. At the Marine Biological Laboratory at Woods Hole Woods Hole Oceanographic Institution, the chromatophores that contain pigment in the skin of cephalopods are being studied to produce optoelectronic systems for adaptive camouflage technology. See: Valerie Coffey, "Where Life Meets Light: Bio-Inspired Photonics," *Optics and Photonics News* 26, no. 4 (2015): 24-31, https://doi.org/10.1364/OPN.26.4.000024.

[261] For example, John Rogers, Swanlund Chair and Professor of Materials Science at the University of Illinois at Urbana-Champaign, developed the apposition compound eye camera system. This is based on the hemispherical imaging system of arthropods that have wide field of view, low aberration, high acuity to motion and an infinite depth of field—useful traits for survival. To replicate the systems of arthropods gives Rogers a hemispherical imaging system with a 180-degree field of view and with no aberrations, which is useful in applications like drones and endoscopy.

[262] Jules S. Jaffe, Peter J. S. Franks, Paul L. D. Roberts, Diba Mirza, Curt Schurgers, Ryan Kastner, and Adrien Boch, "A Swarm of Autonomous Miniature Underwater Robot Drifters for Exploring Submesoscale OceanDynamics," *Nature Communications* 8 (2017): 1-8, https://doi.org/10.1038/.

water measured in meters to tens of kilometers). Furthermore, the M-AUEs actually replicate the very forms of ocean life they are studying because they "mimic the vertical swimming behaviors of plankton,"[263] in order to better understand plankton migration, transport and the formation of subsurface patches. Described as "robotic plankton,"[264] by Perry Naughton, the principal SIO researcher working with Jaffe on this project, they test the dispersal of plankton and density of the water; and like plankton, they use the energy of the water as a propulsion solution.[265]

The knowledge gained through their experiments with M-AUEs was applied in a collaboration with UCSDs Mechanical and Aerospace Engineering program to produce a system called the Autonomous Fish. Though technically speaking it was a robotic jellyfish that was produced for this bioinspired project. (fig. 24). The unit's movement system was inspired by the use of tentacle propulsion—an advantageous solution given its low hydrodynamic disturbance which used less energy and also resulted in less disruption to the environment.[266] Although the jellyfish is not exactly the kind of companion species Donna Haraway had in mind, this invention nevertheless surely qualifies as an example of an inter-species relation from which humans benefit. While still a romantic vision in its infancy, Jaffe's impetus to "give cameras hands," seeks to ameliorate the way science created a visual record that was severed from human vision. Instead, in a process where camera vision takes

[263] Ibid., 2.

[264] Perry Naughton, "Self-Localization of Mobile Swarms of Underwater Vehicles Using Ambient Acoustic Noise," San Diego, UCSD Robotics Group, June 7, 2018.

[265] For one iteration of this system, the ambient acoustic sound of snapping shrimp was used to "localize" members of the swarm. In other words, the distinctive acoustic signatures of these crustaceans were used to better calibrate their locations and communicate between one another, rather than how it is usually done via bouncing signals off the ocean floor or using transmission stations.

[266] Their goal was to develop an open source prototype that would inspire students and offer the public a low-cost solution (under $500) to underwater exploration. Their goal of making ocean imaging more accessible to the public, points to the likelihood that imaging of the sea will no longer be the exclusive proclivity of marine science, and unlike aerial drones, these systems can take advantage of the energy ocean currents provide for long range camera systems with the ability to cover many more miles underwater than possible in the air.

inspiration from animals, humans will be able to not only experience, but manipulate microscopic worlds in real time as active rather than passive agents.

It perhaps comes as little surprise that in following these developments in camera design we evoke the intersection of hunting and photography. Specifically: in tracing developments in animal inspired camera designs at the Jaffe Laboratory we see the progression from the SPC that operates like a trap to AUVs that are more physically active in the pursuit of their prey. The SPC works like a baitless trap in a way that is reminiscent of the tiny wooden cameras that Fox Talbot had scattered around Lacock Abbey, devices that his wife gave the moniker “mousetraps.” The square of light sensitive paper affixed to the back of Talbot’s mousetrap cameras is similar in scale to the square cube of water the SPC samples for plankton. Thought of in this way, it is as if the black interior of Jaffe’s ‘camera obscura’ snatches the subject away when it decides to present itself, (albeit without their consent). The automated nature of the SPC makes it like a microscopic version of the trail cameras that hunters use, both of which provide data to table the same basic information sets such as species distribution and density. Furthermore, the SPC is prone to the same disadvantages of trapping technologies, in that, while every effort is made to target a specific species it is often a surprise what is snared in the trap—instead of a coyote you get a racoon or in the case of the SPC, instead of plankton you get a grain of sand.

Returning to the activities of our terrestrial bipedal vertebrate photographers, it can be seen that they too engage in animal inspired camera adaptations, not simply to trap their target species, but to manipulate their behavior. I first became aware of the “Camera Lens Buddy” one afternoon at Scripps while watching a photographer take a suite of images for a client’s newborn child. The mother cradled her tiny daughter before the camera. With rolls of new skin still waiting to be stretched out by bone, the baby’s wisps of hair were pulled into a short geyser sprouting from the crown of her head that was fastened with a rubber band (fig. 25). As yet untrained in the protocols of acknowledging devices such as cameras, her gaze was lured toward the black rectangle by way of two cartoon-like

prosthetic eyeballs stuck to an elastic band that was strapped over the camera lens. The photo assistant stood to the side holding a purple feather duster at the ready, in case more attention-grabbing props were necessary. Otherwise known as "Animal Lens Buddys" or "Photo Friends," the assortment of mostly animal inspired lures has become somewhat of a craze. Monkeys, dogs, bees, ladybugs, crabs, jellyfish, penguins, pigs, owls, elephants, octopus and dinosaurs—all caricatured with disproportionately large googly eyes—perform just as googlies do in the game of cricket as a deceptive delivery. Described as a "small cute fluffy courier between you and the child," eBay and Etsy sellers tout them as effective to "quickly catch the attention of babies, kids and adults."[267] Here, the photographer's eye, the eye of the lens, and the eye of the viewfinder are no longer dislocated, but now all converge through the eyes of our camera buddy. Typically crocheted from cotton or wool or made by stuffing felt, these animals are perched on the lens and function like puppets for the way they animate the photographic subjects in ways that are animist, at least as far as babies are concerned. In more scientific terms, via this anthropomorphic adaptation, the camera no longer simply captures 'animals' but transmogrifies into animals in order to trap humans.[268]

The Fuzziness of Private and Public Photo Space

The photographic events staged on the beach complicate the notion of any strict delineation between private and public space, revealing this binary to be more imaginary than real. As already discussed, the camera coordinates leisure as an activity of noticing and asking to be noticed, where the

[267] Yana Kirichenko, "Camera Lens Buddy," Etsy for KiriDecor, 2018, accessed June 20, 2019, https://www.etsy.com/listing/527171583/camera-lens-buddy-lens-bling-crablens?ref=shop_home_active_18&frs=1.

[268] The use of baiting aquatic rather than terrestrial animals into the camera's view has a more literal history at SIO, through the work of John Isaacs, who invented a baited camera system. Connected to his studies of plankton by following the food chain into larger pelagic species, Isaacs lowered a 25-gallon drum stuffed full of fish bits to the ocean floor at depths between 400 and 7,000 meters, accompanied by a camera rig trained on the tasty offerings to see what he might be able to lure in to the "banquet." See: John D. Isaacs and Richard A. Schwartzlose, "Active Animals of the Deep-Sea Floor," *Scientific American* 233, no. 4 (1975): 86.

private lives of families and individuals are scripted in public. Here, in what might otherwise demand more clandestine viewing practices, the nature of being a voyeur is largely normalized by the presence of the camera. As media theorist Paul Frosh has discussed with respect to the way photographic practice functions as a performance of power, "by making the gaze of the private viewer integral to public visibility, the concept of voyeurism undoes the reification of public and private as two static domains,"[269] where "the constructed boundary between the public and the private is both porous and precarious."[270] Interestingly, Frosh models these insights though an analysis of practices of the paparazzi and family portraiture, which taken together characterize the rather incessant nature of familial photo practices at Scripps Beach. Similarly, although addressed from the perspective of the image, Barthes notes the "publicity of the private," where "the age of Photography corresponds precisely to the explosion of the private into the public, or rather into the creation of a new social value, which is the publicity of the private: the private is consumed as such, publicly."[271] At the beach, the conflation between the registers of private and public are in part a result of the theatrically 'un-theatrical' nature of how the roles of actor and audience are less distinct. Put simply, the people involved in these photographic events swap between photographer, subject and spectator . This interchangeability is encouraged at the beach, given this site is as much an auditorium as it is a stage. Here, unlike the traditional proscenium stage, performers extend into the audience. As a result, downstage and upstage remain largely contingent on the viewer's perspective; and in line with more contemporary solutions for creating theatrical liveness, 'actors' have the added challenge of addressing an audience that surrounds them from all sides.

[269] Paul Frosh, "The Public Eye and the Citizen-Voyeur: Photography as a Performance of Power," *Social Semiotics* 11, no. 1 (2001), 49.

[270] Ibid., 51.

[271] Barthes, *Camera Lucida*, 98.

Furthermore, the indistinct nature of public and private space is, perhaps ironically, a result of what can be called "boundary making practices" that are constituted as individual photo troupes oscillate between different locations underneath and around the pier. Any vacant patch of sand is understood as fair game until it becomes occupied with the physical presence of photographers and subjects, which demarcate perimeters that are continually being made and unmade. There is also an immaterial nature to the boundary that is created, a zone experienced by the photographer through the viewfinder as they frame, as well as an imaginary zone framed in the minds of those witness to the event. Photo troupes working alongside one another, troupes waiting to occupy the same space or spectators/bystanders who wish to pass though the scene, must guesstimate the range of space that is available to them without appearing in the camera's frame. The taboo nature of entering this pie shaped zone is commonly expressed as a gesture of submission—head bent forward with shoulders slumped or sometimes the palm of one's hand is used to shield the face as though excusing oneself from the image. This space is constructed by the photographer in concert with the those who witness the event who imagine the three-dimensional scene as collapsed into a two-dimensional image. Without the use of physical boundaries as in traditional theater, while this space is not literally occupied, it is very much delineated as off limits (although its boundaries are nebulous as users of the beach are not exactly privy to the lens' angle of view). This expectant or gestating space of photographic events has an enormous range—between the genres of the selfie and the seascape it spans a couple of inches to several miles. As such, it is the camera's frame and the imagined trajectory of the lens' angle of view that functions like the proscenium arch which typically divides the stage from the auditorium. However, it is not exactly the subjects of the event that properly maintain command of the space, but an active camera. In order to maintain command over this space as though it were private, it must be vigilantly occupied by a camera continuously at work (as an active space) or otherwise new troupes, who wait like vultures at the margins, will swoop in to occupy it. Hierarchy, in terms of how long any one troupe can reasonably lay claim to the space, is not necessarily contingent

on whether or not other troupes identify the practice as amateur, semi-professional or professional. Instead it is contingent on the genre of photography being practiced. For example, a professional landscape photographer has less claim to the space than an amateur family photographer. If professional photographers have more claim over the space it is because they typically have extra people, props and equipment to activate the space more comprehensively. Even still, it is quite common that when any photographer spends too long in stasis tinkering with their camera or paused for some other reason, they render their space passive, thus giving other photographers the confidence to move in and lay claim to 'their' space. Just as it was for the landscape painters' lowly status in the academic hierarchy of genres, this is perhaps why the seascape photographer—who's camera is immobilized on a tripod—is always lower down on the pecking order when it comes to any perceived natural right to claim this space. While it is true that their exposures are typically longer and it is hard for other photographers to determine if they are actually shooting or just waiting for the light to change, their cameras occupy the space in more passive manner.

A final means of considering the way photographic events compound the fuzzy nature of beach space being at once private and public, involves considering the interchangeable relationship of what constitutes foreground and background. Specifically, given that the lens' angle of view extends well beyond the area of space photographers can reasonably lay claim and because there are no artificial backdrop screens to separate each of the troupes—try as photographers might—it is impossible to keep strangers out of their images. While bodies in space demarcate an unambiguous spatial perimeter that cordons off one troupe from another, the camera's view does not adhere to the same spatial demarcations. By penetrating past friends to collect strangers, the boundaries between each cluster are softened as people get tangled up in each other's images. A motley crew of beachgoing actors that might seem incidental are thus netted in the backgrounds of images—a fortuitous and often deliberate byproduct of the photo-catch. At other times, the activities of adjacent troupes spill into each other's images. This engenders forms of improvisation where photographers

adapt what is already being shot, by now suddenly incorporating strangers. At other times, the troupes bleed into one another more deliberately, when for example, they are invited to participate in the moments of another group by photographing it or appearing as guest subjects. In this way we can think of backgrounds becoming foregrounds, not literally, but in terms of the value added by that which is not necessarily front in center of the frame, but still a significant component in constituting images. Thus, while the intended subject is usually located in the foreground of images, it is in the recesses of images that a quiet agency is at work.

Unlike our beachside photographers, in scientific applications the phenomena of unwanted artefacts populating images is a much less desirable quality. Known as "backscatter," in its general meaning across different contexts, the term refers to unutilized or excess energy from a signal. Aboveground, the term refers to unwanted light that enters directly into the camera lens—light that has not interacted with the subject. As far as underwater photography goes, the term backscatter is misleading in that it refers to unfocused particulates in the foreground (invisible to the human eye) that intervene when light is reflected from them when using a flash to illuminate the scene. With respect to the SPC, the unwanted artefacts of backscatter are eliminated through the use of a technology called darkfield illumination. So unlike images of plankton, (where darkfield illumination removes unwanted noise from both the foreground and background), the images taken beachside incorporate this 'noise' that lurks either side of 'the subject' as a desirable quality of the image. Thus, backscatter constitutes value added energy—constituted by the activity of animals, atmospheres, smells, sounds and the energy of light and water that work to animate and co-produce photographic events. It is not only that the background is continually changing, but that which is deemed foreground and background also change as figure and ground are contingent on the way that the angle of the sun constantly re-evaluates objects pushing some backward into darkness and pulling others forward into light. Thus, any given object's radiance is constantly shifting as light is absorbed, refracted, reflected, scattered or depolarized differently. Thus, there is a fluid relationship between subject and background which can

be interchangeable, one where what was once an unacknowledged artifact in the background can suddenly become acknowledged as subject in the foreground. Bystanders of photographic events are regularly collected as essential collateral, where they are transformed into performers, thus making the distinction between passive audience member and actor much less precise than it is in the theater and work to generate a hybrid space that is at once private and public.

Scripps Henge

Returning to where this chapter began, the henge-like architectural affordances of Scripps Pier co-ordinate with the sun for an event known as Scripps Henge, which is perhaps the most significant example of the way a private research pier is adapted by photographers into public use as a pleasure pier. "Just like Stonehenge!,"[272] proclaims San Diegan landscape artist Alison Haley Paul, as a reference to *the* Stonehenge on Salisbury Plain in southern England. Since 2013, this event has been colloquially referred to as Scripps Henge, a moniker applied allusively for not only this pier's resemblance to the megalithic monument's trilithon structure but also because Stonehenge was aligned to the sun's position to mark sunrise at the midsummer solstice and sunset at the midwinter solstice.[273] Similarly, the earth's orbit around our most prized celestial gem coordinates with Scripps Pier on two auspicious occasions each year when the sun lines up perfectly within the tunnel-like aperture of the pier. The first of these moments occurs after the December solstice when the sun's path creeps northward, passing through the March equinox until April 30 (as it was in 2018), when at 7:30 p.m. the sun hits the horizon at precisely 289.28 degrees West-northwest. At this moment—for those standing under the pier and looking straight out toward the sea—the sun hangs perfectly framed inside

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[272] Alison Haley Paul, Instagram, 2018, accessed December 12, 2018, https://www.instagram.com/p/BmSglbABBum/?tagged=scrippshenge.

[273] John H. Moore, "Scripps Pier Sunset Alignment," 2016, accessed November 3, 2018, http://johnhmoore.com/featured/Scripps-Pier-Sunset-Alignment.html.

the rectangle of sky and water at the end of this tunnel. Over three years that I attended the event, its disciples have grown in number year-by-year. In 2018, there were roughly 170 photographers assembled at the pier for sunset and at its busiest in 2019 a little over 200 people gathered. There is little room for the sun to move when bounded vertically between the pylons and horizontally by the water's edge and the pier's deck, and as such, this phenomenon doesn't last much more than a day or so as the sun continues its northern drift.[274] As "proud mom and coffee lover" Diana Kravchenko (who regularly uses the pier for her work as a family photographer) comments, "San Diego doesn't have any ancient buildings, but it has the Scrippshenge."[275] In June 2014, it was crowned with the hashtag #Scrippshenge on Twitter.[276] One blogger congratulated Matt Soave's initiative in running the calculations to predict the event, "you did a lot of research to get the shot. It also gives a better appreciation of what ancient peoples had to do to build their astronomically aligned structures [at] Stonehenge. They didn't have Googgle [sic], NOAA or computer astronomy programs to help them get the data."[277] When this phenomenon punctuates the regular afternoon activities of photographers at the pier, the dispersed troupes converge and transform the staging area under the pier into a crowded auditorium whose audience members train their collective resources on the sun's descent into the rectangular frame toward the end of this watery stage.

[274] For those that miss the event, the opportunity soon returns shortly after the June solstice when the sun's path apparently reverses. For those standing at 32.866'N 117.254'W and just eight minutes and 102 days later at 7:38 p.m. on the August 10, the he sun's azimuth coordinates with the pier once more.

[275] Diana Kravchenko, Instagram, 2017, accessed August 5, 2017, https://www.instagram.com/p/BTmdedPF8mC/?tagged=scrippshenge.

[276] "#Scrippshenge." Twitter, 2014, accessed March 14, 2017, https://twitter.com/hashtag/scrippshenge?lang=en.

[277] Darren Rowse, "Perfect Sunset Composition – How I Did It," *Digital Photography School,* 2008, accessed January 20, 2018, https://digital-photography-school.com/perfect-sunset-composition-how-i-did-it/.

While the event certainly has a comic register in terms of the vapid futility of everyone capturing the same image, the question of why people want to shoot the same thing is misguided. This question assumes that the principal motivation of participants is to record an image of the event. Instead, their motivation is threefold—to engage in acts of photo-play, to be entertained and to feel a connection with nature in what constitutes participation in a contemporary form of pseudo-pagan pilgrimage. From the bystander's perspective at least, it looks as though individual participants are taking the same image—an image they could easily procure online without having to leave home. Their investment in time and money is at odds with the simplicity of acquiring a perfectly good image that someone else took. So, why go to all the bother, what is it that makes people want to photograph the same thing? This question was posed to one photographer in 2015 by an ABC 10 News reporter, who asked, "we see these pictures a million times, what do you hope to get out of it?" To which the man replied, "a better picture, every photographer here hopes to get a better picture than the guy next to him, or her."[278] Thus on the surface at least, there is some truth to their motivations being driven by acquiring an image. This competitive spirit reflects the game-like nature of an event where the prize is the notion of an ideal image that nobody else has, an elusive fiction that motivates photographers to capture the event for themselves.

To extend the notion of the event's game-like nature, it can be observed that the crowd that amasses underneath the pier engage in practices that are reminiscent of the more ludic qualities of ball

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[278] "When the Sun Aligns with Scripps Pier," San Diego: ABC 10 News, May 6, 2016, https://www.youtube.com/watch?v=Ha5koy4aghI. Phillip Colla's decision to shoot the event from the water is one example of this. After "pondering" how to shoot it differently he decided that "leaving the shore was really the only option." As he explains: "photographing this event is frankly rather formulaic and straightforward, to the point that people pack the narrow space on the shore between the pier pilings well before the sunset to ensure they have a 'spot' when the sun lines up. It's not a secret photo op nor is it spontaneous, but it is a striking and fleeting sight to see. I met a couple photographer buddies for one of the lineup evenings in 2013 and managed to photograph it reasonably well. This year I gave the matter some thought and realized I just couldn't bring myself to do the same photo over again, especially with the crowd that forms." See: Phillip Colla, "Surfer's View of Scripps Pier Perfect Sunset, Solar Alignment, La Jolla," *Natural History Photography Blog*, 2016, accessed August 12, 2017, http://www.oceanlight.com/log/surfers-view-of-scripps-pier-perfect-sunset-solar-alignment-la-jolla.html.

games on the beach. On the day of the event, three to four hours before sunset, a noticeably larger number of photographers than usual begins to assemble under the pier with tripods to stake out their position. The first few claimholders establish the stage's apron from which a queue of photographers gradually form behind—a boundary guided by the high-water mark. As etiquette has it, this perimeter is only slightly advanced upon by those who arrive later and are prepared to get wet as they crouch in front of the existing photographers. While the auditorium rakes gently down towards the ocean, it is not steep enough to completely shoot over the top of the photographers in front of you. As photographer Craig Stevens observes, "it's tough to get a cool picture (ideally I'd have one zoomed out to show more sky) but there are dozens and dozens of cameras set up so I had to zoom in quite considerably to get a picture that didn't include a bunch of other cameras/photographers. In fact, even in this image, I had to edit out the top of one other guy's head."[279] The challenge of capturing this event, and one that motivates photographers, is that there are really only a few decent vantage points available, given that overwhelmingly, the goal is to have the sun perfectly squared up within the pier. With this in mind, more and more people form an aggregate mass, and to borrow a term from rugby, squish into a "photo-ruck"—an interlocked and ordered formation of players pushing forward, who try to gain possession of a very different kind of ball which they similarly kick back into their cameras. Inevitably, someone arrives much later and pulls a "photo-lineout" by 'periscoping' their camera from an enormous tripod with a cable release, raising their camera above the sea of bodies they are submerged in. While photographers wait for sunset, they natter among themselves sharing photo tips, teach brief photo lessons to one another on subjects like reciprocity to those they identify as more amateur than themselves, show each other examples of their photography work on their cell phones and admire each other's photo equipment. As the group swells, individuals within the ensemble of the

[279] Craig Stevens, "Scrippshenge." flickr, 2018, accessed July 24, 2018, https://www.flickr.com/photos/beantown/42160604141/.

photo-ruck tinker with their cameras—they fire off test shots while making small modifications to their settings and framing. The photo-ruck makes collective gestures, for example, when someone up ahead modifies their posture or their camera's placement, their movements reverberate in the photographers behind them who must now readjust their own positions. Stacked up on top one another the mood is mostly convivial, though participants make it known to queue-jumpers when they need to get to the back of the line.[280] For those walking along the shoreline who get between photographers and the setting sun, the photo-ruck sounds a collective heckle. While this is initially done in a more jovial fashion, it takes on a more serious tone the closer it gets to sunset. As the sun moves down, gradually appearing larger the closer it gets to the horizon, the excitement of the crowed is expressed in hushed tones. For only a few minutes as the sun comes into full view it scatters internally on lens elements, creating a flourishing of sun pillars that cut across the pier's pylons in a starburst pattern. Within the span of just a few minutes, it is all over as the last fingernail of the sun's light vanishes below the horizon. There is no great crescendo to the event's conclusion—once the sun has set, the crowd disperses fairly quickly and moves out from under the pier leaving only a handful of people who remain photographing.

This 'game' unfolds in the context of an event that is a form of entertainment for the way that suspense is invoked for the audience. While there has been academic disagreement over the taxonomy of exactly what features constitute a hengiform monument, it typically includes a hanging element that both Scripps and Stonehenge share. In the case of Stonehenge, this component is the lintel stone perched horizontally across the tops of pairs of large upright stone posts, that taken together form the

[280] Abbie Alford reporting for News8 San Diego made one such observation of aggression while reporting in 2018. Abbie Alford, "Scripps Henge: Sunset Lines up Perfectly with Pilings of Scripps Pier," San Diego: News8 San Diego August 8, 2018, http://www.cbs8.com/story/38846374/scripps-henge-sunset-lines-up-perfectly-with-pilings-of-scripps-pier.

triliths. However, unlike the "pendulous rocks"[281] that William Stukeley had in mind when he described these hanging stones in 1740, in this example of Californian Neolithic technology, the pier's deck is far less precariously poised. Instead, there is perhaps another feature responsible for its popular comparison to Stonehenge. The precarity of the suspended rocks at Stonehenge is substituted in this modern manifestation by the suspense created through the pendulous motion of the sun as it swings into the aperture of the pier. The sun holds center of its rectangular frame only for the briefest of moments—never really motionless—but always vacillating between the edges of the frame. While movement at Stonehenge is geological in scale, (thus vastly more protracted) and although this dangling miasma of incandescent plasma is not the same as rocks forged of sarsen sandstone, in both cases, suspense is created by the impending movement of one component put into motion as one's imagination projects matter forward in time. At Scripps, suspense is created in the countdown to sunset as people wait to see how the phenomenon will pan out. This produces an atmosphere of excitement and anxiety, especially if it looks doubtful the sun will be visible through clouds or a marine layer—the latter being a circumstance unique to the topography of costal southern California. If this happens to be the case, the satisfaction of taking an image will need to be deferred until another time.

Lastly, the motivations of participants operate in excess of capturing images seeing that capturing an image of the setting sun is a placeholder for participating in a pilgrimage. While the activity seems unthinkingly routine on the surface, it is motivated by a genuine interest and awe of natural phenomena. As one of the most popular spots on the San Diego photo circuit, this event makes what is already a site of pilgrimage feel more like a site of worship during the two occasions that it happens each year. While there is absolutely no sense of any shared belief system among participants, the event enables the vastness of nature—in this case personified by the sun—to be collectively

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[281] William Stukeley, *Stonehenge: A Temple Restor'd to the British Druids* (London: W. Innys and R. Manby, 1740), 8.

admired as it is rendered in human scale when viewed through the architecture of the pier. It is perhaps ironic then, that for those who claim this as a spiritual experience, the only access to the precultural dimension of the sun that arouses interest, is when it is most full bounded by a cultural artefact. Nevertheless, during the event's climax, as the enormous yellow dwarf star that bathes us in light, energy and heat each day, is squared up in the pier, participants make an orans gesture. With arms raised and palms facing outward holding camera phones fastened between thumbs and index fingers, this event feels like a form of non-denominational nature-based paganism, as participants appear to be paying tribute to the sun being anointed as its rays dip into the sea (fig. 26).

In a related, though quite different way to the Jaffe Lab's *in Situ* approach to microscopic photography, there is an *in Situ* component to the experience this pier's tunnel promotes of nature. Although unintended, the experience at Scripps is strikingly similar to those elicited by two works of *in Situ* or site-specific land art—namely, Japanese photographer Hiroshi Sugimoto's *Enoura Observatory* and American artist Nancy Holt's *Sun Tunnels.* Located in the Great Basin Desert in northwestern Utah, Holt's *Sun Tunnels* comprise four 22-ton concrete cylinders—18 feet in length and 9 feet in diameter—arranged to frame the sun on the horizon during the summer and winter solstices (fig. 27). If Scripps Pier and Stonehenge were to have a child, it would resemble something like Sugimoto's *Enoura Observatory*. At roughly the same latitude as San Diego, though 5,617 miles eastward across the Pacific Ocean is another purpose-built complex with multiple structures for observing astronomical phenomenon. Sugimoto's structures that are most evocative of Scripps Pier, include two tunnels where viewers are invited to experience the passage of time as marked by the sun's immutable movement. First, the *Summer Solstice Light-Worship 100-Meter Gallery* is a hallway made entirely from glass on one side that ends with a balcony overlooking Sagami Bay. On the other side are photo works from his seascape series taken of the Sea of Japan are displayed. Burrowing through the earth to cross underneath the gallery is the *Winter Solstice Light-Worship Tunnel / Light Well*—a 70-meter-long tunnel (fig. 28). Like the aspect through Scripps pier, the tunnel frames a

view across the bay and out into the Pacific Ocean—a view that is dramatically changed during the winter solstice when the sun is framed in the center of its aperture. In a similar vein to his earlier time-lapse images inside movie theaters, his intentions here are similar—to use technologies that register the passing of light in artistic form, in order to reawaken our primordial capacity for developing self-consciousness. In a personal statement on the project Sugimoto makes these intentions clear, "the changing of the seasons made us aware of the external world and lead to the birth of consciousness. That's why the world's ancient civilizations all did things like worship the sun and celebrate the winter solstice. I want to recreate those ancient festivals and stone monuments as art in order to re-experience the spirituality and ancient peoples."[282] While the engineers of Scripps Pier could not have imagined they were building a portal to encourage San Diegans to connect with their ancient past, these artworks, like Scripps Pier use tunnel structures that coordinate with the sun to produce a worship like ambience. Furthermore, these *in Situ* artworks demonstrate that Scripps Pier is equipped with all the features necessary to qualify as a suitable candidate for such subliminal worship should the local population feel inclined. As is the case of Stonehenge, Scripps' "magical tunnel"[283] may well be activated as a place of pilgrimage for neo-druids and other followers of pagan, neo-pagan, New Age and earth-based religions in the years to come.[284] In the context of a society with

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[282] Quoted by: Lindsay Duddy, "Hiroshi Sugimoto's Enoura Observatory in Japan Frames Annual Movement of the Sun," *Designboom*, 2017, accessed December 5, 2018, https://www.designboom.com/architecture/hiroshi-sugimoto-enoura-observatory-odawara/.

[283] As characterized by Instagram user amandasgrant. See: Amanda Grant, Instagram, 2018, accessed February 16, 2019, https://www.instagram.com/p/BlipJivngxF/?taken-at=296096.

[284] British historian Ronald Hutton has described the ways that the utilitarian function of Stonehenge has been reactivated and misappropriated as a place of pilgrimage. See: Ronald Hutton, *Blood and Mistletoe: The History of the Druids in Britain* (London: Yale University Press, 2009), 323. Also see: Ronald Hutton, "From Universal Bond to Public Free for All," *British Archaeology* 83, (July–August 2005).

radically fewer opportunities for participating in common worship practices—this event serves as a substitute for connecting with a 'higher' power, to feel small and to feel the force of an entity whose vastness is difficult to comprehend—or perhaps it is all just a veiled excuse for hanging out at the beach.

Conclusion

Scrips Pier marks the site where scientific and vernacular practices of photography are brought together to discover what qualities we can attribute to photographic events that transcend standard categories. However, rather than trying to collapse these unique genres as equivalent, the purpose has been to open lines of inquiry that pass between an unlikely constellation of practices, rather than cordon them off. As distinct practices—while subjects and their photographers at the beach are busy eliciting and manipulating expressive choreographies, marine scientists are busy developing new *in Situ* imaging technologies that camouflage the device's presence such that the ecologies they document are left unadulterated. As is the case in the following two chapters, the dramaturgical model serves to unpack the spatiotemporal qualities of how photographic events are staged and the way performances oscillate between being scripted and unscripted. As far as practices on the beach go—an ever-revolving constellation of photo troupes are simultaneously at work as they engage in boundary making practices commanding use of 'vacant space,' but can't help getting caught up in each other's images. Quite unlike Erving Goffman's use of the theater as a model for social interaction, at the beach the lines between backstage and frontage are largely permeable as foregrounds and background become interchangeable. As private bodies flaunt themselves publicly before the camera the lines between public and private space are tested. Equally, the dramaturgical model applies to the way the Jaffe Laboratory performs science though photography, provoking our perennial fascination with the invisible to garner public interest in science. In the vein of 19th century scientific discovery, while the SPC conjures a world that is imperceptible to human vision, their ever-accumulating archive

constitutes a blind spot of their own creation—a pictorial unit of measurement that idles expectantly awaiting interpretation.

Unlike the way the hand has been historically invoked to symbolize that which is decidedly un-photographic, in this chapter the hand returns as a metaphor to redistribute a more inclusive sense of the agents responsible for authoring photographic events. Furthermore, the hand works to evoke photography as a bodily technology, that we see performed beachside in acts of photographic touch. Jaffe's romantic vision of giving cameras hands represents the impulse to develop a new generation of microscopic in Situ imaging technologies inspired not by humans, but by non-human animals such as jellyfish. Similarly, this is an approach we see deployed in the work of photographers who seek to lure children into their images, though the use of animal inspired camera lens buddies. In drawing these practices together, whether it be harnessing cryptic strategies or propulsion technologies of aquatic animals or coaxing children into images, we see humans drawing on the strategies of animals in forms of photo-hunting.

The bioinspired work at the Jaffe Lab is significant in reminding us that *to image* is a function of animals prior to it being a function of apparatuses that *produce images*. Thus, given the ways that marine species figure as a significant counterpart in developing photographic technologies, the Jaffe Lab's approach suggests an alternative (though speculative) trajectory for situating photography as a technology that 'first' developed in the imaging systems of animals inhabiting aqueous environments. Resolution, sensitivity and contrast for example, are all biological capacities. To 'image,' means to sense light from a multiplicity of directions in order to find food, conspecifics to reproduce with and to detect predators. Although it is beyond the scope of this study, this gives us pause to consider photography, not only as a system that inherited representational strategies from painting, but a system that inherited the imaging systems of our non-human animal counterparts. If we accept that human vision developed from the imaging systems of aquatic species, then cameras have a pre-history in underwater animals. From a scientific perspective, generating a permanent record of visual experience

is not so much a matter of inheriting the representational systems of quattrocento perspective, but the challenge of replicating the often vastly more sophisticated visual imaging systems of other species.

The bodily nature of photography is most apparent in the forms of photographic touch that we witness beachside where the camera sanctions forms of looking that would otherwise be more clandestine. Here the camera exacerbates the already spectacularized forms of looking at the beach, wherein performing photography the subject's demand to be desired is satiated. In my descriptive accounts of these performances the atmospheres of the beach come to life, where for example we witnessed the paradox of the way intimacy is performed—ranging from desexualized to highly sexualized forms of contact. This schism between the family and the individual is revisited differently in the dissertation's final chapter, in what I call "communal individualism," where at Yosemite individual photographers work in highly communal imaging contexts. The gendered forms of bodily production that we witness at Scripps—practices that express a sense of freedom but also constitute form of subjugations is a theme revised in the next chapter where we see the honorific and repressive functions of portraiture play out in the work of police photographers.

At the end of this chapter we saw the hand reappear in a collective orans gesture during the twice-yearly Scripps Henge phenomena. This exemplifies the way a working scientific pier is coopted by photographers as a stage, thus transforming it into a pleasure pier. We will see similar practices again at the viewing platforms in Yosemite that constitute stages where the body is put to work for the camera. While beachside photographers transform the 'proper' purpose of the pier, this should not obscure the fact that it is also the pier that transforms their practices. In framing a picture-perfect view to the ocean, the pier provides a ready-made camera obscura that photographers work inside to render images of the landscape. When the pier's aperture coordinates perfectly with the sun, photographers engage in worship-like practices where the medium is constituted in forms of socialization more than a representational technology. In celebrating the contemplation of something both so primordial and eternal as the setting sun—Scripps Pier's function as a portal is evoked not only literally but

metaphorically. Approaching photography via the event at Scripps reveals the ways that in staging both marine science and vernacular practices (ranging from weddings to graduations), the medium's purpose is not simply to produce verifiable evidence of objective fact. Instead, via iterative practices speculative futures are conjured. Whether related to predictions regarding oceanic ecology or practicing idealized versions of family life, this is a medium as firmly ensconced in the future as it is in the past. Thus, taken as a performance, photography does not so much document our realities but works to establish them and while photo practices are indeed scripted these constitute new scripts for realities that are as yet to materialize.

CHAPTER 3 — THE CAMERA AS AN 'AGENT' IN POLICE PHOTOGRAHY

Introduction

This chapter takes a different approach to previous academic studies on the subject of police photography. On the whole, scholarly work on this subject has focused on the way images are mobilized in state apparatuses as a means to power. Specifically, the way the image acquired the status of evidence and then through the archive was deployed in "scopic regimes of modernity" (to borrow Martin Jay's adaptation of the term)[285] in practices of repression and regulation, where divisive ideologies of the state are not only visible, but constituted through the image. Although my study does not engage this scholarship, it would be impossible without it. As a corollary to this work, this chapter asks, what happens if we approach police photography "back-to-front,"—so the actual processes that produce the archive were foregrounded rather than remaining obscured behind the image?

However, before I begin to answer this question it is important to acknowledge a distinction between the camera and the archive, a distinction that Allan Sekula makes in his study on the relationships between the emerging science of criminology and photography in the second half of the 19th century.[286] Sekula's essay charts photography's early uses in policing as a cautionary tale to urge us to be vigilant in resisting future attempts that seek to use photography as an instrument of social repression. He argues that while modernist and postmodernist art practices may have attempted to challenge the use of photography as an instrument of suppression, the ideology of these practices are still painfully present in its more vernacular uses such as surveillance and biogenetics and that socially engaged photo practices are irrevocably connected with this questionably dark historical legacy.

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[285] Jay borrows Christian Metz's term "scopic regime" in: Martin Jay, "Scopic Regimes of Modernity," in *Vision and Visuality*, ed. Hal Foster (Seattle: Dia Art Foundation, 1988), 3-23.

[286] Allan Sekula, "The Body and the Archive," *October* 39 (1986): 3-64. https://doi.org/10.2307/778312.

However, the crucial distinction that Sekula makes in his study is that the medium's repressive function was not realized via the camera, but principally via the archive. Specifically, he argues that both Alphonse Bertillon and Francis Galton deployed a bureaucratic model and not an optical model, where the central apparatus of photography's truth telling capacity was not the camera, but the filing cabinet. Sekula's insight serves as inspiration for this chapter and in the spirit of the dissertation's aims, my own argument in this chapter serves as a means for unhinging photography from the image in order to consider the medium as a thing that happens, rather than from a perspective calibrated by the conceptual, ideological and symbolic portent of images. Specifically: what else might be discovered about photography by looking at the medium through the 'lens' of the camera?

As a means of grounding my analysis, this chapter draws on interviews and fieldwork with crime scene and forensic photographers from several police departments in Southern California. These include the Los Angeles Police Department (LAPD), the San Diego Police Department (SDPD), the San Diego Sheriff's Department (SDSD) and the Santa Ana Police Department (SAPD). The photographic event takes place at the scene of the crime and in the photographic studio where suspects and victims of violent crime are photographed. In contrast to Scripps Pier and the following chapter on Yosemite, participation in the photographic event is radically scaled back. Instead its scale is intimate, involving the participation of only a handful of people authorized to be there and for the most part is hidden from the purview of the general public. Unlike the other two chapters, access to my research subjects was more structured and limited and as such my primary source material is drawn mainly from interviews and time spent in the laboratories and offices of these various police departments as well as attending what they rather quaintly refer to as "ride-alongs" with crime scene photographers at the LAPD and SAPD. For police photographers, the photographic event often begins in the aftermath of a crime's event, that they then attempt to reconstruct in narrative form through their sequencing of shots. This is done before they have all the facts on hand as to what actually took place. Here, I argue that the photographer engages in a series of "indecisive junctures" to try and determine the "decisive

moment(s)" of the crime, by re-staging the event as a photographic sequence in the form of a narrative film storyboard. Thus, crime scene photography in practice skews the way critical theory has constructed the photographic event, because it starts from the event to reconstruct the image, rather than starting from the image to reconstruct the event.

In advancing the dissertation's aim to consider a more distributed sense of the agents responsible for authoring photographic events, the camera is placed center stage. This chapter emphasizes the bearing the camera has on scripting photographic events by making several proposals regarding its affordances that operate in addition to its function as an apparatus of representation. My consideration of the camera begins by presenting it as a *thing*—a "memory-thing," "body-thing" and "puzzle-thing." Alternatively, as an *object*, I consider the camera as a transducer, which serves as a model for conceptualizing the camera as a technology of affect. In distinguishing between objects and things, Bill Brown reminds us that like the example of the car that stalls or the drill that breaks, "we begin to confront the thingness of objects when they stop working for us."[287] Here, I would add that to speak of the camera as having a thing-like status, it is possible for it to perform as both an object and a thing simultaneously, where the status it accumulates as a thing allows us to see the agency it already has, that is obscured by its primary, collectively or typically understood function. The example of the car malfunction also serves to remind us that the camera can also be used to defer human agency in cases where such a scapegoat is necessary. In their role as transducers, cameras facilitate exploratory processes of photographic doubt, produce somatic effects on police photographers and their subjects, as well as afford police photographers the ability to moderate empathy for the victims of crime they photograph. I propose that these affordances the camera makes possible are properties that more appropriately (rather than exclusively) belong to the camera and as such contribute to the way photographic events are performed, structured and experienced. As a caveat, it is important to state

[287] Bill Brown, "Thing Theory," *Critical Inquiry* 28, no. 1 (2001), 4.

that I am not advocating an object agency for the camera at the expense of human agency or any other agency for that matter. Nor do I propose that cameras have their own independent agency. As addressed in the introductory chapter, intersubjectivity is never exclusively human or social, but tied up with the non-human in processes where bodies and technologies are always imbricated. Thus, my purpose here is to soften the boundaries between the supposed 'immaterial' nature of the material and to emphasize the capacity for material things to behave as if they are animate.

In terms of the body, the example of police photography serves as a useful departure point from the way photography is traditionally cast as a visual technology, given that the body is accentuated in situations where photographers are drawn into uncomfortably intimate scenarios with victims and perpetrators of crime. The dead body, as a portrait genre, contradicts the way photography transforms subjects in objects, given that the deceased subject (which holds an indeterminate thing-like status), is already an object. For example, in situations where the photographer is brought into close contact with victims of violent crime, the apparatus intervenes between bodies and prevents the photographer from overly registering with the traumatic experiences of their subject. Here, the camera functions as an "insulator" to dampen the highly charged emotional nature of the event. To a certain degree the camera gives the photographer license to move through these intimate and volatile situations at a quickened pace. Even in this highly regimented schema (where Standard Operating Procedures mandate what shots are to be taken and in what order), the camera is used by the operator to willfully induce a form of non-seeing (while still being conscious of what they are seeing), where the apparatus is used to filter out information in concert with their ongoing cognition of the event.

The Camera as Thing

The material characteristics of objects are always accentuated when they are put out on display as things to be admired. This is especially the case for an apparatus that is meant to be used more than it is meant to be looked at. The office spaces at both the SDPD and the SAPD are each

decorated with a modest glass case where twenty or so decommissioned cameras adorn the shelves. Based on when they were first manufactured, these collections double as a timeline that begins from when these police departments were first incorporated. However, the Photography Unit at the LAPD, wins hands down as having the most impressive display of retired cameras, a viewing of which embodies a concept familiar to material culture studies—that when objects lose their 'proper' purpose they become more accurately designated as things.[288] Located at 555 Ramirez Street in Downtown Los Angeles, the Scientific Investigations Divisions' (SIDs) headquarters occupy the entire second floor of the former LAPD storehouse—a bunker like facility where the rooms are large and the concrete is thick.[289] One of the most striking features you notice upon entering the staff photographers' central office is their remarkable collection of used cameras. The assemblage of over 70 cameras that formerly served LAPD photographers is on a shelf perched about two meters above the floor that runs three-quarters the length of the 65-foot east wall. The shelf is installed above ten computer terminals where photographers upload, archive, and retrieve their images through the Digital Information Management System (DIMS). Once you get over the impossibility of ever being able to get a fix on how many cadavers and criminals these cameras have collectively photographed, there is something quite enigmatic about their materiality that stimulates the imagination. Their collection, which now includes a few digital models, is not arranged in chronological order. Nor is the position of each camera determined by their capacity to record greater or lesser amounts of information. Instead, they are arranged so as to accentuate the diversity of their shape, size and material components.

[288] For examples on the scholarship on the nebulous nature of things see: Arjun Appadurai, ed. *The Social Life of Things*, (Cambridge: Cambridge University Press, 1985); Bill Brown, ed. *Things* (Chicago: University of Chicago Press, 2004) and Peter Schwenger, *The Tears of Things: Melancholy and Physical Objects* (Minneapolis: University of Minnesota Press, 2006).

[289] The Scientific Investigation Division (SID), of which the Photography Unit is part, was incorporated in 1927. They moved into their current building on Ramirez Street in January 2013. Today, the SID is comprised of two sections. The scientific end includes the Serology/DNA Unit, Toxicology Unit, Comparative Analysis Unit, and Questioned Documents Unit. The technical end includes Electronic Surveillance Unit, Photography Unit, Latent Prints Unit, and the Polygraph Unit.

For example, a pristine clear and black anodized aluminum Sinar Norma large format camera, with its leather bellows stretched to capacity like a snake trying to warm itself, dwarfs the tiny Minox subminiature spy camera next to it. The austere ruggedness of a Nikon FM2s chromed silumin alloy body is set off against the ostentatiousness of a Rolleiflex waist level viewfinder medium-format twin lens reflex, with its elegant folding frame finished in brushed chrome and tan leather panels. At one point in the sequence of cameras is a portable shoulder mounted flash pack with the front panel removed exposing its internal circuitry. Mounted at a severe angle on Gitzo 3-way pan/tilt head, a Hasselblad 500 ELX bears down on the room imperiously. Adjacent to it a wooden Horseman 4x5 field camera sits with the patience of a plein-air painter. Interspersed are rolls of different film formats and various types of 35mm film with their tongues pulled out so they flop expressively over an adjacent camera. In its entirety this presentation makes clear the incredible diversity and experimentation in form invested in the camera apparatus, all of which once served the same basic function of focusing light on the rear end of a black box. However, now in their twilight years, this is a function these cameras no longer serve.

In the 91 years that separates their Kodak 120 roll film autographic camera and their newest addition, a Nikon D300—the installation serves as a timeline that narrates the activities of one of the oldest dedicated police photography units in the United States. For staff at the Scientific Investigations Division (SID) this nostalgic display is tangible testimony of something to be proud of. The cameras' presence operates as an impetus for motivating the staff by reminding them of the significant historical lineage of which they are now part. It also might make them a little nervous, for the fact that almost all police departments around the United Sates are phasing out their dedicated photography units (if they ever had one), in preference for making cameras readily available to all sworn officers. In this way, it keeps staff mindful of the need to make what they do count. The sentiment of the display is not unlike a series of employee of the month headshots that one often encounters in the workplace. More specifically though, the display is reminiscent of the framed photographs of officers killed in the line

of duty, which line the hallways of the entrance to the SID. Thus, in similar fashion to the commemorative function that these photographs serve, their camera display is designed to animate that which is past as a means of keeping its memory alive in the present.

Included in their line-up is a Mamiya RB67 Pro-S, a camera that piqued my curiosity seeing that it was the first serious camera I ever bought. It was the camera that Larry Day and I talked about on my first visit to the Photography Unit. I met Day at the start of his shift at six in the evening, during which time he works as the commanding officer coordinating all of the jobs photographers are assigned, until two in the morning when his shift ends. Day is the Photography Unit's longest serving employee, having now worked 26 years in total, his first ten were spent in the field. Given my familiarity with the Mamiya RB67 Pro-S, it was the first camera I asked him about. Day explained that this camera on the shelf holds a special place for him, as it was the camera his mentor used during his first homicide. In that particular case, a male prostitute was bludgeoned on the back of the head and then thrown upside down into a window well at Hollywood High School. For Day, "it was the whole big enchilada, all at once, in one crime scene, with criminalists, detectives, and Robbery Homicide"[290] and the Mamiya brought back memories of the way his mentor "talked me through each shot and why he was taking each shot, as he was taking it and this has stuck with me the whole time."[291] Although, I had not expected our discussion of the Mamiya to evoke these memories, it made clear the emotional attachment that many of these cameras have for staff photographers. Thus, like photographs, cameras also possess the ability to evoke memories of the past.

Day's story of the Mamiya reminded me of the role that cameras can play in ways that exceed their function as a technology of representation. In 1998 when I was an undergraduate art student in

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[290] Larry Day, "Interview with Larry Day," by Alex Kershaw, *Los Angeles Police Department, Scientific Investigations Division, Photography Unit*, unpublished, 2015.

[291] Ibid.

Australia, I decided that the medium format Mamiya RB67, which had earned its reputation as the "workhorse of the pros,"[292] was the camera for me. I had been regularly taking the Mamiya RB67 out on loan from the university's equipment store during my studies on field trips. Lugging the camera and a few lenses around in my backpack, along with a modest tripod strapped to the side (which came in at around 20 pounds), was an experience that felt less like mobilizing the determination of a Suffolk Punch and more like strapping the weight of a Sherman Tank to my back. I was however, undeterred by the fact that the Mamiya was really designed as a studio camera rather than a portable camera. I tracked one down through the Trading Post that was well priced. I called a man (whose name I have long since forgotten) and organized a time to visit him at his house to check it out. Upon arriving at his home I was offered a glass of water and ushered into the family dining room where a Mamiya RB67 Pro-S kit was spread across their entire eight-seater dining table, methodically separated into its 42 constituent parts.[293] It felt as though I had walked into an operating theater midway through an anatomy demonstration for surgery students. Having never seen the camera fully disassembled like this, I was sure that the seller's meticulous dissection was some strange ruse to coerce me into purchasing a camera that had no chance of taking pictures anytime soon.

As the initial phase of our transaction proceeded, this thing began to present itself as more body-like than camera-like. To calm my nerves, like any sensible second-hand shopper would, I asked the man why he was selling it. He explained that he had used the camera for work as a crime scene and forensic photographer for the New South Wales Police Department. Having recently retired from the

[292] "Mamiya RB67 Pro SD," Mamiya Leaf, 2011-2013, accessed December 12, 2015, http://www.mamiyaleaf.com/legacy_RB67.asp.

[293] The kit included: one camera body, two collapsible focusing hoods, two magnifying lens', two 6x7 centimeter film backs, one 4x5 centimeter film back, three 120 film inserts, three dark slides, one polaroid back, four spools, one left hand grip holder, one mirror up cable release, one standard cable release, one 90mm lens, one 127mm lens, one 250mm lens, three lens hoods, two extension tubes, three black and white filters, three ultraviolet light filters, one camera carry strap, four focusing screens, one mounting lock/nameplate for the focusing hood, one revolving adapter, one film insert, one camera case with inserts and strap and a collection of threads.

force he had no need for the camera anymore. Although this specimen was in impeccable condition the Mamiya RB67 Pro-S was well beyond its prime. Manufactured between 1974 and 1990, in 1997 the New South Wales Police Department sent this workhorse off to the glue factory, replacing it with Nikon digital SLRs. With this knowledge, the scene took on a slightly more macabre tenor. The apparatus now more closely resembled a collection of stiff body parts waiting patiently in the aftermath of an autopsy. My eyes wandered over the assortment of Fresnel glass-focusing screens and it struck me as uncanny that this camera had now, at least temporarily, met a fate similar to the many corpses that were once unwittingly focused for this man's eyes on the surface of these ground glass screens.

As our negotiations progressed this thing began to present itself as more puzzle-like than camera-like. My body's experience of the camera was topographic, in that I was presented with a perplexing array of metal, glass, and plastic to be witnessed from above—a jumble of things to be looked down on rather than a devise to be looked through. In this way, as Bill Brown suggests, the transparency of this once stable object was placed in tension with the opacity of a thing, where, "a *thing*, in contrast, can hardly function as a window."[294] However, knowing my vendor's background, it now seemed natural to present the camera as a puzzle to be solved. By theatrically recasting his dining room table into a crime scene the camera became a collection of clues to be inspected and then pieced back together. His intention in pulling the camera apart was not only designed to impress, but it was integral to his sales pitch which involved us collaborating to reassemble the camera. It became a performative event that Victor Turner may have described as liminal—a transitional phase after separation and prior to reincorporation.[295] It also seemed to qualify as liminal for the grotesque quality of the scene where elements were messed about within a subversive and slightly ludic way, where "in

[294] Brown, "Thing Theory," 4.

[295] Victor Turner, *From Ritual to Theatre: The Human Seriousness of Play* (New York: PAJ Publications, 1982), 24.

liminality people ‘play’ with the elements of the familiar and defamiliarize them. Novelty emerges from unprecedented combinations of regular elements.”[296] In the time that it took us to put the camera back together again, we performed the camera’s “full mechanical reliability,”[297] which was one of its most distinctive selling points. In what we could call the camera’s base materiality (that is, its most literally material state), its function was demonstrated not in its capacity to produce images but in its ability to prove itself capable of being reassembled—transformed from a body-puzzle-like-thing to something that looked more like the camera I knew. Its status as an object was only conferred when I retrieved my first roll of correctly exposed film back from the lab a week later.

Perennial Problems: Autonomy Versus Agency

Before continuing to address the way that the camera functions as an ‘agent’ in police photography, it is worth considering the police photographer’s own understanding of this proposition and how this intersects with the perennial debate in photographic theory regarding agency and automatism. Police photographers were eager for me to have the impression that their work was both objective and creative. In the context of the debate over photographic authorship, the art historian Douglas Nickel poses the question this way: “machine or human: which is the author?” Nickel’s response is that any theory that advocates photography’s essential nature as indexical will ultimately end in a stalemate with theories that see it as a manifestly ideological human construction.[298] In the case of police photographers, while earnestly invoking the camera’s agency to claim their work as a true objective record, they also invoke the capacity for creative license. However, for police

[296] Ibid., 27.

[297] "Mamiya RB67 Pro SD."

[298] Douglas R. Nickel, "Impressed by Nature’s Hand’: Photography and Authorship," in *Photographic Theory: An Historical Anthology*, ed. Andrew E. Hershberger (West Sussex, UK: Wiley Blackwell, [2009] 2014), 403.

photographers these qualities do not exist in a dialogical relationship, but exist as two independent truths that they claim are characteristic of their work. Absent from an assessment of their own work is that if indeed there is latitude for creative license, then what role do the ideological constructions irrevocably embedded in the work of policing have on their own practices? In other words, it is a stretch to claim that the evidentiary and artistic applications of the medium are mutually exclusive. This attitude is most pronounced in the case of the LAPD, who identify themselves as "photographers first." What they mean is that unlike almost every other police photo unit in North America, their photographers are not sworn police officers recruited from the rank and file, but have backgrounds as working photographers in commercial and creative industry. As a condition of employment their staff must have at least three years of industry experience. For example, the staff's backgrounds include commercial studio photographers, documentary filmmakers and art school graduates. By invoking their status as "photographers first," it is as if they took Sekula's differentiation between the camera and the filing cabinet to heart. Separating their work from its role in the archive is used as a means of claiming exemption from the legitimate criticisms that their police colleagues are subject to. Their status as 'non-police' sometimes played out quite literally in the field as a means of avoiding the unwanted attention of bystanders that photographers imagined as having an unfavorable attitude toward the LAPD. For example, during a ride-along to a crime scene with Andrew Millet, he broke protocol by removing his vest that identified him as a police photographer. When I asked why he did this, he told me that he didn't want to draw attention to himself and be heckled by spectators. In terms of the work LAPD photographers produce, they invoke their more creative backgrounds as significant to claim that they can deliver a superior product in comparison to photographers without proper training.

We should take these claims of LAPD photographers with a grain of salt, considering that they are used internally to justify the added expense of staffing an agency with dedicated photographers. In the context of industry wide downsizing, (where in some departments for example, patrol offices

double as photographers) they must justify the value added to policing by employing experienced photographers. While photographers at the LAPD insist on the latitude for creative license in interpreting SOPs, from what I witnessed this constituted little more than modest flourishes that did not significantly alter their sequencing of shots. As I address later in this chapter, I experienced photographers at their most creative while making decisions regarding how to apply SOPs in crime scenes scenarios when it was not at all clear what had taken place at the scene. While it is certainly the case (at least in the context of the LAPD) that photographers of the 1930s, 1940s and 1950s were at greater liberty to engage humor and irony in their work to manufacture more theatrical images, this is not so much the situation today.[299] Although it is beyond the scope of this chapter, it must be acknowledged that in the context of a moment when finally the camera lens is being turned on the work of policing itself—it goes without saying that their pretense of autonomy is problematic when considering the increasingly militarized ways policing is implemented on the social body.

The Camera as Transducer

As a model for the camera's agency as an object in the photographic events of police photography the notion of a transducer is an appropriate model. As an apparatus entwined in processes of co-producing images the camera can be thought of as a technology of affect—or in other words a transducer. As a transducer the camera is an apparatus responsible for altering the overall flow and experience of the times in which photographs are made. At its most general, a transducer is a device that transfers or transforms energy from one form into another.[300] In terms of the body, all sensory

[299] This is the argument Tim Wride makes. See: Tim B. Wride, "The Art of the Archive," in *Scene of the Crime: Photographs from the LAPD Archive*, ed. Deborah Aaronson (New York: Harry N. Abrams, Inc., 2004), 18-23.

[300] The etymology of the word is from the Latin transdūcere, meaning "to lead across." It combines trans (across) and ducere (to lead). "transducer, n.". Oxford English Dictionary Online, Oxford University Press, accessed December 28, 2015, http://www.oed.com/view/Entry/204675.

receptors are transducers in that they transform kinetic energy, light, sound, heat, and energy from chemical reactions into nerve impulses or action potentials. In terms of the camera, I propose that this quality connotes the capacity of the apparatus to manipulate or convert energy passing between the subject or object facing the lens and the photographer who is positioned behind the lens. As a means of illustrating this quality of the camera I would like to begin with what is perhaps most particular about the genre of portraiture in crime scene photography—which is that the photographer's subjects are for the most part no longer living. When I asked Brande Silverthon, who manages the San Diego Sheriff's Regional Crime Laboratory what techniques she has developed over the years for photographing people, she thought this a rather tongue-in-cheek question, "well we deal a lot with people that aren't moving! It's very easy to associate them with an item of evidence, it's maybe just an inanimate object at that point to us."[301] Constituted as evidence in the context of crime scenes, dead bodies almost always present themselves to the camera horizontally in landscape orientation. This is in stark contrast to the majority of other genres of photographic portraiture where subjects orientate themselves vertically to the camera. As a consequence, in crime scene photography dead bodies are almost always photographed in landscape orientation rather than portrait orientation. This fact emerged during our conversation, when Silverthon spoke about one of her most difficult cases since starting work at the Sheriff's Department eleven years ago:

> I just recently had a suicide, a 14-year-old hung himself and by the time we got there they had not cut him down and so he was still, um, hanging there. And when I was taking a close up of his face, like the head shot, I found it so weird. I felt like I was taking a portrait more than a crime scene photo and it was really disturbing.… So, in some situations I do think about the camera. Because, I remember when I took the photograph I actually changed the direction of my camera, versus if he was laying on

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[301] Apart from her position as a supervisor, Brande also works crime scenes under the title of Senior Forensic Evidence Technician. A significant difference between photographers in San Diego and Los Angeles is that in San Diego, police photographers are also responsible for collection and processing of evidence. At the LAPD this is a separate job handled by the Field Investigation Unit. Brande Silverthorn "Interview with Brande Silverthorn," by Alex Kershaw, *San Diego Sheriff's Regional Crime Laboratory,* unpublished. 2105.

> the ground I would have done it like this [gesturing horizontally] and done it more segmented, where in this situation it was much more appropriate to turn the camera this way [gesturing vertically] and that might have been the only reason that it affected me so much.

Without dismissing the already emotionally volatile nature of the event, the change in camera orientation that the scene demanded, triggered or transduced a change in Silverthon's emotional connection with her subject. As the energy of this emotionally charged scene transfers from the subject through the camera as transducer, it is manipulated—a manipulation that corresponds with the rotation of the camera itself. This literal camera manipulation corresponds with a more psychological conversion, which is experienced through the camera by the photographer as a change in their emotional state. The camera's viewfinder frames this experience for Silverthon as a portrait rather than a landscape, a quality that would not have been manifest in her own experience of the event independent of the camera. As Silverthon explains, the reason that this felt unusual was that the camera brought her face-to-face with the young boy as a living subject in portrait orientation rather than her usual experience of photographing non-living objects in landscape orientation.[302] The effect of changing the camera orientation via which Silverthon photographed the scene in front of her was that she became less able to treat the young boy as an item of evidence and was coerced into a more empathetic portrait-style engagement with her subject. In other words, the effect of rotating her camera 90 degrees or so was that she was forced to recognize the young boy as a subject that was alive only hours earlier rather than her more routine practice of recognizing human subjects as objects of evidence.

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[302] This is not to suggest that Brande has no experience doing regular portraiture work. Apart from the photography that Brande does outside of work, which mainly involves photographing her children at sporting events, she has regular experience shooting portraits of living suspects and victims at the Regional Crime Laboratory.

By proposing the transducer as a model for the camera as a technology of affect, my debt to the work of Tim Ingold must be acknowledged. In *Making: Anthropology, Archaeology, Art and Architecture* Ingold proposes the transducer as a model for discussing the contribution of inanimate objects (he prefers the term matter) to practices of making.[303] Transducers “convert the ductus—the kinetic quality of the gesture, its flow or movement—from one register, of bodily kinesthesia, to another, of material flux.”[304] Unlike the camera however, all Ingold’s examples of the transducer are quite artisanal objects. For example, Ingold proposes the kite as one of his examples that is presented as an object that enables transduction between the human operator and the air in which it is suspended. Notwithstanding the differences between cameras and kites, I propose that the camera acts as a transducer—as an object that occupies the position of a fulcrum in the exchange between operator and subject/object during the times photographs are made. In these situations of conversion, the camera leverages variable and changeable intensities back and forth—continually redistributing the force of being acted upon and the forces that act upon being. According to Ingold, it’s not so much that the transducer activates agency, because this is already immanent in humans and objects, but that it converts their energies in a specific way. In this vein, I agree with Ingold, who views the notion of ascribing an autonomous agency to objects as futile. Instead, Ingold frames the concept of agency in relation to the transducer via a perspective where we can see both humans and objects possessed by action, and where matter is ascribed its due course as an active participant. Approached in this way, the transducer mediates a correspondence that takes place between the other entities that are present in what Ingold calls the "dance of animacy."[305] This is a creative process where transducers "mix the

[303] It is worth noting that Bruno Latour’s notion of a “mediator” is similar to Tim Ingold’s notion of the transducer. For Latour, non-humans can take on the properties of either and intermediary or a mediator, for enabling social connections and spatiotemporal activity. Latour makes a distinction between *intermediaries*, which transport “meaning or force without transformation” and *mediators* that “transform, translate, distort, and modify the elements they are supposed to carry.” Latour, *Reassembling the Social*, 39.

[304] Ingold, *Making,* 102.

[305] Ibid., 103.

movements of one's own sentient awareness with the flows and currents of animate life."[306] In a similar fashion the camera establishes particular qualities of intersubjective experience, acting as a conduit by converting the physical and virtual registers that pass between people, places, and objects.

However, cameras are certainly very different to the examples Ingold uses, which apart from the kite include the toggle, the potter's wheel, and the cello. One objection to adapting Ingold's model of the transducer for the camera might be that cameras moderate a less direct or immediate engagement due to their technological complexity. Furthermore, Ingold's characterization of the objects he chooses for transducers as "matter," is an uncomfortable substitute for the camera which does not seem to connote the same plasticity. In claiming that it is possible for the camera and a cello to share the function of a transducer, Walter Benjamin's distinction between the photographer and the violinist is fitting.[307] For Benjamin, the photographer is unlike the violinist, who must seek out their note in an instant. The violinist has a certain freedom in that they are not subject to the same laws that face the photographer who has the advantage of operating a mechanical device, where errors can be corrected after the fact. In typically cryptic fashion Benjamin does not spell it out, but we can infer that his suggestion is that there might be greater scope for error in photographic processes. This presents itself as an inverted freedom, in that it is actually a constraint when compared to the creative immediacy of the violin. However, in the context of crime scene photography, there is little room for error. Once the crime scene photographer has begun work, they are unable to delete any image as mandated by Standard Operating Procedures (SOPs) designed to maintain the integrity of chain of evidence. More generally though, a prior knowledge of the flexibility for correcting mistakes in postproduction does not make the immediacy of the camera's presence any less palpable for those participating in the times photographs are made. Like the toggle, the potter's wheel, and the cello, the

[306] Ibid., 108.

[307] Benjamin, "Little History of Photography," 517.

camera is a tool that requires training, granting operators a chance to develop intimate relationships with the apparatus as they sharpen their techniques. Just because cameras do not resonate with the sonorous immediacy of acoustic vibrations, or the sporadic zippy aeronautics of kites, this does not make their potential for transduction any less plausible. This is particularly the case in the context of police photography where photographers and their cameras are thrown to the wind in unpredictable and emotionally charged situations.

Transducing Doubt, Somatic Effects, and Empathy

In the following analysis I consider the ways the camera functions as a transducer as it lends its affordances to the time that images are co-produced in the photographic events of police photography. These include transducing doubt, somatic effects and empathy. My first proposition is that the camera's unique ability to translate multidimensional experience into a two-dimensional photograph helps transduce an exploratory process of doubt during police photography. Though, what is different about the function of the camera as a transducer (as opposed to Ingold's more artisanal examples), is that the camera is not only applied as a creative tool, that in this case amplifies doubt (as perhaps the inverse of what we would expect from the evidentiary status of images as proof of something), but also as a tool that photographers harness to negate or minimize their own doubts. Like any type of photography, this doubt is manifest in the differential between the way the camera records a scene and the way the police photographer experiences the scene. In this process the photographer doubts whether the camera might capture something in the scene that they do not notice and the doubt that the camera is not capturing the scene the way the photographer wants it to be experienced later on in the residual photograph. The capacity for the camera to record multiple images of the same scene enables photographers to harness this doubt as a means of both accepting and attempting to narrow or

even accentuate the differential between these two modes of perceiving.[308]

It is sometimes the case that the camera will capture something in a crime scene that the police photographer does not identify as an important piece of evidence at the time. This might later be used as a crucial support in securing a conviction in court. The camera's potential to capture things police photographers can't see serves to remind them of the need to harness a doubting of their own perceptive faculties as means of "looking for things they cannot see," or to "find things they did not know they were looking for."[309] As Brande Silverthorn explains:

> You need to take a moment and look at it [the scene] yourself, because you're so focused on the image you're taking and we need these certain sets of images. You know you've got your images, but do you know what's in them? I don't know, I don't know that you do all the time. I've come back here [her office] where I've uploaded photographs and I'm putting them on a CD and I'm looking at them on my computer monitor and I think, oh my gosh there's blood there on the handle for the turn signal on a vehicle, and I didn't notice, I didn't see it when I was there.[310]

In recognition of the potential for the camera to record an important item of evidence that police photographers are not aware of at the time, SOPs mandate practices for ensuring that extensive coverage of the scene is undertaken. Although numbers can vary significantly depending on how

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[308] Vilém Flusser describes the act of photography as a kind of "phenomenological doubt." He argues that photography has a quantum nature in the sense the 'final' shot is a consequence of the total activity of taking multiple images. For Flusser, cameras do not necessarily enable us to realize human intention. The tension is that while they may have been invented for this purpose, they serve to automate our activity, so instead we fulfill the functions of the program made available to us through the apparatus. Flusser understands doubt in the sense that when the camera is pointed at the world the photographer is faced with an endless number of possibilities or viewpoints as a means of approaching the world. Flusser contends that this doubt is prescribed by the structure of the camera's technical program that sets limitations for the photographer. Making images is not simply about what we want, but what we think we want in relation to the camera's capabilities. Flusser, *Towards a Philosophy of Photography.*

[309] This is how Andrew Millett, a police photographer at the LAPD Photography Unit described the process to me. Andrew Millett, "Interview with Andrew Millett," by Alex Kershaw. *Los Angeles Police Department, Scientific Investigations Division, Photography Unit*, unpublished. 2015.

[310] Silverthorn. "Interview with Brande Silverthorn."

experienced the photographer is and how the particular unit is structured, as a rough estimate, between 400-600 images are taken for a typical homicide and with more involved cases the number increases to around 1,200. In cases where police determine the death is not suspicious the number of images average around 300. This large quantity of images is generated through several distinct "passes" that capture the scene at differing scales. For example, in the case of a homicide in a domestic setting, the first pass is called the "approach," which includes exterior shots that establish the context of the scene geographically. This includes photographing street signs and exterior shots that include the residence. The second pass involves the "overalls," where the photographer sticks to the perimeter of each room obtaining total coverage by shooting back into the room with a wide-angle lens. The third pass covers the "details" which are photographs of things identified by the photographer as important pieces of evidence as well as shots that demonstrate the relationship between each item of evidence and the interior space. These are usually done using normal and telephoto length lenses to achieve medium and close-up shots. Finally, a fourth pass of the scene might be made where the photographer alters the scene in order to secure further coverage not visible in previous images. For example, this might encompass opening drawers, cupboards or the refrigerator and moving items of furniture to reveal new aspects of the scene previously obscured. Each of these passes corresponds with the likelihood that the photographer's presence in the scene is altering its original condition. In part, the systematization of these SOPs is in place because it is doubtful the photographer will be aware of everything that is important to capture at the time of the event. This insurance policy is an acceptance of the advantages in the differential between what the camera records and what the photographer is capable of experiencing during their crime scene investigation.

The way doubt plays a part in framing the approach police photographers take to photographing a particular scene is complicated by the fact that already, they are largely unresolved in deciding from what perspective they should reconstruct the narrative of the crime. While the photographic event functions to reconstruct the event of the crime in its aftermath, what or whose

story is being told? For example, Leonard Correra from the SAPD is a "advocate for the evidence."[311] However, from my conversations with police photographers it is clear that they are not entirely resolved as to whether their photographs tell the story of the scene, the evidence, or the crime or some combination of these elements. Furthermore, while they try to maintain the ideal of objectivity, they are aware that their version of the story will be repurposed differently by the defense attorney, prosecutor, jury and judge. Furthermore, doubt is already a natural condition of the scene when the photographer arrives, where it is often totally unclear what took place. As an example, during a ride along with Correa we arrived at a scene where in no particular order I saw—a man in handcuffs sitting cross legged on the sidewalk next to a minivan that was propped halfway up the curb with its two front tires blown out and a smashed windshield. Angled diagonally across the road about 20 feet away was a black BMW with its back end crushed in. Further down, an electrical box ripped out of the ground was resting on the perimeter fence of a basketball court. A fireman sprinkled powder on the road to absorb liquid oozing out from the under the minivan. Two patrol officers were talking to people who had gathered to watch the scene and take images on their camera phones. A medic stepped out the back of the ambulance and told Correa that he had heard there was a knife in one of the cars. When I asked Correa later on how he determined the order in which to take his sequence of images in, the best answer that I could get out of him was that he followed the "flow" of the event as it presented itself to him. So, while there are SOPs, they serve as a general guideline that incorporates a fair amount of latitude in terms of how the photographer chooses to apply the camera to each particular scene.

In recognition of the importance of cultivating a sense of doubt, some police photographers choose to reduce their exposure to the 'facts' of the case as a means limiting their potential for confirmation bias. As an advocate for the evidence, when giving advice to new trainees, Correra cautions them to not let the detectives guide their decisions, but instead be guided by the evidence. On

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[311] Leonard Correa, "Interview with Leonard Correa," by Alex Kershaw, *Santa Ana Police Department*, unpublished, June 10, 2016.

our way to a robbery at the Chase Bank in Encino, Los Angeles, I asked Andrew Millet of the LAPD Photography Unit, if he knew who the suspect was. Millet ambivalently replied, “he could have been a Martian for all I know.” Millet is expressly intentional about not listening to police “radio chatter” as he drives to the scene. The only section of the *LA Times* he is interested in reading are the feature articles, “because they are informed with solid research, the facts have had time to be figured out, it’s distilled.” From Millet’s perspective, (one shared by many of the photographers I talked with), much of the information detectives or patrol officers might offer him as ‘fact’ turn out to be mere speculation. Unlike the detectives, who at that same moment are trying collect as many facts as possible, crime scene photographers are more interested in looking for what they can’t see.

In terms of the things that photographers do see, there is also a doubt as to whether or not the camera is recoding the scene the way they want it to be experienced later. Engaged in their exploration of a crime scene, police photographers continually doubt whether the camera has successfully translated what they are experiencing into the images the apparatus chronicles. Given that the techno-optical limitations of the camera apparatus continually resist the intentionality of the photographer—they doubt whether what they are seeing will be made available for detectives and then a jury when their images are used as evidence during trial. For police photographers it is crucial that this translation process is accurately monitored. The images that police photographers produce forge a vital experiential link between the original crime scene and the processes of investigation that follow. This is more pronounced at the LAPD, where the detectives present during the initial crime scene investigations are not the same detectives that end up being assigned to the homicide. Unlike the San Diego Police Department and the San Diego Sherriff’s Department, investigating detectives at the LAPD first experience the crime through photographs of an event they have never personally witnessed. This is why it is so imperative for LAPD photographers to ensure that there is a clear logic to the narrative of the scene (as per their translation of it), so it that can be easily grasped after the fact by detective(s) assigned to the case.

In this translation process doubt is manifest due to the fact that every exposure involves a compromise between the three variables that control camera exposure. “Reciprocity” as a technical term in photography describes the inverse relationship between the quantity and duration of light that determines the reaction of light-sensitive material. In relation to the camera it characterizes the interchangeable equivalences between aperture, shutter speed and ISO as a means for controlling the total amount of light energy in proportion to the required exposure.[312] These three variables effect how the camera renders an equivalence between how the photographer experiences a scene and how the camera reproduces it. Aperture will affect how depth is rendered, while the shutter speed controls how motion is registered. Thus, the images that are captured through the camera are not the same ‘images’ that the photographer sees through the viewfinder or on the LCD screen. The latitude of the 35mm DSLR cameras that police photographers use is much narrower than human vision. The instantaneous dynamic range of the human eye is around 10-14 stops, which surpasses the 8-stop range of their digital cameras. Thus, the photographer needs to undertake acts of translation where they reimagine the scene in light of the much more limited dynamic range of the camera, which registers a vastly more compressed tonal range. While gradual variations in tonal range may appear as quite distinct to human vision, these same fields when plotted as numeric values between 0 (black) and 255 (white) become drastically less discrete. The result is that the camera clips sections of a scene (usually either at the shadow or highlight end of the spectrum) that are otherwise available to the photographer. The camera in this instance requires the photographer to doubt their own perception of the scene and then make adjustments to values they set on the camera, as a means of bringing forth select portions of the scene that they feel are most important. In this way, the mathematical laws of photographic reciprocity

[312] For example, in reciprocity an increase in the amount of light through the aperture is exactly compensated by a decrease of exposure time by the same factor through the shutter speed.

set limitations that catalyze a more plastic reciprocity of doubting that plays out between photographers and their cameras.

Furthermore, framing decisions and the choice of focal length are significant factors at play as photographers doubt their translation of a scene. Police photographers are essentially "making a film one frame at a time."[313] Thus, they must continually doubt the efficacy of their next photograph before they take it to make sure that it counts as an essential frame that contributes to the logic of their overall narrative sequence:

> Sequencing plays a big part in what we are doing, we take a lot of photos where we'll take one photo just to show a location, cause then we move in real close, and if you only have that really close photo you wouldn't know maybe where you're at. So, we look back to the photo previous, to say ok now where was I when I took that photo in order to take the next photo.[314]

Thus, as the camera is applied within a scene it constantly experiments with trying out different framing possibilities before the shutter is pressed in order to create a logical sequence that accurately captures the story of the crime. Unlike almost all other genres of photography this process is intensified for police photographers who are quite literally telling their story in-camera as a consequence of being unable to erase their images. Further to this, no single shot is deemed more important than any other, and the record produced is more akin to the construction of storyboard for a documentary film where the plot is still evolving. This process becomes exploratory in the sense that in framing, as the camera grasps one thing, something else slips out of view. [315] Thus, the camera's view must constantly be recalibrated by temporarily fixing and then releasing—experimenting with

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[313] Silverthorn. "Interview with Brande Silverthorn."

[314] Ibid.

[315] John Szarkowski has suggested that the choice and elimination in framing is the central act of photography. John Szarkowski, "Introduction to the Photographer's Eye," in *The Photography Reader*, ed. Liz Wells (London and New York: Routledge, 2003).

potential views of the scene in order to best accommodate and capture important relationships between objects and subjects confined within its view. Part of this process involves what Ronald Campsie of the LAPDs Photography Unit calls “setting the camera down,” where the photographer’s ‘looking’ oscillates between experiencing the scene for themselves and experiencing it through the viewfinder:

> At some point you need to say, I’m going to take ten minutes and *I’m* going to look at this scene, because I think so many times, we’re like you know, like let’s get busy, let’s start doing the work, and so we start taking photographs and I’m so habitual in the photographs that I take, I just walk into a room and I do the thing that I do every single time. So, am I seeing everything that’s there through the viewfinder? A lot of times I feel like I don’t. And if I don’t take the time to do that, and say I’m gonna set the camera down and I’m going to look for myself, I’ll walk away from the scene and I’ll think what just happened there, like I didn’t even know, like I didn’t even see what was going on there, it’s in my photos and looking back at my photos I’ll see it, but when I am there in the moment I feel like I really consciously have to set the camera down and say ok now let *me* look.[316]

Thus, behind any ‘single’ image of a crime scene is an accumulation of hundreds of other possible images produced as the photographer continually recalibrates and questions how their experience of experiencing is being recorded by the camera. The reason almost all cameras and their subsidiary equipment is black, is to absorb instances of reflected light exterior to the frame that might be deflected back through the lens. This conceals the fact that these other surfaces and views prevented from sneaking into the final frame had at one time been considered. To highlight the importance of being present with the scene that is momentarily ‘independent’ of the camera, Joe Berner from the SDPA devised a handicap to help students understand this principal. When he teaches forensic photography at Grossmont Community College, one exercise involves placing black tape over the LCD screen to prevent the photographer from checking their photographs after taking them to help build confidence and placate anxiety over the differential between the way the photographer and the

[316] Ronald Campsie, "Interview with Ronald Campsie," by Alex Kershaw, *Los Angeles Police Department, Scientific Investigations Division, Photography Unit*, unpublished, 2015.

camera register the scene. Thus, in these ways the camera does not simply capture the scene—but facilitates and amplifies the photographer's negotiation of doubt with the scene.

In their choice of focal length (which controls the differing effects of optical magnification) the police photographer is given the opportunity to re-sculpt the relative size of objects visible within the lenses' angle of view. Joe Berner, Supervising Crime Scene Specialist at the SDPD Crime Laboratory, discusses his use of this technique, stating, "for example, if you had a gun on a bed you would want to take a picture showing the overall room, but then you would want to, kind of focus on that gun, zoom in and drop your f-stop down to kind of blur out the background so if your jury sees it they know what you're looking at on the bed, it will draw your eye in."[317] In this way Berner is conscious of the potential for using the effects of magnification as a means of producing images that will accentuate the differential between camera vision and human vision in order to produce an image that has a dramatic resonance with a jury when his photographs appear as evidence in court. This constant differential between what photographers *actually* see and the way they *imagine* what they see will be rendered by the camera keeps the process of doubt in play. The doubt that the camera makes manifest, demands constant modifications to where and how the photographer looks and the modifications they make to its settings. So while the final decision to press the shutter release is decisive, it is a decision made via the accumulation of prior relays between decisiveness and indecisiveness embroiled in a process of doubt. Even at the time of shooting, these decisions are often multiple and unresolved. Thus, a crime scene accumulates through a palimpsest of images (both real and imagined) as photographers make several passes, continually aware of the fact that they don't really know what they are looking for until they begin looking with the camera. In this way, the example of police photography can help conceptualize photographic processes as a series of indecisive

[317] Joe Berner, "Interview with Joe Berner," by Alex Kershaw, *The San Diego Police Department, Crime Laboratory*, unpublished, 2015.

junctures rather than how it has traditionally been framed as culminating in the final image as the decisive moment.

Transducing Somatic Effects

My second proposition is that the camera transduces specific somatic effects on police photographers and their subjects during photographic events. It should come as no surprise that cameras are designed with expectations as to how they are to be used. Photographers must then develop particular strategies for incorporating the camera into the ways one's body is already capable of articulating itself. In this way, as Nigel Thrift suggests, the body can't be counted separately from the world of tools. For Thrift, as we have co-evolved with tools they have subsequently produced changes in our physiology, "indeed, the evidence suggests that organs like the hand, the gut, and various other muscle and nerve complexes which have evolved in part in response to the requirements of tools have subsequently produced changes in the brain. The human body is a tool-being."[318] Thrift conceives bodies as effects of the tools to which they respond and participate. More specifically, in relation to the camera as a tool, Jean Rouch argued that technical innovations during World War II led to the development of lightweight 16mm film cameras, which made it possible for ethnographers to become more mobile.[319] The ability to use the camera off the tripod resulted in the birth of handheld filmmaking where, "instead of using the zoom, the cameraman-director can really get into the subject."[320] Rouch named this effect the "cine-trance," which granted ethnographers more improvisational and participatory engagements with their subjects. Rouche describes the "cine-trance"

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[318] Thrift, *Non-Representational Theory*, 10.

[319] Jean Rouch, "The Camera and Man." In *Cine-Ethnography*, 29-46. Minneapolis, London: University of Minnesota Press, 2003.

[320] Ibid., 39.

as a "strange state of transformation that takes place in the filmmaker,"[321] which he likened to the phenomena of possession. It connotes a "participating camera" and describes the intimate reciprocity and improvisational flow between movements of the camera operators' body and that of the camera, where the camera apparatus and body merge more closely. However, Rouch's desire to merge the movements of his own body with that of the camera (which he also likened to ballet), in order to win the confidence of his subjects seems rather distant from the work of police photographers. Perhaps, rather than the fluidity of a cinematic ballet, police photographer's choreography might more accurately be described as a form of photographic capoeira.

Apart from the immobile bodies that police photographers experience at crime scenes, they are also involved in regular photographic engagements with animate bodies. This includes graduation ceremonies, the "grip and grins"[322] of publicity photographs for major public affairs events, aerial work, as well as studio work with suspects, and victims of violent crime. In the studio, their engagements with subjects are shaped by the camera technologies they use. This is apparent in the Suspect Processing Room at the SDPD, where between 150-200 people are photographed each year. It is a fairly small room as far as portrait studios go—measuring only 70 square feet. The atmosphere is fittingly somber with its scuffed white walls and cheap incandescent lights that illuminate a baby blue backdrop (the same color used by the Department of Motor Vehicles for driver's license photographs). When photographers are working in the studio with suspects there is at least one, though more commonly two police officers present. Either a patrol officer and/or a detective is in attendance, acting as a kind of secretary—jotting down the times when certain things happen and recording anything the suspect says. However, as Joe Berner explains, it's "more about safety, they [the officer(s)] will just

[321] Ibid.

[322] Day, "Interview with Larry Day."

stand there and watch to make sure we don't get killed."[323] There are also risks associated with the potential transmission of diseases like tuberculosis, HIV and hepatitis. When Berner first began working for the SDPD 17 years ago he only had access to fixed focal length lenses. This meant that each time Berner needed a different shot; either a full body, medium or close up, he had to change lenses and then move his body either closer to or further away from his subject. As a result, Berner was regularly placed in situations where he had to get within very close physical proximity to his subjects, often suspects of violent crime. This involved shooting identifying marks on the suspect's body such as tattoos, scratch marks, bloodied knuckles, bruises or knife cuts. This was not without its hazards, as Berner explains, "some things that you would probably like to do with a close-up lens, you probably shouldn't do with a close up lens in here."[324] There were times when Berner "took a few hits to the gut,"[325] was bitten, was spat on and once kicked in the face.

In situations where Berner needed to use a wide-angle fixed focal length lens, he was brought within striking range of the suspect. In order to mitigate the dangers this presented to his body Berner developed a simple technique. Rather than facing the subject Berner would turn his body side-on (always toward the opposite side of where his gun was holstered), thus presenting less surface area for the suspect to potentially make contact with. In particular, this position protected his groin region, which was a favored target. These days, the body techniques he developed early on in his career extend to his subjects. With sex crime offenders for example, when Berner needs to get a close-up of their crotch region, he will ask them to put one leg up on a desk before moving in for the shot so they can't strike out at him without losing balance and falling over. The flexibility of now being able to use zoom lenses (which the SDPD acquired 14 years ago) means that he does not always have to get as

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[323] Berner, "Interview with Joe Berner."

[324] Ibid.

[325] Ibid.

close to his subjects as he once did. Instead, Berner is able to maintain a more distanced position that fixes him in a single location in the room as he zooms in—moving the relative distance between glass components in the lens barrel rather than his body. Unlike Rouch's aversion to the zoom lens, the SDPD's acquisition of this technology was something Berner welcomed—and unlike Rouch's desire to get closer to his subjects, Berner is much more comfortable further away.

However, there are still times when having to get up "close up and personal"[326] is unavoidable, and so Berner still uses these techniques—for example, when he needs a particular perspective that can only be achieved at close proximity or for detail shots where he must be no further than 18 inches away in order to achieve the minimum of 1,000 pixels worth of resolution required by SOPs. Berner describes his technique for moving his body side-on as having become a "totally automatic thing,"[327] to the degree that he often forgets to share this knowledge with new trainees. This technique has become habituated to such a degree that it follows him beyond the workplace:

> I shoot a lot of stuff for my church, just volunteer stuff. And I'll go to do a portrait of somebody and out of habit from here [the Suspect Processing Room], I come up side on and I am kind of like [he makes a gesture with his eyes where he scans an imaginary person] look around, and I am kind of like, oh I'm sorry I was just lookin' around to see where your hands were, sorry wrong environment![328]

Thus, the camera's effect on Berner's body has become ingrained to the extent that he uses the same techniques he developed in the Suspect Processing Room when doing volunteer work for his church group. While Rouch's notion of the "cine-trance" may have seemed like a stretch at first, my comparison serves to make the point that the camera can enact a form of possession via its ability to transduce somatic effects on the photographer—producing an affect that becomes distilled through the

[326] Ibid.

[327] Ibid.

[328] Ibid.

photographer's ongoing bodily relationship with the apparatus. In the context of both ethnographic filmmaking and police photography this is a relationship that becomes habituated through training. Thus, the camera's effect on the body in one context can continue to transduce similar effects in new contexts even to the degree where it no longer makes sense for the body to behave in such a way.

In a different way, cameras possess the capacity to transduce specific somatic effects on subjects by provoking habituated responses in their body and its associated set of expressions. This is apparent when photographing victims of crime apprehended within the camera's frame. Leonard Correa describes incongruous moments when victims of domestic violence smile while having their portrait taken. In situations—especially where he is recording facial injuries—he often has to remind his subjects to not smile. He attributes their choice to smile not simply as a default to how they normally perform in photographic events, but as a result of the camera making them nervous or even embarrassed, where smiling helps make light of an uncomfortable situation. With the knowledge that an image of them smiling is not going to help their case, Correa states that he has "an expectation of what a victim of crime is supposed to look like and a jury does as well."[329] This example evokes Allan Sekula's point that in the advent of police photography we see the paradoxical nature of a medium where its repressive and honorific modes converge. While Sekula argues that photography played a significant role in the 19th century formation of a criminal body by establishing a typology of deviance that was used to repress the lower class, it also made the celebration of the bourgeois-self available to the lower class, giving them the capacity to establish social and moral cohesion.[330] While the practices of physiognomy and phrenology were significant in establishing a repressive archival/typological approach to photography in mid 19th century, Sekula reminds us that the criminal archive of which

[329] Correa, "Interview with Leonard Correa."

[330] Sekula, "The Body and the Archive."

photography was deployed happened within the context of a more universal archive that mapped its polar the opposite of respectability and morality. While police photographers might admit to coaching subjects not to smile for the camera, they are mostly resolute about maintaining the pretense of objectivity, often convincing themselves that objectivity is somehow an inherent quality of the medium. For example, in a violent spouse abuse case where the victim is holding their baby, Correa will usually ask if someone on the scene can hold the baby so as not to "taint" the jury on an emotional appeal. However, Correa admits that in certain situations he will help the subject construct an image of themselves to better fit their profile as a victim, where in some instances he would let the victim hold onto the baby, knowing that the effect of a shot like this will more likely help secure a conviction.

Subjects know that the camera can make them something more or something less than who they say they are. Photographers make decisions about the kind of camera that she or he will use and the way it is mounted or held based on the knowledge that it will place different pressures on the subject. A more professional looking camera may be used in a circumstance where the photographer wants to demonstrate respect for the subject being photographed—one that is equivalent to the important person they say they are. Conversely, a smaller and less imposing camera might be used in situations where the photographer wishes to generate a more convivial atmosphere. Smaller focal length lenses can be used to reduce the distance between the subject and camera to make for a more intimate encounter. As subjects present themselves before the camera there is the anxiety that they will not be photographed as they imagine, especially when photographed by a stranger. For Roland Barthes the essential and discomforting paradox of posing for photographs, happens when the desire for the photographic image to "coincide" with his "profound self" can never be realized. This essential self is never reproducible and instead, "the photograph is the advent of myself as other: a cunning dissociation of consciousness from identity."[331] In the subject's experience of being recognized they

[331] Barthes, *Camera Lucida*, 12.

feel the camera's encroachment on their being and are made conscious of their own responsibility in authoring an idealized likeness of themselves. As Barthes acknowledges, when "I feel myself observed by the lens, everything changes: I constitute myself in the process of 'posing,' I instantaneously make another body for myself, I transform myself in advance into an image."[332] As subjects imagine themselves in the image yet-to-be they experience a heightened bodily awareness, a self-consciousness that can manifest in poses that clearly belong to other bodies. As Barthes notes, changes in gesture, expression or posture as a result of being photographed involve a process of self-othering. However, this othering is not necessarily submissive, instead it might manifest as resistance or subterfuge. It involves a process of synesthesia, in the sense that bodily changes are accumulative, where a sensation in one part of the body produced by the stimulus of the camera is then applied to another part of the body. Richard Schusterman has coined the term "transfiguring intensity"[333] to describe how the bodily actions of the photographer and their handling of the camera is infectious in producing a heightened sense of the subject's proprioception. Conceived somewhat differently, Vilém Flusser uses the term "affected behavior" to describe the way the subject manipulates themselves for the camera and photographer, which is a mixture of "reserve and exhibitionism."[334] Unlike other representational media this is perhaps more palpably felt in practices of photography where the differential between brevity and permanence is so acute. What I mean by this is that the camera transduces the awareness in subjects that the opportunities in which they have available to burn themselves into the image are so brief in comparison to the much longer duration in which they will be permanently preserved in the image.

[332] Ibid., 10.

[333] Shusterman, "Photography as Performative Process."

[334] Vilém Flusser, *Gestures*, (Minneapolis and London: University of Minnesota Press, 2014), 82.

As a result of the anxiety that manifests in subjects as they try to prepare themselves for images, cameras have the ability to transduce an experience of time that is out of sync with the subject's own experience of time. To illustrate this point, I will describe a photographic trick (popular with fashion photographers) I witnessed in the portrait studio at the LAPDs Photography Unit. On this particular occasion one of the "top-brass" as Andrew Millet described his subject, came in to have their portrait taken for inclusion in an interdepartmental publication on surveillance techniques. It suffices to say that things were not going particularly well. Millet could just not seem to get his subject to pose the way he wanted. As time went on, for much too long, as far as the sitter was concerned their frustration became evident. As Millet's camera kept on clicking away—and his subject kept on trying to do his thing (with a diminishing enthusiasm that stemmed mostly from embarrassment)—Millet's camera kept on clicking away to no avail. So, to fix the problem Millet's trick was to ask his subject to take a deep breath, pause, close his eyes and count to three. When he was finished, he should open his eyes at which point Millet took another snap. My reading of the situation in the LAPD portrait studio is that Millet's subject was displaced by their experience of the way that the camera segments time. So, in order to fix the problem Millet asks his subject to recalibrate himself (back into his own time) in order to address the camera reinvigorated. This is necessary because subjects are unable to experience the time of being photographed on their own terms. As they attempt to coordinate themselves into the precise moment that the shutter fires, they are never really sure if they have been able to achieve an image of themselves that they will be pleased with. The subject experiences this viscerally through the sound of the mirrored shutter opening and closing. The sound of the camera's shutter marks discrete units of time, that sit on either side of a single second that is further cut into fractions of itself. In this way the camera lays claim to the subject's experience of this time, which are continually being measured with the mechanical precision of the camera's technical disposition.[335] The subject perceives

[335] I would also argue that this is the reason several commercial photographers, particularly in the fields of sports and fashion photography have been experimenting with using video cameras in place of a traditional

these moments of time in-between each clap of the shutter as being longer than they actually are, but always not long enough. That is, never long enough to grow into the image. Thus, the sound of the shutter first punctuates, extends, then truncates the expressive cycle of the subject, transducing somatic effects that hold them to the anxious ransom that the person they know themselves to be might not be the same as the person recorded by the camera.[336]

Transducing Tasks that Moderate Empathy

My final proposition is that the camera transduces the ability to manage the quality of empathetic recognition that police photographers grant their subjects in photographic events. Here the camera works to help strike a balance between having too much and too little empathy. Disciplines like anthropology and art history/theory are well versed in criticisms of the altruistic motivations of photographers, that often unwittingly drive a wedge between participants of photographic events—

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stills camera. For example, commercial photographer Kevin Arnold has blogged about the advantages of using high-resolution 5K video cameras for his work. Writing about a 2012 sports shoot Arnold discusses the advantages of shooting on a Red Epic camera, "what I hadn't anticipated going into this was the advantages this style of shooting would offer in terms of capturing natural expressions and key moments. Obviously, when you're shooting 120 frames-per-second, it's almost impossible to miss a moment. But there's more to it. Shooting video is comparably silent and, without the constant clicking of the shutter reminding them that their every movement was being recorded, the athletes were able to forget I was there. This is huge when you're striving for authentic, candid images, a hallmark of my work." 5K refers to the horizontal pixel count of a stills video file. The resolution of a 5K video frame is almost 14 megapixels (5120 x 2700 in the Red Epic). This is more than enough resolution to meet standards for print publication. The company themselves now markets the Red Epic as video camera for stills work on commercial fashion shoots. Kevin Arnold, "Is it Time to Eliminate Stills from Your Shoot?," 2012, accessed 30 December 2015, http://aphotoeditor.com/2012/05/15/is-it-time-to-eliminate-stills-from-your-shoot/.

[336] I suspect this relationship with the sound of cameras is highly personal. Unlike the example presented here, other people find the sound of cameras comforting. For example, Roland Barthes, describes cameras as "clocks for seeing," and associates their sound with "the living sound of wood." For Barthes, this attitude stems from a nostalgia he has for devices that sonically express time like clocks, bells, and watches as well as the fact that the first photographic devices were related to cabinet making and precision machinery. In his own words: "the only thing that I tolerate, that I like, that is familiar to me, when I am photographed, is the sound the camera. For me, the Photographer's organ is not his eye (which terrifies me) but his finger: what is linked to the trigger of the lens, to the metallic shifting of the plates (when the camera still has such things). I love these mechanical sounds in an almost voluptuous way, as if, in the Photograph, they were the very thing- and the only thing to which my desire clings, their abrupt click breaking through the mortiferous layer of the pose. For me the noise of time is not sad." Barthes, *Camera Lucida*, 15.

turning photographic subjects into photographed objects. Without unnecessarily laboring over these arguments here, it is sufficient to say that there has been ample theorization over the camera's alienating effects in processes where it claims to perform as an objective document on behalf of others, only to amplify the very alterity of their subjects that photographers claim they seek to reduce. The histories of criminology and anthropology share in closely attending the nascent 'science' of photography in devising universal systems of classification for what is normal, civilized or standard and what is not. In their critique of National Geographic style photography, Jane Collins and Catherine Lutz suggest that the camera occupies a space between the photographer and subject that is characterized by distance and alienation.[337] Applying Lacanian psychoanalytic theories of the gaze to photography, they claim that the photographer's gaze is represented by the camera eye, an apparatus that struggles to fill the void between photographer and subject due to class, race and gender differences. However, as far as police photographers are concerned, it is hard to imagine why they would need to bother with trying to narrow the psychic and sensual distance between them and their subjects, especially when photographing a suspect or perpetrator. For example, in the case of Correa's work in Santa Ana, a lot of their homicides are gang related. As Correa told me, "there's always justifications for not having empathy, we had so many gang related shootings here, so it was like hey you know, live by the sword, die by the sword, and you really wouldn't take time to go beyond that."[338] At the same time however, he indicated that part of the support system his co-workers offered him to help deal with the inevitable trauma of the job—co-workers Correa identified as being "a little more empathetic"—involved them reminding him that, "hey that's somebody's son, somebody's nephew, he had a family, and so it kind of brings you back to reality again."[339] Thus, it was Correa's

[337] Collins and Lutz, "The Photograph as an Intersection of Gazes," 367.

[338] Correa, "Interview with Leonard Correa."

[339] Ibid.

contention that while it's natural and even justifiable to not feel anything for his subjects, in order to cope with the trauma of the job it was important to indeed feel something.

Alternatively, in homicide cases when photographing victims, the relationship police photographers have with their subjects is atypical given that their subjects already begin as objects. Furthermore, other than the detectives and a limited audience if the case goes to trial, they do not need to consider the ways their images address a general public. Even still, police photographers regularly profess their desire to treat the lifeless bodies they photograph with respect. For example, as Day pointed out to me, they need to be mindful of how much they rely on humor as a coping strategy, due to the way it can become habituated and eventually function to totally desensitize them. However, at the same time, there seems little point in trying to connect with the cadavers they photograph given that the desire for generating a reciprocal relationship with a subject already rendered as object can feel entirely misplaced. In these situations, what is the point in trying to forge a more empathetic connection with their subjects? What is the point in attempting to secure their subject's trust or instill a greater confidence in the subject's view of their abilities? The simple answer is that they do not need to. However, this is not because their subjects are unable to return their gaze, but given the wretched situations they are called on to document—circumstances of intense emotion teeming with cruelty, misery, abuse, or just heartbreakingly shitty luck—it is easy for police photographers to naturally develop a heightened empathetic connection with their subjects. Especially for a subject turned object that is no longer capable of resisting, let alone returning their gaze.

In this context, police photographers need to manage their empathy. They need to strike a productive balance between generating too much surplus empathy and having too little empathy. In circumstances where the photographer is overwhelmed with empathy for the victim or in the opposite case where they feel nothing, photographers are prevented from being able to get the job done. Berner believes that the ability to sit in the middle of the empathy spectrum is an essential quality for the makings of a successful police photographer. Brande Silverthorn, has described the certain amount of

empathy that a photographer needs for the victim as motivating her to remain passionate about doing whatever is best for the case. It encourages her to make sure that she stays mindful of getting all the necessary shots during a shoot. At the other end of the spectrum, Day recalls his last day with the Scientific Investigations Division as photographer as the day he realized that he lost the ability to forge even the smallest modicum of empathy with the victim he was photographing. Bent over the face of a 15-year-old kid lying dead on the sidewalk, staring at the bullet wound in the side of his forehead, it dawned on Day that the job had become too routine. The numbness of not feeling anything anymore terrified Day and the next day he requested a transfer into the supervisor's position he has now occupied for the past 15 years.

In the inverse scenario where the photographer is overcome with emotion, the camera can be engaged quite literally as a mask to prevent others from noticing their suffering. Police photographers talk of the way they "hide behind the camera"[340] when they break down on a scene as a means of buying them some time to pull themselves together. Fueled by the embarrassment that their emotions have got the better of them and also worried that others on the scene will doubt their ability to remain 'objective,' the camera functions as a shield. Whether in use or only pretending to be used, enabling them to remain preoccupied with technical and compositional considerations during shoots, the camera provides an antidote for photographers, an opportunity to moderate their empathy toward the middle of the spectrum. As photographers busy themselves with choices associated with framing and the various options for camera settings, the camera operates as an insulator, not only working disguise their emotions, but also working as to limit overly empathetic states from manifesting. In pressing the material thingness of a camera up to one's face police photographers insulate against the force of the

[340] As expressed by Leonard Correa of the SAPD: "Sometimes emotions will get the best of us, and um, you know, you're supposed to be this strong professional, ah, image out there of the department and not be flustered by emotions and things like that, but sometimes the scene can be overwhelming and we do, you know and we start crying or get upset, sometimes it's easy to hide behind the camera, so I'll hide my face and that's the same for a couple of us, we've kind of noticed that over the years." Correa, "Interview with Leonard Correa."

encounter with their subjects. As the eye locates the viewfinder and peers through, certain parts of the scene are removed from view that the photographer could clearly see with their own eyes just moments before. The camera's framing is constantly experimented with through changes in the position of their body and adjustments their fingers and hands make to the focal length of the lens as they zoom in and zoom out. The relay between these two modes of seeing in framing is constantly in operation as the photographer circulates around the scene and the items of evidence located within it. As the photographer's looking is continually mediated through the camera, they are forced to pay attention to certain details within the scene at the expense of other details. This accentuates the experience of certain elements and suppresses others. For example, while the subject's position relative to an item of evidence may be noticed the specific details of the subject's posture or injuries may not be. Furthermore, these compositional considerations are simultaneously at work as the photographer attends to alterations in shutter speed, ISO, aperture, and settings on their flash—entrusting photographers with a set of busying tasks that must be undertaken to tell their story. Day developed his own signature style that kept him busy during shoots "to keep the story going"[341] in order to present a more complete narrative of how the whole crime scene fit together. Day's technique was that as he moved from one shot to another, he made certain that some portion of the same object reappeared in each consecutive photograph. Larry put to use whatever was available at the scene—whether it be a fence post, a number on the ground, a car tire, or body part as a reference point to tie each of his shots together:

> My whole being of when I was working was I'm concentrating on composition, tying the next shot into the first, making sure my exposure's correct, making sure it's lit properly, making sure everything is gonna' be there and it's gonna' be visible… You've got so much going on you don't have a whole lotta time to be emotionally involved and intimate. I find I have a hard time with there even being an intimacy because of all the variables of being a photographer, you've gotta' get this, you've got

[341] Day, "Interview with Larry Day."

> too many other things going on in your mind… you've got to divorce yourself from the *actual* emotion of what's going on.[342]

Preoccupied with how to best compose and expose choice elements of a scene in order to tell his story, the camera is deployed to mitigate the potential for Day to develop an overly empathetic engagement with his subject. Day's attention to camera details often prevented him from experiencing the more macabre elements of the crime scene that he only noticed after the fact when reviewing the images as they came off the printer. Thus, 'seeing' through the camera is heightened at the expense of feeling less, where seeing is constituted as a form of blindness that suppresses a more emotional acknowledgement. This is marked by the tension between the photographer's desire to maintain the ideal of 'objectivity' in situations that are supremely intimate and subjective. As Brande Silverthorn makes clear, this is not an objectivity easily cultivated, "we really have to make that concentrated effort to really just be objective and not bring our own feeling and emotion into it and just show the crime for what it is."[343] It is an objectivity that photographers try to foster through developing their technique—techniques focused on solving the puzzle of the crime to award a different kind of recognition that can range from callous indifference to a sense of justice that acknowledges the responsibility crime scene photographers feel toward their victims.

In a very different way, Leonard Correa from the SAPD uses the camera as a coping strategy not only to moderate his relationship with the subjects of his photographs, but with specific locations where crimes took place in his hometown of Santa Ana. After finishing high school, Correa took a couple of photo classes at community college more for pleasure than thinking it would help him get his job as a police photographer. When I met him in 2016, it was his 27th year on the job. Over the years he has built up a vast virtual archive of places in the city that he remembers as sites of crime and

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[342] Ibid.

[343] Silverthorn, "Interview with Brande Silverthorn."

suffering—memories he revisits on an almost daily basis as he drives around the city either on the job or as a civilian. Of these places he says, "they're so personal to me, I've come to the realization that I'll never get them out of my mind, so I have to live with them, just accept them and kind of move forward."[344] As a means of being more proactive about his emotional relationship with these sites, Correa began revisiting these locations and re-photographing them with a polaroid camera. One site for example, was just outside the Santa Ana courthouse at the corner of North Flower Street and West Civic Center Drive, where in 1992 he photographed a car accident. He remembers that a pickup truck ran a red light and collided with a van being driven by a church pastor and his congregation. Eight of the parishioners died in the accident. Because of his work, Correa sees his relationship with Santa Ana as different to other people, "I drive around this city all the time, people see a building or a street corner for what it is. I distinctly remember a crime scene that happened there, a death. And it's just a part of me."[345] When I asked him why he did this, he explained that it was a matter of reconciling his relationship with these sites, so that "I could actually spend time at those scenes and um, just experience it and experience it further. Because we do everything so fast, so with this I was able to actually just sit there and digest what had occurred there."[346]

Although Correa did not intend it at first, revisiting these sites with his polaroid camera developed into an artistic practice. It was the experience of seeing an exhibition in 2004 of photographs from the LAPD crime scene photo archives at the LA County Museum of Art, that gave him the idea to exhibit his own work. The exhibition he saw—*Scene of the Crime: Photographs from the LAPD Archive*—made the argument that when cast adrift from the context of the archive, police photographs from the 1930s to the 1960s blur the line between when a crime scene image is art and

[344] Correa, "Interview with Leonard Correa."

[345] Ibid.

[346] Ibid.

when it is evidentiary.[347] In 2015, Correa exhibited his own work in the show, *Unfinished Conversation: Reconstructing the Invisible* at the Grand Central Art Center in Santa Ana. For this, he exhibited his collection of polaroid images that were then paired with handwritten notes documenting his memory of the event that took place at several crime scenes. Additionally, for the exhibition he returned to these sites several more times to photograph them with a Mamiya 645 camera on color film, so that he could print them at a larger size. One of these images depicted a dingey motel hallway, where he had attended the scene of what he suspected to be a drug deal gone bad. Correa arrived before the paramedics and with just one other officer on the scene, he got to work photographing a gunshot victim. Talking about this incident, Correa describes hearing the sirens getting closer while being absorbed in his work to try and get his shots done before the paramedics arrived and disturbed the scene. In his own words, "I'm actually almost straddling over him cause' it was a gunshot to the upper chest and I'm taking a picture of him and I stop for a moment and I realize he hasn't died. He's just now dying, I watched his eyes open, look at me, then glaze over. And it really bothered me, that I did nothing to comfort this man and then the same thing happened next week, that really hit me hard."[348] Correa told me that he wished he had the courage to just sit with the guy and that he regrets not offering comfort to a man that was dying. As almost a substitute, his work as an artist acknowledges the significance of his ongoing empathetic engagement with these sites and his memories of them. In this way, photography works as a form of art therapy, where the same apparatus he sometimes uses to literally disguise his own emotions from others at the scene of a crime, is also engaged to process the trauma associated with his work as a police photographer—to help not necessarily resolve, but cope with the way these sites continue to affect him, that is to insulate him against the ongoing empathetic engagement he has with the city of Santa Ana.

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[347] Aaronson, Deborah, ed. *Scene of the Crime: Photographs from the LAPD Archive* (New York: Harry N. Abrams, Inc., 2004).

[348] Correa, "Interview with Leonard Correa."

Conclusion

Unpacking the photographic event in the context of police photography from the perspective of the camera rather than the archive reveals this apparatus as both a *thing* and an *object*. As the LAPD Photo Unit's collection of decommissioned cameras demonstrates, cameras like photographs can elicit memories of the past. In the case of the Mamiya RB67 Pro-S, we see the camera's potential to perform as a thing in moments that exceed its 'proper' purpose as a technology of representation—that is, as a body-thing and puzzle-thing. However, in its more familiar state as an object, the camera transduces a variety of affects on photographers and subjects during photographic events. As Larry Day puts it, "we think rectangularly,"[349] a succinct phrase that reveals the way the camera performs as a bodily technology. As the experience of police photographers in Southern California shows, this rectangular thinking that cameras transduce as a technology of affect includes its ability to instigate exploratory process of photographic doubt. Specifically, the doubt that the camera will apprehend an item of evidence that the photographer does not notice as well as the photographer's uncertainty of their ability to translate their experience of the crime scene via the camera which records it quite differently. The camera is also capable of transducing somatic effects on both photographers and subjects by setting specific techno-optical limitations for police photographers whose bodies respond with innovative somatic techniques that become habituated. In addition, the camera transduces an experience of time for subjects that is out of sync with the time of their own bodies as well as affording police photographers the ability to moderate empathetic recognition with victims of crime by enabling them to remain preoccupied with composition and exposure considerations during their documentation of the scene. Finally, (although for entirely different reasons), like the perpetrator who revisits the scene of their crime, police photographers use the camera to reconstitute their relationship

[349] Day, "Interview with Larry Day."

to sites of trauma by revisiting the scene of the crime as a coping mechanism. The example of police photography serves to untether the camera from the image, where we witness it performing as much more than a technology of representation. The purpose of this chapter has been to show the ways photographs are negotiated *with* and *through* the camera, rather than simply implemented *by* the camera. Indeed, if we were privy to the photographs police photographers take, the effects of the camera discussed here would be but barely visible.

CHAPTER 4 — YOSEMITE: PHOTOGRAPHY AS LANDSCAPE MAINTENANCE

Introduction

This chapter takes place at one of the most photographed places in the world. A place whose very formation and contemporary existence is intimately entwined with photography of the American West. This is a symbiotic relationship, in which photography played a role in establishing the park and its subsequent transformations—from news of its 'discovery' in the 1850s, to its designation as America's first State Park during the American Civil War and then later in 1906 when California ceded control to the Federal Government—a maneuver which helped guarantee its future as a wilderness preserve as it gained status as the country's second National Park after Yellowstone.[350] Several years before Albert Bierstadt's Edenic paintings were seen by audiences on the Atlantic Coast, Carleton Watkins and his 12-mule caravan were busy lugging his mammoth-plate camera around "Yo-Semity" as it was then called. The vantage point from which Charles Weed captured the first image of the park in 1859 is the same place that hordes of visitors congregate each day to take their own photographs of upper Yosemite Falls. These iterations are the subject of a photograph at the Visitors Center; appearing underneath the caption "Same Scene, Different Era," is an image of an early 20th century photographer with his 8x10 view camera set up at the waterfall's base. Another view that was virtually contemplated by millions of Apple Mac users while waiting for their computers to start up, is a technicolour version of the view that Watkins (after Weed) claimed as his own in his 1866 photograph: *Yosemite Valley from the Best General View* (fig. 29).[351] Today the experience is

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[350] The Yosemite Park Act of 1864 which established protection for 60 square miles of territory surrounding Yosemite and the Mariposa Grove of giant sequoias. Then in 1890 the national park was established that was roughly 25 times larger.

[351] Although Weed took the first photographs of Yosemite, it is Watkins, who arrived two years later, that is typically acknowledged as Yosemite's first 'real' photographer. Watkins took a set of Weed's Yosemite stereoscopes with him as a reference and made many images from the same vantage points with the goal of improving on Weeds' efforts. Ted Orland, *Man and Yosemite: A Photographer's View of the Early Years* (Santa Cruz: The Image Continuum Press, 1985)

dramatized through the windshield as a vista more than a view as visitors emerge out of a massive 4,233-foot-long tunnel blasted through solid granite bedrock as they descend State Route 41 into the Valley. Should one decide to take advantage of the turnout, your car will pause where Edward Muybridge contemplated the summer rainclouds, whose subtle tonal shifts eluded the latitude of his wet plate collodion emulsion. Modern day versions of the graded neutral density filters that Muybridge invented to overcome this challenge that nature presented to photography are slid over the lenses of professional photographers who can be spotted at the edge of the viewing platform in between the sometimes 7,000 snap-shooters who make the pilgrimage here each day.[352]

In considering the dissertation's four themes, this chapter conceptualizes the photographic event as practice of "photo-maintenance." Specifically, the legacy of Yosemite's significant photographic history sets a precedent, that in tandem with interpretive frameworks established by Park Services, works to constitute a specter that conditions contemporary photo practices. This chapter argues that photographers do not necessarily *capture* the view, but instead work to *maintain* one. In this process Yosemite is rendered as a mythological and primordial wilderness that ultimately works to obscure its contemporary reality and erase its Ahwahneechee history. As such, like we saw in the chapter on police photography, the photographic event unpacks the way 'seeing' photographically involves cultivating blind spots. It should be acknowledged that this argument is more ideological than the arguments made in the two previous chapters. This however does not contradict the basic principal of my study on photography as something approached through the 'lens' of practice. Rather than a critique of the image and its attendant authorial intentions, my critique focuses on the consequences that histories of photography bring to bear on producing a sensibility that shapes practices that

[352] For many Americans visiting Yosemite is a rite of passage. In 2019, four and a half million people visited Yosemite. 2016 marked the highest visitation ever with just over five million. Although no recent comprehensive visitation studies have been conducted, somewhere between 75 to 90 percent of visitors are U.S. residents. Ariel Blotkamp et al., *Yosemite National Park Visitor Study,* National Park Service, U.S. Department of the Interior (Park Studies Unit and the University of Idaho, April 2010).

unwittingly (and in rather benign ways) perpetuate ideologies that are often contrary to the photographer's intentions. In other words, my study is a critique of the way images author practice rather than a critique of the images authored by practice. This argument is developed over three parts, each tending to different types of photo practices dispersed throughout the park. Like the chapter that takes place at Scripps Pier, these various photo practices (that in reality transpire in an uncoordinated manner) are drawn together as a means of rendering the way photography is embroiled in contradictory practices—that is, practices where photography works against its own nature as both a form of care and carelessness. Unlike Scripps however, the practices studied here are not distinguished by a division between the vernacular and the scientific, but instead by the nuanced differences and similarities between amateur and professional practices.[353] Similar to the spectacle-like nature of the beach, the photographic event unfolds in the context of a National Park that already functions as a theater—given that its primary responsibility is not to implement preservationist ideals, but to put the wilderness to work as a resource for entertaining its audience. Under these circumstances, our contemporary experience of the sublime is underwritten by the frustration of being stuck in lengthy traffic jams, as well as competing with irate visitors for limited resources or simply a quiet slice of nature to absorb the 'wilderness' experience.

Making use of the dramaturgical model for analysis, like the dissertation's other chapters, at Yosemite we see the oscillation between scripted and non-scripted practices. Here, this plays out as a tension between the way photography works to *stimulate* rather than *simulate* an experience of nature. Specifically, photography works against the grain of Yosemite's slow geological time to quicken the visitor's pace through the park while conversely encouraging photographers to linger in nature. Like

[353] Another difference is that the stage on which photography is performed is greatly enlarged. In a park roughly the size of Rhode Island, photographic activities are not concentrated around a single structure like they are at Scripps. Furthermore, unlike the unintentional framing of the seascape through the pier, massive infrastructure projects at Yosemite are specifically designed to fame experiences of viewing the landscape.

the beach at Scripps Pier, viewing platforms are co-opted as stages where visitors work like itinerant theater troupes staging one act plays where the body strikes a sequence of poses in an attempt to personalize their experience of nature. Furthermore, the body is put to work in posing at these circus-like circuit of viewing platforms to ameliorate the routine and homogenous experience of a commodified wilderness experience. Alternatively, the photo education programs run through the Ansel Adams Gallery and the Yosemite Conservancy, function as an antidote to the heavily prescribed nature of viewing. In contrast to the way the camera works to insulate the police photographer from their subject, at Yosemite photographers are encouraged to use the camera to enact "photo-foraging," and practice a version of Group f/64s "Pure Photography," to distend their experience in nature. Here their sequencing of images works very differently—rather than trying to distill the essence of a scene as 'objectively' as possible, photographers work against their better judgement to adumbrate multiple versions of the same scene or object (in a manner that is rather Deleuzian) to try and transcend concepts as precepts or sensations where the camera activates the landscape as an interlocutor.

In rendering a more distributed sense of agency responsible for authoring the photographic event, this chapter considers not only the role that agents like photographic history and Park Services play in prototyping contemporary practice, but the role the landscape and animals play in tempering the scripted nature of photo practices. Specifically, this includes an analysis of two seasonal photo events known as Moonbow and Firefall as well as "flash-photo-fires" that spark up along the roadside when animals are spotted from cars—all contributing a much-needed sense of spontaneity. In a process that I call "communal individualism," like at Scripps Pier a rather individualist spirit attends the production of photographs that operate at the scale of the individual, but via intensely communal authoring practices. Like the archetypal hunter, while Yosemite photographers might pursue their subjects with a fervor that accompanies chasing an elusive species of game animal, they also engage the camera as an exploratory device to lure subjects into view and quite differently turn the camera/gun on themselves to produce selfies. More metaphorically though, by maintaining a vision of

Yosemite's landscape as a *tabula rasa*, photographers share the hunter's affinity with the primordial. Just like cartography, photography not only provides the raw data for inscribing the land, but functions to write up one version of history while erasing another, where the past is ventriloquized to mute the prickly truths regarding the circumstances under which America's National Parks were created.

The uncanny ability of photography to function as a means of maintaining an anachronistic aura is the subject of a scene near the beginning of Don Dilello's *White Noise*. In the scene, the book's protagonist Jack Gladney and his friend Murray Jay Siskind, visit a tourist destination in Farmington, which is a barn "known as the most photographed barn in America,"[354] just like the T. A. Moulton Barn in the Grand Teton National Park, near Moose, Wyoming that DeLillo modelled his barn on. Here, the characters bear witness to a kaleidoscopic event of people watching people photograph a barn. Reminiscent of Yosemite's viewing platforms where "there were forty cars and a tour bus"—over the background noise of turnstiles of photographers snapping away— Murray muses, "no one sees the barn, once you've seen the signs about the barn, it becomes impossible to see the barn."[355] As an early adoption of Baudrillard's simulacrum, Murray captures a sense of the loss of the referent as it dissipates into mere representations. However, his attitude is not entirely apocalyptic, instead his character expresses a sense of nostalgia or even excitement for being part of this collective witnessing, noting that "we're not here to capture an image, we're here to maintain one. Every photograph reinforces the aura."[356] This scene so clearly resonates with the situation of Yosemite, where echoes of the park's most revered photographers, reverberate in the practices of today's photographers by maintaining the landscape as it always has been—an atemporal primordial wilderness—incapable of registering either the park's contemporary realities or its significant Native

[354] Don DeLillo, *White Noise* (New York: Penguin Books, 1998), 12.

[355] Ibid., 12.

[356] Ibid.

American history. This is where the chapter's end turns its attention—to the lifeworlds conjured by photographers and the way their approach is shaped by how Park Services presents Yosemite's history. Like the iterative practices of photographers at DeLillo's barn, photographers at Yosemite tend not to consider its history prior to or even after it was first photographed. At the end of this scene in *White Noise*, Murray's tone grows somber when he says, "being here is a kind of spiritual surrender. We see only what the others see. The thousands who were here in the past, those who will come in the future. We've agreed to be part of a collective perception." Indeed, such should be the attitude that we adopt in relation to the underhanded ways that Park Services continue to actively obscure our collective perception of Yosemite. Thus, in the concluding part of this chapter I address the ways Park Services present a sanitized version of Yosemite that absolves them from the very active hand they played in the eventual deracination of the Ahwahneechee: Yosemite's original inhabitants and custodians. Indeed, much like the prototypical treatment of non-western cultures as timeless and unchanging, the ethos of contemporary Yosemite photographers is exemplary of this charge. Using the metaphor of "middle grey," a term borrowed from the Zone System that Ansel Adams invented to describe the half-way point between the extremes of black and white, I argue there is a missed opportunity for practices of photography to more fully tend to Yosemite's conflicting and varied nature.

Photography as Cartography

"Does anyone know what cartography is?" asks Park Ranger Elise Watson, as she performs the daily ritual that is the sunset interpretive tour at Glacier Point (fig. 30). Making use of the almost topographic perspective we have of the valley, Watson weaves responses from the copse of audience members assembled around her to help craft a narrative of what has become orthodox park mythology. She explains that just as mapmaking played an important role in the formation of Yosemite, so did photography—essentially photography as a form of cartography. It was in fact the magnificent

photographs that Carleton Watkins took in the summer of 1861 that were responsible for ensuring that all you see around you is the way it is now rather than being destroyed by mining and logging.[357] She goes on to explain that only a few years later Watkins' stunning images inspired Abraham Lincoln to pass legislation that secured in perpetuity Yosemite as wilderness. Even though historians are unsure if Lincoln ever saw Watkins' impressively large prints or his stereographs, such is the popular sketch of history that pervades the park experience—from displays at the Yosemite Museum, to official guidebooks, as well as woven through visitor information on the Park's website.[358] However, this is not her main takeaway—the point Watson makes at the conclusion of her tour is that just like the park's first photographer and other photo-conservationist that followed him, such as Ansel Adams—our own photographs of the park will help to ensure people keep coming here and once given the opportunity to appreciate its beauty first-hand, we will never allow Yosemite to come under threat again.

If indeed there would be no Yosemite without photography, it is then perhaps unsurprising that it is impossible for today's visitor to experience the park without experiencing it photographically. While there are experiences of Yosemite that exist outside the gamut of the photographic, these are atypical. Taking pictures is the primary means via which the contemporary visitor orients their experience of the park. Even when we are not taking pictures our experience of the park is mediated by the camera. The overwhelmingly visual orientation that has historically underpinned the field of tourism studies and the fact that this field constitutes the majority of contemporary scholarship that takes a non-representational approach to study photographic practices is evidence of how thoroughly

[357] Photography and cartography are further linked because Watkins' images were taken of features that Yosemite's first visitors incorporated into maps, which then allowed subsequent tourists to locate these same views and features on their maps.

[358] An example of the pervasiveness of this popularly held opinion is its inclusion in textbooks on the history of photography. For example, see: Robert Hirsch, *Seizing the Light: A Social & Aesthetic History of Photography,* third ed. (New York: Routledge, 2017), 155.

entrenched photography is in the way that leisure is practiced.[359] Practiced as both a popular and professional pursuit that utilize the park as a commodity—photography permeates every inch of its 1,169 square miles. All of the park's visitors, whether they are hikers, cyclers, amblers, readers, drinkers, lookers, climbers, campers, painters or smokers—whether at rest or in motion—are also photographers. It is no exaggeration to say that no matter where you stop, step or stroll, the principal activity that the visitor bears witness to is people taking pictures. The presence of photography reverberates throughout the park like a never-ending echo attending to every other 'non-photographic' experience we have.

Whether you access the park from the east or the west, both entrances offer dramatic automotive experiences where larger turnouts double as platforms for photographing views. Although Yosemite has not literalized the purpose of these zones as photo opportunities like in Yellowstone (where signs depicting a camera serves as the icon for an approaching view), they do function in precisely the same way. Indeed, before you can take in the view for yourself, the first experience you have of the park are other people photographing it. Stopping to take a picture at Yosemite and stopping to take in a view have become one and the same function. As Sontag notes:

> It would not be wrong to speak of people having a compulsion to photograph: to turn experience itself into a way of seeing. Ultimately, having an experience becomes identical with taking a photograph of it, and participating in a public event comes more and more to be equivalent to looking at it in photographed form… Today everything exists to end in a photograph.[360]

While the action of snapping views might be brief, this activity congeals as the permanent condition of these sites that are strategically plotted throughout the park. If you are lucky enough to stay overnight

[359] For example see: Bærenholdt, Haldrup, Larsen, and Urry. *Performing Tourist Places*. Also see: Larsen and Urry, "Vision and Photography."

[360] Sontag, *On Photography*, 146.

in the valley, then meandering around either the Yosemite Lodge or the Ahwahnee Hotel, you will notice that unlike the walls of most hotels that usually have reproductions of paintings, it is the work of the park's more well-known photographers that grace their walls. Stepping out of your hotel, car, campervan or tour bus for a turn around the valley, most visitors at some point end up on the shuttle bus that gets them to where they are going a little faster. Those that might have, for some peculiar reason, resisted the urge to photograph are exposed to some mild propaganda enroute. Looking up from your seat, one of the panoramic advertisements pasted above the windows gives you a nudge to get with the program. Typed above an image of erect thrushes of ripe heads of Gray's Lupine it reads, "Take only Memories and Photographs: Collecting in the park is not permitted" (fig. 31). Underneath the image reads the Theodore Roosevelt quote: "wild beasts and birds are by right not the property merely of the people who are alive today, but the property of unknown generations, whose belongings we have no right to squander."[361] While this captures a sense of the way photography is pitched to encourage visitors to choose it as an alternative to more invasive practices that they might be contemplating, it also suggests that there is little concern over the effects on the park's future of having millions more images of Yosemite in circulation. This is consistent with the approach National Park Services has taken historically, whereby in prioritizing human use, they have worked with tourist bureaus, chambers of commerce and automobile associations to develop infrastructure that overrides a desire to preserve an unadulterated wilderness. However, some credit for all the picture taking must be awarded to the landscape itself. Yosemite is the epitome of the sublime—with its jagged granite cliff faces, tumultuous waterfalls and dramatic cloud formations—all of which can be seen reflected when stretched across the taut surface of one of its many picture-perfect glassy lakes. Yosemite is a supercharged photo opportunity machine, a National Park on steroids where its scale, that is difficult

[361] The credit line printed on the image reads "Photo by Neil Montanus, Kodak Ambassador."

to register within the fame, makes you wonder what kind of growth hormone the landscape has been taking.

Photography is and always has been vital to the production of Yosemite. This is an experienced shared by most other National Parks of the American West, from Montana to New Mexico and Nevada, such as Yellowstone, the Grand Canyon, Glacier and Zion. From its role in establishing the landscape of the American West as a potent symbol of manifest destiny and nationalist spirit, to producing evidence of nature's majesty to help realize the US National Park ideal, to photography's role in conjuring these national treasures as the posterchild of the modern American environmental movement—the histories of landscapes like Yosemite and photography are tightly imbricated. Also, considering the role photography played in quite literally paving the way through wilderness by lending its support to the South Pacific Railroad Company, the California State Geological Survey and early mining interests such as John and Jessie Fremont's mining estate in Mariposa County—by whetting the appetites of investors and tourists alike—Yosemite and photography have an almost tautological relationship.

Part 1. The Circus-Like Circuit of Viewing Platforms

Yosemite is designed to be experienced from the road. It is not exactly wilderness or even landscape that we experience, but a series of glimpses and views. As a whole, this constitutes what we can call a "photo-odometry," where the taking of pictures functions like a unit of measurement to gauge one's passage through space over time. Yosemite's road network comprises a heavy-handed circuit that visitors follow by car throughout the park, corralling visitors to a series of viewing platforms, that together orchestrate the primary means for experiencing Yosemite and scripting photo practices. Thus, while visitors ostensibly come to see the view, they spend just as much time with their backs turned to it while facing the camera. This activity is organized around the event of choosing one of only a few routes through the park that take you from one view to the next and then back to where

you started—pausing at each platform to take a couple of snaps.[362] Although the Southern Pacific Transportation Company was never able to lay railroad tracks so deep into the Sierras, the automobile has proved a more than acceptable substitute for Leo Marx's *Machine in the Garden*.[363] It is not necessarily the car that propels the visitor through the landscape, but instead it is the camera that puts the car to use as a means of teleporting one between viewing platforms. As Urry and Larsen argue:

> Photography gives shape to travel so that journeys consist of one 'good view' or family 'Kodak moment' to capture, to a series of others. Photography has been crucial in constituting the very nature of travelling and gazing, as sites turn into sights, they have constructed what is worth going to 'sightsee' and what images and memories should be brought back. Photography gives shape to much travel and gazing. It is the reason for stopping, to take (snap) a photograph, and then to move on. Photography involves obligations.[364]

To determine what visitors identified as their primary activity, the last comprehensive park sponsored survey of visitor behavior framed questions in such a way so as to distinguish between the activities of "sightseeing or taking a scenic drive," from "taking photographs/painting/drawing."[365] While it might be possible to differentiate these activities in one's mind's eye, if the fact that while 84% chose the

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[362] The practice of photography coordinates with the viewing platforms and road network to punctuate time in ways that connect the oscillation between stillness and motion. However, quite unlike the nature of photographs that Brooke Bergan claims are "most still when they try to simulate motion," it is the visitor's compulsion to make images that *stimulate* rather than *simulate* their motion. Thus, the practice of photography is a mercurial endeavor that immerses us in a perpetual conflict between the having to pause to take the image and the impulse to keep on moving in order to take more images. However, some visitors have managed to overcome this inconvenience by taking advantage of action cameras which they strap to their foreheads. Brooke Bergan, "A Wedge in Time: The Poetics of Photography," *The Antioch Review* 48, no. 4 (1990): 509-24. doi:10.2307/4612285: 519.

[363] Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (Oxford: Oxford University Press, 2000 [1964]).

[364] Urry and Larsen, *The Tourist Gaze 3.0*, 178.

[365] While doing a circuit of these views is certainly not the only way to experience the park, it is how most people choose to experience Yosemite. The last comprehensive visitor survey in 200 reported that for 84% of respondents "sightseeing or taking a scenic drive" was their primary activity, 73% "taking photographs/painting/drawing" and 35% "hiking". Yen Le, et al., *Yosemite National Park Visitor Study,* University of Idaho (Park Studies Unit: National Park Service, Winter 2008).

former and 73% chose the latter is not enough to convince you of possible overlap, you only have to witness what visitors do when they get out of their car to realize that sightseeing and photographing are synonymous.[366] On the other hand, if you are one the 35% of visitors who chose "hiking," you had better get there early in the morning to secure a parking spot before all the lots fill up or you will be left with little choice but to join the majority of visitors sightseeing via car.[367] These statistics line up with what scholars of tourism studies have observed about viewing platforms, that are "powerful in attracting and immobilizing tourist flows. Virtually no one misses out on such open views; walking is put on hold, eyes gaze, fingers press shutters, bodies pose and loud travel talk is heard."[368] Although in the case of Yosemite, the flows of human traffic are only temporality immobilized at the platforms, each offering a dramatically different view, a form of bait that keeps the itinerant visitors in perpetual motion.

These prescribed experiences are understandable given the routinized and commodified nature of contemporary leisure practices. Yosemite is no exception to the tensions inherent in the way tourism experiences are constructed, in that while travel gives us the freedom to "escape from the patterns and rhythms of everyday life,"[369] it does so in a way that gives the experience a sense of order that is beset by the same types of rules that are a part of the everyday nature of our predictable realities. Due in part to its mechanized nature and its industrial or commercial applications,

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[366] While I am not speaking about visitors that choose to hike in the backcountry or other more prolonged experiences of the park, only 4% of visitors engage in overnight backpacking. Blotkamp et al., *Yosemite National Park Visitor Study.*

[367] As Lucy Lippard writes, "at first people couldn't get to the national parklands *without* cars. Today it's hard to get into them *with* cars." Lippard quotes the views of a park ranger from the mid-1960s who described Yosemite Valley as "A fair-sized city (40,000 to 60,000 people) complete with smog, crime, juvenile delinquency, parking problems, traffic snarls, rush hours, gang warfare, slums, and urban sprawl." Lucy R. Lippard, *On the Beaten Track: Tourism, Art, and Place* (New York: The New Press, 1999), 135-136.

[368] Bærenholdt, Haldrup, Larsen, and Urry. *Performing Tourist Places*, 82.

[369] John Urry, *The Tourist Gaze: Leisure and Travel in Contemporary Society* (London: SAGE Publications, 1998), 31.

photography is an activity that has a habit of organizing leisure as an extension of work. In the context of hyper-capitalism, photography offers the perfect leisure experience. A form of what we could call productive leisure or "purposeful purposelessness," its effort pays the reward of producing a tangible commodity as realized in the photograph. In this way, as Larsen and Urry argue, photography creates obligations, thus quelling the anxiety that accompanies leisure time when you are meant to be unproductive. This view coordinates with Sontag's vision of the appeal of photography to "people handicapped by a ruthless work ethic—Germans, Japanese, and Americans. Using a camera appeases the anxiety which the work-driven feel about not working when they are on vacation and supposed to be having fun. They have something to do that is like a friendly imitation of work: they can take pictures."[370] Thus, photography is the perfect accompaniment to the American National Park ideal that was created not on the premise of preserving nature, but commodifying it to fulfil their primary mandate to offer entertainment and a wilderness ideal rooted in the spiritualizing capacity of nature to produce a productive citizenry.

While there is merit in the argument that the coercive nature of this experience produces a homogenized experience that ensures the same images are perpetuated over and over again, or even that travel photography placates feelings of disorientation in a new setting by making the strange familiar, these are not arguments I wish to make.[371] Instead, photography is practiced at these sights to alleviate the disappointment or anxiety or frustration that accompanies feeling like you are having exactly the same experience as everyone else. So, it is not so much that visitors are a bunch of mindless automatons pointing the camera wherever they are told, but more that they engage the

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[370] Though in the context of a post-internet age, Sontag's argument that what motivates tourists to take photographs is the need to "assuage general feelings of disorientation that are likely to be exacerbated by travel," are not as relevant as they once were. Sontag, *On Photography*, 7.

[371] For good coverage of the second argument see: Erik Cohen, et al., "Stranger-Local Interaction in Photography," *Annals of Tourism Research* 19, no. 2 (1992): 213-33, doi.org/http://dx.doi.org/10.1016/0160-7383(92)90078-4.

medium as a corrective to make the most of what feels likes a cheapened experience. Thus, as will become apparent from my descriptions of the photo activities at these platforms, photography works to personalize an overwhelmingly impersonal experience. In contradistinction to the orderly and routine nature of the photo circuit, photography is performed in ways that are haphazard or improvisational, thus the bodies of tourists "are not just written upon, they also enact and inscribe places with their own stories and can follow their own paths."[372] I do not mean to suggest this constitutes a form a critical practice in response to the highly prescribed nature of how visitors are coerced into witnessing the park, but more that it is a means of soliciting the spontaneous and the unpredictable in the context of a situation where you feel like you are being forced to have the same experience as everyone else.

A Circuitous Circus of Coercive Views

Pulling off Northside Drive on my way out of the park into the Valley View turnout just before sunrise, I entered the carpark and saddled up alongside a blue truck. As the only other sign of activity in the immediate vicinity, this was one of those rare moments where one gets to share their experience of Yosemite in relative solitude. Exiting my car, I noticed the truck's passenger seats were folded over to make room for cargo that comprised two full-sized black metal postcard racks laid down flat and stacked full of cards depicting Yosemite's views. One rack was reclining along the rear passenger seats, while in the front, the other rack was sitting upright and strapped in with a seatbelt as if it were a passenger. The sign at the top read "Cards, 5 for $20: Best Deal or $5 each. By Local Photographer: Nancy Robbins." I spotted Nancy Robbins wading along the edge of the bank capturing views of the Merced River as the sun began to slowly fill the valley. Obscured from her view by my own car, I began a closer inspection of the contents of her truck by trying to photograph through the window (fig. 32). Though it was difficult to see the views depicted and not really knowing why I felt

[372] Urry and Larsen, *The Tourist Gaze 3.0*, 252.

compelled to take what felt like a pointless series of images, I found myself imagining that I was standing outside a souvenir shop spinning around these same carousel racks to select a view. Apart from the fact that postcard views were being taken on a tour of the park to create more postcards, this experience felt uncanny for the way it caused a mild sense of Déjà vu, that was most likely induced given that I had just finished attending a tour of the park with a group of photographers—an experience that felt like being on a circus merry-go-round. For the past five days, our group had been doing repeated circuits of the park, moving from one location to the next to capture our own views of the park.

The strangeness of this feeling might also be a result of the fact that ironically, while photography worked as an exploratory agent in establishing what have become Yosemite's iconic views, this sense of discovery is the antithesis of how the park is experienced today. Instead, visitors follow in the footsteps of well-heeled photographers whose work established and legitimized these views. As Yosemite National Park's website declares: "the view that Ansel Adams made famous, Tunnel View is a must stop for any first time visit to Yosemite Valley."[373] Although the road network that Adams took advantage of to make his iconic images was established long before as a result of the government-sponsored topographic camera surveys that employed the likes of Charles Weed, Carleton Watkins and Eadweard Muybridge as modern day advertising photographers to attract investment, to build infrastructure and open up the park for extractive industry and tourism. By the time that Ansel Adams showed up, much of the hard work was already done. Most of his iconic images were not of views one had to hike for days to reach, but easily accessible from the roadside. Adams built a platform accessed via a short ladder on the side of his car for gaining a little height advantage, which today would be quite useful for shooting over the canopy of heads formed by crowds of photographers

[373] Yosemite Mariposa County Tourism Bureau, "Tunnel View," accessed February 5, 2020, https://www.yosemite.com/what-to-do/tunnel-view/.

(fig. 33). Rather than being invited to wander through the park and discover it on your own terms, park infrastructure is organized into a highly coercive schema to efficiently funnel visitors into the park and spit them back out again. While this is understandable, as a means of minimizing human impact on its ecosystem, altruistic concerns are not the principal motivation for the heavily prescribed nature of park infrastructure. Ultimately, it is just a matter of how to move the most amount of traffic through the park with the minimum amount of congestion.[374]

There is only ever one road to choose from in order to get you to any destination within the park. To enter the park, you have only two options—highway 140 or highway 120. From the east on the 120, heading over the Tioga Pass you have the option of sightseeing at destinations such as Tuolumne Meadows, Olmstead Point and Tenaya Lake. The entry via the 140 is accompanied by striking views of the Merced River, after which you can stop at Tunnel View before entering the valley. At an elevation of 9,943 feet at its summit, the Tioga Pass road is closed for roughly five months of the year on account of the snowfall. That means the park can only be accessed from the west for almost half the year. Both immaculately maintained roads funnel you down into the Yosemite Valley which has the most concentrated number of views including Sentinel Bridge, Lower Yosemite Falls, Mirror lake, Valley View and Bridalveil Fall. If these viewing areas are not enough to entice you

[374] The coercive nature of the viewing experience is not uncommon to the national park experience. As Emily Greenwald points out in her assessment of Yellowstone, our way of looking at national parks "became entrenched, almost frozen, at well-travelled sites such as the national parks, where the built environment and travel literature combine to push each visitor into the same visual relationship with the landscape as all those who came before." Part of the reason why Yosemite, like Yellowstone, is primarily experienced this way is that for visitors who stay one day or less (which accounts for 95% of all visitation), the 214 miles of paved road through the park is more than enough to satiate their desire for discovery. Keeping visitors circulating through the park is crucial to avoiding critical traffic congestion that brings the park to a standstill. For example, during peak visitation times, especially over the summer months, traffic jams transform what is normally a 20-minute drive into a five-hour crawl. As reported by Thomas Gregory of the San Francisco Chronicle in 2018, "to anyone who has visited Yosemite in recent years, the idea of an unencumbered stroll in the valley must seem like a quaint anachronism." Emily Greenwald, "On the History of Photography and Site/Sight Seeing at Yellowstone," *Environmental History* 12, no. 3 (2007): 659, doi.org/10.1093/envhis/12.3.654. Gregory Thomas, "Yosemite Valley is under Siege from Tourists. Can It Be Saved?," *The San Francisco Chronicle* (San Francisco), April 27, 2018, Travel, https://www.sfchronicle.com/travel/article/Yosemite-Valley-is-under-siege-from-tourists-Can-12867769.php.

into the valley, you will most likely need to make a stop here in order fill up your car with gas. Known as Yosemite Village, part of the valley functions as the park's throbbing epicenter containing all the cultural attractions and amenities, including: two hotels, three campgrounds, souvenir shops, a supermarket, as well as a courthouse and a chapel. The Loop Road, as it is called, gets you around Yosemite Valley. Circling the Merced River, it operates on the principal of a speedway circuit where the traffic flows in only a single direction. If you miss your pitstop there is no backtracking, so you must keep following the circuit until you reach your destination once again. In fact, backtracking along the same road is how most people experience the park given that almost all people exit from the same direction they enter (as the two entrances will place you on opposite sides of the Sierra Nevada) and that if you plan to exit the valley for sightseeing, you have to take that same road back in again. Traveling back and forth along the same road is something dedicated photographers experience more than most. As per the advice of numerous Yosemite specific photo-guides, that list the times of day that each of the views are best captured, the most efficient route through the park typically does not coordinate with the route that will offer the most dramatic images.

The only real autonomy the visitor has in experiencing these viewing platforms is what time of day and in what order they choose to visit them. The basic blueprint for your trip is outlined for you, when in exchange for handing over $35 per vehicle entrance fee you are provided with a visitor's map. This standard map and many others like it coordinate with signs that work to organize the flows of cultural choreography.[375] Furthermore, for the roughly 60 percent of people who are first time visitors—especially those who have taking pictures on their mind—a plethora of readily available guidebooks help make most of these decisions for you. For example, Andrew Hudson's *PhotoSecrets Yosemite: The Best Sights and How to Photograph Them* or Michael Frys' convenient pocket-sized chaperon: *The Photographer's Guide to Yosemite* with its map of "classic views" that can be reached

[375] Bærenholdt, Haldrup, Larsen, and Urry. *Performing Tourist Places*, 76.

on a “driving tour of Yosemite.”[376] Even non-specialist books such as Steven P. Medley’s, *The Complete Guidebook to Yosemite National Park,* has a section on photography. Guidebooks such as these play a role in creating what John Urry calls the "hermeneutic circle," to characterize how tourist behavior is determined by travel brochures, postcards, signs, designated viewing platforms and guides that are sources of power “marking out the conduct of visitors and laying out the ‘right’ modes of perception.”[377] This meta-data serves to underwrite the experience in ways that work against the visitor’s autonomy, as Caroline Scarles argues, **“**brochures become analogous to theaters; they image stage scenes through which consumers enter imaginative touristscapes and personally connect with place by creating performances through mindsets where consumer and product unite.”[378]

Whether you are entering or exiting the park, two additional views become available when you peel off the 140 onto the 41. Traveling along the 41 to reach Glacier Point and Mariposa Grove (located in the park’s southern extremity), together with those views already mentioned, constitutes the basic circuit of Yosemite National Park. The design of this road is similar to the design of other roads in the park that have been built without shoulders, so the only place you can pull off without running the risk of being rear-ended is where a turnout is provided. It is unlikely that one of the sparsely spaced out turnouts will coordinate with moments that occur while driving when something catches the attention of your peripheral vision, enticing you to leave your car and investigate further. Instead, your attention is divided between the direction the road wants to take your car and looking back over your shoulder to check that you didn’t miss out on something interesting. Even when the topography naturally creates a spot you might be able to squeeze your car into, these natural egress points from the road are purposefully blocked with barricades. One purpose of this, is that all parked

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[376] Michael Fry, *The Photographer’s Guide to Yosemite* (San Francisco: Yosemite Conservancy, 2012), 10.

[377] Lean, Staiff, and Waterton, eds., *Travel and Representation*, 7.

[378] Caroline Scarles, "Mediating Landscapes: The Processes and Practices of Image Construction in Tourist Brochures of Scotland," *Tourist Studies* 4, no. 1 (2004): 47.

vehicles are visible to rangers who patrol the park from the road. At about 6:00 a.m. each morning Yosemite rangers go out in search for the more freewheeling visitor who mistakenly thought they could stay overnight in the park without booking months in advance. Their lack of planning provides a steady revenue stream for the park by ticketing visitors who had no other option but to sleep in their cars. Unless you plan well in advance to take one of the more remote walking trails, the Yosemite experience is uncanny for the feeling of being in an enormous wilderness preserve, where almost every square inch of space is already spoken for. Of course, these decisions to limit choice work in concert with the natural topography, where steep rocky cliffs buffered by densely wooded terrain, work to further limit any hope for either a more off-road experience or simple carefree wandering. Other than the provision of a limited number of paved roads, there are no backroads to explore. While there are options for taking the walking trails for a day-hike, it is a mistake to think they are any less crowded than the roads. The only option of having some relative solitude is on a multi-day hike on one of the backcountry walking trails and even if you could organize this at a moment's notice it would not be possible as these ventures like the John Muir Trail operate via a highly competitive lottery system that must be planned well in advance.

As one of the park's most famous views, Tunnel View is something of a tease, as its approach prolongs the desire of wanting to escape the confines of your car (especially after a long journey) and capture the view. After passing just beneath the summit of Turtleback Dome, you begin your descent into the valley. Here the road snakes its way along the cliffside offering only partial snippets of the valley glimpsed through patches that open up in walls of unruly brush thrown up along the roadside. This experience continues for several miles, where you are only ever offered small flashes that you piece together to help imagine the full view before the vista is revoked completely when you slip into the darkness of Wawona Tunnel.[379] This momentary sensory deprivation is the final prelude to the

[379] This notion of a patchworked view assembled while moving a speed is described by Wolfgang Schivelbusch as the "mobility of vision." Schivelbusch likens the way the car structures human vision as being

entire valley opening up for you immediately upon exiting this portal. Then, without warning, a large viewing platform presents itself as a chance to satiate your desire to finally experience a view of the entire valley.[380]

The anticipation of gaining access to the view is further extended by the frustration of finding a spot to park your car and the oftentimes precarious process of accessing the platform. The suspense of being presented with the opportunity to view is further dramatized upon exiting the tunnel when you suddenly realize you need to slam on the breaks to exit for one of two carparks that straddle either side of the road. If you are not lucky enough to snag a spot in the larger parking lot that is on the same side of the road as the viewing platform, you must cross back over the main road. Here you run the gauntlet between drivers whipping round the blind corner in the opposite direction as they exit the park and drivers exiting the tunnel who are also blinded as their dilated pupils adjust to the sudden blast of sunlight. This situation, combined with the road's asphalt surface that is kept wet by groundwater leeching form the tunnel's granite walls, help account for the hundreds of motor vehicle

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similar to the way one encounters an onrushing of images like those experienced on television and film. In his own words, "the traveller sees… through the apparatus which moves him through the world. The machine and the motion it create become integrated into his visual perception; thus, he can only see things in motion." Wolfgang Schivelbusch, *The Railway Journey: The Industrialization and Perception of Time and Space* (Berkeley: University of California Press, 1986), 66. Quoted in: Peter Osborne, *Traveling Light: Photography, Travel and Visual Culture* (Manchester; New York: Manchester University Press, 2000), 168. The car, like the viewing platforms and the camera, offers a means for structuring views of the park. I agree with Schivelbusch's argument that there is a cinematic quality to the glimpses that one experiences as framed through the car. Many of the more arresting scenes that one catches out the window are a bit like stumbling across a Gregory Crewdson photograph in the making, which intensifies the feeling of having a premeditated experience. For example, these glimpses I saw out from the car window include a lone car pulled off to the side of the road at dusk, with a family trying to find a set of lost keys via flashlights. Or a landscape illuminated by the flashing lights of an ambulance and fire truck attended by firefighters in gas masks as they try to extinguish a campervan that has erupted in fire where off to the side are a few suitcases that the family managed to salvage.

[380] This dramatization of one's entry into the park, resonates with Rosalind Krauss' idea that the kind of entertainment experienced in viewing a stereoscope is like the experience of moving through a tunnel. Like our eyes piercing through the stereoscope, passage through the tunnel involves experiencing a "deep channel of space," that works to accentuate the recession of space that one is about to experience. Rosalind E. Krauss, "Photography's Discursive Spaces: Landscape/View," *Art Journal* 42, no. 4 (1982): 311-19, accessed September 3, 2019, doi:10.2307/776691.

accidents each year. By last count there were 528 accidents in Yosemite during 2019.[381] The accident-prone nature of accessing this viewing platform is intensified during the chaotic summer months as the National Park Service warn on their website, "this spot can be very popular in summer, so try to arrive early."[382] During peak visitation one's experience of Tunnel View is attended by an orchestra of car horns, wheezing breaks and impatient quips between motorists, walking through the parking lot to the platform you cop an extra blast of heat from the idling engines of tour busses that keep their air-conditioners running.[383]

Personalizing the Homogeneity of Viewing

Eventually, when visitors do manage to access the platform at Tunnel View, they are more than ready to cut loose to regain some semblance of autonomy over their experience of the park. Like we saw at Scripps Beach, the real purpose of photo practices here is less about the desire to produce images and more about personalizing their experience in forms of socialization constituted in the practice of *making* rather than *taking* images. Visitors surge from their cars to claim a spot in between landscape photographers who have set up tripods that are pressed against the edge of the perimeter wall that they use to sit, stand and jump on. Like the camera apparatus, the platform is a viewing technology that both imposes limitations and offers possibilities for capturing the view. Tunnel View's advantage is that it orientates the camera's sightline in a North-East direction, which means that the camera never needs to point directly into the sun, thus providing ideal conditions in either the morning

[381] Yosemite National Park California, "Park Statistics," National Park Service, last modified January 30, 2020, accessed February 5, 2020, https://www.nps.gov/yose/learn/management/statistics.htm.

[382] Yosemite Mariposa County Tourism Bureau, "Tunnel View."

[383] Tunnel View is an example of how park infrastructure has not been able to keep pace with the way visitation has dramatically increased. Horns are constantly blasting from cars that have been parked in by those left with no other choice for getting out to see the view. Others pull off to the side of the road, being careful not to run off it completely.

or the afternoon. Here, the daily program that attends this landscape primarily involves friends, family and couples arranging themselves into an infinite number of bodily articulations in front of a view that is bounded by a walled perimeter (fig. 34). This backdrop for portrait work includes some of Yosemite's most well know natural features such as El Capitan, Half Dome and Bridalveil Fall. Like Yosemite's other viewing platforms, this theater is more akin to the preparatory and uncoordinated nature of an orchestra pit readying itself for the main event. Individual troupes of photographers, usually no more than two or three, sound out their own distinctive photo instruments which together produces a cacophony of loosely coordinated activity as they move from one spot to the next, striking different poses for the camera. Although here, professionals and amateurs alike, tinker with their instruments not as the prelude to one coordinated event, but in separate acts of perpetual preparation and conclusion as one image is taken and then the subject re-adjusts itself for the next photo. These activities constitute what we can call a "photo-pit," that functions as the primary accompaniment for staging the landscape. As proprietary manifestations of the Yosemite brand, these views are maintained not just by photographers, but for photographers. Each day as part of Yosemite's guided tour, an open-air tram (which is more like a miniature road train at the front with a toy carriage attached) pulls into Tunnel View. A Yosemite ranger sits at the helm and announces over the loudspeaker to the group soaking up the view from their seats, "this view is so special that they will cut the trees down to maintain its integrity." Looking out we notice that with the precision of a Zen bonsai gardener, in what Richard Sellars calls "the scenic facade of nature,"[384] a few pine trees have been left to offer a sense of scale and something for photographs to place in the foreground of their images to anchor their compositions.

[384] Richard West Sellars, *Preserving Nature in the National Parks: A History* (New Haven: Yale University Press 1997), 70.

Claiming a sense of ownership is partly achieved given that no universal meaning can be attributed to the poses produced for the camera. If Guillaume Duchenne and Eadweard Muybridge were still around, Tunnel View and other viewing platforms like it, such as Glacier Point and Lower Yosemite Falls, would present a challenge to any topological study that hoped to derive some systematic meaning that we could attribute to the human pose and its accompanying set of expressions. Although, rather than inducing bodily articulations via electric shocks or trip wires, visitors here need little coaxing to strike a pose. Indeed, it is not the photographers here that elicit the choreography of the shoot, but instead it is the subjects who are the primary authors as they lead their photographers around the platform. Meaning often remains rather opaque seeing that the logic of why a certain sequence of poses are performed is known only to the subject. Furthermore, it is not necessarily the case that any meaning at all is intended to be communicated through posing for the camera. For example, sometimes the rationale for the way a sequence unfolds is simply based on whatever is easier—an economy of movement where similar gestures are repeated. For example, a palm is rotated to face the camera while fingers are articulated upright into the "V," for victory sign. For the next shot, this gesture is amplified by substituting the two raised fingers with two arms that are spread wide from one's body. From there, the elbows can be bent inward to join one's hands to sculpt the silhouette of a heart. (figs. 35 and 36). Attempts to translate these gestures as though each new pose in a sequence of photographs is a separate word within a sentence, does not typically reveal any discernable meaning. As in the case above it would read: "Peace," "I am here," and "I love you" or "Victory," "Sacrifice" and "Togetherness." While it is a form of communication, it is not one that resembles any linguistic system, but more that each pose is a singular expressive self-contained act, where emphatic statements of presence and physical expression win out over any systematic meaning. Furthermore, while there are clichéd poses that one witnesses again and again, like the "V" for Victory, there is no common agreement over what any of these standard poses mean. For example, while the "V" for Victory no longer connotes a time of war and some might consciously invoke its use

as a countercultural symbol of the 1960s—like many photo-gestures—its meaning is not only culturally contingent, but its ubiquity has emptied it of any universal meaning. Thus, while there is no doubt that many of the poses are scripted, it is a script that is never easily interpreted.

To alleviate the homogeneity of traveling between the viewing platforms, the logic of how people coordinate their gestures and expressions is quite uncanny—a logic more akin to a one-person adaptation of the surrealist drawing game the Exquisite Corpse. Similar in nature to this childhood-like game, the way people script a sequence of poses is spontaneous, nonsensical and willy-nilly as they draw from an imaginary supply of categories and genres where the next act is only ever at most loosely connected to the last. Furthermore, intuition and habit serve as a resource for choreography. For example, a sequence might include the "two thumbs up," followed by hands on hips looking down, as if to say "I don't give a shit," and then finish in a cutesy cherub pose where the weight of a slightly tilted head is supported by palms that cup the jawline and cheeks. At other times, the game-like nature of posing expresses itself more cynically—as if to underscore the routine nature of viewing—some poses express feigned surprise like the "Edvard Munch Scream" or when an eye suddenly appears through fingers fanned apart or when a face pops up from behind the shoulder of another subject or when two palms face forward at shoulder height for the "stick 'em up."

While the clumsy assemblage of unique categories that participants select poses from includes recognizable pop-culture references, there are others that are less discernable. Sometimes for the spectator, a pose alludes to a something hidden under the surface of thought—a mental image that you can't quite put your finger on. Pop references include the "two-handed hip hop finger chop," or the "sign of the horns" (where the index and little fingers are extended while restraining the middle and ring fingers with the thumb), gestures appropriated from music and sports culture. Or in a reference to the cinema—a pair of lips are gently pursed, eyes wide open and the right hand elegantly poised to hold an imaginary cigarette—reminiscent of Audrey Hepburn's hero shot for Breakfast at Tiffany's. The art of looking is also clandestine as lovers that snuck off for a dirty weekend tease each other with

the camera before checking into their hotel. It is not only adults who engage in play, but children who practice cocking a snook for the camera or collapse on the ground from exhaustion as though the puppeteer animating them went for a lunch break. To psych oneself up for a strenuous hike they have planned for later in the day, there are shows of superhuman strength and supernatural ability. For example, Wonder Woman is invoked by placing hands on hips with legs spread wide apart for stable footing or generic strongmen are invoked when bulging triceps are flashed at the camera while the other arm is extended as it punches into the sky. Elsewhere, there is no shortage of cheeks being pushed aside to make room for the force of a smile that coordinates with a surfeit of saccharine expressions that allow emotions to pass between people when drawing back on cupids' arrow or launching a kiss from the palm of one's hand. Contact between people becomes physical when two or more people coordinate in poses such as the "back-to-back," where they support each other's weight.

It is not only the agency of individual photographic subjects that play a hand in resisting the potentially uniform nature of experiencing Yosemite**.** Tour operators and the gestural conversations that take place between subjects of the camera and the landscape itself also play a role in particularizing experience. In a somewhat more bizarre, if not innovative iteration of laying claim to a unique experience of Yosemite, the genre of fashion photography is combined with amateur landscape photography. Tour operators and photo clubs based in larger population centers close to the park, including San Francisco and Sacramento, have cashed in on the visitor's desire to individuate their experience of Yosemite by offering bespoke photo tours where small groups of photographers are chauffeured around the park in minivans with fashion models, hair stylists and make-up artists in toe. The basic format for the tour involves these troupes doing a circuit of the viewing platforms around the park, where at each pitstop the models exit the comfort of the minivan and perform a series of poses in front of the view for their photographer patrons. This can be seen in figure 37 where two

Chinese models dressed in couture, perform for their group of 15 patrons from the San Francisco Photographers Association.[385]

Situations such as these disrupt the atmosphere of the viewing platform for the extra attention they garner from other visitors, when rather than being just one photo troupe among the others, they become the main event. Similar in nature to the more premeditated photo-shoots at Scripps Pier, in cases like this, photographers that are not paying customers of these fashion model tour groups, edge in on the sidelines and engage in “photo-poaching” as they make their own images of the spectacle. Furthermore, though in a in a less obvious manner, photo troupes also poach from the performances of other troupes inadvertently. Typically, this is done by subjects rather than photographers—when rather than relying solely on mental images to arrange oneself—the posing of another subject is infectious as people appropriate and modify snippets of each other’s actions for their own shots. For example, the “hitchhiker” pose of one troupe triggers the subject of a different troupe who appropriate the gesture by giving the “thumbs-down.” Thus, like a game of telephone, poses get muddled up as these cues are passed between different subjects operating simultaneously on the platform.

Given that the performances of photo-subjects are the most changeable element of the images created at viewing platforms, it is easy to gloss over the landscape’s contribution. While walking though Mariposa Grove, I passed a group of three friends mulling around taking pictures of one another, when one of them who was visibly impatient and waiting off to the side snidely remarked “same pose, different background.” While this insight suggests there is scope to consider the landscape as the more significant variable, this only applies when considering the work of individual troupes rather than considering the work of photographers collectively. For my purposes, this comment points to the scope for considering cases where subjects and photographers directly involve or acknowledge

[385] Park Services seeks to cash in on ventures such as these. According to Catherine Carlisle-McMullen, the Film & Weddings Permit Manager for Park Services, operators like this are required to pay a single use fee of $400. Catherine Carlisle-McMullen, "Interview with Catherine Carlisle-Mcmullen," by Alex Kershaw, unpublished, May 13, 2015.

the landscape as a collaborator. Some poses register ‘invisible’ climatic forces, such as the “backhanded brow wipe” to indicate a sense of exhaustion induced by the summer heat. At other times, features such as rocks are used to bolster subjects who arrange themselves in the lotus position to imitate Buddha. Furthermore, the grandeur of this awesome wilderness invokes vestiges of a manifest destiny spirit, expressed as patriotism when poses such as the “pledge of allegiance” or the “scales of justice” are performed. In this vein, the most common category of pose to harness the affordances of photography’s two-dimensional nature is perennially engaged in acts that virtually connect the body with some feature of the background. For example, at Glacier Point when a subject extends their four finger digits and wipes them from side to side and also when the camera’s angle of view is arranged so that this is superimposed over the face of Half Dome, it appears as though this finger polishing were the reason for its smooth curvature. In another example, along the walking path to Lower Yosemite Falls—a neck is twisted to orient the face toward the sky and a mouth is opened wide to take huge gulps from the waterfall as though it were a fountain. In other cases, the body aligns itself to animate features of the landscape—an outstretched arm and flat palm is pressed against the trunk of a tree, pushing it sideways to a precarious angle. Like other categories of the pose already discussed, the reason that witnessing this is bemusing for the spectator is a result of the slippage between how the pose is caught on camera and how this arrangement is experienced by spectators in real space. Put simply, people look silly when the spectator’s imagination is required to complete the puzzle that can only ever be solved from the perspective of the camera’s viewfinder.

Another means of personalizing one’s experience of Yosemite involves ‘touching’ the landscape via the virtual connections that visitors make using drones, tablets and camera phones. At Glacier Point, some take the risk of defying the park regulations by launching drones from the viewing platform. As means of accentuating the sense of vertigo that can be induced by simply peering over the guardrails, VR goggles are strapped on to guide an experience of Yosemite Valley from the air. While the DSLR remains more a camera than a display device, the opposite is true for these highly

portable handheld display technologies. Often protected in faux leather, silicon and plastic cases that frame a mirror-like surface, they share an affinity with the daguerreotype. Furthermore, the scale at which a live representation of the scene is rendered by a tablet approximates the scale at which a traditional 8x10-inch analogue view camera would render the scene. Like the daguerreotype, these devices remind us of the role that touch plays in photography—although in this case, it is the surface of the image that is acted upon. As imaging devices, fingers slide and smudge across the touch-screen's highly polished aluminosilicate glass surfaces to expand, swipe, snap, contract and tap at real-time representations of mountains, trees, plants and animals. As if an homage to precursors of photographic technology, these contemporary imaging technologies once again resemble drawing aids as scenes are rendered by hand when they are used expressively for taking panoramas where bodies rotate and arms pan to quite literally trace the contours of mountains and ridgelines.

An equally gestural image and perhaps the simplest way to reclaim the potentially homogenous experience of touring Yosemite's views as if they were your own is to compose a selfie. Throughout the park, arms and telescopic poles clutching cameras are constantly extended and retracted. Subjects compose self-portraits using these digital mirrors on the fly as they make adjustments to their own expression, hair and posture, as well as the camera's angle of view. Often snapped at the moment when the camera phone or tablet is steadied as far away from the body as possible (so as to capture more of the view in frame), the trick is to maintain an effortless expression that obfuscates the physical exertion required to construct such an image. The uncanny nature of arranging oneself for a selfie is that while a sense of repulsion is invoked in the gesture of an arm extended far away from the body (as though one were holding some horribly foul smelling thing on your way to the trashcan), there is also an element of infatuation. Although, what makes the advent of witnessing other people take selfies most strange and what also makes this a more emphatic statement of individuality (at least as far as the genre of portraiture goes), is that while the gesture is designed to invoke forms of acknowledgment, it is one that we as strangers shall never witness, seeing the

possibility for satiating the desire for recognition can only ever be realized once the image enters digital social networks. Cut off from the selfie's extrospective function, it is bemusing for spectators to witness countless 'mad' individuals undertaking the linguistic equivalent of talking to themselves. Thus, by only having access to the selfie via the photographic event—to witness people making selfies is to experience a social space where, for the time being, it is as though people are incessantly chattering to themselves. As media scholar Paul Frosh has argued, the selfie is a "gestural invitation to distant others."[386] Frosh links the selfie with Bronisław Malinowski's notion of "'phatic communion, a type of speech in which ties of union are created by a mere exchange of words, whose primary purpose is the production, expression, and maintenance of sociability."[387] As a "gestural image," Frosh argues that the selfie points us to the somatic and sensory dimensions of cultural experience and practice. In this vein, "the selfie is a preeminent conductor of embodied social energy because it is a *kinesthetic* image: it is a product of kinetic bodily movement; it gives aesthetic, visible form to that movement in images; and it is inscribed in the circulation of kinetic and responsive social energy among users of movement-based digital technologies."[388] However, in contrast to my approach, Frosh studies these gestural articulations as inscribed in the image, leading him to claim elsewhere that due to the selfie's proprietary compositional artefacts—like the inclusion of the photographer/subject's cropped arm that holds the camera out of view—the selfie is an entirely new genre of portraiture.[389] The distinction that I would like to draw in relation to a study of the photographic event is that in order for Frosh's argument that the selfie is a form of phatic communication to be fully realized, we must take into

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[386] Paul Frosh, "The Gestural Image: The Selfie, Photography Theory, and Kinesthetic Sociability," *International Journal of Communication* 9 (2015): 1621.

[387] Ibid., 1623. Frosh quotes Malinowski from: Bronisław Malinowski, "The Problem of Meaning in Primitive Languages," in *The Meaning of Meaning*, eds. C. K. Ogden & I. A. Richards, (London: Routledge & Kegan Paul, 1923), 315.

[388] Ibid.

[389] Frosh, "The Public Eye and the Citizen-Voyeur."

account the trajectory of the selfie as an image that enters social networks, that then receives some kind of response. However, in lieu of this context, for those that are privy only to the encounter of people encountering themselves, the selfie functions here as a more emphatic statement of presence that serves to isolate and individuate an experience of Yosemite to ameliorate the risk of their experience being the same as everybody else.

Furthermore, in what must be the ultimate resistance to the way park infrastructure tries to manage one's experience of Yosemite, some visitors defy warning signs and perimeter markings to capture an image that few people are willing to risk. Yosemite is no stranger to the recently dubbed phenomena of "selficide" or "killfiles," terms coined in 2018 to characterize the phenomenon of people who met their end as a result of taking a selfie.[390] This phenomena served as the subject of tongue-in-cheek ridicule for the cover of *Hi-Fructose's* April 2018 cover where a handgun aimed at the photographer/subject replaces the camera phone at the end of the infamous selfie stick (fig. 38). Here, while the metaphor of the camera as analogous to the gun is still in play, it is no longer like hunting but quite literally a form of suicide. Although there are guardrails that enclose the viewing platform at Glacier Point, seeing real estate that offers an unobstructed view is in short supply, people ignore the signs and pass through the barriers and set up their cameras at the edge of the cliff. While waiting for the sun to set one afternoon a woman was walking the perimeter of the edge and tripped over landing flat on her face. Lucky to not fall off the cliff, she peeled herself up and skulked away with her scarlet red face. To date, most deaths have been attributed to falling from great heights, which happened twice in Yosemite in 2018. As part of what some journalists have diagnosed the "sefie-epidemic" in September of that year, Tomer Frankfurter, an Israeli teenager, fell from the edge of

[390] Agam Bansal et al., "Selfies: A Boon or Bane?," *Journal of Family Medicine and Primary Care* 7, no. 4 (2018): 828–31, doi.org/10.4103/jfmpc.jfmpc_109_18. Also see: Hemank Lamba, et al., "Me, Myself and My Killfie: Characterizing and Preventing Selfie Deaths," *ArXiv: Social and Information Networks* (2016): n. pag.

Nevada Fall to his death.[391] One month later the Bay area couple Meenakshi Moorthy and Vishnu Viswanath, were also killed when they fell 800 feet from Taft Point.[392] "Is a photo worth dying for?" reads an A-frame sign atop Vernal Falls (fig. 39). This sign became a permanent fixture after an incident in 2011 when two young children watched their mother, father and uncle swept off the precipice to their deaths while trying to coax their children over the guardrails for a 'better' shot. In the briefest of moments following an unexpected surge of water or a sudden gust of wind, the fear-inducing qualities of the sublime become more than just threatening.

Part 2. Unpredictable Routines—The Contribution of Seasonal Photo Phenomena and Animals

Flash-Photo Fires

Even though I have pointed out the subtle forms of resistance that visitors enact to usurp the heavily prescribed nature of Yosemite's photo routine, left to our own devices we remain a fairly predictable lot. Even though posing at the platforms might from time to time directly acknowledge the landscape, ultimately it takes the unpredictability of animals and natural phenomenon to encourage a more sustained and improvisational connection with the park through photography. If one journeys Yosemite's road network long enough (especially during the warmer months), you are surely guaranteed to encounter what I call "flash-photo fires"—itinerant photographic theaters that flare up along the roadside when animals such as black bear, mule deer and coyote are spotted from cars (fig. 40). As active participants in Yosemite's photographic theater, animals act as circuit breakers to the scripted journeys that visitors take through the park. Largely unscripted, these photographic events are

[391] Paul Rogers, "'Selfie Epidemic': How Israeli Teenager Fell to His Death in Yosemite," *Los Angeles Daily News* (Los Angeles), March 31, 2019, https://www.dailynews.com/2019/03/31/selfie-epidemic-how-israeli-teenager-fell-to-his-death-in-yosemite/.

[392] Paul Rogers, "Bay Area Couple Who Fell to Their Deaths from Yosemite's Taft Point Were Intoxicated," *The Mercury News* (San Jose, California), January 18, 2019, https://www.mercurynews.com/2019/01/18/yosemite-couple-who-fell-from-taft-point-were-intoxicated/.

different from the way that human actors tend to play out individual roles at viewing platforms. Instead, photographers improvise with the momentum of the event where internal and external forces co-mingle in spontaneous and unpredictable ways. While park management concedes that experiencing such animals is a quintessential Yosemite experience, this admission is not reflected in their management plans that are at work to limit such interactions between humans and non-human animals.

On a summer afternoon I was roaring up Glacier Point Road when I noticed a few cars awkwardly parked on the side of the road. I did the same and upon exiting my car, I joined a group of photographers who had their attention trained on a sow black bear and her two cubs who were foraging for food at the bottom of the embankment (fig. 41). In a game of Simon Says, the bears moved stage left and the line of photographers shuffled left and when they moved stage right the line of photographers shuffled right. While most photographers were content to stick to the edge of the road, others walked down the embankment and into the woods to get as close to the bears as possible (fig. 42). Just as you might in any group hunting scenario, comments of distain were audible from participants who were not prepared to put themselves in harm's way in order to obtain a better shot, like those with extra wide angle camera-phone lenses that placed themselves between the sow and her two cubs. As time went on, this event collected more cars and more people. Some exited their vehicles in a hurry with cameras at the ready, while other camera-hunters first inspected what all the fuss was about and then returned to their cars to fetch their cameras. There is a certain hushed excitement in moments like these when an infectious opportunism passes between large groups of photographers who hone their collective attention on the same subject. Unlike the viewing platforms, there is much less human chatter, which allows the sound of multiple camera shutters snapping open and shut to become audible. Perhaps this is what gave some photographers the confidence to approach closer even as the mama bear's claws ripped through the wood of a fallen tree to extract fistfuls of carpenter ants. All of the commotion rendered the camouflage skins fitted over the telephoto lenses and camera

bodies of the few professional photographers in the crowd entirely redundant. Other visitors on a tight schedule who are unwilling to stop, roll on by and execute the equivalent of a drive-by shooting with their camera phones shoved out the window on burst mode (fig. 43). Typical of Yosemite's roads there is no shoulder, so as the procession of parked cars grew on either side of the road, this left only a smidge of room for cars traveling in opposite directions to pass one another. As the event continued to proliferate there was nowhere to pull over. Eventually motorists just stopped in the road—rubber screeched along the asphalt, horns began to honk and drivers pounded on the gas to rev their engines in protest. As people left, some pulling U-turns, the scene eventuated into a phenomenon that is colloquially known as a "Bear-Jam."

While the photography of Bear-Jams is the hunting equivalent of a snapshot, the motivations for taking a photograph are not the same as taking an animal's life. Other than breaking up the routine of their circuit through the park, there is no single answer that can unpack the logic of what makes visitors so compelled to put a camera between themselves and wildlife. For John Berger and Akira Mizuta Lippit, events such as these constitute something like a Requiem Mass. They argue that animals are now fundamentally separate from humans, and thus we must now encounter them in forms of representation. In *Why Look at Animals*, Berger argues that wildlife photography conceptualizes animals as separate to humans. At the same time, it gives the viewer access to places they are no longer a part of, where the presence of even the photographer has vanished. The photo functions as a surrogate for real nature that humans can no longer access. We have a nostalgic concept of the animal as a figure that is free, unlike the way we see our own lives in late capitalism. Thus, photographs of animals act as a substitute for our loss of direct contact with them. Lippit takes this one step further by arguing that we are not just using images as a surrogate for their real absence, but as a means of mourning their disappearance from our lives. For Lippit, because Western philosophy and theology

have denied the animal the human experience of truly dying, we are thus left to mourn their death in representation.[393]

Brower extends their work by looking at the history of "camera-hunting," where the image was quite literally seen as a substitute for the taxidermy trophy, where photographers experienced animals through the viewfinder and not only in images.[394] Brower distinguishes his method from other studies by moving beyond what images of animals say to looking at why they are made and the function of these images. Brower challenges the rhetoric of wildlife photography which is marked by an ideological separation of human and non-human animals. Placing animals at a distance obscures the practice of making images, where animals are experienced up close and personal. Thus, animals should not simply be seen as passive objects of the camera gaze, but participants that have agency in the making of images and as such there is a need to "understand wildlife photography as producing a social relation with animals."[395] Unlike the late 19th century examples of "camera-hunting" that Brower studies, the activities of our Yosemite photographers are not central to shaping contemporary discourses of animality. They are exemplary of a more reciprocal relationship between humans and non-human animals and while we might not directly acknowledge their agency, photographers are drawn to them as a counterpoint to the mostly premeditated nature of their park experience.

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[393] Lippit, *Electric Animal*.

[394] In *Developing Animals: Wildlife and Early American Photography,* Matthew Brower addresses the role photography played in structuring our views of human-animal relations during the late 19th and early 20th century. Brower claims the practice of camera hunting in the late 1890s should be considered quite literally a form of hunting rather the linguistic, metaphorical, and psychoanalytic pairings of cameras and guns we are accustom. As a method, he connects the interactions between animals and cameras he studies more broadly to visual culture rather that situating it within the trajectory of an exclusively photographic history. Brower argues that we cannot accurately understand early photographs of animals from the perspective of what we call wildlife photography today, as this is a genre that emerged much later. As evidence, he uses the work of photographers such as George Shiras, Allen Grant Wallihan and George Bird Grinnell. Although it's difficult to read images of wild animals in this way today, historically photographers thought of their images as hunting trophies, as images of individual prowess, marked by a process of significant effort to establish close contact with the animal. He situates the practice in its historical context technologically (the advent of the telephoto lens for example) as well as connecting it to social phenomena such as nationalism and sportsmanship. Like literal trophies, the image-trophies circulated in ways that attested to masculinity and national identity. Brower, *Developing Animals*.

[395] Ibid., 17.

In a different iteration of the connection between hunting and photography, veteran Yosemite photographer Dave Wyman (who leads photographic tours for the Yosemite Conservancy), has adapted the lens buddy concept (a phenomena we saw at Scripps Beach when photographers attach animal inspired prosthetics to their cameras) by wearing a faux fur hat with a fox's face and cartoon like snarling teeth protruding from the front. As he sees it, while this makes him stand out from the crowd, it softens his approach by working as a conversation starter to assist when approaching strangers that he propositions to pose in landscape shots. It goes without saying that baiting and the use of prostheses that imitate other animals borrow hunting techniques that work to seduce and lure the animal into an acceptable range in order to get a clear shot of it. In a different version of the decoy, to prevent pronghorn antelope from "moving away like if I was walking out to them as a human,"[396] Dave Wyman imitates the deer by placing his hands over his head to make a pair of antlers when moving in close for a shot. Closely connected to the lure, if not interchangeable, is the decoy. Another strategy of Dave Wyman's is the use of a decoy for making sure he takes other photographers off the scent of a good image. When teaching photography classes in the park, his students take turns in posing as decoys. When their group is the first to spot an animal from the side of the road, two students are positioned by the roadside at either end of the animal's location. Here, they pretend to busy themselves as though they were shooting an animal off in the distance. This works to lure other potential passing motorist-photographers away from the real animal, that the rest of the group is then left free to pursue without competition.

In spite of the fact that the chance to spot wildlife is a selling point for attracting visitors, park management takes a lowest common denominator approach (some may say justifiably protecting bears from the stupidity of visitors), by working to reduce the frequency of human contact.[397] When bears

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[396] Dave Wyman, "Interview with Dave Wyman," by Alex Kershaw, unpublished, August 18, 2015.

[397] Momentum for change in Yosemite's bear management policy had been building since a scandal in 1973 when photographs of a of pile of bear carcasses circulated in national media. This was a win for ecologists who had long

enter vicinity of developments and populated areas or come in to feed on a non-secured human food source, the bears are aggressively hazed, sometimes for several days until they vacate the area. In the advent of a Bear-Jam, a member of Yosemite's dedicated bear management team will arrive on scene if they can get there before it naturally disperses. For example, while participating in another Bear-Jam, the first indication of trouble came via the sound of the park ranger's voice that unleashed a set of imperatives, demanding that visitors return to their cars and leave the scene immediately. Patrolling the road's center with a rather rigidly adapted cowboy's stride, dressed in a pressed uniform and crowned with the classic lemon-squeezer pinch flat hat—he emanated authority. His right hand gently brandished a plump shotgun, held upright as though it were not subject to gravity. While the gun might have been used to deter the bear should it try to charge anyone, it was really more of a prop to scare visitors into submission. In lieu of not always being able to prevent bears from losing their fear of people, the next best thing is to generate a sense of fear in humans. Unlike cops trying to bust up an illegal outdoor dance party, visitors were fairly obedient and hurried back to their cars. Thus, just as rangers haze bears, they do so to human animals, once again limiting the potential for a more improvisational approach to taking pictures.

Seasonal Photo-Phenomenon—Firefall and Moonbow

The routine quality of principally portrait genre images taken at the viewing platforms is not only shaken up by the role of animals, but also the unpredictability of nature. While this might happen

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fought to restructure approaches to bear management in the park that typically involved killing problem bears. The tipping point came in 1998 when the number of reported human-bear incidents peaked at 1,584. Park management used the media attention to acquire funding. As part of this effort, since 2003 bears have been monitored using very-high frequency (VHF) signals installed on collars. More recently, GPS collars have also been used to study the bears' temporal and spatial use of the park, allowing them to triangulate the location of individual bears. Knowing the precise locations of roads that bears frequent, in 2007 park-management launched their "Red Bear Dead Bear" initiative. This involved installing red and yellow roadside warning signs and speed limits at known bear crossings and previous collision sites to raise awareness about the frequency of vehicle–bear accidents. See: Rachel L. Mazur, et al., "Using Global Positioning System Technology to Manage Human-Black Bear Incidents at Yosemite National Park," *Human–Wildlife Interactions* 12, no. 3 (2018).

at any time given the Sierra Nevada's unpredictable weather patterns, this tension between the predictable and the unpredictable is best illustrated through two of Yosemite's flagship seasonal photo-events known as Firefall and Moonbow. These events can be 'predicted' for the astronomical conditions that must be satisfied regarding the sun and moon's position which must be at a precise angle to moving water in order to produce the particular lighting effects of these phenomenon. What cannot be predicted is the other weather-dependent conditions that involve the simultaneous co-ordination of multiple climatic and seasonal variabilities such as temperature, rain fall and clear skies. Thus, Yosemite's climate and topography are an agent in the production of images, seeing that obtaining an image is conditional on, rather than independent of these seasonal fluctuations.[398]

Firefall occurs in winter around February when horsetail falls turns lava orange as it flows off El Capitan and Moonbow happens in late spring and early summer when lunar rainbows appear at the base of Yosemite Falls (fig. 44 and 45). Unlike the viewing platforms, Firefall and Moonbow are wholly contingent on the co-ordination of multiple climatic and seasonal variabilities and thus it is more of a phenomenon than a view being captured. While these events might attract the participation of your average visitor, who by chance happens to be in the park at the time, generally participants are a more dedicated species of photographer who travel to the park specifically for these events. Like the other photo practices we have witnessed thus far, photography at these events takes place in the context of communal individualism. However, unlike the work at the viewing platforms, photographers are interested in crafting a unique image that is not a portrait of someone they know.

[398] Neither phenomenon will materialize unless there has been either heavy rain or significant snowmelt to produce a sizeable flow off the valley's northern escarpment. Predictions for Moonbow's dates are calculated on the fact that the angle between the "anti-lunar direction" (the photographer's vision or their shadow cast by the moonlight) and the direction of the light falling on the base of Upper Yosemite Fall must be 42 degrees. In addition, there must also be clear skies and bright moonlight that coordinate with times that the moonlight is not blocked by mountains and cliffs. In the case of Horsetail Falls (classed as an ephemeral waterfall), in order for it to appear, not only does there need to be a sizeable snowpack, but the weather before mid-February (when the setting sun is at the right angle to illuminate the upper section of the waterfall) needs to be warm enough for it to melt and feed the 1,000-foot-tall drop. The presence of mist, fog or even minor cloud cover can eliminate the effect.

Although this is not exactly the kind of photography that Alise Tifentale and Lev Manovich had in mind when they coined the term “competitive photography,” it can be considered an example of such for the way that in spite of following a strict set of conventions that adhere to compositional rules—these photographers who occupy a space between the avant-garde and the amateur—seek to find a style of their own where there is still latitude for individual creativity.[399] In response to these seasonal-photo events, photographers work within a set of constrained parameters to produce a landscape image that runs the risk of replicating the ‘standard’ or ‘typical’ rendition of this phenomena, while seeking to craft an image that differentiates itself from the archetype. At the same time, while the often quite drastic seasonal variations work in their favor to differentiate their images day-to-day and year-to-year, they must be careful not to depart so radically from the formula such that their image no longer qualifies as recognizably exemplary of the phenomena in general. Although it is not part of my analysis here, what is quite striking about the images produced by photographers attending these very same events is how different their images look.

I personally experienced Moonbow when I attended a two-day photography workshop organized by the Yosemite Conservancy. Our instructor was John Senser, a veteran landscape and wildlife photographer of the Sierra, who runs a variety of photo-workshops for the conservancy including Firefall. On June 9, 2017 our group of 11 met at the Yosemite Valley Art Center at 7:30 p.m. where we sat around low tables covered in butchers paper scribbled with colored crayon left from a children’s art class held earlier that day. We began with the customary introductions where

[399] The authors develop this concept in the context of photographers that make images for social media platforms such as Instagram, where the goal is to find their own style that gives the images a consistent feel that can be distinguished as their own. “For a competitive photographer, the Instagram gallery is a carefully edited presentation of their personal experiences, feelings and ideas—as opposed to a space to document themselves and their friends or display visually interesting photos of any subject. In contrast, a competitive photographer shows the world experienced though the first-person point of view. A coherent and unique visual style used for all photos of such photographers is a mechanism to emphasize and mark this individually. The uniformity of style acts as a visual sign for a single consciousness experiencing the world in a unique way.” Manovich and Tifentale, "Competitive Photography and the Presentation of the Self."

participants were asked among other details to identify whether they were a beginner, intermediate or advanced photographer. Senser introduced himself and his wife Cheryl, a registered nurse whose attendance might prove useful in case anyone slips over and hurts themselves he explained. Don't stand on wet rocks Senser implores, "only last week someone fell into the Merced river and they have not been found."[400] All of the group members came from cities in relative proximity to Yosemite like Fresno, San Francisco and Los Angeles. Although the mood was subdued as is often the case for night classes, Senser tried to elevate spirits by explaining that this year there had been a record snowpack coming off the Sierras and so our chances for tonight were good. Senser began the workshop by delivering an abridged history of the Moonbow phenomenon as witnessed by Aristotle, Benjamin Franklin, then Mark Twain and ending with John Muir's experience of witnessing them at Yosemite. From Muir's *The Yosemite* Senser reads:

> Lunar rainbows or spray-bows also abound in the glorious affluence of dashing, rejoicing, hurrahing, enthusiastic spring floods, their colors are distinct as those of the sun and regularly and obviously banded, though less vivid. Fine specimens may be found any night at the foot of the Upper Yosemite Fall, glowing gloriously amid the gloomy shadows and thundering waters, whenever there is plenty of moonlight and spray.[401]

An ordinarily reclusive character, Senser protracted the duration of each word taken from handwritten notes that were shaking in his hand as he read. After our history, he moved on to technical considerations including tips for camera settings such as ISO, lens, shutter speed and camera menu settings. Resting on a painter's easel was a framed photograph that he had taken of the Moonbow several years earlier that he used as a visual aid to exemplify the effects of standard camera settings.

[400] John Senser, "Group presentation for Photographing the 'Moonbow' Double Your Chances #2," Yosemite National Park, unpublished, June 9, 2017.

[401] Originally from John Muir, *The Yosemite,* (New York: Century, 1912), 39.

We were issued with fluorescent yellow, green and orange glowstick wristbands like the ones you get in 99 cent stores as a means of branding our team. Senser then instructed us to regroup at the Lower Yosemite Falls shuttle stop for a 9:00 p.m. rendezvous. The glowsticks were distributed with the proviso that it would be dark and so we would be able to identify group members without having to use our flashlights. Using light unnecessarily runs the risk of spoiling the exposures of other photographers Senser warned us.

Although Senser had “consulted the lunar charts” and predicted the Moonbow would not materialize until around 11:00 p.m., when we arrived a little before 9:30 p.m. it was already in effect.[402] Members from the group were absorbed into the darkness and found positions within the array of other photographers already assembled. Choice positions, however, were exposed to a heavy dose of spray coming off the fall, so for most who did not have a professional wet weather kit, it was a matter of getting in and setting up and then retreating before you and your camera kit were totally soaked. A group of teenagers who had taken seasonal work in the park were mulling about talking, smoking and drinking. There were also families with young kids that had come to see the event. Over the 30 second or so exposure, the real trick to capturing the Moonbow was avoiding water build-up on the lens, which was mostly unavoidable unless you were lucky enough to catch a sudden change in wind direction. Then it is a matter of trust as it is difficult to see the phenomena. With the naked eye it is achromatic and looks like a faint silvery moustache—like a translucent trace of milk smeared across the upper lip. In order to see the full spectrum of colors, one must wait until the 15-30 second exposure has had time to burn itself onto the camera’s sensor and consult the LCD screen. As Senser predicted, we were lucky for the Moonbow to materialize on the first night. On our second night, we

[402] By this he means he had consulted data published by Donald Olsen at Texas State University. Senser’s account of the history of Moonbows was taken from a chapter on the subject in: Donald Olson, *Celestial Sleuth: Using Astronomy to Solve Mysteries in Art, History and Literature* (New York: Springer Praxis, 2014). After reading Muir’s accounts of Moonbows at Yosemite Falls, Olsen decided to develop a computer program to predict their precise dates and times.

relocated to Cooks Meadow to shoot from a greater distance, though it never appeared. As it got later into the night, most people spent their time laying or sitting on the ground waiting for something to happen. As Senser had warned us from the outset, you will likely need to pursue Moonbow from one year to the next before you can expect to produce an adequate photograph of it: "I've been chasing this Moonbow thing… I don't know, for about ten years now. It has its challenges and its charms. A lot of it depends on Mother Nature."[403] The missing variable working against us on the second night was that the wind was not carrying the mist in the right direction to transmit moon's rays.

Earlier that same year in February I attended Firefall. With a moderate clumping of snow blanketing the valley, Yosemite looked entirely different than it did later that June. For example, the viewing area at Yosemite Falls where I had photographed Moonbow was now closed due to frazil ice. Despite the decreased visitation numbers in the winter, events like Firefall keep Yosemite's traffic management team nimble. On approaching the event, starting at three-quarters of a mile before reaching the El Capitan picnic area (the most popular location to photograph Firefall), one encounters a series of digital mobile traffic boards that read "Horsetail Fall_Dive in Left Lane_Park in Right Lane" (fig. 46). As the popularity of this event has blossomed in the last decade, special arrangements are now made to manage traffic flows, like closing the right lane for parking.[404] Based on my research I knew that most photographers would congregate at the El Capitan picnic area to shoot the event. When I inquired at the Yosemite Visitors Center if this was the best place to shoot Firefall, I was told, "well people go there, but I could not tell you exactly where to go." I interpreted the spirit of this to mean that I should figure out where is best to compose a view of it for myself. Although today, I planned to follow everyone else.

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[403] Senser, "Group presentation for "Photographing the 'Moonbow'."

[404] The second location that is well known to photograph the event is across the other side of the valley and accessed off the South Loop Road. There is a clearing at the banks of the Merced River that is cordoned off with yellow waring tape for the event due to erosion. Some people prefer this location as there are more opportunities for placing a tree in the foreground of the composition.

On Saturday afternoon, February 18—the busiest of the four days that I participated in the event (which lasts about 5-days), there were roughly 250 people congregated at a clearing adjacent to the El Capitan picnic area to witness the phenomena, many more people than lower Yosemite Falls' paved terrace can accommodate during Moonbow (figs. 47 and 48).[405] The view from here is optimal as the girth of Horsetail Falls appears at its largest, thus maximizing the lighting effect. Today's conditions were not looking promising. Photographers protected their cameras with wet weather gear: umbrellas fastened to tripod columns, dollar store plastic ponchos, shopping bags from Target and proprietary custom fitted rain jackets. While most were there to photograph, there was a small cluster of people who were content not to record the event. These people were hunkered down right at the front below the sight line of all the cameras. There were some renegade photographers scattered off to the periphery, but for the most part everyone was clumped together in a photo-scrum similar to the masses that congregate under Scripps pier during Scrippshenge. The first people arrived in early morning to claim their spot and now, by mid-afternoon were settled in with provisions of food, camp chairs, tarpaulins, boxed wine and coffee. Photographers arriving late squeezed in where they could. The chitchat among participants was animated as neighbors struck up conversations—small talk about lenses they had recently purchased to photograph animals or tips on using programs like Adobe Lightroom, while others swapped details of their Instagram accounts.

[405] As luck would have it, the 'discovery' of Firefall happened at just about the right time as a substitute for what was originally called "Yosemite Firefall." This spectacle ran between 1872-1968, when piles of embers made from creating an enormous bonfire of red fir bark were pushed off glacier point as a form of entertainment for visitors staying overnight in the valley. This modern version constitutes a less environmentally damaging practice. While both of these events have likely been occurring since long before humans arrived, they have only been attracting sizeable crowds for the past two decades. Most attribute this rise in popularity to the advent of freely available images on the intent. However, in the case of Firefall, Kevin Drum speculates that it was unknown before the first color photograph of appeared in 1973 because it is an artefact of climate change. Kevin Drum, "Why Did No One Notice Yosemite's Horsetail 'Firefall Effect' before 1973?," Mother Jones, 2018, accessed December 12, 2019, https://www.motherjones.com/kevin-drum/2018/03/why-did-no-one-notice-the-horsetail-firefall-effect-before-1973/.

Photographers jogged in place to stay warm in the damp air. Others left their cameras in place to do the work for them, setting automatic timers that clicked away at regular intervals for a time-lapse. Sounds of dogs yapping filled the background, walls of wind pressed through the tree canopy, snow squeaked underfoot, chip packets rustled, cars honked, the crowd murmured and grunted and rain smacked on leaves. With all the commotion, hikers traversing nearby trails were lured to the scene by happenstance. They stood watching the crowd perplexed—looking up at El Capitan, then looking at the assembly of photographers, then looking up at El Capitan—it was not clear what all the fuss was about. In spite of the fact, it was unlikely to occur on account of the fog. The scene framed in view looked different from one minute to the next and that seemed encouragement enough to keep most photographers in attendance. Rolling fog was smudging El Capitan's scalloped granite face in and out of view and combined with clouds erasing its ridgeline. The monolith blended with the white sky such that an entirely featureless white void was all that remained. Given the forecast for sustained overcast conditions, it was impressive that photographers had made the commitment to hang in there all day in miserable conditions. Although, seeing the phenomenon only lasts about ten minutes right before sunset, there is always the chance a short break in the cloud cover will prevail at just the right moment. In spite of the weather hope hung heavy in the air.

Under these circumstances, it was only possible for photographers to fantasize about what they hoped might happen. In this scenario, about an hour before sunset, a heart shaped patch of light will spread over the eastern face of El Capitan. Gradually, this shrinks to a narrow band of light filling a long wobbly vertical depression made from where the rock formation's buttress protrudes. Slow to climax, the rays of the setting sun sneak behind the falls and illuminate the ribbon of water as an orange glow that twists to pink as the sun sets. With all surrounding surfaces cast in deep shadow, it appears that the waterfall is generating its own light source. However, it is likely that Firefall would remain an apparition. Those less optimistic, who were also less willing to face the inevitable traffic jam that would begin at the event's conclusion, took their chances and packed up thirty minutes before

sunset. Conditions aside, a quiet optimism prevailed right until the end—a hushed feeling of hope gradually flatlined into the realization that today was not the day. As it turned out, those who left early made the right bet—as the sun went down the fog got thicker. It got dark, it got dank, then evening came early. For the next several days conditions didn't change much, although everyday hordes of photographers returned to try their luck. This year there would be no Firefall.

Mulling around the event on foot, I overheard one photographer say to another, "a bad day's photographing is still better than a good day's work." This reminded me of a t-shirt I had seen a few times in Australia, only the word "fishing" appeared in place of "photography." While both photography and hunting share in the pursuit of something scarce that is unlikely to materialize unless multiple weather-related contingencies align in the right proportions and at the right time, this was not the same sentiment expressed in this witticism. Instead, it expresses the uncertainty that accompanies photography (that like hunting), involves long periods of waiting patiently for the right conditions to present themselves. As addressed in Chapter 2, Vilém Flusser likens the gesture of photography to that of the hunter lying in wait for their prey. In Flusser's words this uncertainty is a kind of "phenomenological doubt" that any pursuit entails.[406] As my accounts of Firefall and Moonbow illustrate, most of the photographer's time is suspended in waiting. In this vein, Firefall and Moonbow are most closely aligned with hunting animals like turkey, where the photographer-hunter is handicapped to the degree that they must remain in the same position and wait for their prey to come to them, unlike elk hunting, where the hunter is more or less in constant pursuit as they move from one location to another. Furthermore, for both pursuits the idiom of trying to find a needle in a haystack applies and so as a means of maximizing the likelihood of capture in such circumstances, both hunting and photography involve preliminary work in scouting the best locations. Although my account of Firefall was from the location that the majority of people experience the event, there are more

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[406] Flusser, *Gestures*, 38.

seasoned photographers, such as Dave Wyman (whose photo tours will be discussed in detail in the next section), who spend time in the off season trying to uncover secret spots away from where the crowds set up.

Scouting aside, I do not mean to suggest that lying in wait and pursuit are mutually exclusive to either hunting or photography. To the contrary, the way that John Senser refers to Moonbow and the historical circumstances surrounding the first color image of Firefall attest to the fact that the chase is very much a part of the process. For example, Senser refers to the Moonbow as an "elusive beast" during the introduction to his workshop. The promotional literature the Conservancy published for the workshop expresses similar sentiments, "John Senser has stalked and captured the mysterious Moonbow with his camera and will share his experience and techniques. Come prepared for an adventurous pursuit in the dark."[407] This resonates with the rock-climbing adventure photographer Galen Rowell's account of taking the first known color photograph of Firefall. In February 1973, Rowell was driving around the valley with a park ranger when he spotted the phenomena. In his account of the event:

> I broke the speed limit racing the light to the base, where I jumped a signed fence with my 300mm lens to get a clear view. Instead of writing one of the longer citations of his career, the ranger looked at the fantastic light and asked Is there anything else you need over there? My tripod. It's on the back seat. The ranger passed it over and I gave him one of the first prints of a rare natural event that I discovered by accident.[408]

Rowell's narrative reads like a safari hunt where giving good chase is rewarded with the eventual capture of some rare species of animal. It also speaks to the element of chance that both practices

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[407] Yosemite Outdoor Adventures, *#17 Photographing the "Moonbow" Double Your Chances #2 with John Senser,* Yosemite National Park, Yosemite Conservancy, 2017.

[408] Galen Rowell, *Galen Rowell's Vision: The Art of Adventure Photography* (San Francisco: Sierra Club Books, 1995).

share. Photographers return to Firefall and Moonbow year after year until they are able to capture a satisfactory image. For example, on the second night of the conservancy tour I attended, I was set up next to a man from San Francisco who was making his fourth unsuccessful trip to photograph it. Hence the title for the workshop—"Photographing the 'Moonbow,' Double your Chances"—which infers that at least more than one attempt is likely necessary to yield results.

Part 3. Photo-Education Programs: Slowing Down and the Photo-Foraging of Pure Photography

While animals and seasonal photo-events might offer some reprieve from the routine nature of the viewing platform circuit and while they might add spontaneity to the experience, this does not change the frenetic restlessness which photographers devour their subjects, whether they be human, animal or landscape. For help, they need to draw on the specter of Ansel Adams, whose spirit in the park lives on through the presence of the Ansel Adams Gallery and its various photo-education programs as well as photo-education programs run by the Yosemite Conservancy. These programs encourage the potential of photography to activate the landscape as an interlocutor, where participants linger in perception as a means of trying to intuit the landscape in different ways.

The Ansel Adams Gallery Camera Walks

Through initiatives like their daily "Camera Walks" through the Yosemite Valley, the Ansel Adams Gallery offers a clinic of sorts to photographers with the equivalent of a hyperactive-impulsive type attention deficit disorder. Looking to break free of the fast-paced routine of circling the viewing platforms, the resident staff photographers who lead these tours use Yosemite's landscape, stories of Ansel Adams, as well as examples of their own work as self-proclaimed fine art photographers as frameworks to encourage visitors to quite literally slow down and take less photos. These tours attract a slightly more committed practitioner and thus one that is more open to suggestions for improving their photographic practices and taking the time to develop a more engaged connection with the park.

In this vein, the Camera Walks involve developing an intentionality for their practice, which means not only taking less images, but question why and what they are photographing—a process of re-scripting their photo practices. Furthermore, photo programs at the Ansel Adams Gallery work as a kind of "photo-echo," whereby in emulating Adams' own photographic rendering of the park, visitors maintain a consistent vision of Yosemite as a breathtaking wilderness preserve.

Pinned onto a cork board under the porch of the Ansel Adams Gallery is a signup sheet for their daily Camera Walks that take place in the Cook and Ahwahnee meadows, where views of Sentinel Rock, Upper Yosemite Falls and Half Dome can be had within three feet of each other. Located in the heart of Yosemite Village, the gallery is a mecca for Ansel Adams' fans, though it is more accurately a bazaar—selling miscellaneous goods including jewelry, camera tripods, soap, postcards, books and hand printed silver gelatin Ansel Adam's photographs with hefty price tags. Their commercial motivations for luring visitors inside withstanding, these 1.5 hours long walks are surprisingly free of charge. Their use of the word "walk" is telling for the way that the ethos of these walks is in opposition to what staff photographers perceive as run-of-the-mill snapshot tourist photography. As the guide Michael Reese confides to our group, "it took me a long time to move from snapshots to photography."[409] Knowing however, that most of their attendees have been zipping around the park from view to view in their cars taking snapshots, a bevy of six rotating instructors structure the walks as a learning opportunity which is really a placeholder to get visitors to slow down.

In order to mobilize photography to these ends, instructors draw on the park's affordances as a framework for slowing down photographers and gaining more control over one's subject by developing a deeper intentionality about what is being photographed and why. In this exercise the park becomes an open-air classroom—a resource to teach mostly beginner or intermediate level

[409] Michael Reese, "Presentation during Camera Walk," Yosemite National Park, unpublished, June 29, 2015.

photographers basic camera skills. “Mind your edges,”[410] instructs Mike Weiss as we stand before a copse of ponderosa pines (fig. 49). His point being that we should remember to use features like tree trunks to frame our images by darkening the edges while keeping lighter subjects inside the frame to hold the viewer’s attention longer. He then directs us to turn our attention to Yosemite Falls while presenting the centerfold of a book featuring two images of this same waterfall taken by Adams. Their juxtaposition serves as a lesson for the differing effects of shutter speed on moving subjects. During another tour lead by Christine Loberg, our group of 14 are led along a raised wooden walkway in the Yosemite Valley. Growing on either side of the path are dense patches of showy milkweed. Now in full bloom, it is attracting the attention of cobalt beetles and monarch butterflies. Loberg uses this as an opportunity to urge the group to consider changing their perspective to notice different scales—"don’t just do wide images of landscape, but get in close”[411] (fig. 50). Leading by example, she inches her camera into a microcosm of pinkish-purple star-shaped blooms and keeps talking—“it’s like there are worlds within worlds, there is a macro world that is alive here in the valley, if we turn our attention to the macro dimension of this place, it could keep a photographer here for hours and hours. Ansel did this stuff, but you never see it.”[412] Lighting is a factor that instructor Michael Reeves likes to stress, explaining that a big part of landscape photography is waiting for the right lighting conditions or situating yourself according to the light. Walking through the Ahwahnee meadow, Reeves makes use of five-foot-high clusters of cow parsnip to explain backlighting—sometimes, he says, you can get a whole lot of depth by shooting into the light so that the leaves are backlit, which adds depth and gives the photo energy. Depending on the daily weather conditions and the mood of the instructors, any

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[410] Mike Weiss, “Presentation during Camera Walk,” Yosemite National Park, unpublished, July 4, 2015.

[411] Christine Loberg, “Presentation during Camera Walk,” Yosemite National Park, unpublished, July 2, 2015.

[412] Ibid.

array of these formal camera basics, such as the geometry of the frame expressed in the "rule of thirds" or "dominant direction" are used to try to get visitors to take a closer look at the park.

Apart from formal concerns, staff photographers make recourse to their work as commercial photographers and their experience with analogue photography to remind visitors that sometimes less is more. They use their tenure as "working photographers" or "fine-art photographers" as leverage to distinguish themselves as being quite different to the average snap happy tourist. For example, Mike Weiss explains that when he travels into the backcountry with his view camera, he will only take ten images per trip. Also, because the scene is viewed upside down, the photographer is more deliberate with their compositions. Loberg takes this a step further by telling participants that "the first image of the park was made by C. L. Weed, who used glass plate negatives that were one-inch thick."[413] She continues to explain that because of the precarity of transporting these fragile negatives, Weed had to ration his exposures, which goes to show that you do not need to make many exposures to get great shots—"so slow down to look and listen more!"[414] Often the issue of black and white photography is addressed on these tours, seeing that Adams almost exclusively worked in this medium. Weiss suggests experimenting by working in black and white as a strategy to start thinking more carefully about your compositions, "because it takes time to train the eye to see in black and white… it's part of what Adams called previsualization."[415] Quoting sage advice from Adams himself is part of educating participants, rather than shooting everything we see we should think ahead of time, "chance favors the prepared mind said Ansel."[416] Weiss then connects this quote to his background as a commercial photographer, saying that he would not be able to return to the fast paced nature of advertising

[413] Ibid.

[414] Ibid.

[415] Mike Weiss, "Presentation during Camera Walk."

[416] Ibid.

photography as his mind has slowed down too much, a welcomed side effect of being in Yosemite now for so many years he declares. "We're still taking the same images Mr. Adams took," says Loberg, who like other staff photographers consistently uses examples of Adams' work as an instructional tool. This involves leading participants to the same locations that Ansel Adams made famous. At these sites, visitors are shown book and postcard reproductions of Adams' iconic photographs so they can compare what they see in front of them with how Adams chose to render the view. By creating a sense of proximity to Adams, apart from the opportunity to espouse preservationist sentiments and satisfy the appetite of his would-be acolytes, it serves as another method to decelerate their snap happy tendencies.

To get us into the zone so to speak, Loberg tells us, "we are going to the 'Fairy Circle,' so you'll need your imagination."[417] We are then led to a circular clearing created by a ring of well over 100-foot tall pine trees where the grass has been worn to dirt by foot traffic, (mostly because this is a destination that instructors usually include on their Camera Walks). Loberg tells us, "you could call Cook's Meadow Ansel's spot. All of these spots, Cook's Meadow, the Ahwahnee, Sentinel Bridge and Fairy Circle; they are all Ansel Adams' spots."[418] She professes that now with digital photography, people don't have to use their imagination as much, but this is unlike using film where you could not see the finished image immediately. For affect she sets her tripod up, then bends forward pretending to look through the back of her 35mm DSLR and then using her jacket shrouds the top half of her body (fig. 51). Using one hand to imitate firing a cable release and the other to dial in an aperture setting, she explains that this is what Ansel or Watkins would have looked like when using a view camera. Her voice now muffled by her jacket, she says, "I like to pretend I am the only one here. It makes the photo

[417] Loberg, "Presentation during Camera Walk."

[418] Ibid.

feel alive."[419] Without ever naming it as such, her lesson is on Adam's concept of previsualization, which she chooses to perform rather than explain. Hidden beneath her jacket, she asks us to imagine that today is sunny rather than overcast and then proceeds to narrate her internal monologue out loud. Listing all the considerations—including composition and camera settings—Loberg tells us these must be thoughtfully adjusted to render her own artistic vision of the scene, rather than simply documenting what is in front of her.

Following a pathway into Cooks Meadow, Mike Weiss takes pause underneath the low-hanging branch of a black oak that is plush with leaves. He raises a reproduction of Adams' *Half Dome, Oaks, Autumn, Yosemite*, taken in 1938, that includes the same rock formation we can see in the distance to our left. He prefaces this lesson with the admission that this is also a lesson Ansel gave when he taught photo workshops on the importance of "near-to-far."[420] Directing our attention to the way the oak tree frames Half Dome on the left side of Adams' photo, Weiss explains that we too could use this branch right here to put something between us and the subject of the photograph. Weiss uses this to stress the importance of taking the time to get yourself into a position where there is something in the foreground, midground and background, rather than just accepting where you are. Another strategy to keep you occupied is to develop an awareness of when not to photograph. For this demonstration, Weiss presents an image Adams took of Bridalveil Fall in 1927. His point is that the quality of light in this image—where swirling vortexes of water are offset against a rock face and trees in shadow—looks nothing like what we see in front of us here at 9:45 a.m., "Right now, the granite face on either side of the falls is in full sun, while the waterfall is in shadow. It's a problem because

[419] Ibid.

[420] Mike Weiss, "Presentation during Camera Walk," Yosemite National Park, unpublished, June 27, 2015.

the eye looks at the lightest part of the image first."[421] So rather than photographing everything we see right away, we must exercise restraint and patience by returning when the light favors the waterfall.

Just as Ansel Adams did when he led photo classes in Yosemite, staff photographers sometimes bring their own portfolio of work along as an instructional aid. Michael Reese shows us a cutesy image of two squirrels rubbing their noses together as the prelude to a story about travelling up to Glacier Point to photograph a storm. When he got up there, the shot he imagined was just not working because it was too cloudy. While waiting frustrated in the cold he noticed a couple of squirrels and "so I decided to switch to my telephoto lens and got this shot instead."[422] His point is not so much that it is a great photograph, but that photographers need to be ready to respond to the unpredictability of nature and adapt their intentions accordingly. His lesson is that you need to relax and pause—part of developing intentionality is to know when to change your intention. Next, Reese flips to what he considers one of his best shots at Glacier Point, which he got once the sun went down and everybody else had left, "so consider sticking around even when the light looks like it has finished and you might just get a great shot that nobody else got."[423] Projecting his voice over the thunder of Lower Yosemite Falls in the background, Reese shows us an image that he took of moving water (fig. 52). Once again, he begins with a story. Reese explains that it was not a massive waterfall like the one behind him, but a humble stream that he was shooting when he met a guy who was "on a mission to replicate every postcard view he had seen of the place."[424] Reese's cynicism seemed to be a response to the strangers' disapproval of how cropped in he was, such that you could not see the whole scene. Reese explains that what this guy did not know was that by using a long exposure, he was

[421] Weiss, "Presentation during Camera Walk."

[422] Michael Reese, "Presentation during Camera Walk," Yosemite National Park, Unpublished, June 10, 2017.

[423] Ibid.

[424] Ibid.

transforming the moving water into an abstract composition of moving color and light. Reese's point is that photography is about having control over your subject, so rather than simply responding to the main scene or what everybody else is photographing (Reese gestures to Yosemite Falls behind us), it is all about having control over your subject rather than simply responding blindly to stimulus.

For visitors who intentionally seek out the Ansel Adams Gallery, part of their motivation (and one that speaks to their efforts to resist the version of Yosemite as experienced through the viewing platforms), is to reconcile their now embodied experience of Yosemite with their previously virtual experience of Yosemite through the work of Adams. Other than the Camera Walks, staff photographers lead privately guided photography tours and offer more specialist photography workshops. *In the footsteps of Ansel Adams* is the title of one such multi-day workshop where "you will visit a number of locations from where Ansel composed some of his most famous images. At each location, you will have the opportunity to see the same image through your lens."[425] For another workshop titled: *Ansel Adams' Legacy and your Digital Camera,* the focus is on the technical innovations Adams developed for analogue photography and how this relates to the digital camera.[426] Or for those that want to make contact with someone who worked directly with the great master there is: *Ansel Adams' Yosemite: The Art of Seeing with Alan Ross*, where "you will learn to isolate and evaluate the elements of a scene, translate the literal into the expressive, and use optics and exposure to best effect your photographs, all under the guidance of long-time Ansel Adams assistant and master photographer Alan Ross."[427] Another of Adams' assistants was Ted Orland, whose ten-year service as his full time assistant began by enrolling in a two week workshop that Adams taught. Having also

[425] The Ansel Adams Gallery, "In the Footsteps of Ansel Adams," 2019, accessed March 22, 2019, https://shop.anseladams.com/products/in-the-footsteps-of-ansel-adams-tues-sat-1-pm.

[426] The Ansel Adams Gallery, "Ansel Adams' Legacy and Your Digital Camera," 2019, accessed March 22, 2019, https://shop.anseladams.com/Ansel_Adams_Legacy_and_Your_Digital_Camera_p/320100-aal.htm.

[427] The Ansel Adams Gallery, "Ansel Adams' Yosemite: The Art of Seeing with Alan Ross," 2019, accessed March 22, 2019, https://shop.anseladams.com/Ansel_Adams_Yosemite_p/32200512.htm.

taught workshops for the Ansel Adam Gallery for 15 years, Orland's assessment of Adams' legacy is that:

> So pervasively has his vision become ours that many of the million people each year who photograph Yosemite Valley do so with the hope that, if everything turns out just right, the result will not simply look like Yosemite, it will look like an Ansel Adams photograph of Yosemite.[428]

As clarification to Orland's point, photographers not only appropriate specific images Adams took from the same locations, but emulate his technical principals and the reverence he held for the capacity of the landscape to speak directly to the viewer through the photograph. Thus, what motivates visitors to photograph at Yosemite, is not how we might be tempted to caricature them as dupes, doing the rounds of prescribed views with the misguided belief they will produce stellar landscape images. Visitors are well aware that such reproductions can be more easily obtained from the giftshop's postcard rack. Instead, it is to reconcile their virtual experiences of this place with their actual experiences. This more dedicated photographer, shares with the casual visitor the goal of individualizing the experience of a place they have only until now known virtually. Such is the desire of visitors that in anticipation of their travels they have already made numerous imaginative journeys through the park aided by an unlimited archive of readily available material. To take an image means to take a moment to reflect on how what you thought this place was going to look and feel like actually looks and feels like, thus reconciling an experience of something we are already strangely familiar with.[429] We could call this phenomena "image-ination"—a process whereby visitors emulate

[428] Orland, *Man and Yosemite*, 95.

[429] To push this point further, it is not the actual landscape they come to experience but to experience the views of it they have already seen. It is not lost on the average visitor that in order to produce a picture-perfect postcard view like those produced commercially, one needs not only time but professional knowledge. For the average tourist it's not about taking a good image. Martin A. Berger for example argues that unlike literary and cartographic depictions of Yosemite, photographs like those produced by Carleton Watkins that were immensely popular, enabled viewers to get excited about seeing it for themselves. Berger uses the example of the adventurer Fitz Hugh Ludlow to argue that his anticipation for seeing Yosemite was more about "his eagerness to experience the scenes immortalised by Watkins'

views, not in order to *simulate* but to *stimulate* their previous two-dimensional experience of a place that they now experience firsthand.

Other than via direct instruction during the Camera Walks, the peripatetic nature of the average visitor's photographic journey through Yosemite is arrested through osmosis. Specifically, by being brought into physical contact with staff photographers who call Yosemite their home, they rub shoulders with people for whom this vast playground is more *place* than *space*. Indeed, as a result of the way the Ansel Adams Gallery operates on the atelier model of instruction, this contact can be traced back to the park's first photographers. After my interview with Kirk Keeler who manages the education program at the Ansel Adams Gallery, he sent me a document that outlined this hierarchical structure with the names of different generations of Yosemite photographers (fig. 53). Spatialized chronologically, the diagram demonstrates the way teachings have been passed down from expeditionary photographers of the 1800s, to Ansel Adams in the 1920s and then through another three generations of photographers to the present. This perspective is expressed by Michael Wise on the "meet our photography instructors" page for the Ansel Adams Gallery website:

> In the 1500s, Giorgio Vasari formally promoted that the story of art is one of progress – where each artist is to learn from those who came before. I believe Ansel Adams influenced an understanding that the artistic integrity in photography is one to be passed along and not held selectively. In part, Adams' legacy was the development of a genuine collaboration and creative collective. These unifying ideas must endure today.[430]

As living relics, visitors are brought into contact with Adams' earthly representatives (and those that came before him), thus modelling their own photo practices on those who quite literally live and

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photographs," more than his excitement about seeing the valley firsthand. See: Martin A. Berger, "Overexposed: Whiteness and the Landscape Photography of Carleton Watkins," *Oxford Art Journal* 26, no. 1 (2003): 19.

[430] Michael Wise, "Meet Our Photography Instructors," The Ansel Adams Gallery, 2020, accessed January 10, 2020, http://www.anseladams.com/meet-our-photography-instructors/.

breathe the park as the wellspring for their photographic practice. Currently run by his son and daughter-in-law—Michael and Jeanne Adams—as far as the Ansel Adams Gallery is concerned, the bloodline is intact.[431] A significant factor motivating photographers to seek out employment with the gallery is that it offers them a context in which to establish careers as Yosemite photographers. Working at the Ansel Adams Gallery then is more than just a job, but a commitment to one's muse—Loberg for example, has been working with the gallery since 1985 after she met Ansel Adams. Like it was for Adams, the gallery and staff photographers have a symbiotic relationship, wherein they supply the gallery with work and educational services and in turn the gallery provides financial support and enables many of them to live in the valley—a privilege granted to only a small percentage of all park employees. As Reese told me during an interview, "you get most of your best work done in your backyard. Yosemite was Ansel's backyard."[432] Thus, on the Camera Walks, like staff photographers, visitors are not only literally but metaphorically following in the footsteps of Ansel Adams. As Wise claims, "through my photography teaching and guiding work at The Ansel Adams Gallery, I continue to learn the joy of sharing and expressing the creative enlightenments that are bestowed by this natural environment."[433] Thus, Camera Walk attendees catch a glimpse of a very different lifeworld than their own, one that reveres nature as a significant counterpart in producing images and one that works as a counterpoint to their experience of pasting images of themselves over an ever revolving set of landscapes as mere backdrop.

Pure Photography & Photo-Foraging: Scripting to Un-script

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[431] Adams married into the gallery when in 1928 when he married Virginia Best, whose parents first established the studio in 1902.

[432] Michael Reese, "Interview with Michael Reese," by Alex Kershaw, unpublished, September 19, 2015.

[433] Wise, "Meet Our Photography Instructors."

Yosemite is also a source of inspiration for a different set of photographers and their guides who hold weeklong photographic workshops in the park. These attract a more dedicated photographer—typically one who works or used to work professionally in either photography or film or who identifies as semi-professional—meaning that while they don't make a living from it, they spend a lot of their money and time on it. While they are there to learn new skills, most of the participants in attendance during the two trips I took, needed little technical assistance. Instead, they were attracted to the socialization aspect of the trip, a chance to be around others who shared their passion and to be in the company of instructors whose work they admired and who unlike them, possess an intimate knowledge of the park. Reminiscent of the camera club outings taken by amateurs of relatively comfortable means starting in the United States in the 1890s, they practice amateurism in the true sense of the word.[434] As a counterpoint to the circus like nature of the seasonal photo events and the way experience is homogenized via the network of views, these "photo-foragers" use the medium to linger in the landscape to forge a deeper engagement with nature.[435]

The best way to extrapolate the essence of their distinctive approach (that appropriates Group f/64's brand of "Pure Photography") during these workshops is to begin with an example of a tour lead by Dave Wyman and Ken Rockwell (fig. 54). The first full day of our five-day workshop: *Yosemite Photography: Capturing the Spring Light* began with a 5.20 a.m. meetup at Yosemite Lodge where

[434] By this term I mean to invoke not its modern usage, but its older meaning as people with a true love and dedication to the craft. During this tour for example we met at around 5:30 a.m. and worked until sunset each day at around 8:00 p.m. On two occasions there was also a night-time photo session that ended around one in the morning.

[435] So, while I am arguing their engagement is different than the average visitor, their practices still relate to what scholars in tourism studies have pointed out about travel and leisure activities being about self/world making. This is characterized as a process of "world-deconstructing." Lean et al write: "travel is often represented as a process through which individuals make and/or reinterpret their 'world' – perhaps through the guise of knowledge acquisition, identity formation, transformation or self-discovery. In relation to representation, travel is frequently framed as an opportunity to look beyond/behind/through the representations/discourses/narratives of others and to see, engage, interpret, understand issues, peoples, places, cultures, etc. for oneself. This is not only a process of world-making, but also world-deconstructing." Garth Lean et al., *Travel and Representation.*

most of the 11-member group were staying. I had to wake up at 4:00 a.m. as I had a little way to travel from my *sub rosa* abode where I was camped out in a densely wooded area (hidden from the ranger's view)—a consequence of having neither the money or the foresight to book four months ahead. From Yosemite Lodge, we drove to the base of the trail to Mirror Lake, that is just beyond the eastern end of Yosemite Valley. The group gradually dispersed as people were drawn in different directions and after about an hour we regrouped and began the trip back toward where we left our cars. On our way out, Rockwell stopped to photograph a sizeable boulder protruding from the glassy lake. As he was shuffling around getting different angles, one of the participants named Hendrick asked him if it's necessary to have the three elements of foreground, subject, and background in the picture. Ken responded nonchalantly, "you don't need to adhere to those rules, in my work it's not about the subject. Later when we met for a show and tell that afternoon to review some of the group's pictures, Hendrick pressed him on this issue and got this response:

> It's not about a picture of a tree or a rock, like the picture I made this morning, it's not about a rock, it's about a blue shape, it's like a light cyan thing and a green background, that's all it is: colors. If I was gonna' paint that in oils, it's like *plupphh*, it's like a Warhol. So, no I don't give any conscious thought to foreground, to background. The conscious thought I am giving is to the fundamentals: the shapes and colors involved.[436]

Rockwell's explanation encapsulates two qualities that were consistently referenced by both instructors on the trip. First, the goal is to transcend the notion that there is a 'subject' of the image, a goal they encourage with the imperative: "avoid object-based subjects." Second, photography should be apprehended more as an artistic practice than a technical craft, where the objective is to keep photographing the same scene or object over and over again as a means of trying to intuit it differently

[436] Ken Rockwell, "20 May 2017, Saturday," 2017, accessed November 22, 2017, https://www.kenrockwell.com/trips/2017-05-yosemite/index.htm#F20.

from other photographers. Through examples like this and in conversations, workshop participants were instructed to abstract the concept of nature for the purpose of experiencing only shapes, color, and light—as qualities that can't be named, but sensations that can be captured photographically. Although not framed as such, Rockwell expresses a rather Deleuzian distinction between an identifiable conceptual object that can be named and immediate sensations and intensities that transcend category or name. More generally, without acknowledging it as such, our instructors were teaching the aesthetic fundamentals as the distinction between things perceived as opposed to things known. Later, when Rockwell put the image of the Mirror Lake rock on his website, the accompanying caption read "this was a giant hunk of blue ice that fell from an errant airliner and landed in Mirror Lake. But honestly though, this is a grey rock lit by blue dawn skylight—it just looks like blue ice" (fig. 55)[437] Just as Ansel would have had it, the photograph is less a representation of how the landscape looked at that precise moment than a dramatic rendering of the photographer's emotions upon viewing the scene.

These sentiments are consistent with a one-page handout we were emailed beforehand. A floating text box in the center of a document titled "Assignment: Yosemite," includes a quote by the Canadian landscape photographer Freeman Patterson:

> Letting go of self is an essential precondition to real seeing. When you let go of yourself, you abandon any preconceptions about the subject matter that might cramp you into photographing in a certain, predetermined way... when you let go, new conceptions arise from your direct experience of the subject matter, and new ideas and feelings will guide you as you make pictures.[438]

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[437] Ken Rockwell, "Springtime in Yosemite: 18-21 May 2017," 2017, accessed May 7, 2018, https://www.kenrockwell.com/trips/2017-05-yosemite/index.htm.

[438] Quoted from Freeman Patterson's description of the obstacles that prevented him from seeing the best photo opportunities. Freeman Patterson, *Photography and the Art of Seeing* (Toronto: Key Porter Books, 1979).

Without the mention of photography here, one could mistake this instruction for the type of advice you would likely receive on the principals of non-denominational mindfulness during a meditation retreat. During Dave Wyman's introduction to the class he emphasized landscape photography's nature as a process where the photographer "fuses" with the park, where for example, the photons of light that register on the camera should also be considered as a physical sensation the photographer takes away with them when they leave. Asking the group rhetorically "why are we here," Wyman responds that it *might* be about generating memories, taking pictures back to show people and socializing. However, he goes on to say that the *real* reason is to connect with reality—to connect with something larger than oneself—"for some people they connect with reality by doing drugs and rock and roll, but here for us on this trip, it's about using the camera and landscape to connect." To this admission, one group member responded that what he said reminded her of something her meditation instructor once told her. A phrase that Wyman repeated several times on the trip was that we were not taking a "spray and pray" approach like all the tourists at the viewing platforms, meaning that it is not about taking excessive amounts of images and hoping that one will turn out well. Instead, it is about patiently foraging through the park, ruminating on what you experience—not attending to what you 'see' but to what you can do to discipline yourself to perceive. Without going down the rabbit hole of what may or may not define the ontological principals of photographic realism, it is safe to say that abstraction is a uniquely difficult task for the medium of photography. This however, is the challenge such a workshop establishes as a means of drawing one into the landscape, where photography constitutes a form of active lingering.

Although in vastly less academically explicit terms and not fueled by a sense of reactionary purpose (that is, against pictorialism), the sentiments of Wyman and Rockwell resonate with Group *f*/64's distinctive brand of "pure" photography. This seven-member group that formed in the early 1930s in the San Francisco Bay Area, included photographers well known for their work in Yosemite including Ansel Adams and Edward Weston, as well as other members who shared their interest in a

vision of the landscape and nature from a distinctly West Coast perspective. While Wyman and Rockwell's group of amateurs do not have their sights set on innovating photography's medium specificity, they certainly share in the project of learning to see photographically—specifically, by navigating the reciprocal space between what is literally there and how one's intent or emotion decides to render the scene.[439] On the first full day of the tour Rockwell gave an introductory speech. With everyone crammed into a smallish hotel room at the Yosemite Lodge, it was odd that Rockwell chose to name his propaedeutic with the acronym FART—a set of guidelines or principals to work by for making "good pictures" in the field.[440] "F" stands for "fundamentals" he tells us, this means that we should abstract our self from what it is that we are really seeing. So, for example they are not clouds or a person or a car, but shapes and colors. Rockwell says that to help with this he squints his eyes or look off to the corners. For this reason, he says that the worst viewfinders are often the best. Weston refers to the process of learning to see photographically as "camera-vision,"[441] a skill that comes through the process of pre-visualization, whereby one must conjure a finished version of the final print in one's mind before the image is exposed. For Weston, the mental handiwork of pre-visualization is an attempt to regain authorial control over the technical limitations the camera apparatus—a process which speaks directly to the educational premise of these workshops.[442] Viewed as a symptom of the

[439] A section of the manifesto that accompanied their only show together as a unified group reads: "pure photography is defined as possessing no qualities of technique, composition or idea, derivative of any other art form." *Here, pure also connotes* the sense of an unmanipulated photography as different from what they saw as the mediums adulterated forms in pictorialism that emulated painting and thus limited the potential of the medium a voice in its own right. Group f.64 Manifesto, Exhibition File, 1932, American Art Study Center, M. H. de Young Memorial Museum, Fine Arts Museums of San Francisco.

[440] Ken Rockwell, "Conversation during the workshop Yosemite Photography: Capturing the Spring Light," Yosemite National Park, unpublished, May 19, 2017.

[441] Weston, "Seeing Photographically," 174.

[442] For Weston, these limitations are what define the medium: it is instantaneous and once the shot is made there is little room to change the result afterwards. In reference to camera-vision he writes, "hence the photographers most important and likewise most difficult task is not learning to manage his camera, or to develop, or to print. It is learning to *see photographically*—that is, learning to see his subject matter in terms of the capacities all his tools and processes, so that he can instantaneously translate the elements and values in the scene before him into the photograph he wants to make." Ibid., 173.

goal of learning to see photographically, this helps explain the two groups' shared emphasis on the importance of formal composition. "Worry about what's in your picture, not what's in your camera bag… Ansel's images are strong because they did not have the distraction of color," says Rockwell as a prelude to the third principal of FART. "R" for "refine" your picture to articulate a strong composition that is as undistracted as possible. Rockwell likens this principal on the simplicity of photography to the writing of Kurt Vonnegut, who in his estimation uses an unadulterated linguistic style that simplifies a complexity that is discreetly made intelligible for the audience. Rockwell continues that this is just like the photographers from Group f/64 who were concerned with a quest for an elemental form involving a stripped back simplicity. This accords with the scholarly cannon on Group f/64—whether it be a cabbage, a nude or a landscape, the image had a formal concern more than it had a documentary concern; and where the importance of shape, light and composition win out over any explicit social or political meaning. Furthermore, speaking in particular to Ansel Adams' photography as compared with Wyman's notion of fusing with the landscape, for both photographers, nature serves a redemptive function—as an antidote to troubling times (as it was during the Great Depression) or a potential source of answers to universal questions. This is achieved through 'abstracting' the landscape as an expression of the self that still preserves (at least as far as Adams was concerned) the photograph's documentary function to speak truth to power.[443] The last principal of Group f/64 that infiltrates the teaching of Wyman and Rockwell (albeit in abbreviated form), is the cadence with which the camera is applied to the landscape. While Wyman and Rockwell's participants are not handicapped by the finicky nature of analogue film or by the longer exposure times necessary to expose through the f/64 aperture opening available on more cumbersome view cameras, they do embody the spirit of the added consideration these self-imposed technical limitations entail. Wyman's

[443] This claim has been the subject of ongoing debate among historians of Group f/64 and will be addressed later in this chapter.

mantra of "don't spray and pray," reminds one of Adams' often repeated the mantra that "a photograph is made, not taken." Like Adams, the distinctively technical elements of the camera apparatus are engaged to evoke connections between subjects and objects that ordinarily escape one's attention. With the audience in mind, the composition is arranged as a meditation on the beauty of ordinary things that are lifted from the surface of the world and removed from their original surroundings.

This is easier said than done. In reality this is rarely achieved by any photographer, let alone those still perfecting their craft. Ironically as a substitute, our photographers tarnish the good name of Group f/64 by using computer applications for photo-editing and filters like Snapseed and BeCasso. These gaudy augmentations (that include metamorphosing your perfectly crisp landscape image into a cubist work of Pablo Picasso or a psychedelic Vincent van Gogh) invoke the very painterly affectations that Group f/64 rallied to distinguish itself from in their denunciation of pictorialism's painterly emulations. In response to questions from the group about the validity of high-dynamic-range imaging, Rockwell was emphatic: "I don't like to force nature" he said. However, as it turned out this was not the case. In a process that became known among the group as the "Ken Rockwell Effect," one should apply outrageously unnatural vibrancy settings to oversaturate the colors.

Challenges aside, the principals of 'Pure' Photography are enacted during the workshops as participants forage for views rather than take images of existing views. The itinerary is designed to maximize time spent photographing. The schedule is designed to avoid car travel during rush hour traffic and to place photographers in specific locations at specific times based on seasonal lighting conditions (as much as they can be predicted).[444] Though this itinerary is always being adapted on the

[444] Certainly, the workshop's itinerary provides a script, though my point here is that the script serves as a framework for encouraging unscripted approaches. Similar to the Camera Walks, but much more involved, the workshop functions as a corrective to break photographers out of their 'bad' habits. One example of this is the bucket-list style approach one participant of the workshop had, where rather than trying to find views of Yosemite for himself, his approach was more like a collector where Yosemite was another wrung on the ladder of great photo-destinations of the American West. This became apparent during a short slide presentation he gave to the group of his photographs from Zion, Yellowstone and Arches National Parks. Unlike the

fly based on emergent phenomena and where the group's collective mood of the day takes them. While the popular viewing platforms are visited, the group also visit the park's nooks and crannies where there are few other people. Essentially the group drifts from spot to spot, remaining there as long as it seems productive, a flow that is like the pace of fly fishing. Like panning for gold, they stir up the landscape for images, rather than merely accepting what is in front of them by searching thoroughly, though mostly unsystematically. Typically, all members begin at the same location and then spread out, moving at their own pace, sometimes alone or sometimes in groups of two or three. At some point the group manages to reassemble and then makes an assessment of where to go next. This gives participants the permission to be drawn into nature as they cultivate the freedom to wander from interest to interest. Their interests often apprehend what others might consider as discard—odds and ends that constitute atypical renderings of Yosemite.

The flow via which participants photo-forage through the landscape is fairly instinctual, allowing the photographer's attention to oscillate between macro and micro scales. Features expressed by the landscape and its non-human inhabitants serve as cues that pull on the photographer's attention. Following one's nose sometimes happens quite literally—when downwind for example—you are lured in the general direction of the vanilla-marshmallow scent of a Jeffery Pine or the umami odor discharged from a decomposing fox. On one particular day when it had been drizzling all morning, the smell rising off a thick carpet of rust colored pine needles decomposing on the forest floor drew Sarah (one of the photographers) toward an area behind the Ahwahnee Hotel. She began by circling the area taking images as she went. Her attention is diverted when she hears honking from a raft of ducks passing through Royal Arch Creek. Racing over to catch them, Sarah continues to tail them along the riverbank as they wind along the currents of the Merced River. By the time the ducks escape her view,

instructional advice given during this workshop, all of his previous photographs he presented were unmistakably stereotypical views.

she notices Dave Wyman with his cheek and camera pressed up against a red fir tree, shifting on his feet to try and find the right shot. Both Sarah and then another photographer from the group join Wyman at the tree to find him inches away from a luminous ear of sulfur shelf fungus, with one hand operating his camera and the other hand jiggling his iPhone as a light source (fig. 56). When Wyman finishes with the fungus, he steps out of the way to let the other photographers take their own photos and then reorients his camera to the smooth scalloped walls of the cliffs beneath North Dome. Tinkering with the composition by running his viewfinder up and down its towering glacially polished granite walls he says, "it's like a madman went to town on a giant block of butter with a spatula."[445]

We spent another afternoon traversing the area known as Happy Isles—a eyot formed where the Merced River bifurcates. Our group fanned out along the network of paths covering the tiny island. Surrounded on all sides by thick torrents of water our attention was enveloped and made singular for the way the sound of moving water drowned out all other stimuli. Bridges crossing the river gave us a vantage point to shoot down into the water. This allowed us to compose and re-compose rectangular frames of moving water as it surged, plunged and foamed—over, under and around rocks—its changing shapes were accentuated by testing different shutter speeds that offered endless possibilities for composition. Combined with patterns added by striations in the river rocks and reeds pinned underneath the water that transitioned in color from pale green, to white, to deep brown—this was precisely the type of scene that lends itself to testing Rockwell's assertion that it's all about "color, shape and light." The force of such a fast volume of running water, caused the bridge to nudge back and forth slightly. This rocking of the bridge, when combined with eyeballs firmly focused on the water's motion, produced a narcotic state allowing you to sustain your attention in the scene. When you feel like you have exhausted the possibilities of this scene and without having to move, small

[445] Dave Wyman, "Conversation during the workshop Yosemite Photography: Capturing the Spring Light," Yosemite National Park, unpublished, May 20, 2017.

patches of lichen growing on the wooden bridge offer an opportunity for a new round of photographs. Later that afternoon as we traveled to our next location, plans changed when a herd of mule deer were spotted in Stoneman Meadow. This time of year, the deer are lured into the clearings by the smell of wild azalea. This seasonal treat and other snacks like young grass shoots, kept them in the area while our group of photographers got to work on them (fig. 57). As dusk loomed and sunset's orange curtain began to draw down the face of Half Dome, many of the photographers gave up on the deer and found new compositions that they pursued until last light.

A second feature of the group's photo-foraging involves a largely uncoordinated process of rotation between separating to find individual subjects and coagulating around a common subject. When the group congregates around a particular subject, it serves as a forum for discovering new ways to photograph the same thing. People pipe up and offer comments about what they see and make suggestions for how to photograph it either verbally or by just doing it. In an unacknowledged ode to Constructivist photography the body is put to work—pressing up, lying down or crouching uncomfortably—in order to find new perspectives as a means of revealing surprising and uncertain forms that are not always immediately obvious. One example involved the group standing around a deep pond sunken into the valley floor looking at an inverted image of North Dome. Rockwell comments that the great thing about reflections in water is that it reduces the subject brightness range so that now your camera can register detail in both the shadow and highlight areas. People take turns photographing the reflection from where they are already standing, while some shift positions to a different side. People creep to the edge and shoot down while others kneel into the mud for a lower angle. With this in progress, Rockwell advocates that one option for accentuating this quality further, is to use a fixed lens that will "get you moving because point of view is everything."[446] Waiting until there is a window when others are not photographing, one of the photographers dips his compact

[446] Rockwell, "Conversation during the workshop Yosemite Photography."

camera beneath the water and shakes it around as though he were mixing up a cocktail. Another photographer points out that stirring up the water like this makes the particles of scum floating in the water's surface more visible and this gives him an idea. Looking through the viewfinder they circumnavigate the edge of the pond until the scum is positioned in an area of deep clear sky. After reviewing the photo on their LCD screen, they share an image that appears to be taken at night with thousands of stars shining brightly. In practicing this type of landscape photography, where the lighting cannot be changed, the body it put to work in order to change its orientation to the reflected sunlight. In this way the camera serves as a technology that augments the physical motion of our bodies enabling us to perceive versions of 'reality' that we are not able to comprehend alone.

A third feature of photo-foraging involves making the most out of the conditions as they present themselves to you. This not only means maximizing photo opportunities by scripting the activities ahead of time, but also the willingness to be flexible when conditions change. Part of the reason photographers enroll in the Conservancy's programs is that guides like Wyman and Rockwell have an intimate knowledge of the park from a photographer's perspective. For example, they know a place to take you at dusk when everything else looks flat to catch the flowers of the evening primrose opening up. They know that in order to snatch a shot of a rainbow at Lower Yosemite Falls during spring, you need to be there at around 7:00 a.m. and that a rainbow that forms at the base of Bridalveil Fall is visible from Tunnel View at about 11:00 a.m. However, none of this is much good if it rains, which it did for three days straight during one of our trips. In this situation one response was to switch to a macro lens to photograph the mountains though the reflections in drops of water. Another example of how the group adapted to these conditions was to visit a location known as Fern Springs. Just above the spring there is a waterfall which looked better than usual on account of the inclement conditions. Another advantage of the rain is that it adds saturation to the colors of the landscape and in this case made the ferns, wildflowers and moss surrounding the spring a whole lot more vibrant. Another example suggested by a group member was to head over to where we had seen several large

dogwood trees. This they said, would be an opportunity to make some black and white images. With the overcast conditions it was possible to bring out the subtle tones of dogwood's white flowers usually blown out by the sunlight. Furthermore, without the sunlight penetrating into the background it was an opportunity to offset the bloom against a darker background so that they popped out. Although the use of photography as a means of socialization is always a condition of a group tour such as this, adverse weather conditions mean that participants tend to take more photographs of each other. While this might emerge from a sense of boredom or simply a means to keep moving as the cold sets in; as Kevin Markwell observes, photo practices shape the social dimension of a tour by strengthening social bonds and forging a sense of identity among the group.[447] In Markwell's observation, one reason members took less images as the tour went on is because they got to know each other better. However, in this context at least, whether it be taking turns photographing a water droplet or a portrait, the formation of social identity is an artefact of environmental conditions that place added pressure on using the medium to try and invent new images rather than falling back onto old standards.

Last, in keeping with the workshop's ethos of experimentation, the group's photo-foraging involves an adaption of the analogue technique known as previsualization as suited for digital photography. However, considering that digital photography reduces the time between imagining or "previsualizing" the final 'printed' image and actually seeing it to a matter of seconds (in preview mode) or even continuously (in live-view mode), does this not make the technique redundant? While from today's perspective previsualization may seem like an antiquated hangover of modernist-era photographers, the concept remains useful for Rockwell and Wyman as a means of teaching intentionality in a way that is more hands-on than it is conceptual. Through both a formal introduction to the concept and as it emerged in casual conversation, the technique of previsualization was addressed several times during our tour. For example, during the group show and tell in the hotel

[447] Markwell, "Dimensions of Photography."

room, Wyman explained Ansel Adam's use of previsualization to encourage people to think about "the 'whats' and 'whys' each time you press the shutter," that is, to engage the imagination, to pause and to consider your creative interpretation of the scene before pressing the shutter.[448] Prior to the development of previsualization and its attendant zone-system into a fully-fledged technical schema by Ansel Adams and Fred Archer,[449] Edward Weston referred to the process as a kind of mental handiwork—an attempt to regain authorial control over the technical limitations of the camera apparatus. For Weston, these limitations are what define the medium—the exposure is instantaneous and once made there is little latitude to alter the result afterwards. For Adams, previsualization helps the photographer imagine the scene in front of them as a finished image before making an exposure—a technique necessitated in part by the fact that the eye's ability to render a scene (translated as tonal values from black to white), far exceeds analogue film's ability to render it.[450] Even though the system as it was first conceived, was formulated on the basis of analogue photographic processes, a version of the zone system is now available on the camera's LCD screen as a histogram that gives a real-time algorithmic representation of the tonal range distribution of each image taken, not to mention a detailed pictorial representation. So, getting back to our photographers, as they move through the landscape they are perpetually shifting their attention back and forth between looking at the scene and

[448] Though at the same time, teaching previsualization runs the risk of making matters overly complicated, something that Rockwell is firmly against. As he likes to say, "worry about what's in your picture, not what's in your camera bag."

[449] See: Ansel Adams, *The Negative* (Boston: New York Graphic Society, 1948).

[450] This involves intuiting the differential relationship between human perception of a scene and how that scene will be registered through chemical print processes and camera optics. This raises questions photographers must ask themselves related to composition and exposure as they imagine what will be necessary to undertake in the postproduction of the negative. This invokes the capacity to imagine how film will record the scene based on the differential between how the human eye and photochemical celluloid records the effect of light on landscape. However, Adam's notion of pre-visualization is complicated by a moving subject who is also capable of doing the pre-visualizing as are the audience members of photographic events. Ansel Adams and Robert Baker. *The Camera* (Boston; New York: Little, Brown and Company, 1980); and Minor White, *Zone System Manual: Previsualization, Exposure, Development, Printing; the Ansel Adams Zone System as a Basis of Intuitive Photography* (New York: Morgan & Morgan, 1968).

then reviewing how the camera recorded the scene on the LCD display. This activity would seem to limit the very types of imagination that the act of previsualization seeks to encourage. Distracted by the camera's technicity—as something that continuously interrupts the experience of nature—seems to be the complete antithesis of Wyman and Rockwell's brand of cultivating intentionality and mindfulness. This act of constantly checking each image on the camera's display has been dubbed "chimping," and is used by some professional photographers as a derogatory term to describe the amateur's juvenile relationship with their camera.[451] These professionals claim that chimping is an unnecessary crutch, done away with by the seasoned photographer's intuition and experience.[452] Without getting into a debate over the finer details of whether chimping truly limits previsualization, my point is that there is a pervasive vernacular that pinpoints chimping as something that "causes you to miss moments because you're staring at your screen instead of watching the scene."[453] While Vilém Flusser does not reach such a definitive conclusion as those espoused on photo-blogs, he does argue that in the in the context of a post-industrial society, the increasingly automatic nature of the

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[451] As an example of this sentiment see: William Porter, "Why Don't Pros Shoot with the LCD More Often?," *Tech, photography, books, etc,* March 21, 2012, accessed October 14, 2019. https://williamporterphotography.wordpress.com/2012/03/21/why-dont-pros-shoot-with-the-lcd-more-often/. Although the evidence is entirely anecdotal, the term was first used to describe the actions of a photographer shooting cars at a racetrack. As they reviewed images on the camera's LCD screen, they deleted duds and also made the "ooh, ooh, ooh" sound of an excited chimpanzee when they found a good shot. This caricature was meant to be derisive for the suggestion that they were missing potentially great shots while busy fiddling with their camera. The situation of live action photography is quite unlike that of landscape photography where most of the time there is little moving action.

[452] They prefer using the optical viewfinder rather than live view or the LCD screen. For an example of the way these kinds of discussions play out in online photography forums see: Ana Mireles, "Pros and Cons of Chimping – What Is It and How It Can Hurt or Help You?," *Digital Photography School*, 5 September, 2018, https://digital-photography-school.com/pros-cons-of-chimping-defined-hurt-or-help/. In relation to landscape photography: Windwalker, "Digital Shooters...Are You a Chimper?," *High Sierra Photography / Videography. High Sierra Topix*, 5 September 2006, http://www.highsierratopix.com/community/viewtopic.php?t=394. To see views on chimping as compared with Ansel Adams and previsualization see: Graham Clark, "How to Pre-Visualize Like Ansel Adams," *Pro Digital Talk. Digital Photography Review*, 5 September, Mar 13, 2013, https://www.dpreview.com/forums/thread/3400254.

[453] Gary Macker, "Film. No Chimping, No Surprises," November 20, 2012, accessed November 12, 2018. https://www.stevehuffphoto.com/2012/11/20/film-no-chimping-no-surprises-by-gary-macker/.

photographic apparatuses increasingly works to enervate human intention.[454] However, rather than seeing this as a one-way street, Flusser's configuration of the medium is reciprocal, because what he wants to emphasize is the battle between apparatus and operator where "in the act of photography the camera does the will of the photographer but the photographer has to will what the camera can do," in a process where the "photographer and camera merge into one indivisible function."[455] Thus for Flusser, the camera is in possession of the photographer and the photographer is in possession of the camera. So, on the one hand, the camera's finite range of settings demands that we see a landscape through its limitations and at the same time it is these limitations that motivate us to persist in developing our skill to control it. As a side effect of this process, the operator is increasingly exposed to the potential for developing a more nuanced awareness of how they perceive the landscape. Seen in this way, it is my contention that while it is indeed true that "Ansel Adams never chimped,"[456] in the experience of the photographers I witnessed on Wyman and Rockwell's tour, the busyness of camera work prolongs their engagement with nature.

While occupied with the camera's technical considerations or the *in Situ* implications of the mediums' optico-chemical properties might seem the complete opposite of being present and really 'seeing' what is in front of you, the experience of immediately previewing their results works to fuel their desire to linger in the landscape as photographers continue to experiment. This is in keeping with the ultimate goal of previsualization—which to view simply a technical exercise misses an important point that Weston made clear in his description of the process—one "rooted in the concept of the

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[454] Flusser, *Towards a Philosophy of Photography*.

[455] Ibid,. 35.

[456] RJP writes in the comments section of Mireles' posting, "I once had someone 'explain' to me that Ansel Adams never chimped - DUH!!" Ana Mireles, "Pros and Cons of Chimping – What Is It and How It Can Hurt or Help You?," *Digital Photography School*, accessed September 5, 2018, https://digital-photography-school.com/pros-cons-of-chimping-defined-hurt-or-help/.

instant exposure as the essence of photographic expression."[457] As Debra Bright clarifies "both Weston and Adams spoke of the act of choosing the 'correct' tonal values as emotionally and spiritually guided, independent of the subject's connotative meanings and therefore universal and transcendent as form. Tones, shapes, and their arrangements were to be perceived as 'equivalents,' to use Stieglitz's famous term, for 'the feelings the photographer had about life.'"[458] Thus, Bright's point is that previsualization it is not simply a dogmatic belief in perfectly crafting an image as an unadulterated slice of reality, but a process of selecting nature to express personal values that are also transcendent. The potential for the landscape to take one beyond themselves, correlates with Wyman and Rockwell's brand of photo-pedagogy where "letting go of self is an essential precondition to real seeing."[459] Though it should be clarified that for members of Group f/64 the transcendent qualities of the landscape were elicited for the broader purpose of environmental activism (in varying degrees), while for the photographers studied here, transcendence exists on a personal scale that is more closely connected with alterity. Even still, this points to the camera's role as one that activates the landscape as an entity that photographers have a dialogic relationship with, rendering it not merely as a context but as an interlocutor.

Part 4. Landscape Maintenance: Photography Against its Own Nature

Having now tended to a variety of photographic practices at Yosemite, what are the implications when we consider the ways the medium is used as means of maintaining the park? In

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[457] Weston, "Seeing Photographically," 63.

[458] It is ironic that this view of photography is being repurposed by amateur photographers using the small camera formats that Stieglitz (at least initially), used to differentiate art photography and vernacular photography. Bright argues that the notion of artist photographers like Stieglitz and Strand who elevated photography to that of a high-brow intellectual pursuit (where pressing the stutter was an "epiphanic instant"), was a reaction to the growing popularity and easy access to photographic technology.

[459] Worksheet quoted from: Patterson, *Photography and the Art of Seeing.*

evaluating these practices, it will become apparent that there is a deep and not so amusing irony related to the ways that these practices work in contradictory measures. To set the stage, the quickened pace that we are encouraged to experience the park works against the grain of the sheer awesomeness of Yosemite, where deep geological time is out of sync with the technicity of the medium. Ironically, it is precisely this sublime quality of the 'wilderness' that photographers seek to conjure. In their reverence for Yosemite, they practice a form of boosterism that harks back to the work of San Francisco photo studios like those of Robert Vance whose gallery lured tourist in droves with Watkins' gold-toned albumen prints. However, unlike the second half of the 19th century, the numbers that spill through the park today, threaten the very qualities of a pacific paradise that the photographer so desperately seeks to capture. Furthermore, we shall see the ways that photography works as a time machine to recalibrate fictions in the present by maintaining a vision of the park as it always was—a timeless primordial Neverland. Coupled with the underhanded interpretive frameworks set forth by the National Park Services, this perpetuates a sanitized version of history where the potential for Ahwahneechee voices to resonate in the present are entirely erased.

Against Yosemite's Deep Geological Time

The compulsion to photograph works against the geological scale of the landscape which demands that one slows down. In comparing the natural tendencies of visitors at the viewing platform and the pedagogical ethos of the Camera Walks and Yosemite Conservancy tours, there is a schism in photography's involvement in accelerating one's passage through the park, and its function as a corrective to decelerate one's passage. This tension prefigures the concluding part of this chapter that addresses the ways that photography—rather ironically—works in ways that are contradictory to the photographer's intentions. Beneath the surface of these competing forces, the sublime quality of Yosemite's landscape is already at work as a subliminal agent that beckons us to stop and smell the roses so to speak. Other than personalizing one's experience, the act of repeatedly placing the human

figure between the camera and the landscape serves as a feigned, if not subconscious attempt to try and comprehend its unwieldly size by calibrating it at a human scale. However, in terms of the photo practices (at least at the viewing platforms), this function of the landscape is overwritten as a result of the way photography compels us to throw ourselves in front of landscape backgrounds one after the other. Thus, the very same apparatus that is engaged to sharpen our sensitivity to nature, is the same apparatus that dulls our ability to fully respond to the landscape's role in slowing us down.

More than most National Parks, it is not difficult to feel deep geological time at work in Yosemite. Standing at Tunnel View, observing the way the valley (that was once a glacier) snakes into the High Sierras that were uplifted over 60 million years ago or the glacially polished marzipan-like rock faces of El Capitan, you register a timescale at work that transcends the scope of human centered calibration. Sunken 3,000 feet down in a valley that runs two miles wide and seven miles long, you are forever craning and panning your neck to try and digest mountain ranges that erupt from all sides and continue to span beyond your peripheral vision. Pressing through Mariposa Grove you feel the "agreeable kind of horror"[460] that Joseph Addison associated with the sublime—when looking down at fallen pinecones from giant sequoias that are sometimes more than twice the length of your foot—you marvel at the damage they would do, should you be standing in their path. However, while we might be able to intuit the scale of the landscape, the ability to feel as though we have satisfactorily reckoned with it is an altogether different matter. The ease via which the timelessness of the landscape can be compressed into an image functions as a simulacrum for having to fully reckon with its sublime nature. It is perhaps this ability to offset deep geological time through the instantaneous nature of camerawork that makes photography so popular at Yosemite.

Against the Ethos of Conservation

[460] Joseph Addison, *The Works of Joseph Addison,* ed. Richard Hurd, vol. 1, 1903, 511.

Not only does photography work against the tempo of the landscape, it also works against the preservationist ethos that is so deeply embedded in Yosemite's mythology. Park rangers however, more than most, see a very different picture to its image as pristine wilderness, especially when assigned traffic duty on a 95-degree day. One summer afternoon during my fieldwork I sat on the arch of Sentinel Bridge to jot down some notes, while also watching a ranger redirect traffic to prevent a likely gridlock. I remember this moment for the standoff that ensued between him and a motorist that dared to ignore his frantic hand signals when he stopped to ask a question. At first the ranger refused to acknowledge the driver and continued signaling for him to pass through. Slapping his hands on the steering wheel as if to say, "I can't fucking believe this," the driver persisted with his question. Long after the driver had given up on hope of an answer, their confrontation matured into a staring contest, as the ranger took an aggressively paternalistic attitude as though he was waiting for the driver to realize his own mistake and then following a reluctant apology, he would quietly move along. However, as a decidedly perverse return on the investment his family had already made by plodding through a three-hour traffic jam to reach the valley floor, the driver stayed put. Unfettered by the cars behind him laying on their horns and more likely a result of his family's pleas, the driver eventually moved on in defeat.

At the end of his shift the ranger walked over to ask me what I was drawing—remarking that it was a nice change to see somebody without a camera. I explained that I was actually writing some notes and that I was here on research. This provided the perfect opportunity to vent his frustrations. Beginning with a tirade on the stupidity of many visitors who hardly get out of their cars, take a few snaps and then leave, he turned his attention to park management. Pointing at the water passing underneath us, he expressed frustration that the recommendations of the Merced River Plan were not

being followed and that all anyone cared about was letting in as many people as possible to fill the hotels, restaurants and gift shops.[461]

While official park policy might encourage visitors to take photographs in the vein of post-Civil-War era preservationist photographers and while photo education programs model themselves on the legacy of modernist era art photographers who mobilized the medium as a form of environmental activism—these practices echo in the work of our Yosemite photographers as but faintly audible imitations. Whether it be serving the interests of commissioning agents, as a means of petitioning congress, or simply addressing the conscience of a broader public—the interests of the photographers studied here operate at the scale of the individual. While they might well be successful in emulating the visual sensibilities of past photographers these images are not mobilized in the same ways. While there is nothing ostensibly wrong with non-professional photographers not carrying out the charge of those who made their livelihoods from the medium—beyond satisfying the immediate interests of their authors, their friends and strangers as they circulate on image sharing platforms—these images function in a measure that is counterproductive to the spirit of preservationist ideology.[462] Put simply, the more park infrastructure encourages photography, the more people are lured to Yosemite through exposure to these photographs that promote it. Put into motion is a cycle that places exponentially increasing pressure on the status of Yosemite as an idyllic wilderness, thus threatening the very sanctuary that attracts photographers in the first place.

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[461] Park policy has been consistent in their resistance to suggestions for a quota system on cars and instead has built more infrastructure to accommodate their increasing numbers.

[462] Furthermore, while it is not addressed here, commercial photography has played an equally significant role in promoting park visitation. With respect to the role of photography to entice tourism Urry and Larsen argue that unlike the image's role as a substitute for experience before people had the means to travel, contemporary commercial photography constitutes an expert gaze, that arouses people's desire to travel, and constructs hyper real myths about places in what they call "imaginative geographies." Urry and Larsen, *The Tourist Gaze 3.0*.

Photography then, functions as a microcosm of the park's history as one beset by the conflicts between development and preservation. It is no exaggeration to say that the question over where to draw the line between preservation and human use is the most significant and intensely waged debate to have attended every stage of the park's history. A chronology of this enduring tension is expertly attended in Alfred Runte's environmental history, *Yosemite: The Embattled Wilderness.* Runte charts the history of Yosemite and its likely future as an enduring conflict over compromises to the national park ideal that Yosemite should primarily exist for the protection of natural heritage. Instead, park legislation has consistently promoted a "competing rather than complimentary set of management values" that prioritize recreation over preservation.[463] As Runte points out, confusion over how exactly the notion of a sanctuary would be created and maintained is written into the National Park Service Organic Act of 1916 that left the guidelines for management intentionally ambiguous. While it mandated the protection of scenery and wildlife, this was to be undertaken "in such a manner and by such means as it will leave them unimpaired for the enjoyment of future generations."[464] Taking a rather loose interpretation over their duty to 'protect,' Runte awards Yosemite as the national park that most "dramatically reflects America's alleged failures to reconcile nature protection with the wants and demands of the visiting public."[465] While espousing the ideology of the park as a sanctuary, Park Services has responded to greater visitation with greater development that has compromised its protection and served financial self-interest at the expense of the proper management of natural resources. Thus, in the spirit of the National Park Services' ambivalence, photography demonstrates

[463] Alfred Runte, *Yosemite: The Embattled Wilderness* (Lincoln: London: University of Nebraska Press, 1990), 219. Runte argue Yosemite is most special in this regard seeing that it "bears the longest evidence of the tension, found in every major park, between preservation and use." Ibid., 3.

[464] Ibid., 1.

[465] Ibid. The Organic Act gave the director of Park Services the power to "dispose of timber" and permitted "the destruction of such animals and of such plant life as may be detrimental to the use of any [park.]" This allowed the clearing of trees and shrubbery if it blocked a view and the culling of predators to encourage populations of deer and mountain sheep that tourists expected to see. Ibid., 116.

that in practice our propensity to care for nature is not an either/or affair, but works to serve competing interests where (at the scale of the individual at least), our professed appreciation and reverence for the park engages it as a form of resort-style entertainment that works to diminish the very kinds of experiences that the images perpetuate.

The irony that preservationist attitudes (or even less politically motivated sentiments of appreciation), embedded in photo practices work to undermine the capacity of the park to sustain itself, should come as little surprise given photography's historical role as a form of boosterism. What is typically left out of the self-mythologizing narrative espoused by Park Services is the crucial role photography played in promoting Yosemite for commercial purposes. Deborah Bright, for example argues that photography played the most significant role in "the new spiritualizing of nature" through the mass distribution of stereographs, postcards and reproductions in the illustrated press.[466] Indeed, the majority of the most famous expeditionary post-Civil War photographers who photographed Yosemite like Carleton Watkins, Edward Muybridge, William Henry Jackson and Charles Savage, all worked for the railroad companies. Bright draws the collusion between big industry and photography in more metaphorical terms by using Leo Marx's *Machine in the Garden* as a framework to liken the camera to the locomotive for the way it usurped old notions of space and time, "like the locomotive, photography annihilated older understandings of space and time. It was a potent symbol of bourgeois progress, cloaking scientific realism in the perfumed garb of Romantic aesthetics."[467] In the collusion between photographers of the post-Civil War era and the railroad companies, new infrastructure was established in the American West as the stereograph brought images of these unfamiliar places into middle-class homes.

[466] Bright, "The Machine in the Garden Revisited: American Environmentalism and Photographic Aesthetics," *Art Journal* 51, no. 2 (1992): 60-71.

[467] Ibid., 61.

Similarly, in his critique of contemporary environmentalist movements, Michael DeLuca cites the role played by the "wilderness myth" that glorifies the efforts of heroic individuals as nature's eternal savior.[468] Taking Yosemite as a prime example, DeLuca sheds light on the crucial role that the Southern Pacific Railroad and the tourist industry played in both establishing and then 'preserving' Yosemite. This provides a counter history to the more popularized notion that the efforts of individual writers like John Muir and photographers from Carleton Watkins to Ansel Adams were the primary means via which America's first state park was created. These commercial interests supported the work of photographers and artists who disseminated their prints and stereographs to construct the notion of a pristine wilderness to lobby for the establishment of and then extension to a national park and new infrastructure, which served their own interests by promoting tourism and the romantic dream of settling in the American West.[469]

However, what is absent from DeLuca's argument is the acknowledgement that in their own time, even for radical environmentalists like Watkins and Muir, the notion of preservation went hand in hand with the exploitation of nature's resources. This was not seen as a form of destruction, but a means of improving nature for human use. This is the perspective taken by Martin Berger, who argues that Watkins's Euro-American gaze was in keeping with 19th century views of landscape. While emphasizing aesthetic appreciation, photographers like Watkins were cognizant of the need to preserve the land in a ways that did not see the relationship between conservation and development as dichotomous as it is today.[470] So, while there might appear to be an ideological contradiction in Watkins' images as many historians have pointed out—where both nature and industry are

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[468] Kevin M. DeLuca, "Trains in the Wilderness: The Corporate Roots of Environmentalism," *Rhetoric & Public Affairs* 4, no. 4 (2001): 633-52.

[469] DeLuca's purpose in revisiting this history is to argue that because the wilderness myth remains the bedrock of contemporary mainstream environmentalism it stymies contemporary efforts of environmentalists to form coalitions necessary to challenge industrialization. His position is pragmatic in its advice to environmentalists who he suggests must reconceptualize their purist approach by being open to the necessary role that industry can play in effective environmentalism.

[470] Berger, "Overexposed."

celebrated—these were not perceived as contradictions until the 20th century.[471]

Though what is harder to excuse is the way these contradictions persisted into the latter half of the 20th century, specifically with regard to the parks' poster child of environmentalism—Ansel Adams. Adams' shift in perspective on the commercialization of the park from the 1950s to the 1970s, set a precedent for the ways in which photographers continue to work against their own stated interests today. During the 1950s, Adams had been an outspoken critic of the concessionaires as well as Park Services, arguing that the valley should be restored (meaning the removal of most buildings) and strict limitations imposed on visitation and development. The radical about-turn in sentiment twenty years later by this "preservationist-turned-businessman" is characterized by Runte, as an example of the way individual self-interest destroys a communal resource as Adams "discovered the equation between people and profits."[472] In 1952 when annual visitation had just nudged over one million, writing to his Sierra Club colleague William E. Colby, Adams said, "one situation begets another—a rapidly ascending curve of exploitation and 'development' has now brought Yosemite to the brink of disaster—and the insensitivity and evidence here threatens to spread to other Parks."[473] Five years later, writing to another Sierra Club colleague David Brower (who later founded Friends of the Earth), Adams even included himself in a list of things that should be removed from the valley "people, things, buildings, events and evidence of occupation and use simply will have to go out of Yosemite if

[471] Mary Warner Marien describes this quality of his images as the "commercial sublime." In this commercial sublime there is a sense of nature's incredible grandeur, but this is mixed with subtle traces of new human economic development, where the landscape is rendered as both a commercial opportunity as well as a place of natural beauty. Mary Warner Marien, *Photography: A Cultural History,* 4th ed (New Jersey: Pearson, 2015), 133.

[472] Runte, *Yosemite: The Embattled Wilderness.*

[473] The Sierra Club was founded in 1892 by academics at the universities of Berkeley and Stanford. It pioneered wilderness preservation where environmental politics and aesthetic values came together. John Muir was its first president for a 22-year period. Ansel Adams to William E. Colby, Sierra Club Office Files, Bancroft Library (Berkeley: University of California, September 15, 1952).

it is to function as a great inspirational natural shrine for all our people. That means me, you, hotels, stores, bars, shops—everything but the barest service necessities."[474]

However, while Adams had been an ardent critic of the way that visitation was a threat to Yosemite's biological and scenic resources, against the background of his rise to fame as a photographer in the 1970s, his stance dramatically softened. For example, in 1971 in a letter to Richard M. Leonard (a former president of the Sierra Club), Adams wrote, "any attempt to reduce Yosemite Valley to a wilderness area would be futile… the maximum number of people should see Yosemite and should experience its incredible quality. To shut it off from the world would be somewhat similar to closing St. Paul's Cathedral for the sake of the architecture."[475] Adams wrote this the year before he and his wife rebranded Best's Studio as the Ansel Adams Gallery, from which they clearly stood to financially benefit from increased visitation numbers. In addition to the studio and gallery, Adams and his wife engaged in various other schemes to promote visitation. In fact, starting in 1952 Virginia and Ansel Adams collaborated to combine their intimate knowledge of the park and photography for the *Illustrated Guide to Yosemite,* released in various editions over the following decade. Other endeavors included organizing the annual Christmas Bracebridge Dinner at the Ahwahnee Hotel, that was designed to lure families to the park during the slower winter season. Modeled on Washington Irving's *Christmas at Bracebridge Hall* that stories the festivities at an English manor, now set in Yosemite, this Yuletide pageant was a rather incongruous affair. Notwithstanding the purity of their motives, the practices of Adams and the photographers that

[474] Ansel Adams to David Brower, H.C. Bradley Files, Bancroft Library (Berkeley: University of California, January 6, 1957).

[475] Ansel Adams to Richard M. Leonard, Sierra Club Office Files, Carton 163, Bancroft Library (Berkeley: University of California, June 19, 1971).

continue to follow in his footsteps operate as an antidote to the very same incursions in nature their practices encourage. The perpetual maintenance of Yosemite via the act of photography threatens not only the capacity for preservation, but the very ability to perpetuate such images of Yosemite into the future.

The Preservation of a Primordial Past

Adjacent to the contradictions of preservation as it relates to photographic practices, is the question—what exactly is being preserved and maintained in these photographic practices? As a zeitgeist for the types of photo practices studied here, the Ansel Adams Gallery is an appropriate place to find answers. Upon entering its relative sanctuary—away from the clamor of human and automotive traffic crisscrossing the valley floor—you are struck by something quite strange. Perusing framed photographs on the wall and scouring the numerous photo-books on display, you wonder where all the darn people went. Flipping through the portfolios of represented artists like Charles Cramer, Michael Frye, Annie Larsen, John Sexton, Keith Walket and Julia Reardin, it seems like a secret oath has been taken to remove the human element from the equation. The omission of people, cars and crowds is consistent with the approaches taken in the photo-education programs and the documentation of seasonal phenomena studied here. For example, Michael Wise spends part of his Camera Walks giving instructions on inventive compositional techniques "to remove extraneous details from what are otherwise worthwhile images,"[476] such as using foliage to hide a stop sign or an RV. Rather than acknowledging even the faintest whiff of how Yosemite is actually experienced, the landscape is evoked just as Hiroshi Sugimoto evoked the world in his seascapes—in stark magisterial detail, to register an atemporal primordial past completely independent of human history. In this guise, the image maintains the park as it always was—a mythical Arcadian wonderland, a *tabula rasa* waiting

[476] Weiss, "Presentation during Camera Walk," July 4, 2015.

expectantly to be occupied. Erased is not only the amusement park-like character of Yosemite, but perhaps more insidiously, any sense of the human and cultural history prior to the parks 'discovery' by Lafayette Bunnell's Mariposa Battalion in 1851.

Unlike today, the Yosemite Valley that Watkins experienced was actually less populous than it had ever been before or since. Prior to the arrival of tourists in 1851, the Mariposa Battalion (a Californian State Militia) was sent to 'clear' the Miwok group called the Ahwahneechee from their homeland and along the way burned whatever dwellings they discovered. Furthermore, had Watkins wished to include people in his images, the sometimes hour-long exposures, made this a serious technical challenge. This makes the photographic record of Yosemite unique, given that Watkins' treatment is decidedly different to the early Yosemite landscape painters such as Thomas Moran and Constance Gordon-Cumming, who included Indians in their works to evoke a sense of the wilderness. Given that Watkins' Yosemite images were made just ten years after the Mariposa Indian War, it is these circumstances that make his mammoth-plate masterpieces and their distant imitators so shocking for Rebecca Solnit. Shocking, compared to her earlier reading of them prior to learning of the violent historical circumstances surrounding their creation. For Solnit, the images "suggest a place in which nothing has ever happened and which no human has ever touched: They are the birthplace of the photographs of virgin wilderness that feed the continuing appetite for exploration and for conservation. They speak to eternity, not to current events."[477] That they don't speak of current events is perhaps not so surprising given Watkins' tenure with mining interests that used his images to attract investors and also because it was primarily the gold rush that instigated the Mariposa War. While some have excused Watkins' omissions as a circumstance of his time, the art historian Martin Berger is not so forgiving. Berger situates Carleton Watkins' depopulated landscape photographs of Yosemite

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[477] Rebecca Solnit, *Savage Dreams: A Journey into the Hidden Wars of the American West* (Berkeley: University of California Press, 2014 [1994]), 360-61.

within a racial politics of whiteness, to argue that his images confirmed the Gilded Age viewers' superiority by legitimizing their claim to civilizing the landscape and confirming their aspirations for economic development in the region.[478] Using Watkins' image, *The Yosemite Valley from the Best General View* as his primary example, he argues that unlike other photographers of the time who included people in their images, Watkins' majestic scenes of the Yosemite landscape that were absent of people is a more empathic statement of white superiority because rather than presenting people and nature as oppositional, it naturalizes the presence of humans. Thus, Watkins' images worked to impress a Euro-American value system onto a landscape as though it had no history.[479] Watkins' treatment is consistent with other expeditionary photographers of his generation that photographed Yosemite including George Fiske, Eadweard Muybridge, J. J. Reilly & Company and Charles Weed, whose fictionalizations of the West were motivated by establishing forms of cultural independence. [480]

Unlike it was for photographers of Watkins' generation, these days, choosing to ignore Yosemite's contemporary realities are indeed aided by a landscape that no longer has the privilege of Ahwahneechee involvement in resource management. Without the burning practices in place that are

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[478] Berger, "Overexposed."

[479] This treatment is replicated in the approaches taken to naming Yosemite. The first white prospectors and pioneers who named Yosemite used a value system that tended to anthropomorphize the landscape as opposed to referencing Native American names that recognized the landscape as their home. They named the largest falls, gorges, waterways, and mountains, in a way that emphasized human agency by using European architectural prototypes for their naming classifications, like domes, and cathedrals. This worked to signal their superiority over the Native Americans and to consolidate a national identity through impressive natural features that rivalled the human architectures of Europe.

[480] Berger's views are consistent with scholarly criticism related to Watkins' generation of expeditionary photographers. Scholars have pointed out the links between landscape photography and the way it was implemented to develop the American West in the 1800s and the way it was used as a means of comparing America's relatively new geological history with the much older cultural history of Europe. The notion of an untouched pristine wilderness appealed to the ideals of Manifest Destiny and propensity that Victorians had for geology. For example Martha Sandweiss writes: "In focusing on the most dramatic features of the western landscape, in minimizing the presence of people with earlier claims to the land, in illustrating what Americans could accomplish through focused use of the West's resources, the photographers and their patrons turned their backs to the history of human conflict in the West and set their eyes squarely on the region's future." Martha A. Sandweiss, *Print the Legend: Photography and the American West* (New Haven: Yale University Press, 2002), 206.

vital in attending to the health of the valley, as well as generating a reliable food source—from the Ahwahneechee point of view at least—the valley is in serious need of a haircut.[481] The Tunnel View of today looks as sparsely populated as it did in Watkins' images because this mammoth adventure park is hidden from view under a thick canopy of trees. Unfortunately, at Glacier Point (the park's most favored vista), Park Services are unable to camouflage the impact of their massive infrastructure project, which at directly 3,214 feet below is clearly visible. This is no great matter for the self-proclaimed "rockarazzi" who simply ignore this eyesore in favor of Half Dome and Hanging Rock who are featured as the real celebrities (fig. 58 and 59).[482] Placing these pesky incursions out of frame is a custom visitors are more than familiar with, a treatment they instinctually maintain by emulating the approach of the park's first photographers through to the 20th century's most successful commercial photographer and his acolytes.

Returning to Ansel Adams Gallery, to flip through the pages of the numerous monographs on Carleton Watkins and other early Yosemite photographers, save for the material artefacts of retired technology, we see images that are strikingly similar to the ones still made today. By choosing to maintain this vision of Yosemite from where we stand in relation to history today, the practice acquires an ideological dimension where preservation and erasure have grown comfortable bedfellows. The criticisms that Berger makes of Watkins are echoed in criticisms made of the American environmental movement generally as well as those that art historians have leveled at Californian modernist photographers, including Group f/64.[483] Oft cited is Cartier-Bresson's backhand

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[481] Turek and Keller write that the open nature of the valley was shaped by Indian horticulture. The pastoral beauty that was a result of Indian land use, was however perceived quite differently by white settlers. For example, "to John Muir and others the land seemed vacant, gardenlike, unspoiled, right for the taking—or saving." Michael F. Turek and Robert H. Keller, *American Indians & National Parks* (Tucson: University of Arizona Press, 1998), 20.

[482] Yosemite Hikes: The best places to take your feet in Yosemite National Park, "Glacier Point." 2006, accessed June 2, 2018, https://www.yosemitehikes.com/glacier-point-road/glacier-point/glacier-point.htm.

[483] For example, the activist Carl Anthony writes: "with its focus on wilderness, the traditional environmental movement on the one hand pretends there were no indigenous people in the North American

to Adams: “the world is going to pieces and people like Adams and Weston are photographing rocks!”[484] While downplaying their spirited vision for landscape preservation as naïve, criticisms tend to proceed by juxtaposing their more symbolic treatments with the socially engaged, overtly political and straightforward social documentary practice of the time.[485] Furthermore, by configuring a dichotomous relationship between nature and culture, Adam’s apolitical renderings fall well short of addressing the complexity of the problem. While this perspective struggles to account for Adam’s activism through his involvement with the Sierra Club, the inclusion of his images in radical political publications like *Dune Forum* and his affiliation with leftist Bay Area politics, he remained an outspoken critic of those that dared to poke fun at his most beloved muse.[486] Adams made his distaste widely known for Rondal Partridge’s 1965 image, *Pave It and Paint It Green*, which blurred the line between city and wilderness by presenting Half Dome taken from the vantage point of a carpark chockablock with cars. Partridge, while working as Adams’ assistant later made a documentary film with the same title, that exposed the human impact on Yosemite and the rampant commercialization resulting in loss of natural habitat.[487] For Adams, Half Dome represented something very different. In

plains and forests. On the other, it distances itself from the cities, denying that they are part of the environment." Quoted in Kevin DeLuca and Anne Demo, "Imaging Nature and Erasing Class and Race: Carleton Watkins, John Muir and the Construction of Wilderness," Chap. 2 in *The Wilderness Debate Rages On: Continuing the Great New Wilderness Debate,* eds. Michael P. Nelson and J. Baird Callicott, 189-217 (Athens, Georgia: University of Georgia Press, 2008), 190.

[484] Jonathan Spaulding, "The Natural Scene and the Social Good: The Artistic Education of Ansel Adams," *Pacific Historical Review* 60, no. 1 (1991): 26.

[485] Spaulding provides a good overview of these kinds of criticisms Adam’s received in the 1930s.

[486] As a counterpoint to the charge of apoliticism that addresses these points in detail see: Ellen Macfarlane, "Group F.64, Rocks, and the Limits of the Political Photograph," *American Art* 30, no. 3 (2016): 26-53. Focusing predominately on the work of Adams and Weston, Macfarlane challenges the orthodox scholarly assessment that the work of Group f.64 was apolitical given its preoccupation with aesthetic/formal qualities, and instead argues that their work embodied a subtle politics as part of a socially conscious practice. Macfarlane cites a range of evidence in order to recast their work as a form of quite activism such as personal correspondence between the two artists that shows they were thinking deeply about socio political issues of the time, their inclusion in socially conscious themed exhibitions, and their professional associations with politically minded artists.

[487] In his obituary that appeared in the LA Times Partridge is quoted as saying “[Adams] always jumped over the fence… walked past the garbage. He always wanted to get an immaculate view and I spent my life stepping back to

reference to his image *Monolith, the Face of Half Dome* (1927) Adams said, “the great rocks of Yosemite, expressing qualities of timeless, yet intimate grandeur, are the most compelling formations of their kind… they are the very heart of the earth speaking to us."[488] Also the subject of Adams' disapproval was the work of Ted Orland—another of his former assistants and another bad apple that strayed too far from his master's tree. Unlike Adams, Orland's often witty and satirical images included cars, tourists and trash bins. However, the point is not about passing judgement over what might be the most appropriate way to represent Yosemite, but more that very little has changed in the representation of a National Park whose circumstances today are radically different from those of the 19th century. Apart from the rare murmur of dissent—whether it be the casual visitor, dedicated amateur or professional fine art photographer—these practices all qualify for the same types of criticism that Berger leveled at Watkins' idealized rendering of Yosemite.

The Maintenance of Erasure

Returning to Elise Roberts' interpretive sunset tour at Glacier Point that we began the chapter with, she is right to suggest the similar role played by photography and cartography, but not only for the reasons she gives. While photography and cartography might have helped secure Yosemite's future, they also erased its past. Like map makers of the late 1800s, who chose Anglo names over thousands of existing Indian names, photographers have largely failed to acknowledge the region's Native American and Spanish history by impressing a Euro-American value system onto a landscape as though it has no history.[489]

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include the garbage in my photographic view.” Elaine Woo,"Rondal Partridge Dies at 97; Photographer Known for Irreverence," *Los Angeles Times*, 2015, Obituaries, https://www.latimes.com/local/obituaries/la-me-rondal-partridge-20150627-story.html.

[488] Ansel Adams, *Yosemite Valley,* ed. Nancy Newhall (San Francisco: 5 Associates, 1963).

[489] Peter Browning points out that it is a sad irony that Lafayette H. Bunnell chose the name Yosemite, the name of the very tribe that his detachment had been sent to forcibly capture and evict. Although the Miwok had names for most major features within what is now Yosemite National Park, few of these names have survived. Instead, the 1863

This is little surprise given the way Park Services perpetuates a history of visionary photographers, heroic settlers, and intrepid wilderness explorers. The risk for Park Services in adequately addressing the history Ahwahneechee's presence in the park, is that any remotely accurate accounting would squarely implicate them as active participants in their deracination. As Mark Spence argues, the preservationist ideal adhered to by American National Parks is predicated on Indian dispossession.[490] For Spence, the idealization of an uninhabited landscape and the role it played in forming a sense of national identity is intimately connected with the segregation of Native Americans. At Yosemite, since its inception in 1916, the National Park Services have rendered Native Americans "visitors" of their homelands, regulated their cultural practices and forcibly annexed them to reservations and other communities outside park boundaries.

As an extension of his argument, the construction of this wilderness myth is then maintained by Yosemite photographers who, like Park Services (though less intentionally) perpetuate the ideal of an ahistorical wilderness where the Ahwahneechee's relationship with the park has no bearing on their efforts. Today at Yosemite, all levels of the parks' interpretive infrastructure are at work in cultivating a collective amnesia of pernicious past practices by diverting attention elsewhere. Plaques at the

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California Geological Survey named most of the prominent peaks with Anglo replacements. Peter Browning, *Yosemite Place Names: The Historic Background of Geographic Names in Yosemite National Park* Lafayette (California: Great West Books, 1988). Also, Martin Berger criticizes early map makers for leaving so much of the valley unlabeled and not taking advantage of the many Indian names or those awarded by Spanish explorers. The first white prospectors and pioneers that named Yosemite used a value system that tended to anthropomorphize the landscape as opposed to referencing Native American names that recognized the landscape as their home. They named the largest falls, gorges, waterways, and mountains, in a way that emphasized human agency by using European architectural prototypes for their naming classifications, like domes, and cathedrals. This worked to signal their superiority over the Native Americans and to consolidate a national identity on account of natural features that rivalled the human architectures of Europe. Berger, "Overexposed."

[490] Using three case studies including Glacier, Yellowstone and Yosemite National Parks, Spence studies the policies of Indian removal and follows the history of how the formation of a national park system in the American West during the 1870s to 1930s, went hand in hand with the removal of native Americans from their homelands. To realize their interests, the National Parks Services needed to promote the construct of an uninhabited wilderness ideal. Mark David Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999).

viewing platforms where photographers congregate, overwhelmingly emphasize geological history over human history. The Yosemite Museum's film program runs nightly screenings where visitors are entertained with documentaries like *Return to Ballance: A Climbers Journey* and another feature on the efforts of the park's search and rescue teams. While the program also includes films on the park's photographic history (aka Ansel Adams), there is nothing on indigenous history. Instead, playing on the half-hour is Ken Burn's *Yosemite: A Gathering of Spirit*, that celebrates the "visionary individuals whose efforts laid the groundwork for Yosemite National Park."[491] Similarly, history's time clock at the Yosemite Theater begins with, *Meet Galen Clark: Yosemite's First Guardian*. These live performances where actors dress in period costume also include *Yosemite through the eyes of a Buffalo Soldier* and *The Spirit of John Muir*. The bookstore's entire collection of volumes on Native American history, that are benevolently categorized on a small shelf labeled "conservation," are but a mere footnote to the plethora of volumes on either John Muir or Frederick Olmsted. In-house media productions rarely addresses issues of indigenous history. The popular *Yosemite Nature Notes* series that began in mimeograph from in 1922, continues to conceptualize the park as a biological ecosystem quite distinct from human involvement and impact.

Tucked behind the Visitors Center is the *Indian Village of Ahwahnee*, a replica village built over the site of their original village, replete with a chief's house, ceremonial roundhouse and a bark house. Upon entering the village, the lackluster approach taken to maintenance makes it feel as though you have walked into an exhibit that is temporarily closed for renovations. Today, it is no longer used for large gatherings that early Californians called "fandangoes," where 'traditional' Indian culture was put on display for the entertainment of tourists. As a meta-narrative to its contemporary ghost-town like status, the interpretive plaque that greets visitors prior to entering explains that after 1900, "the

[491] Environmental Film Festival, "22nd Environmental Film Festival Program," Washington DC, 2014, 13.

number of Indian people living in Yosemite began to shrink, with housing more difficult to obtain, fewer Indian People came to Yosemite for employment." In a deliberate obfuscation of history, it fails to mention that when Park Services took over management in 1916, as part of their strategy for the original village, they began to screen who could and could not live there. In 1929 the new Superintendent Charles Thomson (who distained the Indian presence), placed stricter measures on who could remain in the village.[492] For example, those who could not gain employment during fall and winter in the valley would have to leave, though almost nobody whether Indian or white worked in the valley during these months.

At the Yosemite Visitors Center, their permanent walk-through exhibit that chronicles the history of the park is unapologetic in its labelling of Native Americans as the park's "first visitors." This exhibit would have you believe that conflict with the Ahwahneechee ended after the gold rush era. On a plaque titled "Destruction and Disruption," blame is laid squarely at the feet of "miners of the gold rush [who] from 1849-1851 invaded the Sierra Nevada foothills."[493] In actual fact, the most decisive blow to the Indian population came just years after the formation of the National Park Service, when the new park master plan slated the Indian village for removal. The Organic Act of 1916 gave them broad ranging powers for development and alterations to the environment to

[492] In this shift their tenure in the park shifted from moral birthright to whether they had tenured employment. Coupled with neglect, having to pay rent and unreliable work the population thinned out as per the National Park's intention. Spence, *Dispossessing the Wilderness*, 129.

[493] The plaque goes on to further dramatize the role of the gold rush era miners in the total obliteration of the Ahwahneechee: "Imagine strangers invading your neighborhood, burning your house to the ground, ransacking your local grocery store, and taking over your town. Could you make a living in a foreign culture that invaded your world?" The display adjacent to this one goes on to implicate tourists as the reason for questionable practices, as though the National Park Service had little choice in the matter: "from 1916 – 1929 Park Services and the concessionaires sponsored Indian Field Days… in order to fulfil the expectations of tourists, many took on the stereotypical roles of Indians as depicted in western movies." To be fair, National Parks are not wrong in identifying the historical circumstances surrounding the destruction of the Ahwahneechee prior to their arrival. Though as Turek and Keller claim Yosemite was no exception to the deracination of indigenous people as a necessary circumstance for establishing the American National Park system. With 80 percent of the population having already declined proceeding contact with Spanish Mexican and American settlers as well as the 1849 Gold Rush the 1850s, the native population dropped by another hundred thousand during the Mariposa Indian War.

encourage public use—to “provide for the enjoyment” of visitors through the development of new amenities.[494] This amounted to a more absolute control of the village—with strict regulation of social behavior, the erosion of their previous moral right to be there and the threat of eviction for most of the community.[495] This version of history however, does not make for good business.

Unfortunately, this presentation of history is not challenged at the Yosemite Museum. Seeing that it is focused on Miwok culture, we should expect that at least here, that hard truths are not glossed over. Upon entering the museum and passing a small kiosk selling Native American inspired trinkets such as obsidian knives with deer antler handles and carved knitting sticks, at the entrance to the main exhibition room is an oversized black and white photograph titled, “CHRIS BROWN (Chief Lemee) dancing for Park Visitors in the Indian Village behind the Yosemite Museum, June 20, 1949” (fig. 60 and 61). Like the Chris Brown depicted in the image, his doppelganger that takes the form of a mannequin next to the photograph, features him with painted face, dressed in feathered headdress and costume as was typical of the way event organizers encouraged Indians to conform to stereotypes of Great Plains culture. The odd thing about the image is that Chief Lamee—the image’s ‘principal’ subject, who is centered in the foreground—is in fact out of focus with his back turned to the camera. As a result, the viewers’ attention is directed to the background where a group of well-healed white tourists—some taking pictures and others adorned with cameras dangling around their necks—have congregated to watch him dance. Reproduced at such a large scale, it makes you wonder what the intention was behind the selection of an image that so blatantly contravenes the most basic laws of composition.[496] This assumes however, that Chris Brown is the intended subject of the image, which

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[494] Quotations of the National Park Service Act of 1916 are from: Lary M. Dilsaver, ed. *America's National Park System: The Critical Documents* (Lanham, Maryland: Rowman & Littlefield, 1994).

[495] Spence, *Dispossessing the Wilderness*, 122.

[496] The benign caption gives little away. It reads: “demonstrations of Native American Culture have long been popular with visitors to Yosemite. The Indian village located directly behind this building, was built in the late 1920s, and is open year-round. Although daily demonstrations of Miwok dancers are no longer presented, demonstrations of Miwok and Paiute culture take place there during the summer.”

clearly he is not. Together with its caption, the image emphasizes the experience of the tourist over that of the dancer, where the real heroes of the image are the tourists and Chief Lemee is pictured performing the role of entertainer. While visitors are no longer regaled with such performances of Native American culture that were held during the Indian Field Days sponsored by Park Services and private concessionaires, this presentation underscores the way that Indian culture is put on display more for its entertainment value, rather than any serious attempt to present a counter or even parallel narrative to the populist white male pioneer settler and preservationist history that visitors are indoctrinated with.

My reading of the photograph is consistent with the interpretive mechanisms throughout the entire park, which work to efface any substantial consideration of the Ahwahneechee in how visitors frame their experience. Continuing past the photograph into the exhibition room of the Yosemite Museum, you find yourself surrounded by Southern and Central Miwok crafts like woven baskets and snowshoes, as well as clothes made from animal hide studded with precious stones. These displays are accompanied by reproductions made from their archive of garden-variety 18th and early 19th century photographs that bear testament to an all too familiar anthropological gaze. Sepia portraits of a forgotten past tucked behind the veil of history, where mostly anonymous subjects are cheerily engaged in all manner of industrious hunter-gatherer type activities, though sometimes returning the odd eerily vacant or incredulous stare. To ease the viewer into the 20th century, is a diorama of plastic mannequins featuring a scene from a "Yosemite Indian family's summer morning" that a cardboard plaque tells us is from the 1880s (fig. 62). In the scene, a woman gathers seeds while a man teaches a young boy how to make an arrow. Save for the naked child, the adults are fitted in period western clothes. They are all crowned with cheap wigs, the man's resembling the sort of unruly silvery contrivance you would seek out at a party supply store if you decided to dress up as Andy Warhol for Halloween. The unease that accompanies being provoked to remember the dead in this way is amplified by a second plaque that makes it seem as though Indians had a choice in their acculturation:

"the native people of Yosemite were fashioning a new way of life in the 1880s, incorporating elements of their native culture with that of non-Indians. Both men and women had opportunities for employment in Yosemite."[497]

However, the pièce de résistance is another diorama—a live diorama—that is performed on a small raised platform adjacent to this scene. Decorated with props like a bear skin bag and carpeted with a ragged bison pelt now worn down to the hide in sections, demonstrators who are dressed in 'traditional' period costume perform here several hours each day.[498] On my fist visit, a teenager was chiseling an obsidian arrowhead blade. On another occasion, an older man extracted and then ground the pulp from seeds of a grey pinecone. He explained these hollowed-out seeds will later be used to make a necklace. While this museum is the only place in the park that presents an alternative history to the one of pioneers beset by the challenges and charms of wilderness that pervades the rest of the park, the Ahwahneechee presence in Yosemite and documentation of their demise is naturalized here as part of inevitable historical progression. Park Services should be embarrassed by the naiveite of not

[497] There is some truth to the suggestion that the circumstances for the Ahwahneechee were better prior to the establishment of the National Park Service. The Indian population in Yosemite grew as a result of tourism. They became integrated into the tourist economy, although as time went on their ability to remain in the valley was contingent upon them getting work in hotels and with concessionaires. For much of the 1900s Yosemite Valley remained home to a mostly autonomous Indian village. This presence was unlike Yellowstone and Glacier national parks where they were completely removed. Their ability to integrate with tourists enabled a degree cultural continuity and independence that was the largest native community in the central Sierra Nevada at the time. Yosemite was not handed over to federal control until 1906, and unlike Yellowstone that was managed federally from the outset, the state of California never had any official policy to exclude or remove them from the land. However, after 1906 when it was transferred to federal control, and then in 1916 the newly formed National Park Service took a strict approach to controlling the valley's native population and managed them like a resource to facilitate opportunities for entertaining park visitors. As the federal government took over management there was a desire by park management to coordinate their presence in line with the fantasies tourist had of Indian lifeways.

[498] This practice first originated in the 1930s under the management of Superintendent Charles Thomson. In a report that determined the future of park policy toward the Yosemite Indians it was stated that "historical association with Yosemite makes them very significant to the Park; to drive them out would result in an ethnological loss comparable to the loss . . . (that] our deer would mean to our fauna exhibit. Park Services agreed with an advisory board recommendation for an exhibit "done in the aboriginal style, with one or two Indian families resident, during the summer garbed in native dress, carrying on the pursuits of their forebears." Quoted in: Spence, *Dispossessing the Wilderness*, 123-124.

considering how a live diorama evokes practices of the past—practices that we have come to find morally repugnant—where indigenous culture is gussied up and put out on display. It is not only reminiscent of barnyard circus entertainment, but also of photographic dioramas designed to play into stereotypes of a mythic Otherness embedded in the idea of the noble savage. In this rendering, the Ahwahneechee are invoked with the same mix of annihilation and romanticism that characterized Lafayette Bunnell's description of their role as being "a decorative past in someone else's future."[499] What is missed in the context of a display on Yosemite Indians is an opportunity to present conflicting narratives and thus complicate the historical circumstances through which this National Park was forged. Should this eventuate, it would give photographers pause to reconsider their approach and problematize the ways they continue to maintain this park as primordial wilderness void of the very people who were its original custodians.

Conclusion: Toward Middle Grey

As the case of Yosemite's photographic event shows, the medium serves as a form of maintenance that is embroiled in contradictory practices. Just as Fredric Jameson diagnosed the tendency for contemporary cinema to practice a "nostalgia for the present,"[500] today's Yosemite photographers proceed with the same Antebellum era optimism that characterized the park's earlier photographers, who like them, are ambivalent about reconciling a vision of the park that accounts for its original custodians. At Yosemite, in the context of a vanishing present, photography is used to reiterate the fabrications of a fictional past.

[499] This is how Solnit uses these sums up Lafayette Bunnell's presentation of the Indians they pursued and removed from Yosemite in his memoir *Discovery of the Yosemite and the Indian War of 1851 Which Led to That Event.* Solnit, *Savage Dreams*, 252.

[500] Fredric Jameson, "Nostalgia for the Present," Chap. 9 In *Postmodernism or the Cultural Logic of Late Capitalism*, (Durham: Duke University Press, 1992), 297-96.

While the park's viewing platforms organize the act of looking in decidedly photographic ways that homogenize the visitor's experience via a highly premeditated circuit, photography also grants a modicum of autonomy to reclaim something of the personal in this experience. Thus, in contrast to the very routine nature of moving from one viewing platform to the next, the activities that unfold at these views can be quite haphazard and serve as a means of making the most of a situation where it is painfully apparent that you have little choice but to experience the park the same way as everybody else. Here, photographers engage the medium in highly dramatized choreographies that put bodies to work. However, in order to more fully unscript photographic practices, we humans require the assistance of seasonal photo phenomena such as Firefall and Moonbow as well as animals, who instigate more spontaneous engagements. As a parallel to the oscillation between scripted and unscripted practices, photography is not only put to work in accelerating one's passage through the park, but in trying to slow it down. We see this at work in the Camera Walks run by the Ansel Adams Gallery and during multi-day photo tours run through the Yosemite Conservancy. These programs, such as the ones mentored by Dave Wyman and Ken Rockwell illustrate the way that "Pure Photography" works as a corrective to encourage more intimate contact with the landscape that prolongs our experiences in nature. Ironically, while the purpose of this practice is to develop more intuitive and interconnected relationships with nature that is perhaps similar in spirit to the way Native Americans saw their own human agency as contingent on and diminished in relation to their natural ecosystem, Ahwahneechee cultural history has no bearing on framing their experiences. Indeed, perhaps the fervor with which this primordial vision is maintained is evidence of its role as a substitute for the guilt for not adequately addressing past injustices. Furthermore, while each of the photo practices studied here have unique differences, they all practice a form of communal individualism, where the highly spectacularized and collaborative circumstances of how these images are produced remain unacknowledged. This is indeed necessary when following historical precedent, where photographers continue to maintain a vision of the park as an uninhabited primordial wilderness that is

void not only of the past, but of the way its theme park like nature threatens ongoing preservation efforts. While expeditionary and fine art photography played a role in establishing this 'view' of Yosemite, photography is no longer like cartography for the way it establishes territory. Instead, it shares with cartography the function of maintaining the status quo as users follow now well-established visual topographies that map out modes of representation that work to erase unsettling histories related to the Park Services' treatment of the Ahwahneechee.

To adapt a term from the photographer's vernacular, the effect of this is to push our collective 'exposure' of the park toward "middle grey." Similar to the average tonal value of a grassy meadow, middle grey occupies Zone V on Adams' scale as the midway point between Zone 0 (black) to Zone X (white). Middle grey is the standard unit of measurement used to calibrate light meters, which photographers rely on to determine the correct exposure settings. However, as photographers know all too well, this indicated exposure must be interpreted because what the light meter assumes is that any given scene contains a roughly equal amount of the full range of tones from white to black. Blindly following the lightmeter, especially for scenes with an above average amount of either highlight or shadow will push the exposure in the opposite direction (away from black or white) toward middle grey. Dead center between the unruly excesses of black and white, the effect of this is to flatten the scene's contrast. In similar fashion, the interpretive frameworks set forth by Park Services that work in tandem with photographic histories to calibrate contemporary practices, function to suppress the pulse of challenging histories that should help frame any proper accounting of contemporary visitor experience. Instead, the emphasis on victories related to natural heritage flatline the way the park is photographically maintained at the expense of incorporating narratives of the park's cultural history, thus limiting the potential for contrasting interpretations of the park and its historical record. Surely, any attempt at true conservation must do a better job of more fully acknowledging the Ahwahneechee past.

But whose responsibility is this? While it is unreasonable to expect that vernacular photo practices take the lead on exposing the darker corners of Yosemite's history, there is indeed an opportunity for Park Services to be more proactive in this regard. While participating in Michael Wise's Camera Walk (when he demonstrated using foliage to obscure signs of human life), I was reminded of an experience I had back in Australia on a photo job I was doing for the Australian Tourism Bureau. Part of the assignment included photographing at the Uluṟu-Kata Tjuṯa National Park, which is where Ayres Rock is located. This 'rock' or Uluṟu as it is known to the Aṉangu (the parks' indigenous custodians) competes with the Opera House as Australia's quintessential icon. Thus, like Yosemite this National Park is both a major tourist destination and a distinctive nationalist symbol. All commercial photographers that visit Uluṟu must attend a media briefing, during which time park rangers suggest using trees or shrubs to obscure specific sections of the rock that cannot be photographed because they are sacred to the Aṉangu. I don't mean to invoke this example to argue that Australia does it better (white Australia's relationship with its traditional owners is anything but resolved), but to suggest there are even small ways that Park Service can include Native American perspectives in shaping the visitor's sense of meaning regarding cultural landscapes. Other suggestions to help recalibrate Yosemite's photographic event might include interpretive photo-tours told from an Ahwahneechee point of view or commissioning documentaries that address the park's Ahwahneechee history. In terms of the bigger picture, giving the Indian Council of Mariposa County a say in park management would be important. Ultimately it is about incorporating the multiple layers of meaning present in cultural landscapes to help more fully shape the sensibility of visitor-photographers who in turn help challenge reductive renderings to expose the contentious and continually shifting nature of place meanings through time. For a technology of representation that many argue has a medium specificity defined by its theatrical-like capacity to animate the past into the present—one that

"awakens a desire to know that which it cannot show,"[501] there is an opportunity to cultivate an attitude of care that takes into account the varied contours of Yosemite's past. In this vein photographers could truly embody their role as visitors rather than pilgrims to not a singular, but multifaceted national shrine.

[501] Edwards, "Photography and the Performance of History," 17.

FIGURES

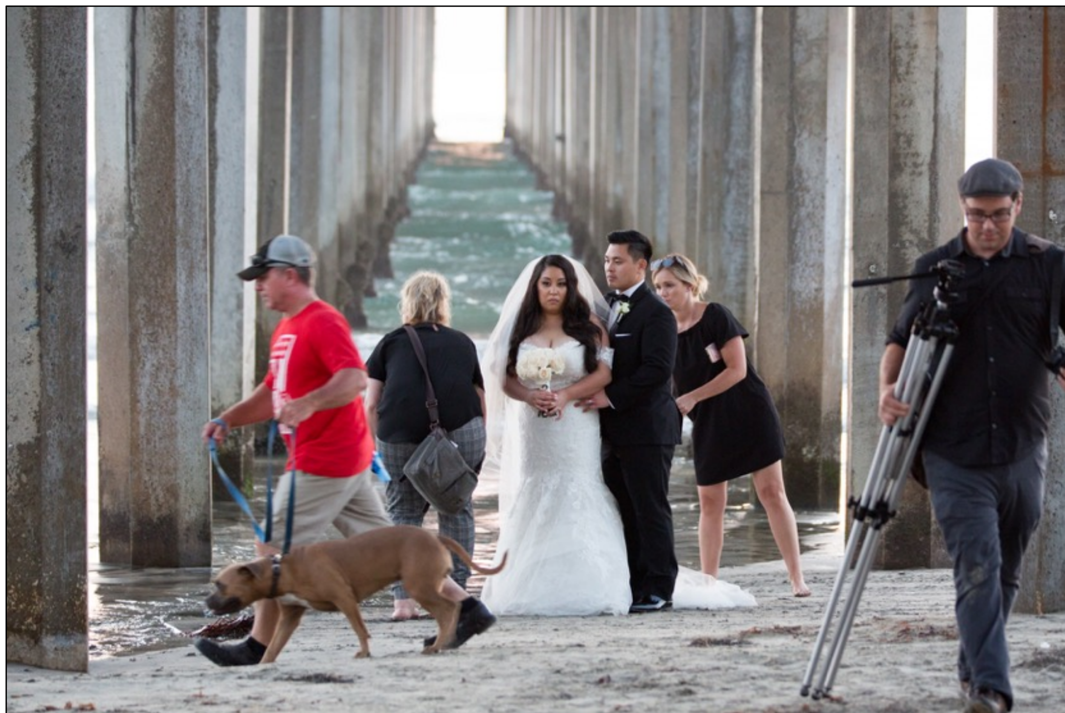

Figure 1: Wedding couple under Scripps Pier. Photograph by Alex Kershaw. August 3, 2018.

Figure 2: Wedding couple under Scripps Pier. Photograph by Alex Kershaw. May 27, 2017.

Figure 3: Woman using overflow from the seawater pump system to shower for a photograph. Screenshot from soulofbrit's Instagram feed. July 25, 2018.

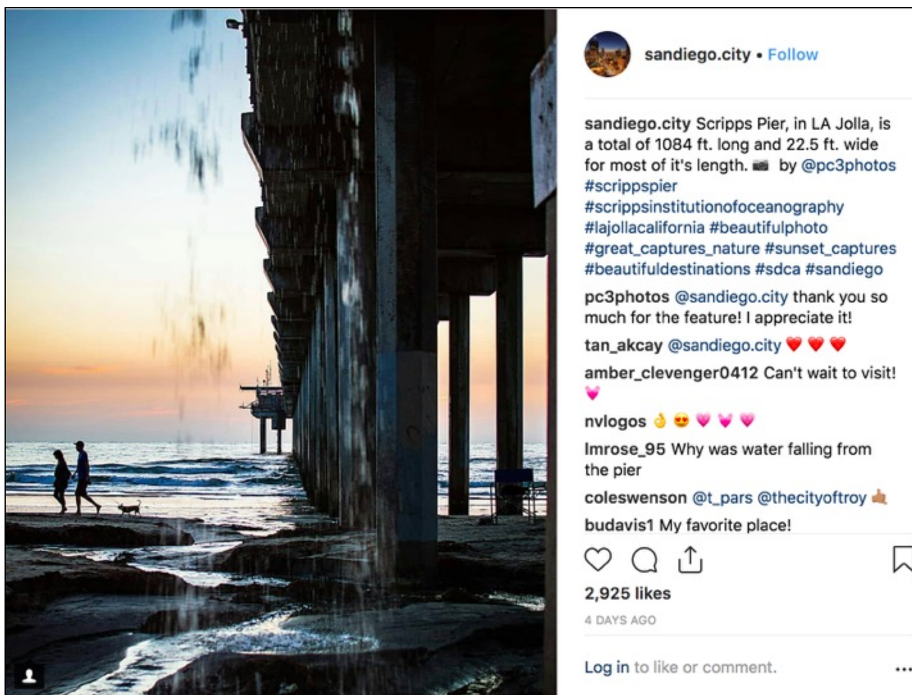

Figure 4: Runoff from the seawater pump system used as a compositional element for a photograph. Screenshot from sandiego.city's Instagram feed. August 25, 2018

Figure 5: Sunset at Scripps Pier. Photograph by Alex Kershaw. September 8, 2017.

Figure 6: Teenagers in a hammock strung between two pylons at Scripps Pier. Photograph by Alex Kershaw. June 29, 2018.

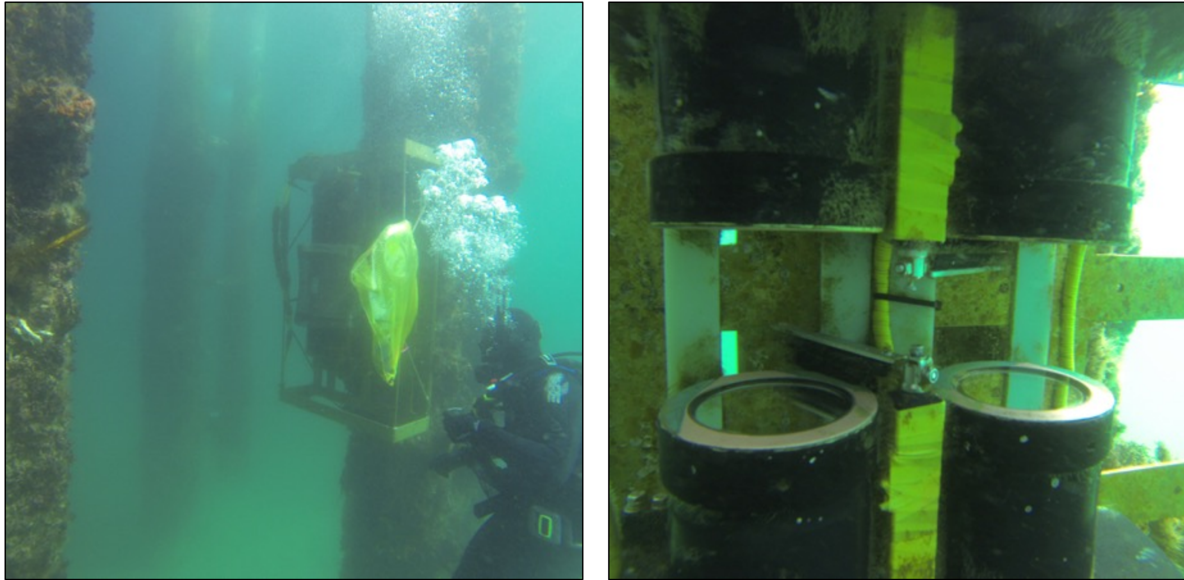

Figure 7: Images of the Scripps Plankton Camera fastened to Scripps Pier. Image courtesy of the Jaffe Laboratory for Underwater Imaging. February 3, 2018.

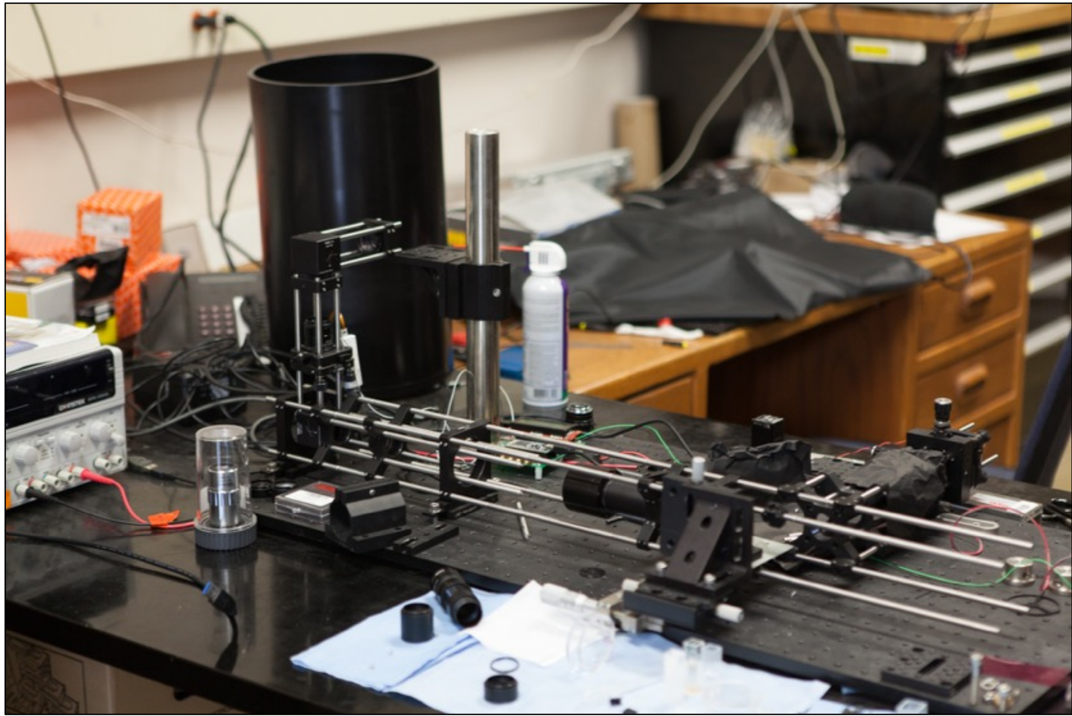

Figure 8: Components for the Scripps Plankton Camera being built. Image courtesy of the Jaffe Laboratory for Underwater Imaging. June 8, 2015.

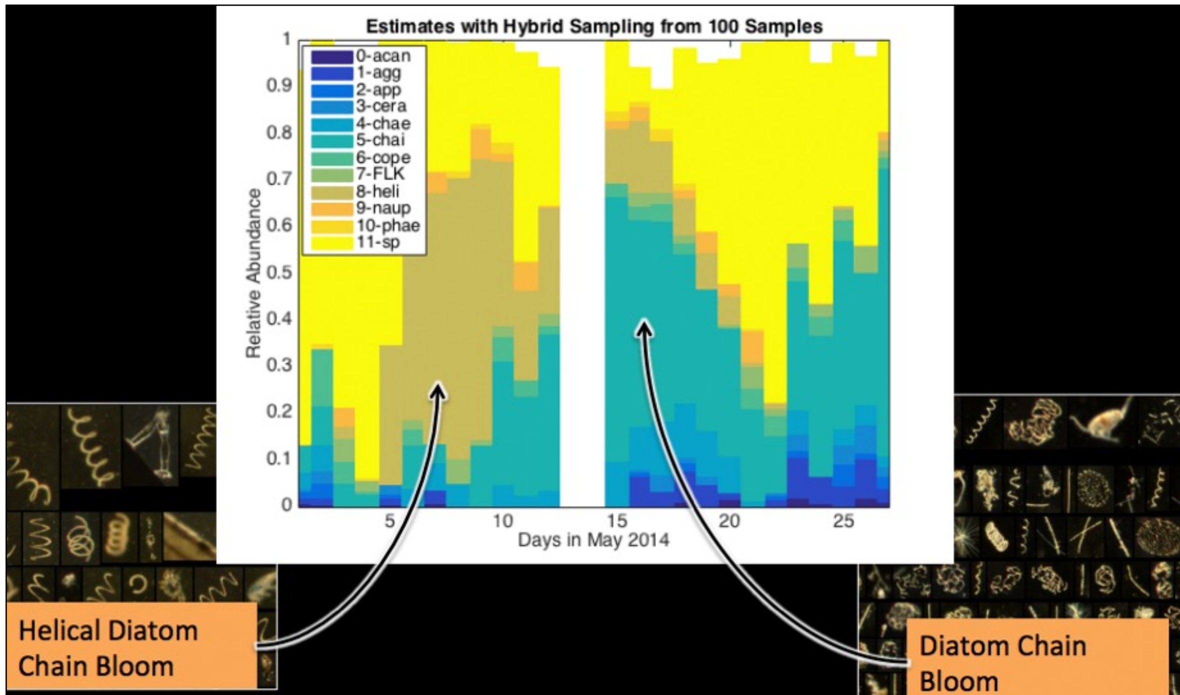

Figure 9: Graph illustrating the distribution of plankton blooms (daily relative abundance for May, 2014). Image courtesy of the Jaffe Laboratory for Underwater Imaging

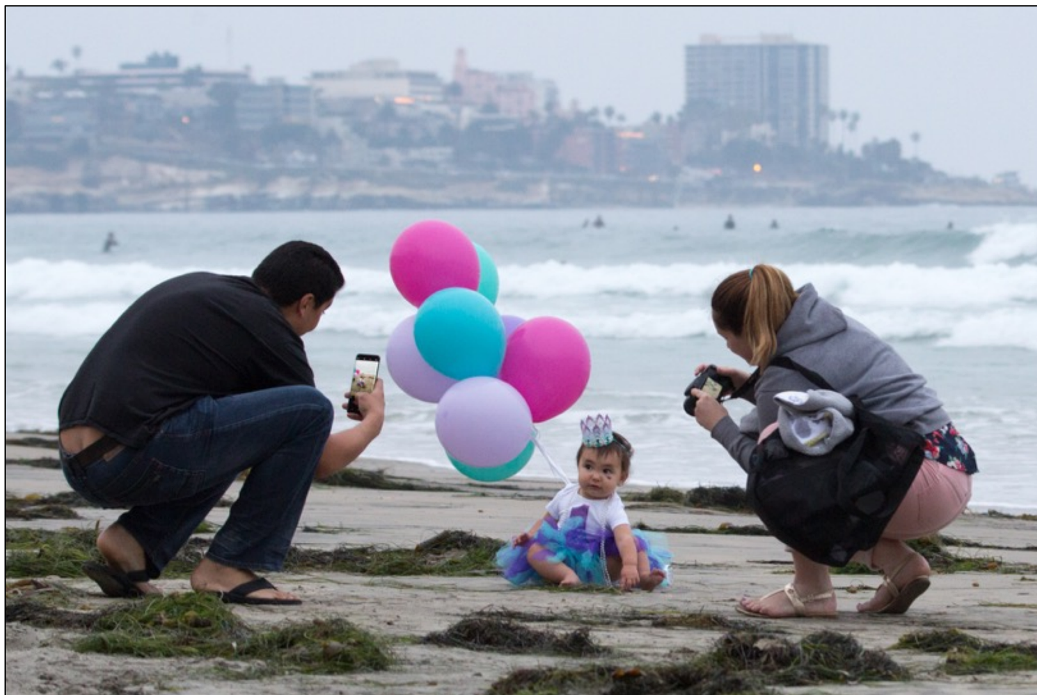

Figure 10: Couple celebrating their daughter's first birthday. Photograph by Alex Kershaw. June 2, 2017.

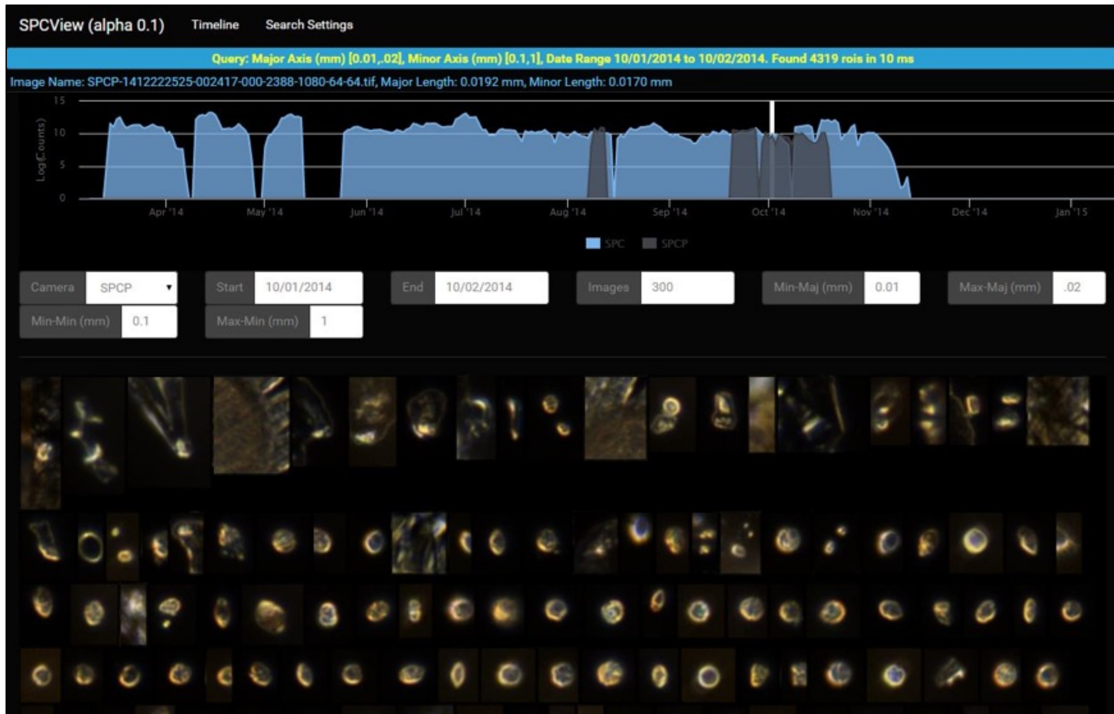

Figure 11: *SPCView* application for browsing images from the plankton cameras. Image courtesy of the Jaffe Laboratory for Underwater Imaging**.**

Figure 12: Posing for a photographer during a family reunion. Photograph by Alex Kershaw. August 3, 2018**.**

Figure 13: Drone taking images of a boy celebrating his first communion. Photograph by Alex Kershaw. May 13, 2017

Figure 14: Maternity photo shoot with subject holding an ultrasound image of their child. Photograph by Alex Kershaw. June 29, 2018

Figure 15: Image sequence generated by the Scripps Plankton Camera of individual plankton arranged in order of the time they were photographed. Screengrab taken November 4, 2018 at 9:00 a.m. Image courtesy of the Jaffe Laboratory for Underwater Imaging.

Figure 16: Elizabeth Stringer’s artwork on display at Geisel Library, University of California San Diego. March 29 - May 29, 2105.

Figure 17: A duo performing acro-yoga under Scripps Pier. Photograph by Alex Kershaw. November 5, 2018.

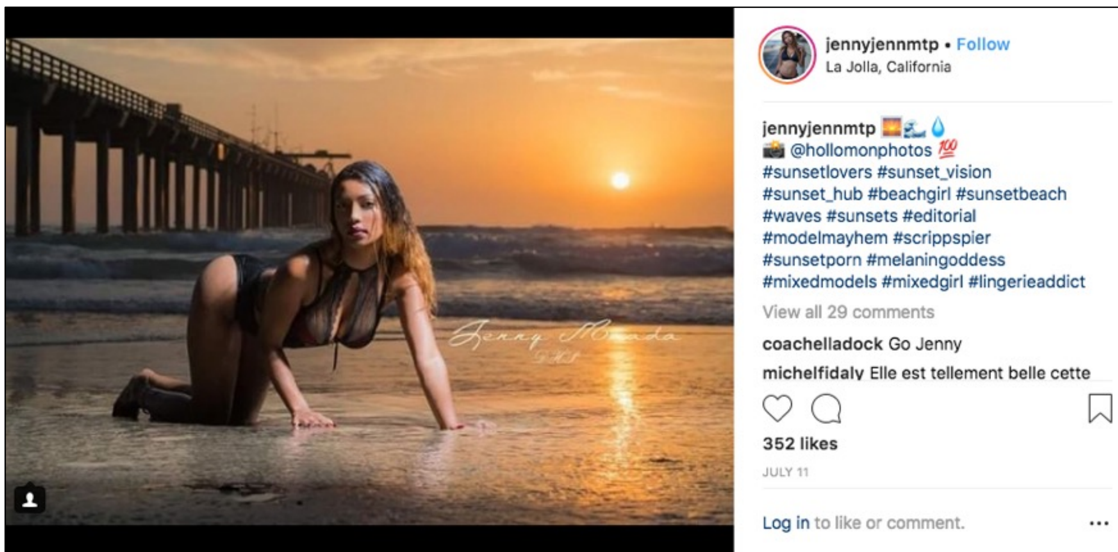

Figure 18: Woman posing at sunset. Screenshot from jennyjennmpt's Instagram feed. July 11, 2018.

Figure 19: Bodybuilders posing for various shots at Scripps Pier. Photograph by Alex Kershaw. April 4, 2016.

Figure 20: Bodybuilders posing for various shots at Scripps Pier. Photograph by Alex Kershaw. April 4, 2016.

Figure 21: Staged engagement scene at Scripps Pier. Screenshot from kelseybeltranphotography's Instagram feed. December 4, 2017.

Figure 22: Model posing on a rock at the northern end of Scripps Beach. Photograph by Alex Kershaw. August 03, 2018.

Figure 23: Woman posing under Scripps Pier. Screenshot from babygabb's Instagram feed. August 01, 2018.

Figure 24: Scripps autonomous jellyfish. From report released June 3, 2016. Image courtesy of the Jaffe Laboratory for Underwater Imaging.

Figure 25: Photographer with camera lens buddy attached to camera lens. Photograph by Alex Kershaw. September 1, 2017.

Figure 26: Scripps Henge. Photograph by Alex Kershaw. August 8, 2018

Figure 27: Image of people photographing Nancy Holt's *Sun Tunnels.* Screenshot from janinesaintg's Instagram feed. June 21, 2018.

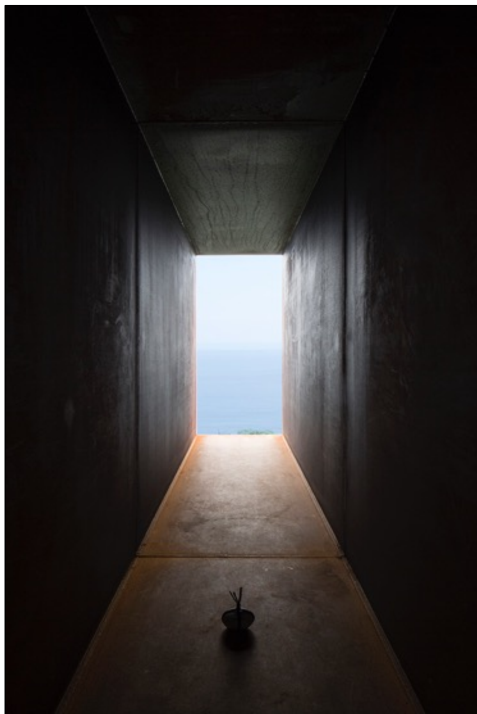

Figure 28: Images of Hiroshi Sugimoto's *Winter Solstice Light-Worship Tunnel / Light Well,* Enoura Observatory, Japan.

Figure 29: Carleton Watkins, *The Yosemite Valley from the Best General View*, 1866, albumen print, 16 1/8 × 20 9/16 in, J. Paul Getty Museum, Los Angeles.

Figure 30: Park Services ranger addressing visitors during the daily interpretive sunset tour at Glacier Point. Yosemite National Park. Photograph by Alex Kershaw. July 2, 2015.

Figure 31: Advertisement on Yosemite Valley shuttle bus. Yosemite National Park. Photograph by Alex Kershaw. May 19, 2017

Figure 32: Postcards by Nancy Robbins strapped into the passenger's seat. Valley View, Yosemite National Park. May 22, 2017.

Figure 33: Ansel Adams setting up his view camera with Half Dome in the background. Photograph by *Cedric Wright, Ansel Adams: Photographing in Yosemite, 1942. Gelatin-silver print. Center for Creative Photography, The University of Arizona.*

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Figure 34: Posing at Tunnel View, Yosemite National Park. Photograph by Alex Kershaw. June 11, 2017.

Figure 35: Posing at lower Yosemite Falls, Yosemite National Park. Photograph by Alex Kershaw. June 10, 2017.

Figure 36: Posing at lower Yosemite Falls, Yosemite National Park. Photograph by Alex Kershaw. June 10, 2017.

Figure 37: Two models pose for the San Francisco Photographers Association at Tunnel View, Yosemite National Park. Photograph by Alex Kershaw. February 19, 2017.

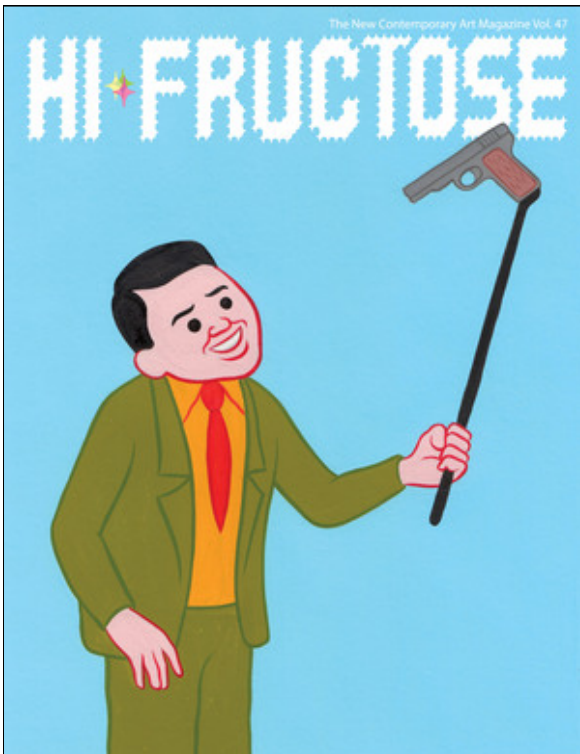

Figure 38: Cover image for *Hi-Fructose Magazine.* Vol. 47, April 2018.

Figure 39: A-frame warning sign at the viewing platform at Vernal Falls, Yosemite National Park. Photograph by Alex Kershaw. July 1, 2015.

Figure 40: Example of a “flash-photo fire” when photographers are attracted by mule deer. Cook’s Meadow, Yosemite National Park. Photograph by Alex Kershaw. June 28, 2015.

Figure 41: Example of a “flash-photo fire” when photographers are attracted by black bear. Glacier Point Road, Yosemite National Park. Photograph by Alex Kershaw. June 29, 2015.

Figure 42: Getting close to a black bear to get the shot. Glacier Point Road, Yosemite National Park. Photograph by Alex Kershaw. June 29, 2015.

Figure 43: Drive-by photography during a “flash-photo fire.” Glacier Point Road, Yosemite National Park. Photograph by Alex Kershaw. June 29, 2015.

Figure 44: Firefall. Yosemite National Park. Photograph by Dave Wyman. February 25, 2016.

Figure 45: Moonbow. Yosemite National Park. Photograph by Alex Kershaw. June 9, 2017.

Figure 46: Traffic signs for changed traffic conditions during Firefall, Yosemite National Park. Photograph by Alex Kershaw. February 18, 2017.

Figure 47: Photographers and spectators congregated at the El Capitan picnic area for Firefall, Yosemite National Park. Photograph by Alex Kershaw. February 18, 2017.

Figure 48: Photographers and spectators congregated at the El Capitan picnic area for Firefall, Yosemite National Park. Photograph by Alex Kershaw. February 18, 2017.

Figure 49: Mike Weiss from the Ansel Adams Gallery addressing participants on a Camera Walk in Cooks Meadow, Yosemite National Park. Photograph by Alex Kershaw. July 4, 2015.

Figure 50: Christine Loberg from the Ansel Adams Gallery instructing participants on a Camera Walk in Cooks Meadow, Yosemite National Park. Photograph by Alex Kershaw. July 2, 2015.

Figure 51: Christine Lowberg from the Ansel Adams Gallery demonstrating what using a large format view camera looks like during a Camera Walk in Cooks Meadow, Yosemite National Park. Photograph by Alex Kershaw. July 2, 2015.

Figure 52: Michael Reese from the Ansel Adams Gallery shows participants images from his portfolio. Cooks Meadow, Yosemite National Park. Photograph by Alex Kershaw. June 10, 2017

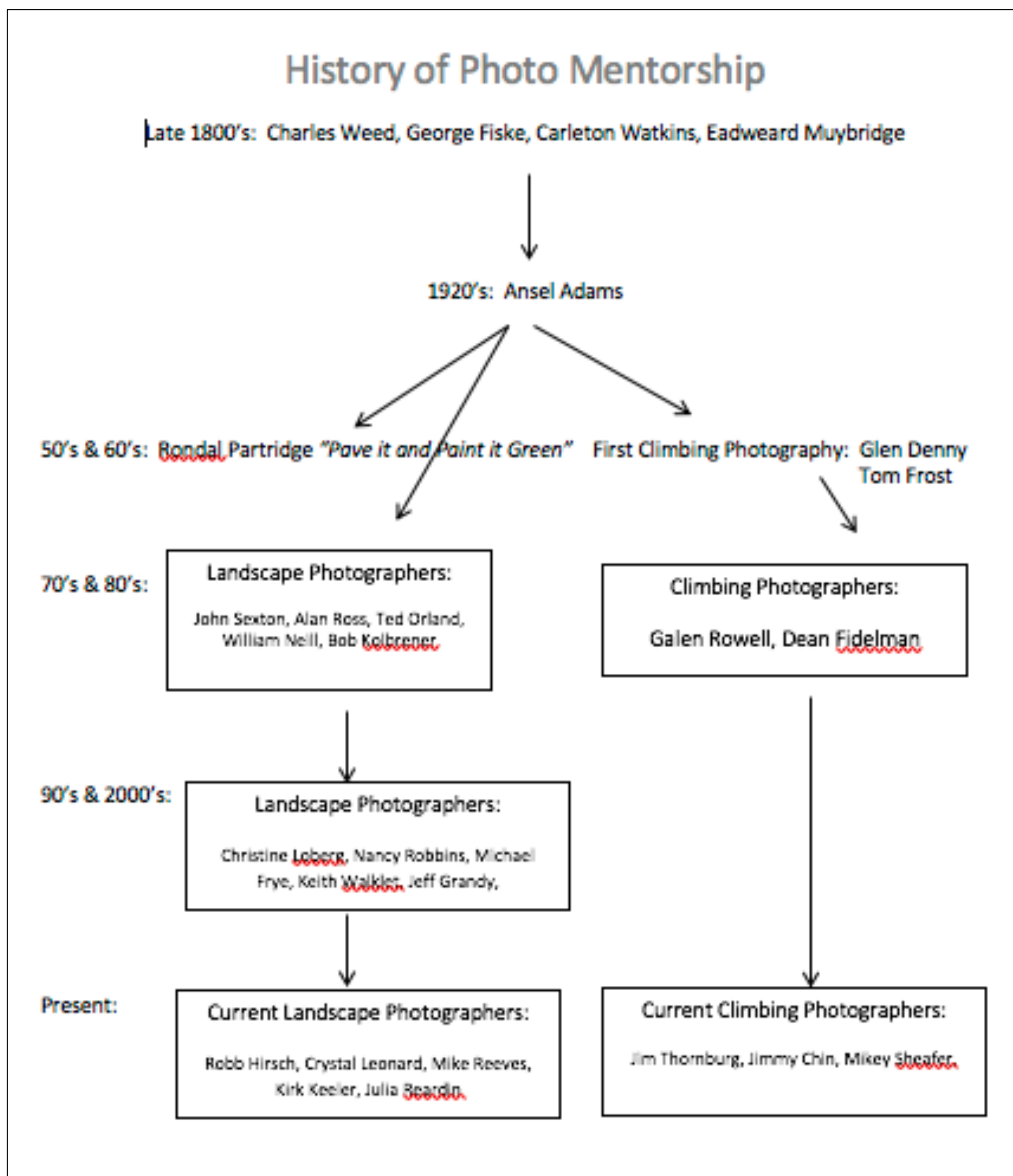

Figure 53: Diagram prepared by Kirk Keeler showing the lineage of generations of Yosemite photographers.

Figure 54: Participants of the workshop *Yosemite Photography: Capturing the Spring Light* lead by Dave Wyman and Ken Rockwell. Fern Spring, Yosemite National Park. Photograph by Alex Kershaw. May 19, 2017.

Figure 55: *Blue Ice, Mirror Lake, 6:24 A.M.* Photograph by Ken Rockwell. May 19, 2017.

Figure 56: Dave Wyman photographing sulfur shelf fungus. Royal Arch Creek area, Yosemite National Park. Photograph by Alex Kershaw. February 2, 2017.

Figure 57: Dave Wyman and a student photographing mule deer in Stoneman Meadow, Yosemite National Park. Photograph by Alex Kershaw. May 20, 2017.

Figure 58: “Rockarazzi” at Glacier Point viewing platform, Yosemite National Park. Photograph by Alex Kershaw. June 29, 2015.

Figure 59: “Rockarazzi” at Glacier Point viewing platform, Yosemite National Park. Photograph by Alex Kershaw. June 29, 2015.

Figure 60: Entrance to the Yosemite Museum with the photograph and mannequin of Chief Lemee. Yosemite National Park. Photograph by Alex Kershaw. May 19, 2017.

Figure 61: *CHRIS BROWN (Chief Lemee) dancing for Park Visitors in the Indian Village behind the Yosemite Museum, June 20, 1949.* Photograph by Ralph H. Anderson. Yosemite Collections. National Park Service.

Figure 62: *Yosemite Indian Family's Summer Morning*. Diorama at the Yosemite Museum. Yosemite National Park. Photograph by Alex Kershaw. May 19, 2017.

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