



Ansel Adams, Preliminary Eye Exam, Jules Stein Eye Institute, UCLA, ca. 1966 (photograph © 2012 Regents of the University of California. All rights reserved)



Ansel Adams, Moonrise, UCLA, ca. 1966 (photograph © 2012 Regents of the University of California. All rights reserved)

Invisible Products

Julia Bryan-Wilson

Light

We are witnessing an exam. The doctor holds his finger against a man's cheek to steady his subject as he peers into the pupil. The patient's eye, rimmed with lashes, is illuminated by a small circle of light that shines from the doctor's device, but the extreme close-up here renders the face masklike, dark and grainy, with a glint on the tip of the nose. His mouth is set in a stony frown. The photographer has positioned the lens of the camera so as not to interfere with the face-to-face precision and proximity of this procedure, one suggested by the doctor's neatly trimmed fingernails and the partial view of an instrument (like the nose, it gleams).

Taken in the mid-1960s, the image, captioned *Preliminary Eye Exam*, Jules Stein Eye Institute, UCLA, is in many respects unremarkable—it could be an illustration in an optometry student textbook or a promotional brochure for a clinic. Yet the image is notable because it was taken by someone not widely known for photographing humans, much less scenes of medical science: Ansel Adams.¹

In 1964, the famed landscape photographer Adams undertook a commission to create a “portrait” of the campuses, research centers, and laboratories that make up the University of California. He documented the UC system for three years, touring the state to visit both urban sites and remote outposts; this labor resulted in over 6,700 negatives, 179 of which were selected for inclusion in a book entitled *Fiat Lux* (“let there be light,” the Latin slogan of the university). Published by McGraw-Hill in 1967 to coincide with the hundredth anniversary of the founding of the university in 1968, *Fiat Lux* is an oversized, hardcover coffee-table book populated with images of students, teachers, architecture, and the California terrain, accompanied by text authored by Adams's longtime collaborator Nancy Newhall.² Vast in scope, *Fiat Lux* was the largest undertaking Adams ever pursued aside from his lifelong dedication to photographing Yosemite.³

Preliminary Eye Exam is a play on the project's title; it emphasizes, even thematizes, a complex circuit of illumination. The round medicalized beam of light becomes a surrogate for the camera and its monocular lens. Adams turns the Biblical exhortation “let there be light” into a command about the will to see, the power to inspect, and the disciplinary effects of observation; this is a light that, ironically, also blinds. The slightly uncomfortable intimacy asserted here implies a larger tension evident in Adams's commission, an unresolved friction, even, between the photographer and the subject he was hired to document.⁴ Adams's *Fiat Lux* pictures are not widely known (they are barely known at all), yet they pose critical questions about how a public university represents itself—and attempts to conjure its own stability—in a moment of crisis.

Adams for the most part delivered the photos one might expect of such a hired hand—studious learners taking notes in libraries, distinguished professors bent over microscopes, drama rehearsals conducted outdoors in the evening fog. Indeed, Adams did not shy away from producing typically “Adamsy” images, even strikingly citing himself in obvious ways, as in an image of a moonrise over UCLA that formally replicates his own famous *Moonrise, Hernandez, New Mexico* from 1941.⁵ In this photograph, he gives the university a version of itself gilded by the Adams brand, placing his recognizable aesthetic and stylistic frame over this subject matter. Despite its echo back to a much-lauded picture, *Moonrise, UCLA* is a

Unless otherwise noted, all Ansel Adams photographs were published in Ansel Adams and Nancy Newhall, *Fiat Lux: The University of California* (New York: McGraw-Hill, 1967); the images from the book that accompany this article were scanned by the University of California Press and processed by the Center for Digital Archaeology at UC Berkeley. The caption texts in my essay come directly from the pages of *Fiat Lux* to preserve Newhall's prose; in some cases, further information is provided for clarification in brackets. There are no dates printed in the book; the dates listed in the captions have been cross-checked against other sources, but some remain approximations.

My most tremendous thanks go to Catherine Cole for her generosity regarding this project and for catalyzing conversations about Adams throughout UC Berkeley. We spoke on a panel about *Fiat Lux* in fall 2011, and I would not have approached this material without her encouragement. I am also grateful to Mel Y. Chen, Trevor Paglen, and Anne Walsh for thinking through some of these images with me, and to Rita Hao for advice and assistance. I presented a preliminary version of this material at Harvard University, and thank the audience there for its comments.

1. Against the largely hagiographic accounts of Adams that have dominated his reception, there is a small but growing critical literature; see Anne Hammond, *Ansel Adams: Divine Performance* (New Haven: Yale University Press, 2002); Suzanne Hudson, “Naked Pictures: Ansel Adams and the Esalen Institute,” in *West of Center: Art and the Countercultural Experiment in America, 1965–1977*, ed. Elissa Auther and Adam Lerner (Minneapolis: University of Minnesota, 2012), 286–305; David P. Peeler, “The Art of Disengagement: Edward Weston and Ansel Adams,” *Journal of American Studies* 27, no. 3 (1993): 309–34; and Jonathan Spaulding, *Ansel Adams and the American Landscape* (Berkeley: University of California Press, 1998).

2. Ansel Adams and Nancy Newhall, *Fiat Lux: The University of California* (New York: McGraw-Hill, 1967). While I focus on Adams's photographs, there is much to be said about Newhall's careful

Ansel Adams, *Class Change, Berkeley, ca. 1966* (photograph © 2012 Regents of the University of California. All rights reserved)

writing and the complex image-text relationship found on the pages of the book.

3. In the wake of Adams's commission, the University of California was referred to as the "Yosemite of Public Education," making explicit the comparison with the landmark national wilderness park. Clark Kerr, "The Yosemite of Higher Education," in *Ansel Adams: Fiat Lux*, exh. cat., ed. Melinda Wortz (Irvine: Regents of the University of California, 1991), 12.

4. Adams frequently took commercial assignments, including his high-profile work for the National Parks Service, and lesser-known projects for corporations such as IBM and AT&T. *Fiat Lux* was not his only university commission; for instance, from 1932 to 1952 he worked on retainer for a small Catholic college in San Rafael, California, Dominican College, taking pictures for its promotional materials. When the Dominican photos were exhibited in 2002, they were criticized for their proplike, staged vignettes of student life; see Carl Nolte, "Out of His Element: Ansel Adams Not Known for Pictures of People," *San Francisco Chronicle*, February 16, 2002, A-19.

5. The New Mexico shot, which underwent considerable darkroom manipulation, is a much more striking, high-contrast image due to the burning and dodging techniques that Adams perfected to selectively darken or lighten. The images in *Fiat Lux*, which were meant for mass production on paper with variable ink quality, were deemed adequate for this project but were not subject to the same standards as his prints.

6. See Robin Kelsey, *Archive Style: Photographs and Illustrations for U.S. Surveys, 1850-1890* (Berkeley: University of California Press, 2007).

7. *Fiat Lux* does contain many traditional portraits of teachers, scientists, and students. One is of Peter Selz, then curator of the University Art Museum (now called the Berkeley Art Museum), displaying a maquette of the planned Mario Ciampi-designed building. When asked what it was like to sit for this picture, Selz replied, "Adams was no portraitist." Conversation with the author, October 2011.

8. Memo from Verne Stadtman to UC Vice President Sorensen, February 10, 1967, the Bancroft Library, CU 5.9, box 17, file 3.

9. "Campus Life: Berkeley; Exhibit Displays University Photos by Ansel Adams," *New York Times*, February 3, 1991, A44.

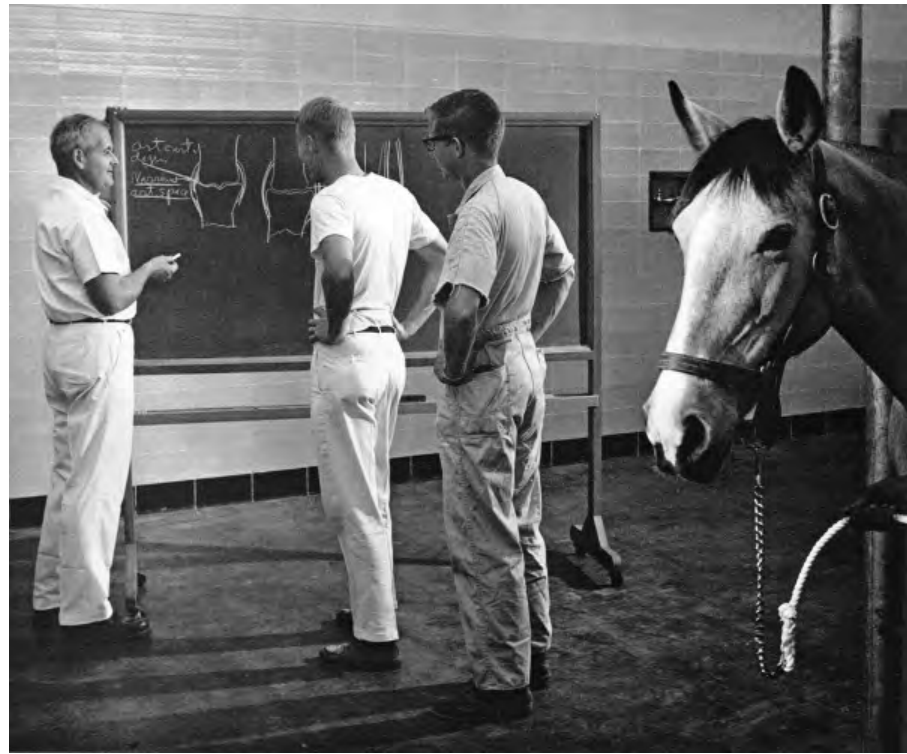
10. Of the over six thousand negatives, Adams chose 605 images to print himself and sign; the Bancroft Library at UC Berkeley holds this repository, while the negatives reside at the California Museum of Photography in Riverside. The images

dull image: with none of the tonal range of the original print, it is a dim, flat copy that highlights how UCLA's Romanesque revival architecture differs from the drama of a low-lying New Mexican village clustered in front of snow-capped mountains. As printed in the book, the photograph spreads over two pages, with the thin line of the gutter running through its right-hand side and interrupting the image's compositional integrity. The 1941 photograph, with its glossy black sky and white moon, showcases Adams's special claim of expertise in capturing shades of gray by means of his zone system, as well as his propensity for sharp, uniformly focused depth of field. Rather than elevate the campus via this association, his mimicry introduces a dissonance that emphasizes the picture's distance from the luster of the iconic New Mexico version. Robin Kelsey has discussed the false binary of "documentary" versus "artistic" in US photography topographic surveys, particularly when the bureaucratic demands of the archival imperative meet individual style.⁶ No doubt Adams was chosen to represent the university on its hundredth anniversary precisely in order to impose his magisterial gaze, to place his style onto this archive.

Interestingly, the *Fiat Lux* project was not termed a "survey" (with its implied mastery and comprehensiveness) but rather a "portrait," which suggests a more idiosyncratic or contingent enterprise, one that takes into account personality, affect, and stage of life.⁷ As one observer commented at the time, "This is a portrait by an artist rather than an essay by a photojournalist."⁸ By personifying public education in this way, Adams was also given more freedom to capture what struck his interest rather than strive toward an (illusorily complete) or systematic index. As a result, the book has a meandering, peripatetic quality; it travels from subject to subject and from place to place, organized by broadly defined themes (e.g., "The University and the Community").

From their inception, the *Fiat Lux* pictures met with critically mixed responses. At the time of its original publication, the book was "virtually ignored."⁹ Adams's photographs were placed in storage at the UC Berkeley Bancroft Library, which holds archival and special collections, and were not seen publicly for several decades.¹⁰ No doubt this was in part because of the shifting political climate; Adams was hired by UC president Clark Kerr in 1964, but by the time the book came out, Kerr had been fired by the Board of Regents under pressure from California governor Ronald Reagan.¹¹ *Fiat Lux* was one of Kerr's prize projects, but in the wake of his controversial departure and the university's recalibration of priorities that had more to do with immediate damage control than long-term collective "portrait-making," the entire enterprise faded quickly from view. After languishing unseen—"mothballed for a quarter century"¹²—selected images from the *Fiat Lux* archive were seen in a tightly curated exhibition that debuted at UC Irvine and traveled to other UC campuses and the Oakland Museum in 1991–92.¹³ The curator Melinda Wortz, commenting on *Fiat Lux*, emphasizes its connection to Adams's oeuvre, rather than its strangeness; she extolled how "Adams captured light in his photographs in ways that celebrate its beauty and mystery."¹⁴ (Initiated in part as a celebration of the twenty-fifth anniversary of the Irvine campus, the excavation of Adams's *Fiat Lux* pictures in 1991 could be tied to what Deborah Bright noted was an ideological resurgence of interest in landscape photography at about this time.)¹⁵ But beyond its significance for Adams's reputation, *Fiat Lux* exemplifies the impulse to collectively envision the public university just





Ansel Adams, *Large Animal Clinic, Davis. Dr. John D. Wheat explains a diagnosis to graduate students, ca. 1966* (photograph © 2012 Regents of the University of California. All rights reserved)

from the *Fiat Lux* commission are not part of the Adams estate but rather belong to the University of California, as stipulated by Adams's contract (which is also in the Bancroft).

11. Kerr recalls being "fired with enthusiasm." Clark Kerr, *The Gold and the Blue: A Personal Memoir of the University of California, 1949–1967* (Berkeley: University of California Press, 2003), 309.

12. Pamela Marin, "Ansel Adams, Fans Go Back to School," *Los Angeles Times*, January 8, 1991, online at http://articles.latimes.com/1991-01-08/news/vw-8022_1_ansel-adams (as of August 30, 2012).

13. Melinda Wortz's catalogue includes an essay by Newhall and process shots of Adams at work with his assistant Liliane de Cock; de Cock's role in the *Fiat Lux* project is discussed in her "Working with Ansel on *Fiat Lux*," in *Ansel Adams: Fiat Lux*, 27–31. A further collection of images from this storehouse was published about a decade later in *Unseen Ansel Adams: Photographs from the Fiat Lux Collection*, intr. Jason Weems (San Diego: Thunder Bay Press, 2010).

14. Wortz quoted in Michael Ryzdyski, "OC Focus: Ansel Adams," *Orange Coast Magazine*, January 1991, 54.

15. See Deborah Bright, "Of Mother Nature and Marlboro Men: An Inquiry into the Cultural

as that collectivity, and that "public," was stretched to its breaking point. Though Adams's images might be easy to disparage, it is also valuable to take the project seriously as an ethical enterprise. What was at stake in the production of these photographs, and how are those stakes redefined as the images continue to circulate? This essay explores some of the crucial questions that *Fiat Lux* raises—in particular how seemingly disparate issues of protest, futurity, and technology become coarticulated—to think through its moment of origin as well as its current resignifications.

Blanks

As with the eye-exam image, much of the *Fiat Lux* work flies far afield from conventional assumptions about Adams's well-known aesthetic. Take this curious space of instruction: three men gather around a blackboard, the teacher with chalk in the air, mid-gesture, the other two with hands on their hips in a show of attentiveness and deference. A horse's head juts out from the right edge of the frame, its inky eye staring at the camera lens, lending what might otherwise be an ordinary classroom a hint of the slightly surreal. The two students are turned away from the animal, oblivious. These two scenes—horse head and act of learning—seem to have little relationship to one another, as if two images had been sutured together. Both are crisply in focus, with the light that hits the men streaming from the right, casting long shadows on the floor. Disjunctively, the horse's head appears illuminated from the left.¹⁶ Attached to the horse's bridle is a white rope—one of the brightest passages in the photograph—held by a disembodied hand that hovers like an apparition just inside the frame of the image.

Meanings of Landscape Photography," in *The Contest of Meaning: Alternative Histories of Photography*, ed. Richard Bolton (Cambridge, MA: MIT Press, 1987), 125.

16. In an afterword to the *Fiat Lux* book, "Notes on the Photography," Adams states that "natural light was used in every possible situation," but goes on to admit that indoor lighting proved problematically flattening. Thus, especially in laboratories, he applied "additional light with restraint." *Fiat Lux*, 192. On this page, he also enumerates other technical specifications, including which film stock, cameras, light meters, and lenses he used.

17. Another iteration from the same photo shoot is not published in the book and is located in the digital archive; it may be the original negative from which Adams cropped the printed version (I cannot locate an original negative with this exact composition). In the uncropped version, the body holding the bridle (a white man) is fully visible. It could be argued that Adams published the cropped version because it is formally stronger—more graphic and easier to decipher, with fewer figures to clutter the visual field and less blank space above and below. This discrepancy demonstrates that there was often substantial revising and manipulation of the final, published photos.

18. Pierre Macherey, *A Theory of Literary Production*, trans. Geoffrey Wall (1966; London and New York: Routledge, 2006), 89.

19. Peace/Rights Organizing Committee, "Crisis in the Berkeley Movement," 1966, Online Archive of California, available at www.oac.cdlib.org/view?docId=ktgh4nbotc&brand=oac4&doc.view=entire_text (as of August 15, 2012).

20. W. J. Rorabaugh noted that "many of the 12,000 people in the theater carried the signs." Rorabaugh, *Berkeley at War: The 1960s* (Oxford and New York: Oxford University Press, 1989), 108.

21. Adams was dyslexic and had the equivalent of an eighth-grade education; he was not necessarily comfortable with (and even might have been estranged from) the more formalized classroom structures of higher education.

Cloaked in shadow, the hand is made especially dark due to its relative contrast next to the rope. What are we to make both of the insistent gaze of this horse and the intentional absence of the body that belongs to this hand? It is a specific compositional choice: a laboring body is evoked here, only to be effaced, cropped out by the edge of the picture.¹⁷

As with this excised figure, Adams's *Fiat Lux* photographic project is notable not only for what it depicts, but also what it does not. It is marked by glaring, willful omissions, and blind-spots—no images in the book portray the Free Speech Movement, for instance, which exploded at UC Berkeley in 1964 and resonated throughout universities all over the world. There is scarcely any indication of this turmoil within Adams's massive body of images; instead of capturing the protests that have become clichés of this active time on campuses, such as rallies on Sproul Plaza or Mario Savio delivering speeches, Adams serves up images of students filing off dutifully to their courses. In the picture of a class change at Berkeley, students scurry between buildings on a gently hilled landscape, the clock tower keeping watch. Note how atomized the students are, each walking in her or his own space; their scattered distribution paradoxically summons opposing visions of demonstrating bodies flooding these same sites. The lack of student activism, including anti-Vietnam War protests, in *Fiat Lux* is a major gap, and it could be argued that it functions as a structuring or determinate absence, to use Pierre Macherey's formulation, a blank that rearranges and resignifies everything else around it in an "eloquent silence." Macherey writes of literary texts, but could be speaking, too, of a body of work such as *Fiat Lux*: "The [work] is furrowed by the allusive presence of other [works] against which it is elaborated; it circles about the absence of that which it cannot say, haunted by the absence of certain repressed words which make their return."¹⁸ In its disavowals, displacements, and erasures, *Fiat Lux* has the potential to speak all the louder to the unruliness of student protest and attempts to control or ignore it.

One image Adams did take of a protest—not published in the book—is of students holding signs protesting Arthur J. Goldberg's appearance at the Berkeley Charter Day anniversary in 1966 (Goldberg was the US ambassador to the United Nations under President Johnson). A flier published in advance urged large-scale, visible turnout at this event: "We must prepare a counter demonstration. March 25 and 26 have been declared International Days of Protest against the war in Vietnam."¹⁹ Judging by Adams's photograph, a sizable contingent had massed, holding signs that say "Arthur Goldberg Doctor of War!" "I Oppose This War!" and "US Get Out of Vietnam!" Framed so that the lens is focused on a vertical stack of signs and faces—almost a grid—the photo clearly places Adams amid or at the very least near a scene of protest. This day would prove to be a flashpoint for the limits of free speech on the Berkeley campus, with a dozen students cited for violating university policy and competing leftist camps vying for primacy in the antiwar movement, but *Fiat Lux* betrays no overt indication of this turmoil.²⁰

This is only the most obvious evidence of Adams's selectively trained vision—for, surprisingly, he was not interested in photographing conventional sites of learning. In the *Fiat Lux* book, there is not a single image of college-age students at their desks with a professor at the front of a class.²¹ Instead, Adams set out to imagine the collective labors of education within the UC system differently, in particular to insert it into the distinctive geography of the state, to put the university

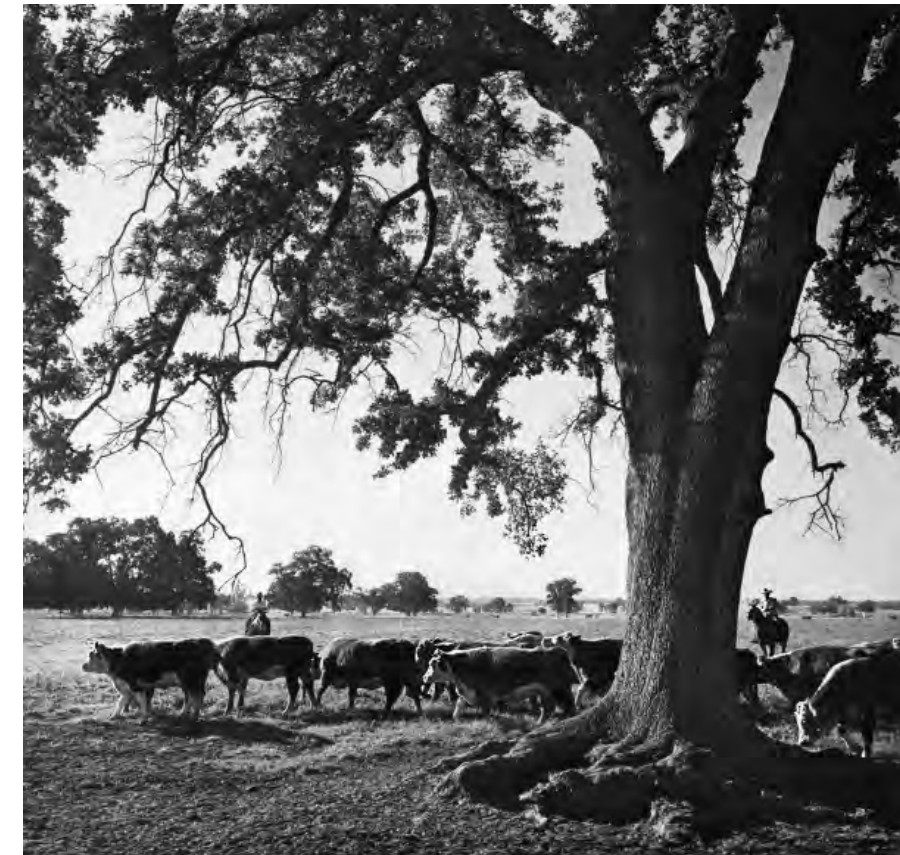


Ansel Adams, *Charter Day Audience, Greek Theater, Berkeley, March 1966*, contemporary print from original negative by Ansel Adams. Sweeney/Rubin Ansel Adams *Fiat Lux* collection, UCR/California Museum of Photography, University of California, Riverside (photograph © UCR/California Museum of Photography). This work was not published in the *Fiat Lux* book.

in a close dialogue with the land, or what we might call, cautiously, “nature.” Thus, Adams’s depiction of the Bodega Marine Laboratory consists not of the lab facilities themselves, but rather a close-up of a tide pool teeming with anemones. *Fiat Lux* also features several scenes of countryside dotted with animals; these images are for the most part generic. As Bright has theorized, landscape photography often keys into established painterly genres such as the pastoral, and frames space in particular (and particularly gendered) ways.²² In *Cattle Ranch, Tehama County, near Redding*, cows huddle around a tree, its leafy branches stark against the light sky. The cattle are herded by two cowboy-hatted figures on horseback; though their features are indistinguishable, they are unmistakably men. Bright speculates that West Coast mid-century photographers like Adams had a particular investment in these anachronistic figures, as well as in an aesthetic which “was premised on an identification between a mythical Eden and the American landscape and was well suited to the conservative social climate of a post–World War II United States basking in its reborn Manifest Destiny as a world superpower.”²³

Combing through the *Fiat Lux* archive, one is struck by the proliferation of nonhuman creatures in both expected and unlikely locations—as in the horse head floating alongside the blackboard. There are many more shots of animals in pastures, and they resemble what we might expect from a lauded (if politically compromised) conservationist like Adams.²⁴ Yet their presence within *Fiat Lux* reminds us that while depictions of cattle grazing on farmland or sheep on a range appear at first glimpse to have little to do with the educational mission of

22. She comments that landscape remains “singularly identified with a masculine eye.” Bright, 126.
 23. *Ibid.*, 129.
 24. For a critique of Adams’s conservationist efforts with the Sierra Club, see Timothy W. Luke, “Nature Protection or Nature Projection: A Cultural Critique of the Sierra Club,” *Capitalism Nature Socialism* 8, no. 1 (1997): 37–63.



Ansel Adams, *Cattle Ranch, Tehama County, near Redding, ca. 1966* (photograph © 2012 Regents of the University of California. All rights reserved)

the university, these pastures were testing grounds and outdoor laboratories for what was then becoming the state’s large-scale industrial meat production and corporate agriculture. The text for the cattle range photo describes some of the benefits of the “livestock industries:” “Mechanization, control of disease, and nutrition studies have made it possible for a single cow to produce a third more milk than she could before.”²⁵ Corporate farming was pioneered and promoted throughout the 1960s; in 1968 a US Department of Agriculture study estimated that California was second only to Florida in the amount of farmland owned by corporations.²⁶ This boom was fueled not only by technological innovations in equipment but also by a growing surplus of cheap migrant labor, laborers who were, starting in 1962, actively organizing through the efforts of the United Farm Workers.

Such laborers are not visible in the photos of the *Fiat Lux* book; instead, Adams depicts a cultivated grid of citrus trees fanning out under the clouds, devoid of human workers, or a cotton field in the Coachella Valley likewise sans laboring bodies. In an image of a broccoli field, a massive harvesting machine presides over the dense vegetable textures. The horizon line is high as the machine appears to hover or float on a sea of leaves, which, articulated by Adams’s focus, press up against the surface of the image. It is important to note that Adams had a different vision of agriculture and human effort when, twenty years earlier, he documented another (for him unlikely) topic: the Japanese-American internment camp known as the Manzanar War Relocation Center. In

25. Adams and Newhall, 159.
 26. See Philip M. Raup, “Corporate Farming in the United States,” *Journal of Economic History* 33 (March 1973): 274–90.



Ansel Adams, Broccoli Harvester, Salinas Valley, 1966 (photograph © 2012 Regents of the University of California. All rights reserved)

Ansel Adams, Farm, farm workers, Mt. Williamson in background, Manzanar Relocation Center, California, 1943, silver gelatin print. Library of Congress, Prints and Photographs Division, LC-DIG-ppprs-00370 (photograph in the public domain)

Ansel Adams, Richard Kobayashi, farmer with cabbages, Manzanar Relocation Center, California, 1943, silver gelatin print. Library of Congress, Prints and Photographs Division, LC-DIG-ppprs-00260 (photograph in the public domain)

27. Ansel Adams, *Born Free and Equal: The Story of Loyal Japanese Americans* (New York: U.S. Camera, 1944).

28. Jasmine Alinder, *Moving Images: Photography and the Japanese American Incarceration* (Champaign: University of Illinois Press, 2009), 55.

29. Through his connections at the Sierra Club, Adams was a friend of the Manzanar director, Ralph Palmer Merritt, and received a personal invitation to photograph the camp. He accepted in part to satisfy his desire to contribute in some way to the war effort. Adams later referred to these images as shots of “a great injustice,” but they have long been controversial, as they did not contest the central claim of the internment policy, which was that the Japanese were interned for political rather than racial reasons. See, for instance, Jan Zita Grover, “The Winner Names the Age: Historicism and Ansel Adams’s Manzanar Photographs,” *Afterimage*, April 1989, 14–18; and Anne Hammond, “Ansel Adams at Manzanar Relocation Center, 1943–1944,” *History of Photography* 30, no. 3 (Autumn 2006): 245–57.

these images, taken in 1943–44 as part of Adams’s brief foray into social documentary work and packaged under the title *Born Free and Equal: The Story of Loyal Japanese-Americans*, Adams captures active scenes of farming in an effort to document the everyday life of internment and to humanize, if not dignify, the residents of the camp.²⁷ The historian Jasmine Alinder comments that in the Manzanar photos Adams plays to his strengths as a landscape photographer, inserting the internees into the land to show that they belong, as well as the “power of the individual in the grand western landscape.”²⁸

Here, farmers work in the furrows of the crops, Mt. Williamson rising up in the distance, or proudly hold up cabbages for inspection—yet this casual satisfaction has led many scholars to take Adams to task for his overly sunny depiction of life in these camps.²⁹ In addition, the project was viewed as upholding a racist stereotype of Asian “passivity,” in which Japanese-American citizens were “ideally suited for domestic labor and other forms of servile work.”³⁰ In the Manzanar series, Adams focused more intently on close-ups of faces than he ever did before or since, a compositional choice that had political implications, for as Alinder writes, “by placing the viewer so close to the subject, Adams demands that the face be reckoned with and acknowledged on familiar terms.”³¹ Could one say the same of the UCLA eye exam? For Adams, the interfaces between humans, technology, and nature proved consistently problematic; he struggled with tone in the Manzanar series, as well as in the *Fiat Lux* project. How close was too close for his camera?

Time

Adams’s overarching charge with the *Fiat Lux* commission was hardly modest: he was asked nothing less than to reveal not only the current state of the university, but to forecast the future.³² To quote Adams’s and Newhall’s introduction to the book: “When Clark Kerr, then president of the University, asked us to undertake





Frontispiece for Adams and Newhall, *Fiat Lux* (detail), with *Charter Day, 1964, Hearst Greek Theatre, Berkeley* (photograph © 2012 Regents of the University of California. All rights reserved)

this survey in words and photographs . . . he challenged us to project, as far as possible, ‘the next hundred years.’”³³ Notions of futurity became an explicit motif of the book itself, as its frontispiece features a wide shot of the Hearst Greek amphitheater at Berkeley in 1964, packed with bodies neatly corralled into their seats, over which is written “DEDICATED TO THOSE WHO WILL MAKE THE FUTURE.” (Two years later, the same theater would seethe with antiwar demonstrators protesting Goldberg’s appearance.) To his credit, Adams also recognized the quixotic nature of this enterprise and noted how difficult it was, in simple pragmatic terms, for photography to capture or fix on film the sprawling system, as the university was in an ongoing and impressive state of flux; “on many campuses the university was being torn down, rebuilt and expanded at a rate unbelievable, perhaps, except by eyewitnesses.”³⁴ Moreover, photography is poorly suited to document that which is nascent, the almost-here, the not-quite-yet. He further wrote that his task was thus “literally impossible, of course, because you cannot—as yet!—photograph a thought beginning to stir.”

Adams’s task was even more complicated by the ambition that his collective photographic overview might not just freeze its own historical moment, but become a prophetic tool. As the theorist Siegfried Kracauer states, “If photography is a function of the flow of time, then its substantive meaning will change depending upon whether it belongs to the domain of the present or to some phase of the past.”³⁵ What time is registered in the pages of *Fiat Lux*? Roland Barthes influentially theorized one relationship between temporality and photography, positing that the photo reaches forward as much as it reaches back, referring to the



Ansel Adams, *Technician, Riverside, ca. 1964–66* (photograph © 2012 Regents of the University of California. All rights reserved)

Ansel Adams, *Collections [The Museum of Vertebrate Zoology, Berkeley], 1966* (photograph © 2012 Regents of the University of California. All rights reserved)



“this will be and this has been,” anterior future of photography.³⁶ But Adams was handed a special, if not “impossible,” temporal problem with this commission, which was to use photography—a stubborn index of the present—to show the future. This future-looking is even harder to imagine given the simple fact of Adam’s style: if in the early twentieth century his affiliation with Group f/64 put him at the forefront of a renunciation of pictorialist photography and a turn to modernism, by 1964 he was working in an accepted or even conservative idiom.³⁷ Few *Fiat Lux* images are formally advanced; Adams’s innovation and experimentation in the service of pictorial clarity for a mass-market audience lent his works a “practical modernism,” as one scholar has termed it.³⁸ Given this, what discursive tense are these images meant to sound? Theorists of photography have long noted the medium’s vexed temporality, as it registers the current moment as well as embeds within it a soon-to-come history, becoming a trace of the past. It is thus connected to fraught issues of memory and commemoration, as well as to modern regimes of capitalist timekeeping.³⁹ What sort of temporal projection did Adams attempt with these photographs, an especially difficult task in the mid-1960s, when projections of the future of the university were under a great deal of political pressure?

Along with the cattle and sheep in idyllic settings, Adams depicted creatures already captured and preserved for science, such as insects carefully aligned in petri dishes cradled in the palm of a faceless scientist, and birds laid out in drawers for classification and study at the Museum of Vertebrate Zoology. Why the persistent recourse to nonhuman subjects in this vision of the university’s future? Akira Mizuta Lippit in his book *Electric Animal* has posited that anxieties about the destruction of nature and the frailty of animals have meant that wildlife exists in a state of perpetual vanishing—in turn, we are propelled to continually represent them. He writes, “Modernity can be defined by the disappearance of wildlife from humanity’s habitat and by the reappearance of the same in humanity’s reflections on itself: in philosophy, psychoanalysis, and technological media.”⁴⁰

30. Alinder, 45.
31. *Ibid.*, 57.

32. Adams received a fee of \$75,000 for this project paid in quarterly amounts, which included all travel and supplies reimbursements, as well as a \$15/hour or \$100/day professional fee. He was contractually obligated to produce one thousand negatives that would collectively be a photographic portrait of the university. He produced almost seven times that many, and the high cost of materials and extensive travel expenses ate the entire sum he was paid. See the oral history interviews conducted in 1972, 1974, and 1975 by Ruth Teiser and Catherine Harroun, “Conversations with Ansel Adams,” with an introduction by James L. Enyeart and Richard M. Leonard, Regional Oral History Office, Bancroft Library, UC Berkeley, 1978.

33. Adams and Newhall, 7.

34. *Ibid.*

35. Siegfried Kracauer, “Photography,” trans. Thomas Y. Levine, *Critical Inquiry* 19, no. 3 (Spring 1993): 421–36 (italics in original).

36. Roland Barthes, *Camera Lucida: Reflections on Photography* (New York: Hill and Wang, 1981), 96.
37. See Therese Thau Heyman, ed., *Seeing Straight: The f.64 Revolution in Photography* (Oakland: Oakland Museum of California, 1992).

38. Rebecca A. Senf, “Ansel Adams’s ‘Practical Modernism’: The Development of a Commercial Photographer, 1916–1936” (PhD diss., Brown University, 2008).

39. For more on photography and memory, see Geoffrey Batchen, *Forget Me Not: Photography and Remembrance* (New York: Princeton Architectural Press, 2004); for an examination of photography as it connects to modern notions of time (as well as to early cinema), see Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive* (Cambridge, MA: Harvard University Press, 2002).

40. Akira Mizuta Lippit, *Electric Animal: Toward a Rhetoric of Wildlife* (Minneapolis: University of Minnesota, 2000), 3.



Ansel Adams, *Hands with Chips, Eureka [The Forest Products Laboratory], ca. 1966* (photograph © 2012 Regents of the University of California. All rights reserved)

Ansel Adams, *Pulp Mill, Eureka, ca. 1966* (photograph © 2012 Regents of the University of California. All rights reserved)



If animals and insects are meant to signify a sphere of what could be called “nature” outside human culture or civilization (that is to say, modernity’s past), they may also be depicted in relation to an increase in industrialized agriculture, pest eradication, and the scientific categorization of species. Adams is famous for the memorialization of a highly constructed, nostalgic vision of nature that appears timeless, yet these images unravel that temporal logic by intersecting with contemporary ideas of nature as a conduit toward progressive notions of productivity, disease management, and knowledge. In one image, for instance, the Californian forest Adams campaigned to preserve is showcased as a nascent product, bark chips, and it serves as a reminder that the place of nature and non-human creatures in universities is often to provide experimental fodder. Another image, shown in the book on the page opposite the hands, depicts a pulp mill in Eureka—here the chips are piled into an epic mountain range, rising high and filling the frame, as, over a peak in the distance, a machine motors away. Nature reemerges not as our idealized past but as raw materials to be processed, as well as the testing grounds for future medicine, future goods, future regimes of labor, and future accounts of life. It is in images like these, with their darker edges, that Adams is at his most abstract and formally innovative; in the heap of bark he draws from the landscape idiom only to estrange it from itself, as texture, shape, and line overtake horizon or vista.

In an image similar to the one with hands cradling bark chips, another pair of disembodied hands, cropped by the camera frame, shows pupae collected in small plastic containers, some selected out to be cupped in the folds of a human palm. Adams’s camera is not interested in probing the mechanics behind these close-ups, but rather in the physical, bodily encounter between scientists and their objects of inquiry, these messy moments of tactile engagement; he comes back again and again to the touch of the hand. At the same time, *Fiat Lux* shows



Ansel Adams, *Sugar Beets, Spreckels, Salinas Valley, 1966* (photograph © 2012 Regents of the University of California. All rights reserved). This work was not published in the *Fiat Lux* book.

Ansel Adams, detail of *Preplanting Fumigation of Soil, Salinas Valley, 1966* (photograph © 2012 Regents of the University of California. All rights reserved)

the increasing distances between humans and their labor due to mechanization and technological efficiency, as Adams serves up the ostensible disappearance or obsolescence of some forms of manual effort (hence the disjuncture between these scenes of agriculture and those in the Manzanar photos). In another image not selected for publication in the text, beets are piled high in a train, their surfaces still muddy with earth, gesturing toward the bounty of the California harvest. Yet as they recede toward the twinned smokestacks in the distance, we realize they are being chugged off to a factory that will process them for their sugar. What look like glistening canals or ditches are in fact plastic fumigation covers for strawberry fields, pulled taut against these vulnerable and lucrative crops. Are these images of nature as it is in the midst of a productive restructuring, or are they pictures of despoliation, perversion, madness? The images are agnostic on these issues; it is compelling that in this body of work, instead of taking a firm or legible stand, Adams vacillates between celebration and a stance more difficult to parse.

Nowhere is this ambivalence made clearer than in the photograph of the “astromonkey”—one of several monkeys at the White Mountain High Altitude Research Station being groomed for space exploration in the context of the 1960s Cold War “space race,” when nations competed to hurtle beyond the surface of the Earth. Newhall’s caption refers to the animals as “a charming troupe of pale gray, pigtailed monkeys who have been instrumented so that every physiological reaction to acceleration, weightlessness, confinement, radiation, and other hazards can be recorded.”⁴¹ Wearing a hospital gown, confined by a neck brace that keeps it in place, and attached to a machine with rows of dials and buttons, the monkey strains to look up at the physiologist-cum-keeper who smiles down at it; is this look tender, plaintive, or terrified? The man, Dr. Nello Pace, is a specialist in high-altitude research who in the 1940s was officer-in-charge of



41. Adams and Newhall, 113.



Ansel Adams, Nello Pace and Astromonkey, ca. 1966 (photograph © 2012 Regents of the University of California. All rights reserved)

Ansel Adams, another frame of Pace and the astromonkey, ca. 1966, contemporary print from original negative by Ansel Adams. Sweeney/Rubin Ansel Adams *Fiat Lux* collection, UCR/California Museum of Photography, University of California, Riverside (photograph © UCR/California Museum of Photography). This work was not published in the *Fiat Lux* book.

the radiological survey of the aftereffects of the US bombings of Hiroshima and Nagasaki.

The image of the scientist and monkey reaching toward mutual eye contact made it into the book, but there are others, never published, from Adams's massive archive of negatives: for instance, one with both researcher and animal sharing a gaze and looking directly at Adams, and one in which the monkey opens its mouth into a scream, baring its teeth and moving so rapidly that its head is a blur of anxiety, or aggression, or fear, while the doctor smiles for the camera lens. The blur makes it inadmissible for inclusion in the book, as it is out of bounds of Adams's clean modernist vision, one ruled by crisp contrast and stable subjects. For Adams this was not a "good enough" picture to be published—the moving, open mouth is a moment of control that has been violated (the monkey is braced, after all, and Dr. Pace carefully posed). "Can we make this silence speak?" asks Macherey. "What is the unspoken saying?"⁴² Perhaps in this case, it is not so much listening to the unspoken as hearing that which goes unheard or, like a monkey's scream, is to us unintelligible.

Knowledge

The data collected from this monkey is part of what *Fiat Lux* calls "the university's invisible product, knowledge."⁴³ The wording from this chapter heading is taken directly from Kerr—who commissioned Adams to make the photographs—from his 1963 book *The Uses of the University*.⁴⁴ Kerr was widely influential for his advocacy of a managerial business model for higher education, a model in which the product may not be visible but still contributes tangibly to a market economy. Along

42. Macherey, 96.

43. Adams and Newhall, 90.

44. Clark Kerr, *The Uses of the University* (Cambridge, MA: Harvard University Press, 1963).

45. The Donahoe Higher Education Act (which included many of the provisions of the Master Plan) was signed into law on April 27, 1960, by Governor Edmund G. Brown.

46. This quote is taken from a 2003 memo from the president of the University of California, Richard C. Atkinson, writing to defend a UC Regents vote about limiting enrollment, which was perceived as a radical departure from or even betrayal of the mission of the Master Plan. Memo from Richard C. Atkinson, "What is the current status of the access provisions of the Master Plan for Higher Education in California?" September 13, 2003, online at www.ucop.edu/acadinit/mast-plan/mpregents091503.pdf (as of September 12, 2012).

47. For more on changes Kerr set into place regarding faculty autonomy and corporatization, see Christopher Newfield, *Ivy and Industry: Business and the Making of the American University, 1880–1980* (Durham: Duke University Press, 2004).

48. Clark Kerr, *The Uses of the University*, 115; quoted in Hal Draper, *The Mind of Clark Kerr: Behind the Battle of Berkeley; His View of the University Factory and the "New Slavery"* (Berkeley: Independent Socialist Club, 1964).

49. For a trenchant analysis of this trend, see the special issue "The Humanities and the Crisis of the Public University," *Representations* 116, no. 1 (Fall 2011).

50. Clark Kerr, "Reconsideration after the Revolts of the 1960s" (1972), a rebuttal to his critics that was included in later editions of his book *The Uses of the University* (1963; Cambridge, MA: Harvard University Press, 1972), 112.

51. Guy Debord, *The Society of the Spectacle*, trans. Ken Knabb (1967; London: Rebel Press, 2006), 107 (italics in original).

with his views of the "multiversity," many of which have had regressive consequences, Kerr also took progressive stances: he advocated for the autonomy of the university in the face of a consolidating state government and was the primary author of the 1960 Master Plan for Higher Education that guarantees access to public education for qualified students in California.⁴⁵ Unprecedented in its own time and to this day under continual threat, the Master Plan is widely considered "a compact between the state, the institutions, and the residents of California. . . . The feature of the Master Plan best understood by the general public is the promise that all California residents will have a higher education opportunity somewhere in the system."⁴⁶ Given that Kerr both criminalized student dissent and pushed for broader access to public education, his legacies are still contested.⁴⁷

Kerr's vision of the multiversity in 1963 came under a great deal of attack one year later during the Free Speech Movement. A protest pamphlet by Hal Draper called *The Mind of Clark Kerr* is emblazoned with the subtitle "His View of the University Factory and the 'New Slavery,'" and scathingly deconstructs Kerr's text. The following quote from Kerr is repeated in Draper's pamphlet: "The university and segments of industry are becoming more alike. As the university becomes tied into the world of work, the professor—at least in the natural and some of the social sciences—takes on the characteristics of an entrepreneur. . . . The two worlds are merging physically and psychologically."⁴⁸ According to Draper, Kerr wanted to turn the university into a "factory" and professors into businessmen. This model has proven prescient: with the increasing drive toward privatization, the public university shifts for more and more corporate support, and as part of a larger neoliberal imperative, professors are encouraged to market themselves in ever more entrepreneurial methods.⁴⁹ Kerr himself, however, defended his language, noting that he never called for the university to turn into a factory. "This phrase [knowledge industry] was then credited to me, then 'industry' was turned into 'factory,' then the word 'knowledge' was dropped, and what started out as [Fritz] Machlup's factual description of the 'knowledge industry' become my asserted goal to turn the university into a 'factory.'"⁵⁰

Kerr's vision of a multiversity found detractors across the globe, in no small part because Draper's pamphlet circulated internationally in the 1960s. Kerr is referenced, for instance, in Guy Debord's *Society of the Spectacle*:

As culture becomes completely commodified it tends to become the star commodity of spectacular society. Clark Kerr, one of the foremost ideologues of this tendency, has calculated that the complex process of production, distribution and consumption of knowledge already accounts for 29% of the gross national product of the United States; and he predicts that in the second half of this century the "knowledge industry" will become the driving force of the American economy, as was the automobile in the first half of this century and the railroad in the last half of the previous century.⁵¹

Debord was exactly right, or, rather, Kerr was right, but they come to opposite conclusions about the ramifications of this economic shift. These writings index the growing recognition in the 1960s that a knowledge economy was taking hold in new and significant ways.

One of the most challenging aspects that Adams faced with the *Fiat Lux* commission was not just grappling with the problem of how to capture the future or



Ansel Adams, *Televised Instruction, Santa Barbara*, ca. 1966 (photograph © 2012 Regents of the University of California. All rights reserved)

forecast for one hundred years, but more simply how to photograph knowledge production in these crucial few years. Knowledge is by its nature immaterial as it is created and dispersed, but in this time of transition, knowledge—however intangible or difficult to visualize—was becoming reified into a commodity. It was just at this moment that political economists began to name a larger shift in the nature of production—it came to be known as postindustrialism or post-Fordism, in which capitalism congeals in new ways around the management of knowledge, and results in massive redefinitions of work, service, and production.⁵²

The way Adams found to represent this postindustrial shift to the “invisible products” of the new university, a shift which is extremely complex and stubbornly resistant in some ways to being imaged, was to turn to plotting relationships between humans, machines, and animals. For it is in the management of animals that we can more palpably witness active training and disciplining.⁵³ Even the animals Adams showed grazing on farms were in a complex state of acculturation. This was a logistical solution to a conceptual problem, the problem of how to represent what the university does when it is not producing marketable commodities by grinding up the forest. As Adams stated in a 1972 interview, “The difficult subjects to handle were the ‘abstracts’: How do you do mathematics? How do you do social sciences?”⁵⁴

Searching for ways to capture the consolidation of immaterial knowledge into a visual product, Adams photographed just-invented classroom technologies such as televised instruction. A teacher draws a cell or embryo onto a glass screen that is shown via closed-circuit television to hundreds of students simultaneously in many small classrooms. Tellingly, the shape is larvalike, encapsulating the very notion of potential life in formation (or of students as they are patronizingly understood as matter-in-process). Pioneered in the 1960s, this televised instruction has morphed into today’s online distance learning, which is heavily pro-

52. There is a wealth of material about this economic transition and its affective ramifications; for one early look that is also keyed to the idea of future projection, see Daniel Bell, *The Coming of Post-Industrial Society: A Venture in Social Forecasting* (New York: Basic Books, 1973). For a Marxist perspective on the shift, see Harry Braverman, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century* (New York: Monthly Review Press, 1974).

53. For a convincing take on the cultural and market “currency” of nonhuman animals, see Nicole Shukin, *Animal Capital: Rendering Life in Biopolitical Times* (Minneapolis: University of Minnesota Press, 2009).

54. Teiser and Harroun, 1.



Ansel Adams, *Dr. John H. Lawrence, with the multiple-port in vivo counter [Donner Laboratory of Medical Physics and Biophysics, Berkeley]*, ca. 1967 (photograph © 2012 Regents of the University of California. All rights reserved)

Ansel Adams, *The magnetic coil of ALICE, and Charles C. Damn, physicist, in charge of the ALICE group, Livermore*, 1966 (photograph © 2012 Regents of the University of California. All rights reserved)

Ansel Adams, *Laboratory Research, Langley Porter Neuropsychiatric Institute, San Francisco Medical Center*, 1964 (photograph © 2012 Regents of the University of California. All rights reserved)



moted as a potential cost-saving technique to teach the maximum number of students with minimal instructor presence. To quote Draper’s 1964 pamphlet that was skeptical of Kerr’s dream of an integration of industry, technology, and learning: “The new slavery to technology may bring a new dedication to diversity and individuality.”⁵⁵ Draper’s pessimistic, critical 1964 pamphlet glosses this passage by commenting that for Kerr, “the new slavery and the new freedom go hand in hand.”⁵⁶

Along with nature, Adams was especially riveted by its ostensible opposite: technology. In these images, a man smiles over a prone woman whose body, covered by a sheet, is surrounded by a small forest of mechanical gear that uses radioisotopes for medical diagnosis. Note that the caption refers to the male doctor, not the female patient, who is both unmentioned and unnamed. In other images, mechanized farm equipment displaces the workers who run it, rendering humans at the mercy of the machine; this is especially clear when Adams photographs the

55. Draper here ostensibly quotes Kerr directly, but I cannot locate this quote in Kerr’s writings.

56. Draper, 20.

Bevatron particle accelerator in a lab for nuclear weapons technology (which dwarfs the tiny humans standing in its midst), or zooms in on the magnetic coil of the Adiabatic Low-energy Injection and Capture Experiment (aka ALICE). In this image, a physicist’s head is visible, just off center, through a glass portal, with metal equipment surrounding him like a prosthetic helmet. As with the eye-exam photo, the image suggests a potent symmetry between machine and the camera lens as devices for seeing differently. At a neuropsychiatric institute, a woman sits back in a chair, as if relaxing at the end of a long day, but her head is wired with cables that snake to a box on the wall that connects to a bewildering set of machines, dials, and devices that swallow the foreground. With this nest of wires and cords emerging from her skull, the organic and the inorganic meet in a symbiotic tangle. She is not so different, perhaps from the astromonkey in its neck brace. There is an obviously imbalanced gender dynamic here, with women pictured as passive patients and men as active agents: this gendering runs across the *Fiat Lux* pictures. How is this a depiction of knowledge as it is being formed and processed into data and systems to be used? Here the future of knowledge is mined directly from the minds of subjects.

Destruction

With its smiling students, bespectacled professors, well-stocked libraries, grazing animals, and lush vistas, *Fiat Lux* presents a view of the University of California that could be castigated, as Catherine Cole notes (ventriloquizing such critics), for being “monumental, idealized, modernist, masculine, Anglo-centric and utopian, succumbing to many of the delusions and pathologies inherent in such epic, utopian projects.”⁵⁷ Along with its troubling gendering politics, *Fiat Lux* certainly is “Anglo-centric”—I would simply say racist. The cast of characters in *Fiat Lux* is predominately white. While some nonwhite students and teachers are sprinkled among the pages, most people of color are relegated to the role of “community members” who are helped by the university’s mission of “outreach,” like tutored children in Watts. Other such mid-century cataloging photographic projects include the Edward Steichen—curated *The Family of Man*, exhibited at the Museum of Modern Art in New York in 1955, which was popularly successful but came under critical scrutiny from critics such as Susan Sontag, who wrote that such an effort “denies the determining weight of history—of genuine and historically embedded differences, injustices, and conflicts.”⁵⁸ There is also a strain felt within the *Fiat Lux* images, as they stage their own antipathy toward some of what the university was doing at this moment. The bark chips in the forest-products laboratory map one of the coordinates of that anxiety; the omission of the Free Speech Movement or anti-Vietnam War protests suggests another.

It is possible, too, that Adams felt obligated to smooth out any images of perturbation, to have his photographs in sum perform an averaging function by excluding moments that seemed exceptional, or overly timely. By definition a project meant to capture a complex system as it might look in one hundred years can hardly include unrest, volatility, or what might have been deemed too “current.” The political demonstrations that erupted as Adams took on his project could have seemed, at the time, to be a series of small and fleeting disruptions, wholly tied to local circumstances and bound to a specific moment (rather than being,

in retrospect, part of a global movement of youth self-determination and the burgeoning New Left). In the logic of the assignment, he was meant to select the normative structures he thought might endure, and remain silent on apparently momentary aberrations. In addition, Adams was not given the free rein that Kerr had hinted at in initial conversations, but had specific marching orders regarding the intended tenor of his images. According to a “letter of understanding” between Adams and Earl C. Bolton, Vice-President of University Relations, in 1964, “It is hoped and intended that the book will capture and portray the following ideas and concepts: 1. That the University is a single entity which manifests itself in many ways and in many locations throughout the State; 2. That the University is a warm and sensitive institution dedicated to the welfare of human beings, and; 3. That in addition to excellence in teaching and research, the University provides outstanding public service to the people of California.”⁵⁹ As a result of this mandate to depict a “warm and sensitive institution,” the bulk of the pictures tend toward the mundane. Yet as we have seen, there are persistent glimpses of trouble, moments where ambivalence or a more charged tone seeps in, and these images are often where Adams is at his most unresolved, and hence noteworthy, compositionally.

These ruptures in the archive also point to other political fault-lines related to the clause regarding “the welfare of human beings,” with its narrow phrasing that excludes nonhuman animals and the environment. Though it strikes one now as the more pacifying picture, the inclusion of the non-screaming astromonkey in *Fiat Lux* was potentially inflammatory, for it was at this moment that questions were being asked nationally about the use of animals in research labs. Animal experimentation had been occurring within universities for decades with little oversight, but an article in *Life* magazine entitled “Concentration Camps for Dogs” in 1966 brought new attention to this issue.⁶⁰ Accompanied by photos by Stan Wyman, this article told lurid tales of pets being stolen, taken across state lines, and sold for experimentation and research purposes. There were more letters to the editor written to *Life* about this article than any piece in the magazine’s history, and public pressure helped spawn the passage of the Animal Welfare Act, signed into law by President Johnson later that year.⁶¹

It is unclear if Adams cared about animal experimentation in the 1960s; regardless, *Fiat Lux* enacts a complex displacement regarding violence to vulnerable bodies. The caesura it introduces regarding student activism now registers as a tear or rupture. If the public university at this moment was a space of great potential, it was equally a site of violence; Adams’s photographs cannot help but picture that, if obliquely. In December of 1964, in a speech that would galvanize students and become one of the most repeated of its era, Savio, echoing some of Kerr’s own discourse, spoke of Kerr as a “manager,” with youth and students as “raw material” meant to be processed into a “product.” Savio urged students to “put your bodies upon the gears and upon the wheels, upon the levers, upon all the apparatus, and you’ve got to make it stop. And you’ve got to indicate to the people who run it, to the people who own it, that unless you’re free, the machine will be prevented from working at all.”⁶² Though nothing like this speech or its aftereffects are visible in the photos Adams took, Savio’s analogy is rendered through other means, through Adams’s many moments of bodies being penetrated, being probed, or merging with the machine, images that partake of both

57. Catherine Cole, “Picturing Our Future,” *Townsend Center for the Humanities Newsletter*, February–March 2012, 8.

58. Susan Sontag, *On Photography* (New York: Farrar, Straus, and Giroux, 1977), 208. Blake Stimson puts forth a cogent analysis of the humanism in *The Family of Man* in *The Pivot of the World: Photography and Its Nation* (Cambridge, MA: MIT Press, 2006).

59. Letter of understanding between Earl C. Bolton and Ansel Adams, October 21, 1964, Bancroft Library, CU 5.9, box 17, folder 1.

60. Michel Silva, “Concentration Camps for Dogs,” *Life* 60, no. 5 (February 4, 1966): 22–29.

61. See Benjamin Adams and Jean Larson, introduction to *Legislative History of the Animal Welfare Act*, USDA National Agricultural Library, Animal Welfare Information Center Resource, Series Number 41, September 2007, online at www.nal.usda.gov/awic/pubs/AWA2007/intro.shtml (as of September 12, 2012).

62. Savio quoted in *The Free Speech Movement: Reflections on Berkeley in the 1960s*, ed. Robert Cohen and Reginald E. Zelnik (Berkeley: University of California Press, 2002), 119. See also the interview with Savio by Jack Fincher, “The University Has Become a Factory,” *Life* 58, no. 8 (February 26, 1965): 100–1.

fantasy and nightmare—nuclear weapons research, corporate farming, animal experimentation.

Adams later said about these few years, “A history of that should be written and fully analyzed some day because it was a tremendously destructive period, with a destructive psychology involved. I think most of the personnel, the actual staff of the University were very, very good. Of course, some of them felt a little bitter when the activists took over in Berkeley. Many of them said, ‘Well, it can’t be any worse than it is, so we’ll go with the activists.’ That compounded the trouble.”⁶³ It might seem contradictory that a naturalist like Adams would so easily mouth a reactionary view, but conservationism is often not so far from conservatism. Adams characterizes activists as damaging or “destructive”; he was a friend of Kerr’s wife through the Sierra Club, and he had a generational inclination toward the administration. What is more, Adams was intent on a romantic, idealized depiction of the landscape as something to be consumed, and the university was fluent with that ideology of consumption.

The images in *Fiat Lux* were meant to forecast the survival of the university in relation to the state, its students, and the trust that undergirded it. What can these photographs tell us about the possibilities for the future of public education, ones both nourishing but also potentially troubled? Adams’s project was one attempt by the university to produce its own public face, to put a familiar, even comfortable and contained, frame around itself. In some respects, Adams was on well-trod territory; yet this was not the California landscape he was accustomed to depicting. Instead, he was confronted with a volatile threshold in which the landscape was being rapidly transformed by the university that hired him. The years 1964–67 were also the cusp of radical new possibilities for education, for knowledge, and for the economy, and proved difficult to grasp. He reined in this unpredictable subject matter with his own controlled photographic practice, which is likely why we see no images of unruly student demonstrations, and why the animal pictures are highly postured—this indicates his desire for docility.

In the keenest writing about *Fiat Lux* to date, the poet Barrett Watten writes, “Adams’s portrait of the university betrays a structured fantasy of state power linked intimately to the objectifications and exclusions of modernist form. In these overly composed and scripted portraits and landscapes, photographic modernism sought a guaranteed social role as interpreter and guardian of state institutions.”⁶⁴ Watten incisively notes that modernism and the role of photography as a form of social control are at issue here. Just as Adams completed his work, the public image of the University of California became ever more difficult to contain via photography. Despite the 1967 release of the *Fiat Lux* book that tried so carefully to manage and curate a portrait of a functioning system, the university was increasingly depicted by the late 1960s as a place on the verge of major insurrection, with helicopters and the National Guard brought in to tear-gas its own students. The containment Adams (and Kerr) sought within the frame of the camera proved impossible.

Adams was charged to represent the future of the university via photography, and chose to do so with a variety of means—using partial or fragmented bodies, human-machine interfaces, and in relation to nonhuman animals. Some of these are expected ways to figure futurity, and are catchalls or shorthand for the futuristic, as with the astromonkey in its neck brace.⁶⁵ More than that, Adams attempted

to make visible what was called “invisible”—that is, knowledge production—at a time when its legibility was under tremendous scrutiny. He did not, because he could not, easily picture how labor was transforming into something less easily photographed. *Fiat Lux* reveals the special capacities—and insufficiencies—of photography to capture economic and social transitions. Invisible bodies, invisible products, invisible power dynamics, and not-yet-formed knowledge skirt the margins of Adams’s *Fiat Lux* project; we must pay attention to the ideological image regimes, editorial processes, and managerial impulses that underlie it.

Coda: Remix

In fall 2012, as part of a university-wide initiative entitled “On the Same Page: *Fiat Lux* Remix,” every faculty member and incoming student at UC Berkeley received a newly reissued copy of Adams and Newhall’s long-out-of-print 1967 book. This is intended to initiate a campus dialogue in which Adams’s images will be revisited and interrogated vis-à-vis the current state of the university. Spearheaded by theater, dance, and performance studies professor Catherine Cole, the discussion features at its heart an exhibition of Adams’s signed prints of the UC system at the Bancroft Library, as well as a series of ambitious online prompts that call for a more participatory engagement with the material. The webpage invites students to “write the story” of *Fiat Lux* and “perform the score” of the photographs by retaking them and refashioning Adams’s compositions—that is, using the images as a creative springboard for their own initiatives and imaginations. Under the rubric “On the Same Page,” discussions and events focus on different aspects of Adams’s work and the idea of envisioning the future, including a contest for any undergraduate to submit “a photo, a video, an essay, a play, or anything else that expresses your response to the Ansel Adams photos, and/or your vision for the University of California.”⁶⁶ Freshmen and sophomores are encouraged to take seminars whose themes are keyed to Adams from a range of disciplines that includes computer science (“Photographing History in the Making,” taught by Brian Barsky), English (“The Arts at Berkeley and Beyond,” led by Genaro Padilla), and physics (“Science at UC,” with professor Bob Jacobsen).

Some on campus mutter that reprinting the *Fiat Lux* book is an expensive venture that detracts from more pressing concerns. How can we invent or build a future when the present demands our attention? Yet for Cole, Adams’s images have taken on a peculiar urgency given the current economic crisis in California, where the state is facing a \$2 billion deficit.⁶⁷ Kerr’s Master Plan was heralded as a way to make public education more affordable to far more people along a greater diversity of class lines, with enrollment booming at community colleges and a growing California State University system feeding into the UC campuses. If Kerr’s vision was tinged with utopia, sometimes utopia has its purposes. Now those innovations are imperiled, and a UC education is no longer a possibility for many families and students. The major financial restructuring of the UC system and within public higher education as a whole means we are at the crux of major, perhaps unimaginable, change. Reconsidering *Fiat Lux* as a modest modernist achievement as well as a partial photographic failure, commissioned when UC was at a different moment of change, is one way to hold these transitions in thought.

63. Teiser and Harroun, 9–10.

64. Barrett Watten, “Ansel Adams at the End of History,” *Artweek*, May 20 1993, 4. Watten has also written a provocative text that revisits *Fiat Lux*, the Berkeley Free Speech Movement, and the rise of experimental poetry in the 1960s and 1970s: “The Turn to Language and the 1960s,” *Critical Inquiry* 29, no. 1 (Autumn 2002): 139–83.

65. In fact, the architecture of one UC campus, Irvine, was aligned with dystopian futurism when it served as the filming location for the 1972 science-fiction movie *Conquest of the Planet of the Apes* (dir. J. Lee Thompson). With its brutalist buildings and concrete walkways, it offered an ideal backdrop for a tale of total control, fascist governmental policies, and widespread surveillance. Interestingly, this story is in part a racial allegory about enslaved apes who finally learn to come into their own voice, and, by educating themselves, organize on their own behalf.

66. “On the Same Page” website, at <http://onthesamepage.berkeley.edu/content/contest> (as of August 15, 2012).

67. See Cole, 6.



Louise Macabitas, University of California, Davis police officer Lt. John Pike pepper-spraying student protestors, November 18, 2011 (photograph © Louise Macabitas)

In the years that Adams worked on *Fiat Lux*, with his assistant dragging along his many lenses, filters, and film stocks, photography was a cumbersome and time-consuming affair, and access to cameras and film developing was not widespread.⁶⁸ The switch from analogue to digital techniques, along with the immediacy they provide and the sheer ubiquity of photographic-lens-based devices on cellphones, means that students in 2012 are experiencing *Fiat Lux* within a very different visual culture. Photography is no longer a specialized technology, but a routine part of daily interactions. No less than in the mid-1960s, this is a time when the University of California is trying, with little success, to manage its own image photographically as well as politically. In 2009, a news photographer was arrested as he documented a protest against fee increases and budget cuts outside the Berkeley chancellor's residence; the university police, refusing to acknowledge his press pass, confiscated his camera. He was recently awarded some \$162,500 in an out-of-court settlement.⁶⁹ The arrest and the seizure of his camera were meant to give the police access to his photographs, but controlling such images is increasingly impossible, given that most people on a college campus are holding some sort of device capable of taking and transmitting pictures.

Take the example of the "pepper spray cop," Lieutenant John Pike, who was photographed and videoed casually discharging his canister into the faces of non-violent student protestors at the University of California, Davis, in November 2011. The image that most widely circulated was taken by a twenty-two-year-old psychology student at Davis, Louise Macabitas, who was on the scene with dozens of others, citizen-journalist style, cameras and cellphones at the ready. These protests were in part against privatization—that is, against the model that Kerr helped set in motion, though as Dylan Rodríguez has speculated, the disproportionate attention given to the spectacle of "police brutality" at Davis deflected attention from the organized violence against protests occurring at campuses such as UC Riverside, and from the structural state violence perpetrated against

68. Adams's assistant de Cock reports that he was assiduous about checking his gray card and carried with him several light meters, along with equipment for the many formats he used for this project, including 5 x 7", 4 x 5", and 35mm. Adams constantly tested his equipment, spending at least an hour a day running through exposure times and experimenting with filters, lenses, and apertures. See de Cock, 27–31.

69. See Henry K. Lee, "UC Pays to Settle Photographer's Suit over Arrest," *San Francisco Chronicle*, July 2, 2012, online at www.sfgate.com/bayarea/article/UC-pays-to-settle-photographer-s-suit-over-arrest-3679859.php (as of August 15, 2012).



Artist unknown, "Pepper spray cop" meme featuring Eugène Delacroix, *Liberty Leading the People*, ca. November 2011

students and faculty of color as a matter of course.⁷⁰ Within days, the pepper-spray photo spawned a wealth of parodies that were visible all over the globe, through social media and the internet, in which the photo no longer existed merely as evidentiary document, but as material for dozens of *détourné* mash-ups.

Many of the images that circulated on social network sites like Facebook inserted the cop with his poison-orange spray (rarely were the students included) into canonical art-historical scenes by the likes of Michelangelo, Delacroix, Munch, and Manet. This use of art history is telling, as part of the "pleasure" of the meme stemmed from a presumed shared set of references, a frisson of recognition that spoke to an educated audience (art history standing in for or epitomizing an elite humanities discipline). As when studying for an undergraduate survey exam, when an image flashed across the screen, you acknowledged its source with satisfaction: "Aha! Seurat!" In some, the pepper spray is turned on familiar historical figures, underscoring the act's horrors; but surely another aspect of the popularity of this meme was the irreverent joy in seeing those figures defaced. In the case of the Pike-Delacroix mash-up, the macabre joke is at its zenith: here the pepper spray becomes underarm deodorant, a domesticated hygiene product rather than a tool of state control. Photography is not only more ubiquitous and more participatory than in Adams's day, but is also a piece of malleable information like any other, open as never before to lightning-quick dissemination and manipulations—remixed indeed. As with the *Fiat Lux* photos, these images exceed their own time and will be cast into the future for prospective audiences to reconsider in relation to the exigencies of their present.

70. Dylan Rodríguez, "Beyond 'Police Brutality': Racist State Violence and the University of California," *American Quarterly* 64, no. 2 (June 2012): 303–13. In the same issue, see also Sunaina Maira and Julie Sze, "Dispatches from the Pepper-Spray University: Privatization, Repression, and Revolts," 315–30.

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