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A Great Day for Palladio: Alfred Stieglitz's Palladium Photographs

Sarah Greenough

Many epithets have been used to describe Alfred Stieglitz (1864–1946): a visionary photographer whose passionate belief in the art of his medium changed the course of twentieth-century culture; a charismatic impresario who introduced modern European art to this country and championed American painters and photographers when few others saw the merit of their work; and a competitive, verbose, and shrewd gallery director and publisher whose revolutionary exhibitions and periodicals set new standards for conceptual rigor. Yet he is rarely portrayed as a scientist in spite of the fact that he was thoroughly trained in the chemistry and optics of photography and internationally recognized for his many innovative contributions to the craft of photography. His technical foundation was gained while studying at the Technische Hochschule in Berlin in the 1880s with the celebrated photo-chemist Dr. Hermann Wilhelm Vogel, who instilled in him a deep knowledge and profound appreciation for the science and practice of photography. Stieglitz first established a name for himself in the photography world not through his pictures but his technical articles published in American, British, French, and German periodicals on a wide variety of subjects—from assessments of Eastman's new stripping films or Carbutt's celluloid films to remedies for overexposed plates and methods for toning Aristo prints with platinum.[1] These writings display a detailed understanding not only of the latest processes and products but also of the chemistry and optics of photography, and they reveal Stieglitz's recognition that a careful manipulation of physical conditions during the printing process could impart different aesthetic characteristics.[2] His contemporaries recognized the importance of his scientific training: his good friend, the critic Charles Caffin, wrote in 1901 that Stieglitz possessed both a "scientific and . . . artistic temperament," and he asserted that "the foundation threads of his purposes are scientific, and into these he has woven the artistic woof."[3]

Despite the fact that Stieglitz wrote more than 260 articles in his lifetime—more than 60 of which were on technical matters and more than 20 of those on the platinum printing process—between 1918 and 1923, when he most actively worked with palladium paper, he did not publish anything on the subject. His silence is not surprising. As the most celebrated photographer of his era, he no longer needed to demonstrate his technical prowess (fig. 1). In addition, after spending more than thirty years championing the artistic merit of photography, organizing numerous exhibitions at 291, his gallery in New York, and elsewhere, and publishing three periodicals, the curmudgeonly Stieglitz was frustrated by those photographers who seemed to value technique over expression. He had come to believe, as he wrote to the British photographer and editor R. Child Bayley in 1919, that

> the stupidity and sham in Pictorial Photography [must] be struck a solar plexus blow. . . . At one time Gum & Co. , . . . diffused lenses, (ultra) glycerining and oiling, etc., were of experimental interest. . . . Steichen, Demachy, Eugene, the Viennese, did honest work for the development of photographic pictorial expression.—But from the aesthetic point of view . . . most of the prints done by those workers have a greater historic value than art value. . . . One is always conscious of the clash between process [and] expression.

Figure 1. Alfred Stieglitz, G*eorgia O'Keeffe—Hands and Thimble*, 1919. Palladium print, 24 × 19.4 cm. National Gallery of Art, Alfred Stieglitz Collection, 1980.70.138.

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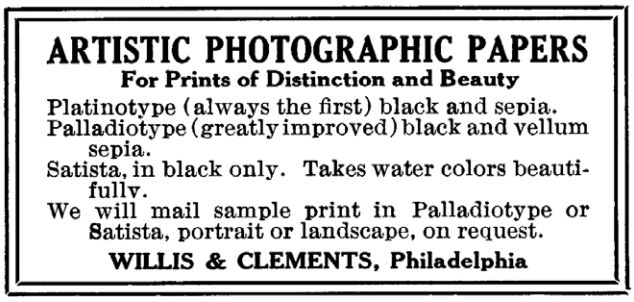

Figure 2. Willis & Clements advertisement for the Platinotype Company's "Artistic Photographic Papers." From *Abel's Photographic Weekly* 24, no. 618 (October 25, 1919): 406.

Instead, deeply influenced by the modernist painting and sculpture he had exhibited at 291 and sparked by the profound inspiration he received from the artist Georgia O'Keeffe (1887–1986), his focus after World War I was to put science in the service of art, merging process and expression: he wanted, as he wrote to Bayley, "to put into form by photographic means . . . a feeling generated by, born of, intense experience . . . to make the medium *do* what one feels" so that it becomes "an inherent part of oneself." But the difficulty, as he frequently admitted, was how to do so. "I try and try and try until I get what I want—no manipulation—*Straight*. It is impossible to work out any method to produce *right* results mechanically. It is not a question of photo-meters—thermometers—measured light—all these help if one will—but what I'm after depends on other factors."[4]

While Stieglitz did not publish any articles on palladium printing, he was a voluminous letter writer and he shared snippets of information with his fellow photographers, most notably Paul Strand (1890–1976). Referring to the Platinotype Company's Palladiotype paper (fig. 2), he frequently complained to Strand of his aggravating struggles with "that infernal Palladio."[5] In April 1919, he told Strand that he aspired for "real skin smoothness for virtually everything,"[6] while in his letter to Bayley later that year he stated that everything in his prints "must be right—surface, color, values, depth."[7] But he lamented that the frequent cracks he found on the paper's surface, plus the paper manufacturer's "ambiguous"[8] directions made it nearly impossible "to make any definitive deductions."[9] The results varied so widely that "experimenting," he wrote, "becomes more & more expensive & maddening—& every 'shot' at a print—result—is a big ?."[10] Encouraged by Strand, who believed that palladium paper was "far ahead of platinum," with a finer tonal range and a better surface when waxed,[11] Stieglitz continued his experiments. But he admitted that he did "nothing according to instructions. If I followed them I might as well throw the cans of paper into our blazing fires."[12] In the process, he discovered that although Willis & Clements, the Philadelphia firm that distributed Platinotype Company products in the United States, recommended using a different developer for Sepia Vellum Palladiotype prints, the developer normally used for "black" Palladiotypes gave him far better results.[13] Yet, while he complained vociferously about the inconsistency of palladium paper and its price—$4.00 for a tin of twelve 8 × 10 inch sheets of paper, the equivalent of about $50 today and a lot of money for Stieglitz whose income was drastically reduced at this time—he continued to shoot away "as if I were Rockefeller," he wrote, "trying to find out all about palladium printing," especially "its elasticity."[14] "My negatives are perfect," he told Bayley on October 9, 1919, just "as I want them—all straight, sharp, untouched [but] to get a print—straight—which responds to what I want [that] is the rub."[15]

However, most of Stieglitz's comments in his letters about his palladium prints are not about his practice but about the weather. He frequently wrote about the weather when he was at his family's vacation home in Lake George, New York,

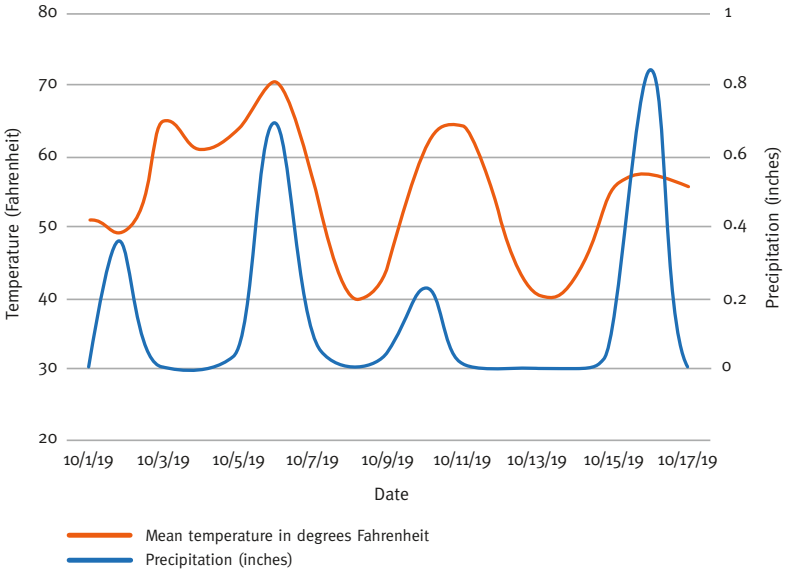

Figure 3. Glens Falls, New York, meteorological record for October 1–17, 1919. National Oceanic and Atmospheric Administration, National Centers for Environmental Information.

Sarah Greenough, "A Great Day for Palladio: Alfred Stieglitz's Palladium Photographs," in *Platinum and Palladium Photographs: Technical History, Connoisseurship, and Preservation*, ed. Constance McCabe (Washington, D.C.: American Institute for Conservation of Historic and Artistic Works, 2017), 348–355.

Figure 4. Alfred Stieglitz, *Rebecca Salsbury Strand*, 1922. Black palladium print, 18.9 × 23.1 cm. National Gallery of Art, Alfred Stieglitz Collection, 1949.3.545.

where he did most of his printing at this time. Situated in the Adirondacks in upstate New York, Lake George is a long, narrow lake, running north-south, with weather that changes quickly. The weather and in particular clouds and mist were frequently the subjects of O'Keeffe's and Stieglitz's art. But they also bedeviled Stieglitz's work with palladium paper. Particularly in 1918 and 1919 when the family was still living at Oaklawn, their large house on the shores of the lake, humidity was a critical problem, as the mist from the water permeated the air. Meteorological records from the weather station in nearby Glens Falls show a correlation between Stieglitz's successes—and his failures—and the level of precipitation (fig. 3).[16] An examination of the records for October 1 through 9, 1919—the date when Stieglitz wrote Bayley—shows large swings in both temperature and rainfall, from not quite 4/10 of an inch of rain on October 2, to no precipitation on October 3, to 7/10 of an inch on October 6, when Stieglitz wrote Strand: "The palladio is here but I've had no weather for printing."[17] The precipitation then fell to zero on October 7, 8, and 9. A few days later on October 13, 1919, when meteorological records show that the precipitation was zero and had been so for the last two days, Stieglitz wrote to Strand, "Gosh, what a day! Printed all morning. . . . Quite remarkable prints in a way."[18]

Stieglitz understood how critically important it was to store, handle, and print palladium paper when it was dry: "I've ordered some paper from W[illis] & C[lements]," he wrote Strand, "I don't expect any great results—the humidity in Philadelphia combined with the proverbial office-boy intelligence of that firm reinforced by the humidity up here—that's a combination not easily mastered."[19] In 1920 when the Stieglitz family moved from Oaklawn up the hill to a farmhouse, they were spared some of the pervasive mist from the lake, but humidity continued to be a problem as the clouds rolled in over the nearby mountains seemingly without any warning. From his perch up on the "Hill" Stieglitz wrote Strand in August 1920, "Even though this is a 'dry' morning up here—everything feels cold & damp. And I won't dare to print until the sun has gotten in quite a lot of work and by that time the wind may have veered south—signifying some moisture."[20] On July 12, 1923, he wrote to Strand's wife Rebecca, "The weather is [too] perfect. So dry & clear that all vegetation is gradually going on the blink—burning up. Great for palladioing but I'm not palladioing. I suppose I ought to order some [paper] by wire to let vegetation live. Rain would set in [for] sure just as soon as the paper to be printed in 'absolute dryness' arrived in the Lake George P.O. addressed to Alfred Stieglitz."[21]

It is clear that for Stieglitz a great day for "palladioing" was a dry one, but what does that mean? Stieglitz followed Willis & Clements's directions to avoid excessive humidity, but how were his prints better or different when he worked on dry days? Were they darker, richer, with greater detail? Were they different in tone, or did they have a longer tonal range? What, in short, does Stieglitz's assertion that it was a great day for "palladioing" tell us about his aesthetic objectives at this time?

Stieglitz did not keep records to indicate what and when he photographed or printed, yet because of his copious correspondence we do know the exact dates he made a handful of his palladium prints. On July 15, 1922, he wrote Strand that the last "two days have been whirlwind ones. The sun was bright & atmosphere fairly dry."[22] He also noted that he opened a parcel of palladium paper that had arrived the previous November but had not been properly stored in the interim. Stating that it was "old palladium paper," which he much preferred to the newer one released that year,[23] he said that he feared it was ruined. Nevertheless he used it and got what he referred to as "an astonishing result" of Rebecca Strand's hands made on black buff palladium paper, "exactly the thing I was after" (fig. 4).[24]

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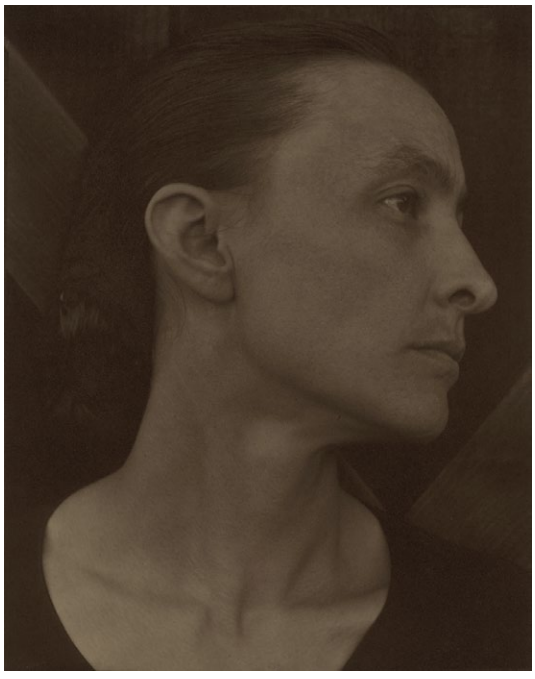

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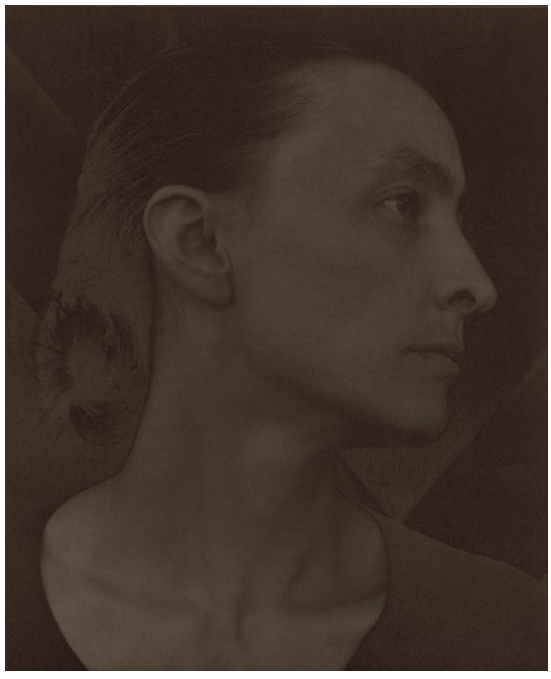

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Figure 5. Alfred Stieglitz, *Georgia O'Keeffe—Neck*, 1921. Figures 5a and 5b are made from the same negative. While figure 5a only hints of tone reversal, figure 5b exhibits solarization—reversal of the darkest image area to lighter and more sepia hues.

5a. Palladium print, 23.8 × 18.9 cm. National Gallery of Art, Alfred Stieglitz Collection, 1980.70.155.

5b. Palladium print, 23.8 × 18.7. cm. National Gallery of Art, Alfred Stieglitz Collection, 1980.70.154.

Again on October 28, 1922, he wrote to Rebecca Strand of his "mad, mad days. . . . It's print—print—more print. . . . And today finally a cloudless dry day & cold. Palladio weather—the first in nearly seven weeks! Well, I did get some prints. Some howling ones. Several of you."[25] And later on November 1, 1922, he wrote of "the beautiful prints" he had made of her. Asserting that they were entirely different from Strand's pictures of her, he wondered, "How you'll like them as 'Portraits' I don't know. As prints, as photographs, everyone will have to like them."[26]

So what were these "howling" pictures of Rebecca Strand that everyone would have to like, if only as prints? To answer this question, one must step back and think about Stieglitz's larger objectives at this moment. The period from 1918 through 1924 was one of great, often playful, experimentation for him, not just with palladium

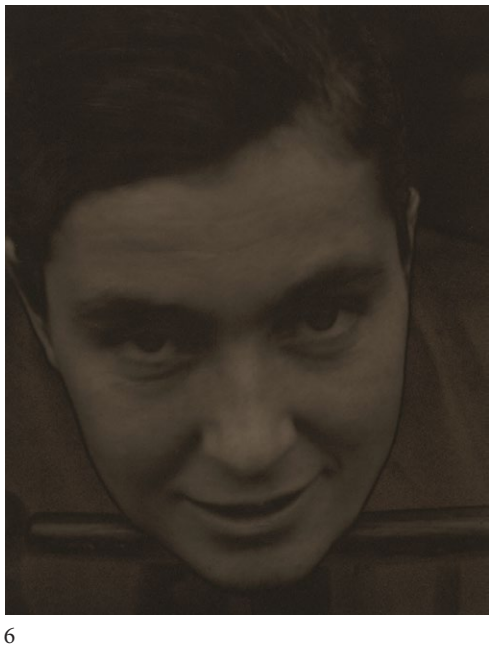

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Figure 6. Alfred Stieglitz, *Rebecca Salsbury Strand*, 1922. Palladium print, 23.7 × 18.8 cm. National Gallery of Art, Alfred Stieglitz Collection, 1949.3.547.

Figure 7. Alfred Stieglitz, *Margaret Treadwell*, 1921. Palladium print, 23.6 × 19 cm. National Gallery of Art, Alfred Stieglitz Collection, 1949.3.471.

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Sarah Greenough, "A Great Day for Palladio: Alfred Stieglitz's Palladium Photographs," in *Platinum and Palladium Photographs: Technical History, Connoisseurship, and Preservation*, ed. Constance McCabe (Washington, D.C.: American Institute for Conservation of Historic and Artistic Works, 2017), 348–355.

Figure 8. Alfred Stieglitz, *Helen Freeman*, 1921/1922. Palladium print, 19.2 × 23.7 cm. National Gallery of Art, Alfred Stieglitz Collection, 1949.3.461.

paper. As he consolidated the lessons he had learned from Auguste Rodin, Pablo Picasso, Henri Matisse, and Constantin Brancusi, and from African art, and applied those ideas to his portraiture, and as he reflected on Rodin's modernist understanding that a part of the body could be expressive of the whole, his pictures began to be less narrative and more about the articulation of expressive form and line. He emphasized form by moving in close to the body. But he also learned that he could exploit a phenomenon that he and his contemporaries commonly referred to as "solarization," the reversal of tone in what would normally be the darkest areas of the image.[27] Solarization strengthened the lines of Stieglitz's compositions, delineated unforeseen shapes, and added an unexpected vibrancy and intensity to his pictures. He discovered that palladium paper, far more than platinum, had a tendency to solarize, and he learned, probably through trial and error, that the lower the humidity, the greater the chances for solarization (fig. 5). The first prints Stieglitz made that show an expressive use of solarization are from 1918 and 1919, but he explored it most extensively in the early 1920s when he turned his attention from photographing

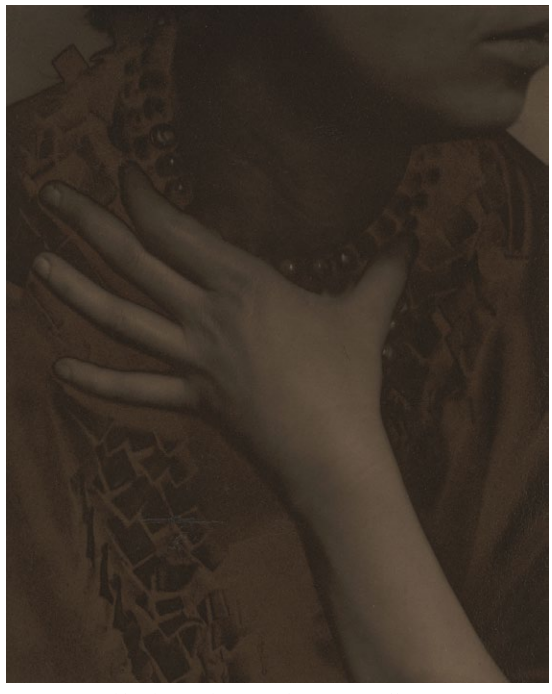

Figure 9. Alfred Stieglitz, *Katharine Dudley*, 1922. Palladium print, 23.4 × 18.8 cm. National Gallery of Art, Alfred Stieglitz Collection, 1949.3.492.

O'Keeffe to depicting others and made such prints as the "howling" picture of Rebecca Strand and others of Margaret Treadwell, Helen Freeman, and Katharine Dudley (figs. 6–9). To explore the abstract, graphic linearity of the

27 Sarah Greenough, "A Great Day for Palladio: Alfred Stieglitz's Palladium Photographs," in *Platinum and Palladium Photographs: Technical History, Connoisseurship, and Preservation*, ed. Constance McCabe (Washington, D.C.: American Institute for Conservation of Historic and Artistic Works, 2017), 348–355.

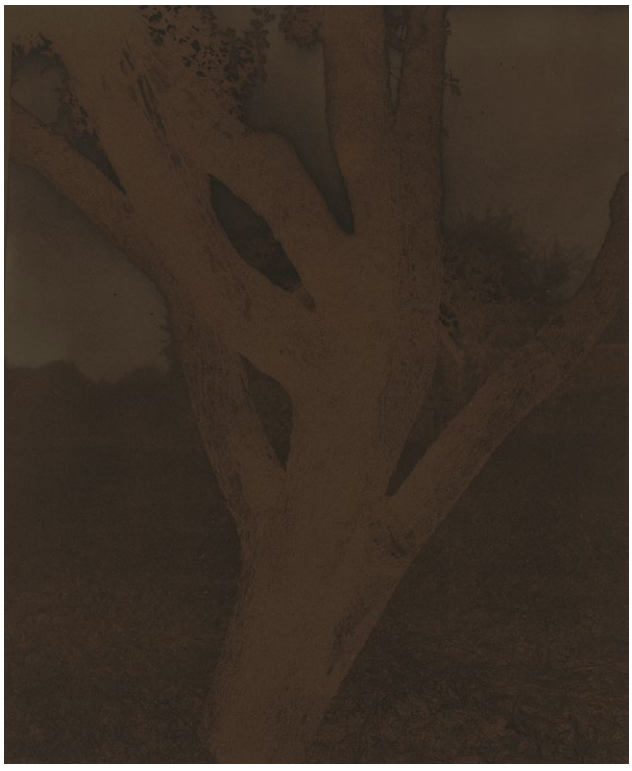

Figure 10. Alfred Stieglitz, *Apple Tree*, probably 1921. Palladium print, 22.6 × 18.6 cm. National Gallery of Art, Alfred Stieglitz Collection, 1949.3.538.

landscape of Lake George, he also pushed his experiments further, making a negative of a tree that must have been almost impossible to print (fig. 10).

Knowing that Stieglitz often made prints long after he exposed his negatives, one might well ask when he made these solarized prints: in the early 1920s when he made the negatives or in the late 1920s or early 1930s, after he saw Man Ray's and Lee Miller's photographs, which actually used the somewhat similar looking but different Sabattier effect (fig. 11).[28] Although the competitive Stieglitz was always eager to claim priority, his letters from the early 1920s that note his hope for dry days when solarization was mostly likely to occur, coupled with an examination of meteorological records, demonstrate that these prints were made at that time. In addition, as his portraits of Treadwell, Freeman, and Dudley show, Stieglitz frequently posed his subjects in the early 1920s in front of dark backgrounds, knowing that prints from the resulting negatives would solarize when exposed on palladium paper on a dry day (see figs. 1, 5b, 6, 8–10). Also, when Stieglitz exhibited several solarized prints in 1923, Strand praised them, noting how Stieglitz had taken solarization, which was "really a defect," and turned it into a conscious virtue and "made the negative with that in mind."[29] Finally, in 1924, when Stieglitz made his important gift of photographs to the Museum of Fine Arts, Boston—the first time such a conservative American art museum had accepted photographs—he included solarized prints. Seeking to donate only the finest examples of his art to this prestigious institution, Stieglitz knew that these prints demonstrated both his superb technical skills and his ability to exploit photography's unique, elastic properties, such as solarization. Merging process with expression, these prints showed how he could make the sometimes fickle medium do what he wanted.

Stieglitz's experiments with both palladium paper and solarization dramatically diminished after 1923.[30] The year before, his friend, the critic Waldo Frank, had asserted that the power of Stieglitz's photographs lay in his ability to hypnotize his subjects.[31] Incensed by the comment, Stieglitz turned his attention skyward: surely no one could accuse him of hypnotizing the clouds that moved so freely across the sky. He printed most of his photographs of the clouds on gelatin silver paper, as he did for the rest of his work from 1924 to 1937. Yet during the brief period from 1918 through 1923, when he was able to get, as he told Bayley, "the A. 1.1. from each negative" with palladium paper, "the print lives—it is ART. It satisfies aesthetic requirements."[32] And it was, indeed, a great day for palladio.

Figure 11. Man Ray, *Lee Miller*, 1929. Gelatin silver print, 26.7 × 20.6 cm. The Museum of Modern Art, Gift of James Thrall Soby, © 2014 Man Ray Trust/Artists Rights Society (ARS), New York/ADAGP, Paris.

 Sarah Greenough, "A Great Day for Palladio: Alfred Stieglitz's Palladium Photographs," in *Platinum and Palladium Photographs: Technical History, Connoisseurship, and Preservation*, ed. Constance McCabe (Washington, D.C.: American Institute for Conservation of Historic and Artistic Works, 2017), 348–355.

Acknowledgments

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Notes

1. See Greenough 2000, 257–68. See also Ronel Namde and Joan M. Walker, "Platinum Toning of Silver Prints," in this volume.

2. See, for example, Stieglitz 1891, 249.

3. Caffin 1901, 28.

4. Alfred Stieglitz to R. Child Bayley, October 9, 1919, in Greenough and Hamilton 1983, 203–4.

5. Alfred Stieglitz to Paul Strand, August 24, 1920, Alfred Stieglitz/Georgia O'Keeffe Archive, Yale Collection of American Literature, Beinecke Rare Book and Manuscript Library, Yale University, New Haven, Conn. (hereafter YCAL) and Paul Strand Archive, Center for Creative Photography, University of Arizona, Tucson (hereafter CCP).

6. Alfred Stieglitz to Paul Strand, April 27, 1919, YCAL and CCP.

7. Stieglitz to Bayley, October 9, 1919, in Greenough and Hamilton 1983, 204.

8. Alfred Stieglitz to Paul Strand, October 2, 1919, YCAL and CCP.

9. Alfred Stieglitz to Paul Strand, May 20, 1919, YCAL and CCP.

10. Alfred Stieglitz to Paul Strand, May 20, 1919, YCAL and CCP.

11. Paul Strand to Alfred Stieglitz, October 13, 1919, YCAL and CCP.

12. Alfred Stieglitz to Herbert J. Seligmann, October 14, 1921, YCAL.

13. Alfred Stieglitz to Paul Strand, April 27, 1919, YCAL and CCP.

14. Alfred Stieglitz to Paul Strand, August 4, 1921, YCAL and CCP.

15. Alfred Stieglitz to R. Child Bayley, October 9, 1919, in Greenough and Hamilton 1983, 204.

16. The Glens Falls weather station recorded the temperature and amount of rainfall, not the relative humidity or dew point.

17. Alfred Stieglitz to Paul Strand, October 6, 1919, YCAL and CCP.

18. Alfred Stieglitz to Paul Strand, October 13, 1919, YCAL and CCP.

19. Alfred Stieglitz to Paul Strand, July 27, 1920, YCAL and CCP.

20. Alfred Stieglitz to Paul Strand, August 24, 1920, YCAL and CCP.

21. Alfred Stieglitz to Rebecca Strand, July 12, 1923, YCAL.

22. Alfred Stieglitz to Paul Strand, July 15, 1922, YCAL and CCP.

23. Alfred Stieglitz to Paul Strand, August 2, 1922, YCAL and CCP.

24. Alfred Stieglitz to Paul Strand, July 15, 1922, YCAL and CCP.

25. Alfred Stieglitz to Rebecca Strand, October 28, 1922, YCAL.

26. Alfred Stieglitz to Rebecca Strand, November 1, 1922, YCAL.

27. For further discussions of this phenomenon, see Mike Ware, "The Technical History and Chemistry of Platinum and Palladium Printing," and Alisha Chipman and Matthew L. Clarke, "A Technical Study of Paul Strand's Platinum Prints," in this volume.

28. The Sabattier effect is a partial reversal of tones in a silver developing-out print achieved by exposing the print with light during development.

29. Strand 1923.

30. By 1924 Stieglitz wrote Strand that he "had lost confidence in all material." Alfred Stieglitz to Paul Strand, August 2, 1924, YCAL and CCP.

31. Reported in Stieglitz 1923, 255.

32. Alfred Stieglitz to R. Child Bayley, October 9, 1919, in Greenough and Hamilton 1983, 204.

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