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OCTOBER

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Photography:
A Special Issue

Nadar — *My Life as a Photographer*
Rosalind Krauss — *Tracing Nadar*
Hollis Frampton — *Impromptus on Edward Weston: Everything in Its Place*
Hubert Damisch — *Five Notes for a Phenomenology of the Photographic Image*
Craig Owens — *Photography* en abyme
Douglas Crimp — *Positive/Negative: A Note on Degas's Photographs*
Jean Clair — *Opticeries*
Thierry de Duve — *Time Exposure and Snapshot: The Photograph as Paradox*

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HOLLIS FRAMPTON, the filmmaker, adds the present study on the work of Edward Weston to his already published essays on such figures as Muybridge, Strand, and the primitives of photography. He teaches film at the Center for Media Studies at SUNY, Buffalo.

NADAR was the professional name of Gaspard-Félix Tournachon, whose memoirs *Quand j'étais photographe* were published in 1900 by Flammarion. Three chapters are here translated into English for the first time by THOMAS REPENSEK.

CRAIG OWENS writes on performance and teaches art history at Hunter College, New York.

Photography: A Special Issue

Like printers in the darkroom, we are watching the development, in sharpened and proliferative detail, of a structured field in depth, Photography. Pursuing this dazzlingly obvious simile one turn further, we are surprised by that now coming into view. We had thought Time captured, arrested, but it is History, embedded in the economy of production, that emerges as the shaping, compositional subject of that presumed arrest. There is, in all the current literature, the sense of an epiphany, delayed and redoubled in its power. Only now, we are instructed, is Photography truly "discovered," and now it is that we must set to work, establishing an archaeology, uncovering a tradition, constituting an aesthetic. It is to be redeemed, by the scholarship and speculation of our time, from the cultural limbo to which for a century and a half it had been consigned.

It was in 1848 that Lamartine, exhibiting his disdain for the medium, declared, "It is photography's servility which accounts for my deep contempt of the chance invention which can never be an art, only an optical plagarism of nature. Is the reflection of glass on paper art? No, it's a sun stroke caught through a maneuver. But wherein does its human conception lie? In the crystal, perhaps. Surely not in Man. . . . The photograph will never replace the painter; one is a Man, the other a machine. The comparison ends there." But Lamartine is able, toward the end of his life, to proclaim, unabashedly, that photography "is more than an art, it's a solar phenomenon, in which the artist collaborates with the sun!"[1]

The distance between those two statements is bridged by the accelerated development of the techniques of mechanical reproduction, and Lamartine's revision of judgment confirms and supports the industrial implications of that acceleration. This special issue of *October* is admittedly another symptomatic response to the delayed confrontation with the puzzles and conundrums inscribed within the medium. It is an effort to unpack the paradoxes and contradictions of photographic practice; it joins in the embryonic enterprise of photographic theory. As such, it is open to the charge of complicity with the scholarship and speculation which are reconstituting—more surely than anything else—a status for photography as a commodity within the framework of a sector of our market economy, the sector of artistic commerce.

We are in a privileged position, witnessing a process best described not in the idealist idiom, as epiphanous, but, with greater clinical accuracy, as "the return of the repressed." The structure of the market in formation, the nature of its exchange mechanisms, the manner in which notions of value are defined, the

1. Lamartine, *Cours familier de littérature. Entretiens sur Léopold Robert*, Vol. 6, Paris, 1818, p. 140.

transmutation of abundance into scarcity, the setting into place of relationships between productive forces are now disclosed, though still unarticulated in current theoretical and historical discourse.[2] Scholarship and commerce are conjoined and implicated in this setting into place. Thus questions, of value, authenticity, formal structure, perceptual and semiotic analysis are now formulated with reference to photographic process. They derive most clearly from traditions of older art-historical and art-critical scholarship, as the commerce of photography-as-art derives from the practices governing the diffusion of prints and casts. The theory and history of photography strains, however, to ignore this complicity, much as art-historical conoisseurship, as traditionally taught, feigns a disdain of the market it sustains. The notions of value, of presence or aura, of authenticity currently revived and adapted for photography are the presuppositions of such commerce.

It is a largely unacknowledged fact that photography (and the commerce of photographs) is expanding and solidifying at precisely the moment when American painting and sculpture, long internationally dominant, are in a state of low tension. The market for painting and sculpture, as everyone knows, has been characterized by a steadily inflationary situation over the past two decades, accompanied, most interestingly, by fitful crises of guilt on the part of artists and institutions under pressure from the disadvantaged strata of artistic producers. Two other critical or crisis-inducing factors have been at work: the mounting strain upon the traditional gallery through the inflationary scale of production (to sell an earthwork involves one in relations of landed property), and the insertion of temporality within the art of the last two decades. The art-critical injunction, a decade ago, to "defeat theater" can now be seen as a very real defense, that of a specific, vested interest, against the insidious dissolution of prevailing market structures (and the roles of both painter and gallery) in the structure of exchange. Earthworks, performance, cinema, video, all pose problems to the dealer insofar as they infinitely expand and thereby revise the spatio-temporal données of commerce. Performance and video have now invaded Soho and the galleries of Western Europe as lively forms of enterprise, difficult to assimilate to the market structure. The solution seems to lie in the small, flat surface of the photograph, with its equivocal and ambiguous temporal aspect, inflatable, of course, to painterly dimensions. The result is the generalized and euphoric collecting—scholarly, critical, and actual—now at work.

We need, we urgently need a radical sociology of photography to force upon us, to disclose to view, the structural and historical nature and implications of our present photographic revisionism. Bernard Edelman has traced, in the only rigorous study of this sort known to us, the process by which the photograph begins to acquire value, orginating in the sudden appearance of modern techniques of reproduction of the real that provoked a disequilibrium in established

2. The critical work of Alan Sekula suggests an exception and alternative to the prevailing censorship of these problematic aspects of photography.

categories of description.[3] The history of this process is divided into two parts. In the first, the reproductive capacity is defined as imputable to the machine itself. It is the artisanal period of the mid-19th century, in which the photographer is very much the worker; he is then both at the service of the machine, and at one with his tool. He is the proletarian of creativity. Photography is at this point in history variously described as a curiosity, a toy, and as useful. It has not yet been subjectivized. For the camera to become subjectivized involves a reversal of the relation between means and end. The work of the machine becomes the work of the subject, and this work is a means of "creation." Photographic reproduction then begins to bear the marks of a subjective or intellectual act of creativity and it is precisely at that time that it begins to be the object of legislative protection. The photographer moves from the level and role of artisan to that of proletarian, and in time, to that of the artist. For it is in the interest of the industry and of the market to protect first, the status of the photograph as a commodity, then, that of the photographer as artist. This will require the re-creation of the conditions of scarcity which reenforce the value of uniqueness revived from the preindustrial era of the art.

In a fascinating discussion organized in 1973, dealers discuss with an artist and an historian, the modes and mechanisms of fine-art handling of the photographic.[4] The exchange turns, quite naturally, upon two questions; the first is that of value, as intimately linked to scarcity. (Should one destroy the artist's negatives in order to increase value?) What does authenticity mean for a photograph that may be printed by a range of persons? What can an artist expect to gain or lose from the recognition that his is a mechanical medium? In response to a second consideration, the crisis implicated in this art of the era of mechanical reproduction is rehearsed in the obsessive insistence on the privileged status of the darkroom as the locus of the creative process. Until that comic moment when the "artist," in this case Aaron Siskind, admits he cannot necessarily distinguish a print made from his negative by another person, as against one of his own developing.

The darkroom, that inveterate generator of metaphors and paradoxes, promising value, subverting authenticity, develops the contradictions of our culture.

THE EDITORS

3. Bernard Edelman, *Le droit saisi par la photographie (Eléments pour une théorie marxiste du droit)*, Paris, Editions Francois Maspéro, 1973. We are indebted, for many of the following considerations of the constitution of the photographer's status as artist, to this work. Another, earlier and informative socio-historical study is Gisèle Freund's *Photographie et société*, Paris, Editions du Seuil, 1973 (originally published 1936).

4. "Photographs and Professionals: A Discussion by Peter Bunnell, Ronald Feldman, Lucien Goldschmidt, Harold Jones, Lee Witkin and Aaron Siskind," *Print Collectors' Newsletter*, IV, (July 1973), 54-60.



Adrien To
(All Nada

My Life as a Photographer

NADAR

TRANSLATED BY THOMAS REPENSEK

I. *Balzac and the Daguerreotype*

People were stunned when they heard that two inventors had perfected a process that could capture an image on a silver plate. It is impossible for us to imagine today the universal confusion that greeted this invention, so accustomed have we become to the fact of photography and so inured are we by now to its vulgarization.

But not so then. There were some who, like stubborn cattle, refused to even believe that it was possible. What an obstinate race of ill-tempered beings we are: resistant by nature to anything that ruffles our ideas or interferes with our habits; naturally suspicious of everything new, we manufacture menace upon menace until, alas, that tragic irony, "the eagerness to kill," rears its awful head. Why, it seems like only yesterday that one of the learned members of the Institute stood raging in frenzied protest at the first public demonstration of the phonograph. How self-righteously the distinguished professor refused to further dignify with his presence that "ventriloquist hoax," and what a commotion he made stalking out, swearing that the unprincipled charlatan responsible for such a fraud would have to answer to him . . .

Gustave Doré—now there was an incisive, brilliant mind—once said to me, toward the end of his life, his health and spirit broken by disappointment, "What! You mean to say you don't know how much people enjoy finding the one tiny flaw in an otherwise splendid masterpiece?"

As the "Sublime fills us with rioting confusion," so the unknown sends us spinning, shocking us like a slap in the face.

The appearance of the Daguerreotype—which more properly should be called the Niepcetype—was an event which, therefore, could not fail to excite considerable emotion. Exploding suddenly into existence, it surpassed all possible expectations, undermining beliefs, sweeping theories away. It appeared as it remains, the most brilliant star in the constellation of inventions that have already made of our still unfinished century a Golden Age of Science—for lack of any other virtues to recommend it.

Adrien Tournachon. Nadar. *c. 1854.*
(All Nadar and Tournachon photographs courtesy Alfred A. Knopf, New York.)

Photography sprang to life, in fact, with such splendid haste that its rich profusion of blossoms appeared at once, fully formed: the idea rose complete from the human brain, the first induction becoming immediately the finished work.

Scarcely had the steam engine decreased distance, than electricity abolished it altogether. Bourseul, a lowly employee of the French postal system, glimpsed on the horizon the first sign of the telephone and the poet Charles Cros dreamed the sound of the phonograph. Lissajoux's waves let us actually see the sound that Ader transmitted over long distances and that Edison recorded for us for all time. Pasteur, simply by examining a little more closely the parasitic worms discovered by Raspail, laid down a new order that made all the venerable old books useless. When Charcot opened the mysterious door to the psychic world, a domain whose existence had already been suspected by Mesmer, our time-honored criminal code fell to dust. Marey stole from birds the secret of flight for bodies heavier than air and revealed to man the new realm that would soon be his in the vastness of the universe. Anesthesia placed the divine power of mercy into human hands, staying physical suffering. It is all this, indeed, that Brunetière chose to call "the failure of Science."

Here we find ourselves well beyond the remarkable accomplishments of Fourcroy—at that supreme hour when the embattled Nation *commanded* that discoveries be made; beyond even the achievements of visionaries like Laplace, Montgolfier, Lavoisier, Chappe, Conte, and all the others. So profoundly has Science been transformed in our nineteenth century by these almost simultaneous outbursts of creativity that it is only fitting its symbol be transformed as well: The Hercules of antiquity was a man whose strength was his large, powerful muscles; the modern Hercules is a child reclining on a lever.

But do not all these miracles pale when compared to the most astonishing and disturbing one of all, that one which seems to finally endow man himself with the divine power of creation: the power to give physical form to the insubstantial image that vanishes as soon as it is perceived, leaving no shadow in the mirror, no ripple on the surface of the water? Is it not possible then for man, who today can seize the fleeting flash of vision and cut it into the hardest of metals, to believe that he actually is involved in the process of creation?

To return to the point, Niepce and his shrewd colleague were wise to have waited to be born. The Church has always been cool to innovators, if not too warm, and the discovery of 1839 was suspect from the beginning: this mystery smelled strongly of witchcraft and was tainted with heresy—the heavenly roasting pot had been dragged onto the fire for much less.

Nothing was lacking for a good witch hunt: sympathetic magic, the conjuring up of spirits, ghosts. Awesome Night—dear to all sorcerers and wizards—reigned supreme in the dark recesses of the camera, a made-to-order temple for the Prince of Darkness. It only required the slightest effort of the imagination to transform our filters into philters.

That public admiration was uncertain at first was to be expected; people were

bewildered and frightened. The Human Animal needed time to make up its mind and confront the strange beast.

The uneducated and the ignorant were not the only ones to hesitate before this peril. "The lowliest to the most high," so the common saying goes, trembled before the Daguerreotype. More than a few of our most brilliant intellects shrank back as if from a disease. To choose only from among the very highest: Balzac was one of those who could not rid himself of a certain uneasiness about the Daguerreotype process.

He finally pieced together his own explanation for it, seeking refuge somewhat in the fantasist ideas of Cardan. I think I remember seeing this theory developed at great length in a little alcove somewhere in the immense edifice of his work, but I do not have the time to look for it now. I do recall very clearly, however, that he used an exceedingly large number of words to explain it to me on several occasions—he seemed to be quite obsessed with the idea, there in his little violet apartment in the rue de Richelieu—the building had been a famous gambling house during the Restoration and at that time it was still called the Hotel Frascati . . .

According to Balzac's theory, all physical bodies are made up entirely of layers of ghostlike images, an infinite number of leaflike skins laid one on top of the other. Since Balzac believed man was incapable of making something material from an apparition, from something impalpable—that is, creating something from nothing—he concluded that every time someone had his photograph taken, one of the spectral layers was removed from the body and transferred to the photograph. Repeated exposures entailed the unavoidable loss of subsequent ghostly layers, that is, the very essence of life.

Was each precious layer lost forever or was the damage repaired through some more or less instantaneous process of rebirth? I would expect that a man like Balzac, having once set off down such a promising road, was not the sort to go half way, and that he probably arrived at some conclusion on this point, but it was never brought up between us.

As for Balzac's intense fear of the Daguerreotype, was it sincere or affected? I for one believe it was sincere, although Balzac had only to gain from his loss, his ample proportions allowing him to squander his layers without a thought. In any case, it did not prevent him from posing at least for that one Daguerreotype of him that belonged to Gavarni and Silvy before I bought it and that is now in the possession of M. Spoelberg de Lovenjoul.

To suggest that Balzac's fear was something less than real would be to choose one's words very carefully. But, lest we forget, an irrepressible desire to shock has always been the fashionable vice of our brightest minds. These originals, who are still indeed among us today, take such frank delight in making themselves paradoxically ridiculous before our eyes that it would seem to be a mental illness for which we should find a name: *pretentia*. The Romantics coughed languidly at us through their ashen cheeks; the Realists were struck with sudden artless fits of

Nadar. Léon Gozlan. *c. 1855*.



candor; and the Naturalists glared wretchedly with that sordid cast in their eye. Today's generation of decadents and egotists—more tedious by themselves than all the others combined—are afflicted with a shrill screech, the refinement of which only serves to remind us that public madness is not a thing of the past.

Be that as it may, Balzac did not have to look far to find disciples for his new creed. Of his closest friends, Gozlan prudently took cover at once; but good old Gautier and Gérard de Nerval stepped into line immediately. "Faultless" as he was known to be, Gautier never was one to pass up a dubious proposition. Did that writer of elegant and polished verse, floating in an opiate world of Oriental fantasies, forget that the very image of man is forbidden in the lands of the rising sun? As for gentle Gérard, shy and sweet-tempered, always galloping off across some fantastic landscape, he was spoken for well in advance. To an initiate of Isis, an intimate friend of the Queen of Sheba, and a confidant of the Duchesse de Longueville, no dream could be too extravagant. Both of them, however, without any qualms, were among the first to sit—quite successfully I might add—before our camera.

I could not say for how long this trio of mystics resisted the purely scientific explanation of the Daguerreotype, which was accepted very quickly by the public. As was to be expected, our Pantheon of the day protested vigorously at first, but then quickly accepted the inevitable and spoke of it no more.

As the spectral layers appeared, so they disappeared. Neither Gautier nor de Nerval ever brought up the subject again.

Dear Sir,

M. Mauclerc, an actor in transit in our city, has in his possession a daguerreotiped (sic) *portrait of himself, which he has shown to me and the patrons of my establishment—the Café du Grand-Théâtre—a portrait he tells us was taken by you in Paris while he was at Eaux-Bonnes by means of the electric process.*

Some people who know little of the advances made in the Science of Electricity in recent years have refused to lend credence to the claims of this ill-used young man. My faith in him has never faltered, having dabbled in the process myself for a time.

I beg of you, sir, to kindly make my portrait using the same process, and to send it to me as quickly as possible.

My café is frequented by the best Society, including a large number of English gentlemen and their ladies, especially in the wintertime. I strongly urge you, therefore, to take the greatest possible care with this commission, since it can only be considered favorable to your prospects: numerous persons here have already announced their intention to engage your services.

I would like the portrait in color, if that is possible, taken while I am seated at a table in my salle de billards (sic)*—one of the most elegant public rooms in this city.*

I am, Sir,

Your obedient servant,

Gazebon,

Proprietor of the Café du
Grand-Théâtre,
Grande-Place.

Pau, 27 August 1856.

On the back of the folded letter, the practice in those days before the envelope came into general use, with the canceled Imperial seal and stamps of Paris and Pau were the words:

Monsieur Nadar,
Daguerreotype artist,
Rue Saint-Lazare, 113
Paris.

I read and reread this curious letter, which I reproduce here in the original, unable to decide whether I was more amazed at the gullibility of Gazebon or the knavery of Mauclerc.

"Having dabbled in the process myself for a time" set me to thinking, and searching my memory I found there the names of the naïve café proprietor from Pau and the clever itinerant actor.

Some two years before I had received from the same Gazebon—at the instigation of the very same Mauclerc, already then "in transit in our city"—the first of these sensational-sounding epistles. It concerned a gilded copper engraving, a perfect example of Restoration bad taste, entitled *Malek Adel on His Charger*. Poor Malek Adel, it seems, had been passed around from one secondhand dealer to another before being given shelter by Gazebon.

The eternally "in transit" Mauclerc had probably been nosing about one afternoon at the café, and coming across this memorial to the literary taste of the late Mme Cottin, he shrewdly gasped in disbelief, inquiring of the innocent Gazebon whether he was aware that he possessed a treasure of such unquestioned distinction that all the collectors were after it, and that the only other one of its kind belonged to a M. Nadar, Daguerreotype artist, in Paris.

In some such way, I have no doubt, Mauclerc easily coaxed his favorite victim to write to me at once ostensibly about maintaining the market value of our precious masterpieces.

I never answered the letter and the matter was forgotten. It was after this first unsuccessful assault, at least as far as I was concerned, that Mauclerc charged the second time, pushing his trusty Gazebon before him.

So much for Gazebon, whose establishment is "frequented by the best Society, including a large number of English gentlemen and their ladies."—But why *me*? Why this relentless pursuit of me as their chosen vessel? Why contaminate me with complicity in such a foul business? Mauclerc, "*an actor in transit in our city*," what do you want from me?

Not allowing myself to be swayed by what seemed a marked preference for me—an inclination which I nevertheless choose to consider flattering on the part of M. Mauclerc—I left this second letter unanswered, as I had the first.

And so did I bid them adieu, Mauclerc with his eternal schemes, and heroic Gazebon waiting for his "portrait in color, if that is possible, taken while I am seated at a table in my *salle de billard*(s!)—one of the most elegant public rooms in this city."

But this letter begged to be kept as a rare specimen, and I set it apart. Rereading letters like this one at the end of a long and satisfying career is one of those sweet pleasures which needs no justification.

Yet who would have thought that some twenty years later, old Gazebon would be avenged at last and that . . . but let's not get ahead of ourselves.

Can you imagine anything more satisfying than that hour before the evening meal, after a long day's work? Driven from bed before dawn, you haven't stopped

running, your mind has been racing, you've given everything you can, struggling against oppressive fatigue as the day goes on:

I will fall tonight like a slaughtered ox,

and it is only at sundown, when the bell rings, and everyone puts down their work, as the front door turns on its hinges, that a merciful truce is called until tomorrow. It is this cherished hour, satisfied with your day's work—the great human service accomplished—when, restored to yourself at last, you stretch out comfortably in your favorite chair, to harvest the fruit of the day's labor.

But the back door is still open, and if your luck is to be perfect that day, that one with whom you can speak most intimately, who is never far from your thoughts and who thinks always of you, a kindred spirit who has passed through time with you, is suddenly announced into the room. So it was my good fortune one evening to greet the purest soul, the brightest mind, the most quoted person in all of Paris, my dear friend Hérald de Pages; and how nicely our little tête-à-tête was shaping up, leaving fatigue and all the other problems far behind, when, unexpectedly, there came a knock at the door.

"I don't want to see anyone! Will they ever leave me in peace?"

"He has already called three times today, sir, while you were out. He says if you cannot see him now, he will come back later; he says he absolutely must see you."

"Who is he?"

"I don't know; a young man, a workman I'd say, judging from his appearance."

"Send him up," Hérald breaks in—I can tell he has already sensed something interesting.

"All right, let him come up."

*

The young man was shown in, wearing a loosely fitted white shirt tied at the waist, and bare headed. He began by excusing his appearance; he had been working all day and had not had time to go home to change, for he lived with his mother some distance away on the heights of Clignancourt.

He was about twenty years old, at most, a direct, clear look in his eye, reserved, unassuming yet self-assured. He spoke remarkably well, and had none of the drawn-out accent characteristic of the Parisian working class. A fine looking young man, a model French worker: intelligent, responsive, resourceful.

He explained that even though he absolutely had to see me, he would not have persisted if it had not been for the connection that already existed between us: his mother, whose Christian name he mentioned several times, had been in my mother's service in Lyon some years back; in addition, he himself had worked for almost two years for Léopold Léclanché, the son of an old friend of mine.



Nada
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"You nicknamed him *Farouchot*," he laughed so good naturedly, "and a very great loss it was for us all, for me, for everyone, to lose him as we did, for M. Léopold still had great discoveries in front of him, perhaps even more valuable than his electric battery. He was very kind to take me under his wing. I feel a great loss now that he's gone."

"You are an electrician then?"

"Yes, sir. I've always liked my trade, and anything related to it—physics, chemistry, mathematics. I attend courses every evening at the town hall and I read a lot; it's the one thing I really enjoy. I know very little, but I try to keep up with what others are doing. I go to the shops where I can learn something; that's why I left Breguet after a year and a half; it's only a factory; what I am really interested in is the laboratory. I was an apprentice at M. Trouvé's in the rue de Valois while he was working on his duel-motored electric velocipede. I worked with M. Froment on his electric chronometers, and with M. Marcel Deprez, whose generator, I truly believe, sir, is something remarkable that we have not heard the last of. Then there was M. Ader and his telephone . . ."

"Ah! You know M. Ader?"

"Oh, yes indeed sir; a very fine gentleman, sir, and very wise; some day he will have great things to tell us. Yet so unpretentious, so humble."

"Indeed."

"You know him too? Then you know that I am not exaggerating. I was even lucky enough to work with M. Caselli on his autographic telegraphy. Now there . . ."

"But just how old are you?"

"You embarrass me sir; I'll soon be twenty."

"You look younger—but let me see now: you are an electrician; you like to read; you are obviously intelligent; you know my friends *Farouchot* and Ader; and you know your way around—all well and good. But you surely haven't come here this evening only to tell me this?"

There followed a short silence. The young man hesitated, a flush of color coming to his face. Finally, after a great effort:

"I dare not say why it is that I have come to see you, why it is to you and you alone that I *must* come, and why I would have continued to come back no matter how long it took . . . There is nothing more contemptible than flattery, and I want to assure you . . ."

At that moment I must have arched my brow, for he continued:

"Above all, sir, I beg you not to take me for a pretentious fool, which I am not; but what I have to reveal to you is so . . . extraordinary, so incredible, even for one of your experience, so far beyond what is thought to be, that I must beg you to suspend judgment until you have heard me out."

"Yes, please do begin."

"I beg you not to think of me as an inventor, gentlemen. I am only a young

Nadar. Thérèse Tournachon
(the photographer's mother). c. 1855.

man who knows very little, and I don't claim to have made a great discovery—it's only something I happened to find purely by chance while working in the laboratory. You may be surprised by how obvious it will seem. I am speaking, of course, from a scientific point of view; I haven't given a thought to its practical application. I was led to it quite naturally by the recently published accounts on photophony. If MM. Graham Bell and Summer Tainter have indeed established that all bodies can reflect sound under the influence of light, then why do we continue to refuse this gift that light itself holds out to us?"

"And?"

There followed another silence; then resolutely, looking me straight in the eye, he began:

"Suppose for a moment, sir, simply for the sake of argument, as impossible as it may sound to you—but you above all don't have to be reminded that, pure mathematics aside, the great Arago refused to accept that anything was impossible—suppose that a person or an object, anything you like, were in this room at this moment, while your camera technician was in his laboratory, on the same floor or any other floor in the building, unable to see what the object was—not needing to see it! Suppose that a photograph could be taken under these conditions, before your very eyes, over this relatively short distance; would you then grant the possibility of doing the same thing over a considerably greater distance?"

De Pages sprang up as if the young electrician had touched him with a live wire.

Appearing to be surprised, I took the opportunity to examine my interlocutor more closely: his clear, guileless eyes remained fixed on mine.

"And so I have come to ask of you, sir, a favor; a favor that will cost you nothing but that means everything to me. I ask only that you allow one of your own technicians to take, under the conditions I have described, wherever you wish and with whatever model you choose, one photograph to prove or disprove the claims I have advanced. I, needless to say, have none of the photographic equipment necessary, but that end of it has never concerned me.

"Now that I have said it, sir, you see that what I ask is very little. As for my end of it, the little Griscom motor I use—the only equipment I will need—is light enough to hold on my knee.

"I would be eternally grateful if you would do me the honor to witness my demonstration. The profits that could result from it I will not even mention. With absolute trust, I now place myself in your reliable hands."

I dared not move a muscle.

De Pages, in a ferment, sought my eye as eagerly as I avoided his. Clearly, he found me lacking in fervor. Unable to restrain himself, he burst out:

"Do you claim to be able to photograph objects that you cannot even see?"

"I do not claim to be able to do so, sir; I have already done it. But I don't know how else to explain it to you . . . anyway, you will see for yourself. I haven't

invented anything; I have only found something that was always there. If I did anything, I discarded what was unnecessary. Do you remember, M. Nadar, what you wrote about Stephenson's first cog wheel locomotive: 'The greatest obstacle to human understanding is the tiresome habit we have of proceeding from the general to the particular'?"

"Now he's quoting from the classics," de Pages laughed.

"I simplified it, that's all. Only . . . gentlemen, I have a confession to make. In conscience I must tell you . . ."

"Yes?"

". . . that I have—kind as you've been I regret it all the more—already demonstrated my experiment publicly. I should have the review of it here somewhere."

He put his hand into his breast pocket, then, with a frown, searched all the others.

"Damn! I must have left it in the workshop!"

Then, smiling again:

"No, here it is."

He unfolded and handed to me a page torn from some *Gazette* or suburban *Review*. At the head of the "Notes and Comments" column we read, de Pages staring intently over my shoulder:

> At two o'clock last Sunday afternoon, in the town hall in Montmartre, a curious experiment took place.
>
> A young man, almost a child, M. M . . . , having obtained the necessary authorizations, demonstrated for the first time publicly his method of electrical photography, with which ingenious process he is able to photograph persons or things beyond his field of vision. The inventor asserted that from Montmartre, he could photograph the town of Deuil, near Montmorency.
>
> His Honor the Mayor and several Council members were on hand, as well as two or three residents of Deuil, who had been called upon to indicate the places to be photographed.
>
> Several exposures were made in rapid succession and the finished pictures were produced at once. The sites represented were immediately recognized by the party from Deuil; houses, trees, and people standing out with remarkable clarity.
>
> The modesty with which the young inventor attempted to escape the enthusiasm of the crowd has only served to increase public interest in this truly remarkable discovery, the practical applications of which already appear to be limitless.

Speechless, we read this extraordinary account a second time.

The very day before, as a matter of fact, de Pages and I had visited the Exposition of Electricity. We had been dazzled and blinded by the miracles we had

seen there, yet troubled by this mysterious power we have harnessed, which will be ours to use in the future. Rushing to serve us before, indeed without, being summoned, always there, invisible, like some diabolical servant, it silently indulges our fancies.

We had seen it invisibly discharge all duties and perform all functions, realizing all the dreams of the human imagination, Obedient and ready to execute our commands, this all-powerful yet discreet servant is unrivaled in all its forms, and is known by many names: telegraph, polyscope, phonophone, phonograph, phonautograph, telelogue, telephone, topophone, spectrophone, microphone, sphygmograph, pyrophone, etc., etc. It lifts and carries our burdens, propels our ships, and drives our carriages; it transports our voice from place to place without distortion; it writes far beyond the reach of the human hand; it reads our heartbeat and tells us what time it is; it sounds the alarm before we are aware of the fire and warns us of flood waters before they have begun to rise. Our faithful man-at-arms, it diligently stands the night watch in our stead; it regulates the speed of our missiles and routs our most powerful enemies; it reveals the hidden bullet to the surgeon's knife; it stops dead in their tracks locomotives, galloping horses, and highwaymen all; it tills our soil and winnows our wheat, ages our wine, and captures our game; it monitors the cashier at the same time it guards the cashbox; it prevents electoral fraud and may even someday make honest men of our worthy public officials. A first-class worker, a Jack-of-All-Trades—one at a time or all at once as you like: stevedore, postman, driver, engraver, farmer, doctor, artillery-man, bookkeeper, archivist, carpenter, policeman . . . and why not photographer, even long-distance photographer?

Ah! dear Hérald, always wanting to believe, your fine mind delighting in any new idea—just like our friend Latour-Saint-Ybars, now gone before us—your face, illuminated by the infinite prospect that stretched before us, reproached me with my silent obstinacy.

Yes, of course, I gave in. I would have relented long before if . . . if I had not been in the course of our conversation, visited by a strange creature of the imagination.

Suddenly, as often occurs with optical illusions and certain cases of double vision, the noble features of Hérald's face seemed to merge with those of the honest young worker, becoming a kind of diabolical mask which slowly took on the form of a face I had never seen before but that I recognized immediately: Mauclerc, Machiavellian Mauclerc, "in transit in our city"; the electric image mockingly reared its head at me from the far distant past.

And I seemed to become Gazebon, yes, Gazebon the Gullible. I could see myself seated in my Café du Grand-Théâtre in Pau, still waiting for the portrait to be taken by "the electric process" by M. Nadar in Paris; in the meantime, to pass the time, I raised a toast to "the best Society, including English gentlemen and their ladies."

But the young man was still waiting for his answer, not saying a word now, his eyes still fixed on mine; de Pages continued to effervesce:

"Well Nadar, what do you say?"

"What do you want me to say?"

"But what do you have to lose? What does one exposure more or less mean to you? He asks very little in fact."

At this, the young man, with a smile of sad resignation, replied:

"Oh, no, it's not that. I understand very well what is stopping M. Nadar. Yet, if he could see with his own eyes that it is not true . . ."

"Suppose I do agree . . . where would you install your conducting wires?"

"When I tell you, you will be more skeptical than ever. Still, in conscience, I cannot tell you what is not so. The fact is, sir, that I have no need of wires."

"Well! I should have guessed."

"No, sir, I assure you . . . I am not the first: Bourbouze has proven that tellurian currents exist with a galvanometer. Steinheil used the ground as a conductor as early as 1838, I believe. But the way had been paved long before by the Royal Society of London, when Watson, Cavendish, and a third member whose name escapes me—ah, yes, Martin Folkes!—used the Thames itself as a conductor, not along its current, but across it; they even extended it to include the river bank and some adjacent land. But is not air itself recognized as a conductor? Why do we doubt today what has been known for more than a hundred years? Why do we deprive ourselves of our inheritance? And finally, doesn't the photophone, that miraculous image that speaks and moves, function without conducting wires over great distances? The selenium necessary for its operation was discovered in 1817 by Berzelius: Why has it taken us half a century to put it to use? Yet it is always as you have said, 'the human mind proceeds from the general to the particular.' . . . Not needing conducting wires, sir, I simply dispensed with them."

Speechless a moment ago, I now was absolutely stunned.

But the battle had been won, and our young man knew it, for, to mark his victory, he added more familiarly, with a candid smile:

"And now if you will permit me, M. Nadar, I didn't expect to encounter such resistance in a man known for so many daring initiatives; a man who—thirty years before anyone else dreamed of it—predicted the *phonograph*, even conferring on it its name. For it was in 1856, in an article in the *Musée Français-Anglais*, that you . . ."

"All right . . . enough!"

". . . you who took the first underground photographs by artificial light and the first photographs from an aerial balloon; who in 1863 destroyed the myth of the navigability of lighter-than-air craft and singlehandedly advanced the theory—accepted by everyone today—of aerial locomotion by heavier-than-air machines; you who . . ."

"Have mercy!! Come whenever you like."

"Ah! thank you very much, sir."

"When will you return?" de Pages asked, beside himself with excitement.

"I will return on the sixteenth, if that is convenient, at any hour you choose."

Hérald broke in impatiently:

"The sixteenth . . . but today is only the fourth! Why put it off for twelve days? Why not earlier? tomorrow, or today even?"

"I am sorry, sir; I am unable to come before the sixteenth."

"Why?"

But the young man was already moving toward the door, bowing to take his leave. De Pages grabbed him by the sleave:

"But why wait so long?"

"Excuse me, sir, but I am unable to tell you why; it is a personal matter, of no interest whatsoever. I will return the sixteenth."

"But what possible reason could you have to postpone for twelve days a demonstration that obviously means so much to you?"

"I can only repeat, sir; it is a personal matter and there is no need for anyone to intervene."

But de Pages was not one to be put off and he continued to insist with such energy that the young man, besieged as he was, had to give in:

"Come now, in strictest confidence, among friends, what is it?"

"You persist so kindly, sir, that I am unable to resist any further. Since you wish to know, I will tell you. I must wait until the fifteenth . . . to be paid, so that I can buy the supplies needed for the experiment. Last Sunday at Montmartre I used up the last of my materials. It is an insignificant amount, only about forty francs, but I am sure you understand, sir, that I would rather furnish these myself."

Well, he's finally come out with it, I thought.

This time it was I who looked at de Pages. But nothing escapes the vigilant: the young worker swung around toward Hérald, and stifling a tear that remained suspended in the corner of his eye, he said:

"There! You see, sir, I was sure of it. M. Nadar thinks ill of me. Yet he is my witness: I wanted to say nothing of this; I gave in because you insisted and now I am taken for a schemer, a miserable beggar."

It seemed appropriate to calm and reassure him; and I helped Hérald with the task. To bring the story to a close, the young man left with two louis in his pocket—but how we had to beg him!

He will return tomorrow morning at ten o'clock, *without fail.*

There he goes.

*

Since I said nothing, Hérald began:

"Well??"

"So much for your two louis."

"What do you mean? Do you think all that was only a game, that the boy is a liar, that he won't be back?"

"It wasn't very expensive after all. And what a consummate artist: his entrance, modest and reserved, his attire simple and unaffected—all quite correct; preliminary topic: sentimental evocation of the two mothers—a strategy that never fails; the ingratiating exordium, the elaborate oratorical paraphernalia; the endless list of facts and dates—difficult to verify on the spot—which he manipulates like a circus performer; the flattery, a bit obvious, but always appropriate; and to achieve the well-ordered whole, what endurance! what amazing discipline! And from one still so young! Believe me, he has the makings of a future minister whom even our conservative Republic will be able to use in its political horsetradings."

"But the names of friends he mentioned?"

"Information available only too readily to anyone who happens to be standing next to me or a friend of mine for a few minutes."

"And the newspaper article?"

"How is it, Hérald, that you who know the world of publishing so well, the founder of the *Petit Journal*, with its more than four million readers, how can you let yourself be taken in by an item slipped into one of the last issues of some short-lived tabloid—who knows?—perhaps out of kindness or with the cooperation of a compositor friend? How can you believe as you do in the printed word—and you an editor? In spite of your intelligence you do seem to have retained a certain purity of soul! But no, all this means nothing or very little indeed; what is truly admirable is not so much his acquiring all this pseudo-scientific knowledge but his knowing how to use it—how artfully and dexterously he practices his deception! We have witnessed this evening a first-rate performance, and I for one am pleased to have made the acquaintance of this extremely capable young man. He will go far! . . . Yes, I admit, I am hard to please—but it was amusing: as you watched me allow myself to swallow the bait. At last, Gazebon is avenged—on me!—and by me!!"

Are you satisfied, Mauclerc! you and your hideous smile . . .

"But, my friend, how do you account for all this effort resulting in only the miserable pilfering of two wretched louis?"

"I beg your pardon: you are absolutely right. We were worth more than that; he could have gotten five from us at least—proof that even the best horse falters. But do you think that it was for me alone, for this one performance, that he set up this elaborate theatrical intrigue which must have required serious study and repeated rehearsals? No, it would hardly have been worth it. What this spirited boy has served us here tonight he will ladle out to all the photographers of Paris,

France, and the world, seasoning his rhetoric as a cook does his stew, according to individual taste, and there is no one too humble, I'll wager, for whom he will not prepare this highly seasoned concoction. Since none of those whom he favors with his trust and promise of limitless profits will take it into their head to announce to their neighbor that they have been hoodwinked, the game will go on without end. Now that is what someone of a practical bent would call a 'racket.' And at the same time, it's a great philosophical adventure."

After a moment of silence, de Pages concluded:

"Let's think of it no more. But do you still categorically refuse to believe, you who encourage—which I find reprehensible, I must say—our very charming but detestable friend G. . . . to repeat time and again his favorite conceit, 'Everything is possible, even God!'—do you still refuse to admit the possibility of long-distance photography?"

"I think it would be as rash to deny the possibility as to affirm it. I remain, innocent as I am of absolute knowledge, floating somewhere in the middle. Babinet, in reply to Biot's atheist proposition, has said: 'Then you are absolutely certain that God does not exist? Well, my friend, you are *even more superstitious* than you claim me to be. I really know nothing at all about it.' In conclusion, I will only go so far as to say, this time quoting Biot—no truer words were ever spoken: '*There is nothing easier to do than what I did yesterday; and nothing more difficult than what I will do for the first time tomorrow.*'"

*

P.S. When we wrote these words, we scarcely believed that the technical question presented so imaginatively in this chapter would soon be taken up in actual fact by our eminent correspondent and friend Doctor Ed. Liesegang, of Vienna. Regarding this subject, see his very interesting article in the *British Journal of Photography*, in which we may finally see Mauclerc discredited and Gazebon rehabilitated. Three cheers for Gazebon!!!

P.P.S. This morning the first successful wireless telegraph message was transmitted across the English Channel by Marconi. Is there any dream too extravagant? . . .

Marseilles, June 1899.

Atelier Nadar. Marie, Princess of Solms.



III. *The Blind Princess*

"Has Mme Ratazzi arrived yet?" I asked glancing over the list of appointments for the day.

"No, sir."

"*. . . the Princess of Solms*?"

"Yes, but she is not Mme Ratazzi. The Princess of Solms is the sister of the King of Hanover. Her two children—a son and a daughter—came in person to make the appointment for their mother, who is blind. They said that you knew their family, and that they themselves had some years ago been very close to you."

Some years ago, indeed . . .

In a memoir of this sort it would be impossible to avoid entirely that detestable first person pronoun—it would even be awkward to do so. All the same, I beg the Reader's indulgence while I take a moment to recall an episode that occurred in 1863, which, in spite of the great commotion it raised at the time, has now been completely forgotten.

*

It was during my first attempts to take photographs from a balloon—still very difficult in those days before the trail was cut through, child's play today—that I was struck with the eternal human dream of aerial navigation.

Several abrupt descents, during which the wickerwork basket of my balloon, buffeted by light winds and swinging helplessly, crashed into trees and sideswiped a few buildings, gave me something to think about: "If I can't control my balloon in this light breeze, which tangles my mooring anchors, snaps my cables, and drags me all over creation, how can I ever hope to navigate it?"

This fact and the propositions that logically followed from it, led me to conclude that the aerostat—its very name defined its destiny—could never be an airship. Born a floating bubble, so it would die. Those who claimed it was something more had only taken us up a nettlesome, tortuous path that led nowhere.

Still, I used to think that it was man's birthright, since other animals fly, to range far and wide in the heavens.

It seemed to me that birds and flying insects move through the air precisely because they are unlike balloons. They do not rise in the air because of a difference in specific gravity; they exert pressure on the air itself, and it is this that enables them to fly.

Those learned professors, when I bothered to consult them, quickly taught me that flight, in its strictest sense, that is, aerial self-propulsion, is a harmony of dynamic and static forces.

The invention of the Montgolfier brothers was a lofty yet misleading discovery. It sent man along a road beset with pathetic disappointments and ridiculous failures, a route he nevertheless returned to time and again.* It was necessary, finally—as the homeopaths had turned around allopathic theory—to reverse the proposition in order to extract the essential problem:

TO BE DENSER—HEAVIER THAN AIR—TO COMMAND THE AIR—in this as in all other things:—*To be the strongest in order not to be beaten.*

* I must ask a question here: How long has it been since that balloon went up one morning in Meudon, without warning, floated over to Chaville, I believe, and returned as quickly as it went, taking advantage of a few precious moments of blissful calm—to gain victory over an *absent* enemy?

There was a minister of public education or rather public ignorance at the time, who had the nerve to utter in peroration to the assembled members of the Institute—to the embarrassment and confusion of all Frenchmen—these disgraceful words: "*Glory to the French Army, which has found the road of the aerial balloon that now stretches out before us.*"

Undoubtedly! Who would not have agreed that this discovery was one of the most precious of human finds? For the fated and commendable inventor never tired of affirming the magnificence of his achievement, attempting to overcome all skepticism with the inauguration of regularly scheduled, daily balloon flights.

Now then, how many times *since* the solemn declaration of that peerless minister has the inventor repeated even once his little jump from Meudon to Chaville and back?

And how much over all these years has it cost us; how much does it continue to add to an already enormous national budget, the abortive ascents of these "floating fish," which do not fly and can never hope to?

It was something and nothing at the same time: only a mathematical formula. Who would breathe life into it? Certainly not me, for I have none of the mathematical fineness, none of the theoretical grace of an engineer; never having been able to tackle logarithms, by nature resistant to symbolic expressions of the sort A + B, reproached from childhood on for knowing how to count, but no more.

Who then will reveal this great unknown to us; which one of us will set in motion this colossal revolution that will overturn the world of today—think about that for a moment—before which all the pride of human knowledge will be swept away?

But can such a superhuman, empyrean task be accomplished by one human being alone?

Faced with this knotty problem, in which the whole range of human knowledge is brought into play, it seemed necessary to appeal to all inquiring minds, in short, to all who believed as I did.

With a dear friend, whom I have since lost, that splendid La Landelle, and Ponton d'Amécourt, struck alas partially mad—*sapientem stultitiam*—I founded the "Society for the Encouragement of Aerial Locomotion by Heavier-than-Air Machines," and with the same stroke, in a reverie of enthusiasm, created our own journal *L'Aéronaute.*

They came from all over, inventors, technicians, mathematicians, physicists, chemists, and more—the Corps of Engineers, the Department of the Navy, professors and students from colleges and universities. At first count, six hundred had responded to the call. Every Friday evening these faithful souls assembled to discuss ideas and present plans of action.

But still it was not enough: experimentation, experimentation without end was necessary to create from Nothing this Vast Synthesis.

Money was needed, a lot of money . . .

But where to find it?. . .

The only fortune I ever had was my work, and I would not have accepted even one penny from the government of that day—although they bore me good will, a remarkably insistent good will that I recall, which I must in conscience give them credit for today.

I was the only one to encourage my Society for Encouragement, and I was not sufficient to the task.

The idea came to me then that the treasure I was seeking was to be found precisely in what I was trying to get rid of. I therefore had built at great expense to myself an aerostat of previously unheard of dimensions, the balloon of which, containing 6,000 cubic meters of gas, was able to lift forty-five artillery soldiers—which it actually did—standing in the two-story wicker basket. And I called this monster the *Géant.*

I had hoped the ascents of this colossal balloon in every capital and great city of the entire universe would fill the coffers of our Society, allowing, at the same time, for everyone to pay a part of the ransom of future aerial navigation.

In fact, Paris twice, then all of Brussels, Lyon, and Amsterdam, tried to elbow their way into this oddity. I had been right after all, except on one essential point; forgetting to be a wise virgin, my lamp untrimmed, hundreds of thousands of francs poured in only to disappear immediately into thin air . . .

All my great plans came to nothing, except a grim struggle to pay everyone that went on for ten years.

But this concerns only me.

Dear Reader, you must wonder what all this has to do with the Princess of Solms—well, in fact, I am rushing toward her under full sail.

But how can I resist such memories, especially when I find myself standing again before the GREAT CAUSE, there where I will walk no more . . .

The second time we went up in the *Géant*, we left the Champ de Mars at seven o'clock one evening, and at eight o'clock the next morning, through an error in judgment on the part of one of the crew members, we were dropped out of the sky near Hanover, Germany, some 650 kilometers away. For 28 kilometers in the space of 30 minutes—the normal speed of the average express train—we were dragged bouncing across the German countryside. Try to imagine covering the same 28 kilometers in a half hour, sitting in a basket in tow behind a speeding train, and you can see what a lively little dance it was.

There were, surprisingly, no casualties. One person suffered a broken arm; I fractured a leg and had a few sprains; but my dearest wife who had gallantly chosen—in the words of the canon—"to follow her husband wherever he went," was cruelly bruised. The other passengers got off with minor injuries.

We were taken in rather great pain to the city of Hanover which was nearby, where we were installed in too princely a manner on the *premier étage* of the Grand-Hôtel, reserved for our little group—by the order of the King.*

I am unable to describe the concern and kindness that flowed both from the Palace and the French embassy. Baskets of fruit and bouquets of flowers were dispatched by the Queen to my poor wife morning and night—that same queen I was to encounter in Paris several years later, in exile, half mad with grief, keeping vigil over her dying husband in a rented house the two of them had taken in the rue de Presbourg.

Twice a day, without fail, an aide-de-camp of the King came to inquire after

* These expenses, like all the others, including the specially heated train that we had not requested, were all paid back—every last *silbergroschen*—which the King most *certainly* was unaware of. We also paid for all the medical attention we received, except that administered by Doctor Muller—an excellent fellow—who declined all payment for his services, and to whom our government presented several days after the incident the *ruban rouge* of the Legion of Honor.

I kept all the receipts, amounting to some 6000 francs—six thousand francs!—the cost of one week's stay, including transportation, compensation for damages, and incidentals.

All this by way of reply to the Prussian newspapers: It was because they resented the success of my aerial postal service during the siege of Paris and were trying to get even with me for an article I wrote in which I expressed no great love for Germany, that they all rushed to accuse me then of ingratitude—that most detestable of human perversions.

us. He was a giant, whose large frame appeared even more menacing under his white uniform. I was perfectly free, as he sat at my bedside, to observe that this great body of war concealed a remarkably fine intelligence molded by an excellent scientific education. Needless to add, my presence there in a hospital bed served quickly to enlist him as another adept in our Society.

I had not seen this officer since the adventure in Hanover, when looking through the newspapers one day, I came across his name. I read with regret that Count Wedel, for so he was called, had suddenly left the personal service of the King, and Hanover itself, following an unfortunate duel in which he had shot a duke to death—whose name I have lost somewhere in the *burg*, *stein*, or *berg* endings, the ones that evoke the names of old German families.

*

At last, after being so long in the past, we have finally arrived back in the present: The Princess of Solms is announced. The son and the daughter enter leading and sustaining their mother; eyes closed and smiling in the way of the blind, the Princess slides her feet carefully across the floor.

I had seen the same absent expression on the face of her brother, the King, who was also blind—although I never did find out if their affliction was hereditary. But the King refused to accept his condition; and everyone remembers the innocent deception he frequently practiced with his glasses at the Opéra. He was his sister's twin in another way; he also had a guardian angel, his daughter the Princess Frederika, who never left his side while he lived. Like twin Antigones, both daughters had forever renounced marriage out of the jealous self-devotion of filial duty.

When the Princess had been seated, the laboratory procedures got under way. Between poses I sat with the children, whose friendliness and warmth I was attracted to immediately, both of them being more pleasant than I had been led to believe. They never took their eyes off their dear *maman*, whom they hovered over attentively.

They spent the time retelling the details they remembered of our stay in Hanover: their many visits to see the shattered basket, and the shredded material that was all that remained of the balloon; the questions they asked about the terrible catastrophe; the games they played good-naturedly with my son, who was much younger than they were at the time—he had been brought from Paris as soon as the accident had happened; the Queen sent for him every morning, and off to the Palace he would go. The two of them did not stop asking me questions, inquiring about what I had been up to since then, and what my plans were for the future.

While answering their questions as best I could, dashing back and forth to complete my work, I inquired about a few things that had continued to intrigue me from the time of my convalescence.

And from the rear of the studio, separated from us by a great distance, the Princess sometimes joined in our conversation.

One last time I returned to sit with them, just as they were about to leave. "Oh, by the way, can you tell me anything about a charming gentleman whom I had the pleasure to meet during my stay; he seems to have disappeared since his tragic duel: Count Wedel? . . ."

A thunderbolt striking us on the spot could not have created such chaos.

The two children sprang up, as if charged by an electric current, stretching every muscle in their body toward one point: *maman*. Deathly pale, holding her breath, the daughter pleaded with her hand for silence, and the young man quickly screamed in a whisper, "*No!!!*"

Not understanding, I said nothing.

But already they had turned back toward one another—what thoughts they saw in each other's glance!—and trembling, they breathed a sigh of relief.

Their mother, still smiling, had heard nothing.

Then the young man whispered into my ear, so quietly that I had to strain to hear: "The man killed by Count Wedel two years ago was our older brother . . . We are able to hide this terrible thing from our mother because of her blindness. But we have always feared—we always will fear—that with the Count gone, she may someday suspect . . . Our mother thinks that our brother has been traveling around the world for the last two years. Every two weeks we read her *his* letters—every word of which she knows by heart—letters written by my sister and me . . . She is counting the days until he returns . . . another word could have taken her from us forever . . ."

Tragic frailty of human existence! All these stories lovingly created, carefully intertwined, and dutifully carried on; the patient lies, the breathless intensity—all could have been suddenly undone, cruelly annihilated in a moment: the tender hope of a mother, the heroic consolation of her children, fallen in ruins to be swallowed up in darkest despair, beyond the power of the human word . . . all because of a chance encounter, a word casually spoken on a visit to a photographer's studio, in a strange city . . .

The memory of it still makes my blood run cold.

Tracing Nadar

ROSALIND KRAUSS

Though it was written toward the end of his life, Nadar's memoir, *My Life as a Photographer*, was undertaken at a point when its author's activity in the medium had far from ceased. That is why the title's insistence on pastness (in French it is *Quand j'étais photographe*), its declaration of a chapter's having closed, seems somewhat curious. But Nadar's past tense has less to do with his personal fortunes and the trajectory of his own career through time, than with his status as witness. The man born Gaspard-Félix Tournachon, who called himself Nadar, was aware that he had been present at an extraordinary event, and, like the survivor of some natural cataclysm, he felt duty-bound to report on what it had been like, or even more than that, to conjure for his listener the full intensity—emotional, physical, psychological—of that experience. Nadar writes his memoir with the urgency of the eyewitness and the conscience of a historian. Every passage of the text reverberates with this sense of responsibility.

Which is why the book is so peculiar. For it is structured like a set of old wives' tales, as though a community had entrusted its archives to the local gossip. Of its thirteen chapters, only one, "The Primitives of Photography," really settles down to producing anything like a historical account. And although this is the longest chapter in the book, it comes nearly at the end, after an almost maddening array of peculiarly personal reminiscences, some of which bear a relationship to the presumed subject that is tangential at best.

Perhaps it is this quality of rambling anecdote, of arbitrary elaboration of what seem like irrelevant details, of a constant wandering away from what would seem to be the point, that accounts for the book's relative obscurity. Published in 1900, it was never reprinted, and at this date its surviving copies are both very battered and very scarce.

The memoir on photography was hardly Nadar's only publication. The author of eleven other books, he was a frequent writer of short stories and a prolific essayist. His relation to the world of letters extended beyond the friendships he maintained with the most important writers of his day; it included an

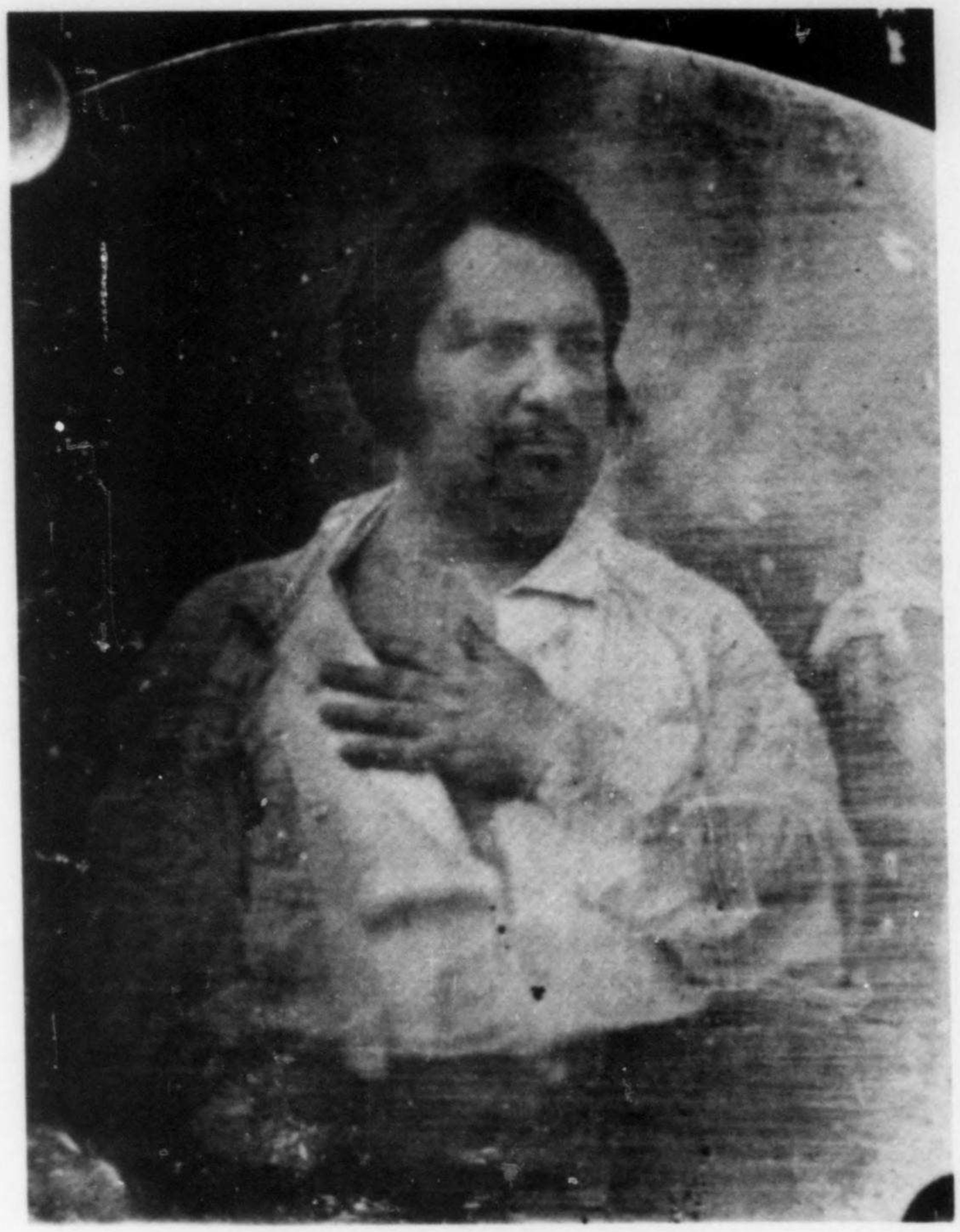
intimate connection to the craft of writing, to the patient and careful construction of meaning. If Nadar undertakes the writing of history in the guise of a novelist, that is because the set of facts he hopes to preserve against time are primarily psychological. "People were stunned," he begins, "when they heard that two inventors had perfected a process that could capture an image on a silver plate. It is impossible for us to imagine today the universal confusion that greeted this invention, so accustomed have we become to the fact of photography and so inured are we by now to its vulgarization."

The immensity of the discovery is what Nadar wishes to communicate, not who did what and when. After listing the incredible stream of inventions that changed the course of 19th century life—the steam engine, the electric light, the telephone, the phonograph, the radio, bacteriology, anesthesiology, psychophysiology—Nadar insists on giving pride of place, in terms of its *peculiarity*, to the photograph. "But do not all these miracles pale," he demands, "when compared to the most astonishing and disturbing one of all, that one which seems finally to endow man himself with the divine power of creation: the power to give physical form to the insubstantial image that vanishes as soon as it is perceived, leaving no shadow in the mirror, no ripple on the surface of the water?"

What Nadar saw, from the vantage of 1900, was the conversion of this mystery to commonplace. And so a chapter was, literally, over, even though his own activity remained unchanged. If this was Nadar's historical message at the turn of the century, it repays our attention, especially now. For at this point, in our turn, we are realizing the immense impact of photography, the way it has shaped our sensibilities without our quite knowing it, the way, for example, the whole of the visual arts is now engaged in strategies that are deeply structured by the photographic.[1] The symptoms of a cultural awakening to this fact are everywhere: in the recent flurry of exhibitions; in the surge of collecting; in the rise of scholarly activity; and in a growing sense of critical frustration about just what photography *is*. It is like the man who, finally accepting his doctor's diagnosis, turns around and demands to know the precise nature of his illness. Cultural patients, we insist on something like an ontology of photography so that we can deal with it. But Nadar's point is that among other things photography is a historical phenomenon, and therefore what it *is* is inseparable from what it *was* at specific points in time, from a succession of responses which were not uniform. In his memoir Nadar treats himself like an analytic patient, fixing on details and elaborating them, in order to recover a past that will be resonant with its own meaning.

The opening three chapters of the memoir exemplify this method. The first is occasioned by an object in Nadar's possession: the only known Daguerreotype of Balzac, which he had purchased from the caricaturist Gavarni. The second,

1. This situation is presented in my "Notes on the Index: American Art of the '70s," *October*, nos. 3 and 4 (Spring and Fall, 1977).



Nadar. Photograph of the daguerreotype of Balzac in Nadar's collection.

triggered by the reality of long-distance transmission systems like telegraphy and radio, is the tale of a confidence trick played on him in the 1870s. The third is a seeming piece of trivia called forth by the certain success of aeronautical technology, which Nadar had always championed over aerostatics, or ballooning. Entirely different in scope, and increasingly peripheral to the history of photography proper, the disparateness of these accounts, their appearance of moving into a subject only by backing away from it, make of these chapters a very odd sort of beginning. Yet there is a connection between them, an underlying theme that Nadar wishes to dramatize.

The story about Balzac revolves around the novelist's superstitious reaction to photography, a reaction that was issued somewhat pretentiously in the form of a theory. Describing Balzac's Theory of Specters, Nadar writes:

> According to Balzac's theory, all physical bodies are made up entirely of layers of ghostlike images, an infinite number of leaflike skins laid one on top of the other. Since Balzac believed man was



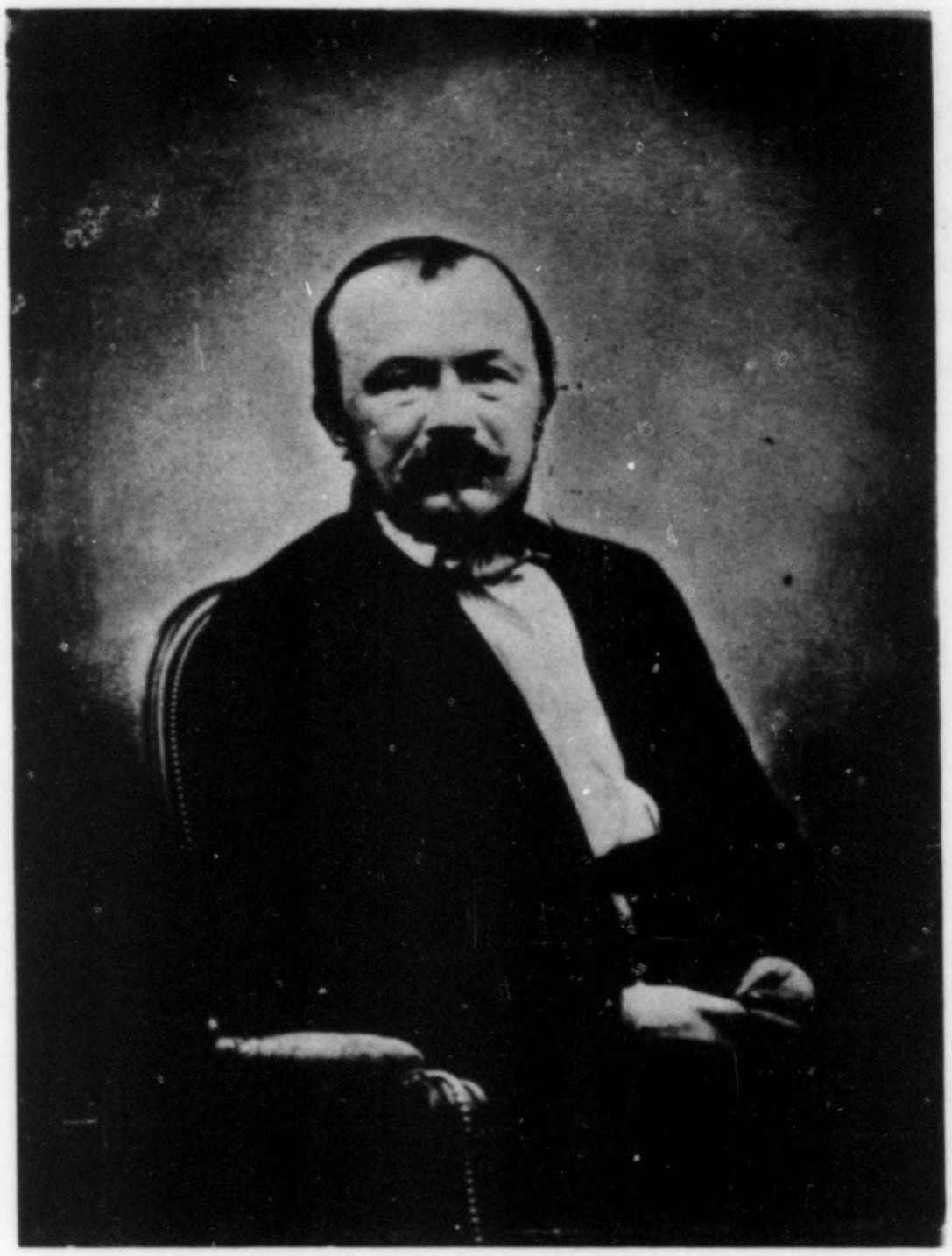
Nadar. Théophile Gautier. *c. 1856.*

> incapable of making something material from an apparition, from something impalpable—that is, creating something from nothing—he concluded that every time someone had his photograph taken, one of the spectral layers was removed from the body and transferred to the photograph. Repeated exposures entailed the unavoidable loss of subsequent ghostly layers, that is, the very essence of life.[2]

Throughout the rest of this account Nadar's tone is affectionately mocking. Théophile Gautier and Gérard de Nerval had rushed to Balzac's side to become "converts" to his Theory, and Nadar focuses more sharply on the affectations of their discipleship than on any suspicions of Balzac's own insincerity. The man of science, Nadar is magnanimous as he indulges the self-consciously assumed, primitivist fantasies of his literary friends.

But the second chapter of the memoir is a replay of this fantasy, with its

2. See Nadar, "My Life as a Photographer," p. 9, above.



Nadar. Gérard de Nerval. *1855.*

terms somewhat changed. "Gazebon Avenged" begins with a letter sent to Nadar in the 1850s from a provincial named M. Gazebon requesting a photographic portrait of himself. Nothing is unusual about this except that, on the assurances of a "friend" of Nadar's, Gazebon expects the photograph to be taken in Paris while he himself remains in Pau. Deciding that he will not dignify this joke with an answer, Nadar forgets the whole business until twenty years later when a young man presents himself in Nadar's studio claiming to have perfected the means for executing Gazebon's demand: long-range photography (*photographie à distance*). While Nadar's companion, convinced by the technological jargon with which the young man supports his claim, gets more and more excited by the prospect of carrying out the experiment, Nadar himself waits for "the touch" to come. When it does, Nadar pays out the money, knowing that he has been defrauded and that he will never see the young "inventor" again. No explicit connection is made between this story and the Theory of Specters, but the psychological point of the story—Nadar's own, deep certainty that "remote-photography" is an impossibility—is a variation on the Theory, from the point of view of Science. Photography can only operate with the directness of a physical graft; photography

turns on the activity of direct impression as surely as the footprint that is left on sand.

It is this knowledge of the physical immediacy of photography that is given an emotional resonance in the story of "The Blind Princess," to which Nadar then turns. In the 1870s a blind woman is brought by her grown children to the studio to sit for her portrait. Because she is a member of the royal family of Hanover, Nadar takes the occasion to inquire after the young nobleman who had looked after him when Nadar was confined in Hanover two years previously, due to a rather grotesque ballooning accident. Nadar's interest in the other man had developed from their shared contempt for balloons and their joint conviction in the possibility of flight in craft that was heavier than air. Having heard that the nobleman had been exiled from Hanover because he had killed someone in a duel, Nadar asks one of the Princess's children if this is true. The drama of this question, which fortunately the Princess doesn't hear, turns on the fact that the victim of the duel was the sitter's eldest son, and though his death has been successfully hidden from the mother, Nadar's question could have revealed it to her. Remembering his own distress, Nadar closes the story with a series of reflections on the psychological consequences, and thus the potential power, of the circumstances of making a photograph: to the point where a life could be affected by the chance remark transmitted through "a visit to a photographer's studio, in a strange city. . ."

The focus of this ending is clearly on the kinds of changes that industrialization brings to every corner of society—collapsing distances, imploding separations of class—so that a French balloonist could be blown into the care of a German royal household, and a princess would engage in the new, social transaction of the photographic portrait-sitting. In thus dramatizing the intimacy of the photographic situation, Nadar fixes again on the physical proximity that is its absolute requirement, on the fact that no matter how any other system of information transfer might work, photography depends on an act of passage between two bodies in the same space.

In these three chapters, then, Nadar circles around what seems for him to be the central fact of photography: that its operation is that of the imprint, the register, the trace. As semiologists we would say that Nadar is giving an account of the photographic sign as an index, a signifying mark that bears a connection to the thing it represents by having been caused, physically, by its referent. And we would go on to describe the limited field of significance available to that type of sign.[3] But Nadar was not a semiologist, and sure as he was of the indexical nature of the photograph, of its condition as a trace, the inferences he seems to have drawn from this were peculiar to his century rather than our own.

For the early 19th century, the trace was not simply an effigy, a fetish, a layer that had been magically peeled off a material object and deposited elsewhere. It

3. In his essays on photography, Roland Barthes analyzes these limitations, which he attributes to the status of photography as "a message without a code." See, "The Photographic Message," and "Rhetoric of the Image," collected in *Image, Music, Text*, New York, Hill and Wang, 1977.

was that material object become *intelligible.* The activity of the trace was understood as the manifest presence of meaning. Standing rather peculiarly at the crossroads between science and spiritualism, the trace seemed to share equally in the positivist's absolutism of matter and the metaphysician's order of pure intelligibility, itself resistant to a materialist analysis. And no one seemed more conscious of this than Balzac, author of the Theory of Specters.

When Barbey d'Aurevilly sneered that Balzac had made description "a skin disease of the realists," he was complaining about the very technique in which Balzac took the greatest pride and which allowed him to boast that he had foreshadowed the Daguerreotype. If written description was intended to skim the surface off a subject and transfer it to the novel's page, this was because of Balzac's belief that this surface was itself articulate, the utterly faithful representation of the inner man. "The external life," Balzac wrote, "is a kind of organized system which represents a man as exactly as the colors by which the snail reproduces itself on its shell."[4] The endless reworking of this metaphor produces the kind of character in the *Comédie Humaine* about which one could write that "his clothes suit his habits and vices so well, express his life so faithfully, that he seems to have been born dressed."[5] Therefore, as eccentric and fanciful as the Theory of Specters might at first strike us, the notion of man as a series of exfolliating, self-depicting images, is only a more whimsical version of the model of the snail. And this model, with its intentional connections to biological study, was meant to carry the authority of Science.

As Balzac never tired of explaining, the physical description through which he was confident that he could trap the vagaries of character had been tested in the laboratories of physiognomy.[6] Whatever the relative obscurity of Johann Caspar Lavater now, *The Art of Knowing Man by Means of Physiognomy* (1783) had enormous prestige in the 19th century.[7] As the title implies, physiognomy involved the decoding of a man's moral and psychological being from those physiological features which were thought to register them. In this reading, for

4. Honoré de Balzac, "Traité de la vie élégante," *Œuvres Complètes,* Vol. XX, Paris, Editions Calmann Levy, 1879, p. 504.

5. Gilbert Malcolm Fess, *The Correspondence of Physical and Material Factors with Character in Balzac,* Philadelphia, University of Pennsylvania (Publications: Series in Romantic Language and Literature), 1924, p. 90.

6. The examples are everywhere. One, from the 1833 *Théorie de la démarche,* goes: "Nevertheless, Lavater said, before I did, that since everything in man is homogeneous, one's gait must be at least as eloquent as one's physiognomy; bearing is the physiognomy of the body. Of course this is a natural deduction from his initial premise: everything about us corresponds to an internal cause." Balzac, *Œuvres Complètes,* Vol. XX, p. 572.

7. In order to locate physiognomy at that point of convergence that it established for itself, and staunchly maintained, between anatomy, psychology, and moral philosophy, it is useful to consider Charles Darwin's need finally to attack this "science" in the 1870s. In his study, *On the Expression of the Emotions in Man and Animals* (1872), Darwin launches an assault on physiognomy as one of the principal strongholds of the opposition to the theory of evolution. Operating on the principle that many of man's facial muscles were put in place solely for the purpose of "expressing" his inner states, physiognomy based its investigations of this unique musculature on the belief that it was species-specific. That is, there was a mutual reinforcement between the idea that each species, man included,

example, thin lips are the index of avarice. Balzac made it no secret that his own characters were built as much from raids on the ten volumes of Lavater's work as on recourse to his own observation.

Lavater himself had paved the way for Balzac's extension of physiognomy to a system of indexical signs, or physical traces, that encompassed far more than the shape of a man's skull or the character revealing conformation of his mouth. The *Analytic Essays* from 1830, like "The Study of Habits by Means of Gloves," or "The Physiology of the Cigar," are elaborate Balzacian glosses on the kind of thing Lavater had in mind when he wrote:

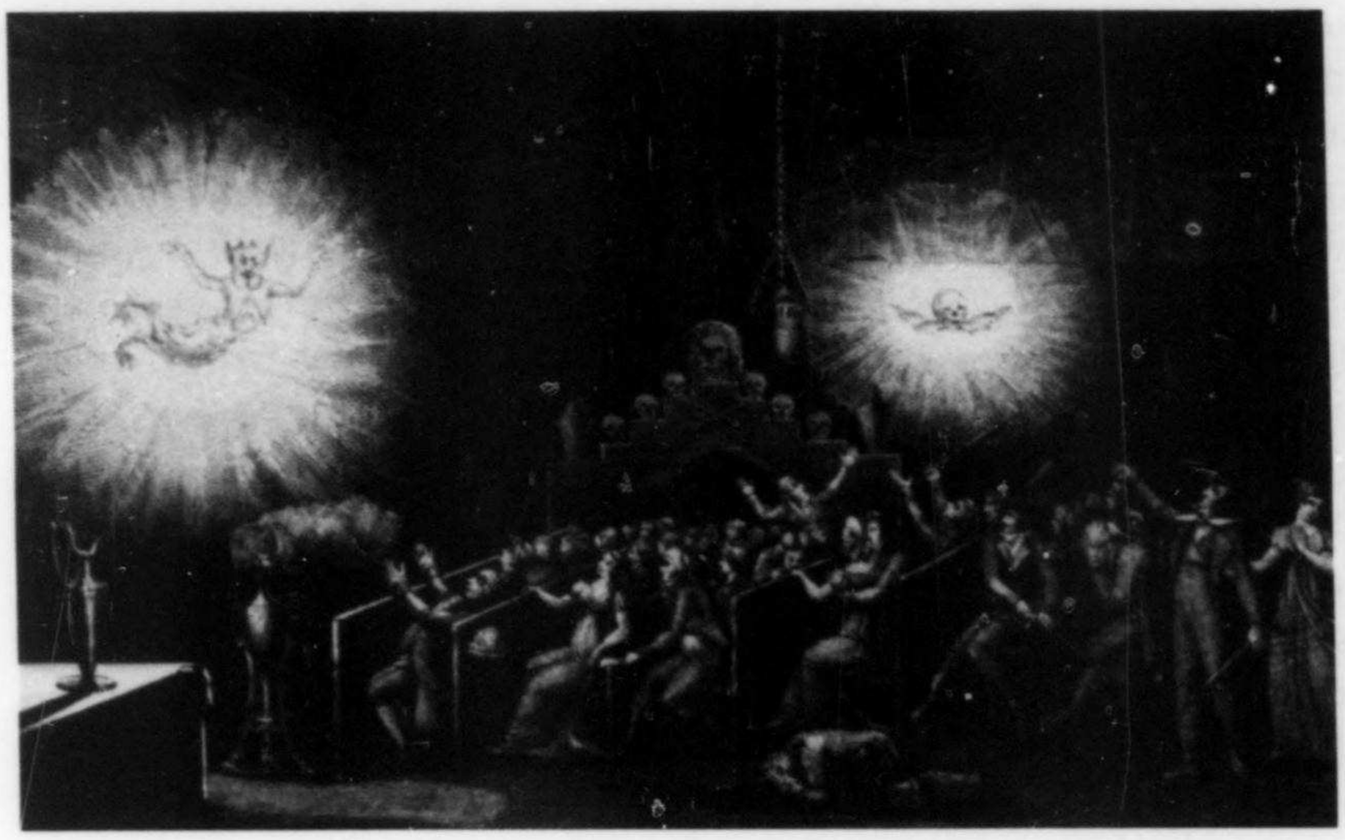
> It is true that man is acted upon by everything around him; but conversely, he too acts upon his environment, and while modified by his surroundings, he in turn modifies them. It is on this basis that one can guage the character of a man by his dress, his house, his furniture. Set within this vast universe, man contrives a smaller, separate world which he fortifies, entrenches, and arranges in his own fashion and in which we discover his image.[8]

In this view, character is like a generator of images, which are projected onto the world as the multiple cast shadows of the bearer. That Lavater's attention should have included the extremely minor art of silhouette making is not surprising insofar as these profile portraits were the literalization of the cast shadow. The very name of the "physionotrace," a type of silhouette produced in 1809 by quasi-mechanical means and included in most histories of photography as a forerunner of the aspirations (if not the actual process) that made the photograph inevitable, bears the mark of Lavater.

But the check that Lavater wrote for the systematic study of physiognomic traces could be cashed in other banks besides that of positivism. Balzac points to this when he speaks of the two sides of his interests, the one indebted to Lavater, the other focused on Swedenborg. And indeed, in *Mimesis*, when Erich Auerbach analyzes Balzac's technique he selects a passage in which both aspects present themselves. For behind the details of dress and bearing through which Balzac renders the *petit-bourgeois* avarice and cunning of Père Goriot's landlady, there gather a set of images drawn from an entirely different register of study, images that create "the impression of something repulsively spectral." These images, Auerbach writes, form "a sort of second significance which, though different from that which reason can comprehend, is far more essential—a significance which can

had come into existence in its present condition, and the notion that the musculature of the human species had been specially fashioned as the instrumentality of a unique capacity to feel and to express, which man shared with none of the lower animals. This capacity arose not simply from a psychological structure far richer and more complex than that of other species, but, ultimately, from the soul. In an argument such as this one, blushing, for example, is taken as a manifestation of a moral life not shared by lower animal orders.

8. Johann Caspar Lavater, *L'Art de connaître les hommes par la physionomie*, Vol. I, Paris, Depélafol, 1820, p. 127.



A nineteenth century seance.

best be defined by the adjective demonic." And he adds, "What confronts us, then, is the unity of a particular milieu, felt as a total concept of a demonic-organic nature and presented entirely by suggestive and sensory means."[9]

For the Theory of Specters to have issued from Balzac's pen, there needs only one ingredient to be added to the Lavater system of physiognomic traces, one element that will transform the physical manifestations of character into the idea of a man as a set of spectral images, or ghosts. That ingredient is light. Light was the means by which the seemingly magic transfer of the photograph was effected, the way in which one could, in Nadar's words, "create *something* from *nothing*." And light, the keystone in the Swedenborgian system, was the conduit between the world of sense impression and the world of spirit. It was in terms of a luminous image that the departed chose to put in their spectral appearances at the 19th century séance. And after 1839 it required only a baby step in logic to conceive of recording these apparitions photographically. "Spirit photography," is described by Huysmans in *Là-Bas*, and in 1882 Georgiana Houghton quite seriously published a work entitled *Chronicles of the Photographs of Spiritual Beings and Phenomena Invisible to the Material Eye*. Surely one of the most grotesque, but revealing suggestions about the possible applications of photography was the notion, broached in the 1890s, of the "post-mortem photograph." Breathtaking in its loony rationality, it involved the reprinting of a photograph taken during life by using the crematorial ashes of the departed sitter. "They will adhere to the parts unexposed to light and a portrait is obtained composed entirely of the person it represents."[10]

9. Erich Auerbach, *Mimesis*, Princeton, New Jersey, Princeton University Press, 1968, p. 472.
10. Aaron Scharf, *Creative Photography*, London, Studio Vista, 1965, p. 25.

Now the spirit-photograph may have been a somewhat freakish idea and rather limited in its currency. But with the industrialization of portrait-photography that took place in the 1860s, came the wholesale production of deathbed photographs. The deathbed portrait is a phenomenon that most histories of photography acknowledge but pass by rather quickly. A combination of curiosity and embarrassment, very few of these objects survive relative to the enormous number that were made. Yet for the commercial photographer of the 19th century, the deathbed commission was one of the major staples of his practice.[11] It is our present-day inability to view this phenomenon as anything but ghoulish that indicates our own removal from a crucial part of photography's history: precisely that part Nadar hoped to evoke through his memoir.

The mysteriousness that surrounded the initial appearance of photography and permitted some of the more bizarre of its later practices is easy enough to patronize. But this sense of mystery is an aspect of the most serious aspirations of the early makers of photographs, Nadar included, and it is this seriousness which is harder to understand. Just as it is hard to understand as anything more than a piety of literary history the incredible, contemporaneous eminence of Swedenborg. It therefore might be helpful to draw a parallel between the initiation of Nadar's account of photography with a story of Balzac at his most Swedenborgian, and the inauguration of Immanuel Kant's career with a work called *Dreams of a Spirit Seer*—an unexpected text on Swedenborg.

In drawing this parallel I wish to point to more than just the prestige of Swedenborg—to the kind of fame and respect that was granted him in the late 18th century, and which made him a strangely persistent object of attention for the young Kant. As *Dreams of a Spirit Seer* makes clear, Kant's decision to take on Swedenborg as an adversary, to bother to attack the great visionary who was busy taking down dictation from the World of Spirits, arises from the way in which Swedenborg's solutions come as perfectly logical responses to the problems of 18th century metaphysics. In Kant's eyes the system of Swedenborg's *Celestial Arcanum* is no more benighted than any other metaphysical system. Why not write about him, Kant asks, "After all the philosophy which has helped us to introduce the subject is itself no more than a fairytale from the Wonderland of Metaphysics."[12] And he concludes by saying, "Questions which concern the nature of spirits, freedom, predestination and our future state, etc., etc., at first arouse all our energies and reason, and lure us by the excellence of their subject-matter into the arena of competitive speculations where we argue indiscriminately, decide, teach, reason, just as pseudo-knowledge dictates."[13]

11. Nigel Gosling speaks of Nadar's own scruples about participating in this industry: "He was rarely tempted (as his son was later to be) to exploit his talent in banal journalism and publicity pictures, and rarely accepted commissions for the ever-popular deathbed pictures (Victor Hugo and the gentle poetess Mme Desbordes-Valmore were exceptions)." See, Gosling, *Nadar*, New York, Alfred A. Knopf, 1976, p. 13.

12. Immanuel Kant, *Dreams of a Spirit Seer*, trans. John Marolesco, New York, Vantage Press, 1969, p. 76. This treatise was first published, anonymously, in Königsberg in 1766.

13. *Ibid.*, p. 94.

But the point about Swedenborg cuts much closer to the bone. No matter how preposterous the outcome of his endeavors, the question that animates them in the first place was utterly serious for the founder of analytic philosophy: how to find data by which to prove the existence of an intelligible (as distinct from a merely material or sensible) world.[14]

Swedenborg's labors as scientist-turned-mystic compose an incredible cadenza on the theme of intelligibility. They turn, as I have said, on the issue of light. Beginning from Newton's view of light as corpuscular—made of infinitely small particles—and adding this to the Cartesian notion that matter consists of particles that are indefinitely divisible, it was possible to think of light as a spectrum that begins in the world of the senses and shades off into the world of spirits. Insofar as the universe is permeated by light, some part of which is divine, it can be seen as a system of symbols, as a great hieroglyphics from which to read off the meaning of divinity. This legibility of the world is Swedenborg's message; the *Celestial Arcanum* is a massive demonstration of how propositions from the natural sphere are transformed into their correspondence in the spiritual one.

Thus the visible world is, once again, a world of traces, with the invisible charged with imprinting itself on the visible. "It is a constant law of the organic body," Swedenborg insisted, "that large compounds or visible forms exist and subsist from smaller, simpler and ultimately invisible forms, which act similarly to the larger ones, but move perfectly and universally; and the least forms so perfectly and universally as to involve an idea representative of their entire universe." Glossing this passage in 1850, Emerson explains, "What was too small for the eye to detect, was read by the aggregates; what was too large, by the units."[15] It is the visibility of the noumenal world which thus concerns Swedenborg, and the demonstration of the way this is possible by light's acting on phenomena to produce an image.[16]

Photography was born in the 1830s by, in Nadar's words, "exploding suddenly into existence, surpass[ing] all possible expectations." And into the initial responses to this event are folded the themes of Spiritualism. For photography was the first available demonstration that light could indeed "exert an *action* . . . sufficient to cause changes in material bodies."[17]

Those are the words of Fox Talbot, published in 1844 in *The Pencil of Nature*, a book laid out as an object lesson in the wonders and possibilities of photography. On the face of it there is no reason why Fox Talbot's statement about light should be read as anything more than the comment of a gentleman-

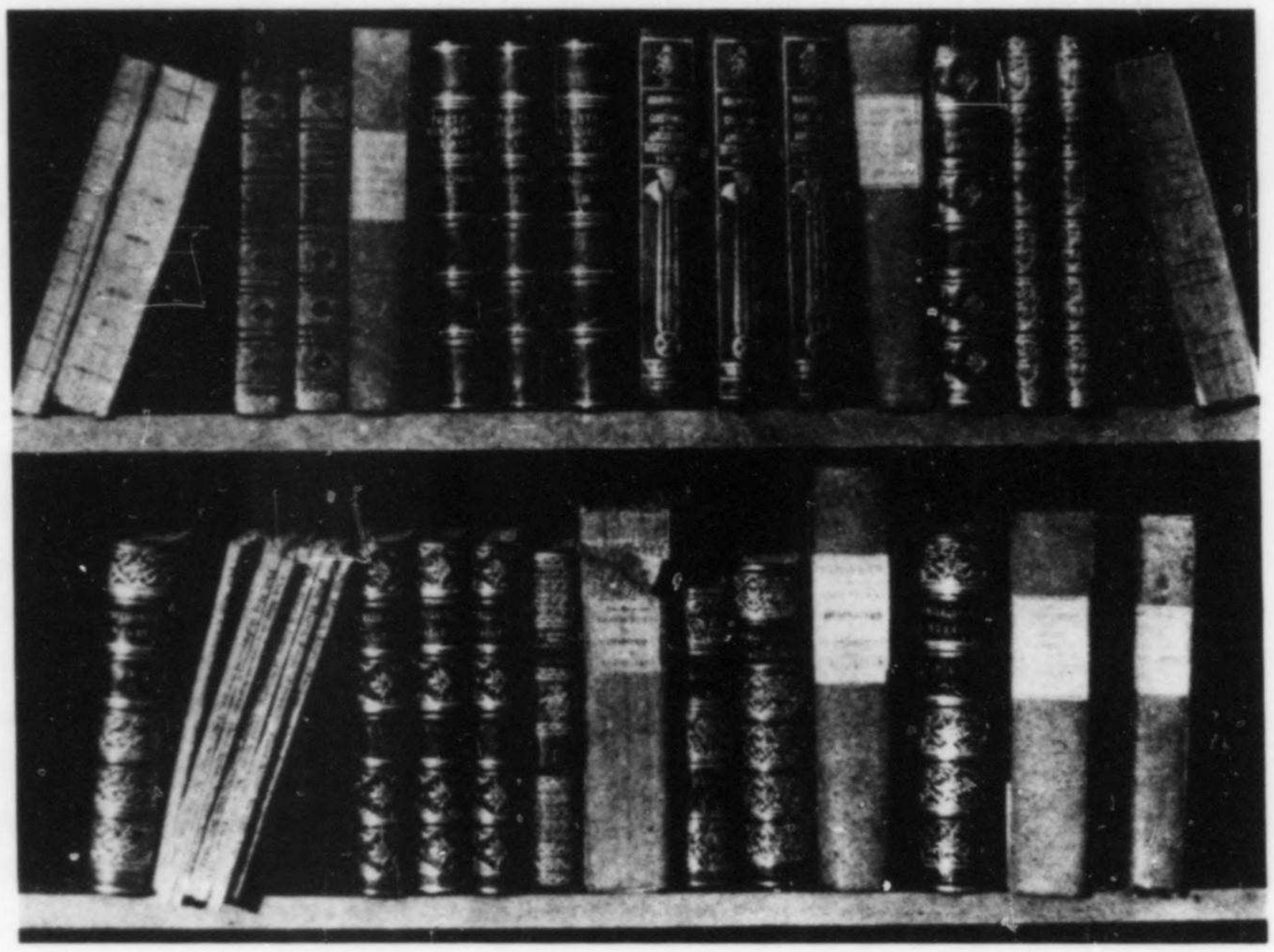
14. Kant's motives for undertaking *Dreams . . .* are discussed by Marolesco in his introduction to the translation.

15. Ralph Waldo Emerson, *Representative Men: Seven Lectures*, Boston, Phillips Sampson and Company, 1850, p. 115.

16. Thus Swedenborg writes, "Man is a kind of very minute heaven corresponding to the world of spirits and to heaven. Every particular idea of man, and every affection, yea, every smallest part of his affection is an image and effigy of him." Cited by Emerson, *Representative Men*, p. 116.

17. William Henry Fox Talbot, *The Pencil of Nature*, facsimile edition, New York, Da Capo Press, 1969, introduction, n.p.

William Henry Fox Talbot. Scene in a Library, *Plate VIII from* The Pencil of Nature. *1844.* *(George Eastman House, Rochester, New York.)*



scientist. Yet it is the curious nature of certain of the plates, which form the bulk of *The Pencil of Nature,* that induces one to hear in his statement the overtones of metaphysics.

Most of the plates are just what one would have expected of such a volume: views of buildings, landscapes, reproductions of works of art. But some of the images are rather peculiar. One of these, Plate VIII, is entitled "Scene in a Library," and what it presents, head-on and in close-up, are two shelves of books. Minimal in the extreme, there is nothing picturesque or in any other way aesthetically arresting in this image. One turns, therefore, to the accompanying two-page text for an explanation of what it might mean:

> Among the many novel ideas which the discovery of Photography has suggested, is the following rather curious experiment or speculation. I have never tried it, indeed, nor am I aware that anyone else has either tried or proposed it, yet I think it is one which, if properly managed, must inevitably succeed. When a ray of solar light is refracted by a prism and thrown upon a screen, it forms there the very beautiful colored band known by the name of the solar spectrum. Experimenters have found that if this spectrum is thrown upon a sheet of sensitive

> paper, the violet end of it produces the principal effect: and, what is truly remarkable, a similar effect is produced by certain *invisible rays* which lie beyond the violet, and beyond the limits of the spectrum, and whose existence is only revealed to us by this action which they exert.
>
> Now, I would propose to separate these invisible rays from the rest, by suffering them to pass into an adjoining apartment through an aperture in a wall or screen of partition. This apartment would thus become filled (we must not call it illuminated) with invisible rays, which might be scattered in all directions by a convex lens placed behind the aperture. If there were a number of persons in the room, no one would see the other: and yet nevertheless if a camera were so placed as to point in the direction in which any one were standing, it would take his portrait, and reveal his actions.
>
> For, to use a metaphor we have already employed, the eye of the camera would see plainly where the human eye would find nothing but darkness.
>
> Alas! that this speculation is somewhat too refined to be introduced with effect into a modern novel or romance; for what a dénouement we should have, if we could suppose the secrets of the darkened chamber to be revealed by the testimony of the imprinted paper.[18]

Throughout *The Pencil of Nature* the photographic plates serve to illustrate the arguments in the text in the manner of object lessons, demonstrations. The photograph of a haystack, for example, supplies the visual proof of Talbot's contention that the mechanical image can suspend an infinitude of detail in a single visual plenum, where natural vision tends to summarize or simplify in terms of mass. Since the above discussion of "invisible rays" ends with a reference to novels, one wonders if the accompanying photograph of books is intended to represent these novels. Yet Talbot speaks of books that have not yet been written. So the status of the photograph as illustration becomes a bit more complicated.

Insofar as the photograph of books is the embodiment of a speculative projection, its role is on some level conceptual. But this is a role forced on the photographic object which is thoroughly integrated into the subject of this particular image. For as the container of written language, the book is the place of residence of wholly cultural, as opposed to natural, signs. To operate with language is to have the power to conceptualize—to evoke, to abstract, to postulate—and obviously to outdistance the objects available to vision. Writing is the transcription of thought, not the mere trace of a material object.

And the kind of photographic trace Talbot postulates, in the way that he describes it, is also to be a transcription of thought, or at the very least, of

18. *Ibid.*

psychological transactions ordinarily hidden from view. The photographs taken with "invisible rays" will be able to reveal the activities that occur within a "darkened chamber." In the application Talbot projects for them, they will manifest not merely behavior itself, but its meaning. In this scenario of a trace produced by invisible rays, the darkened chamber seems to serve as a reference both to the camera obscura, as an historical parent of photography, and to a wholly different region of obscurity: the mind. It would indeed be a special kind of light that could penetrate this region "through an aperture," and by means of its emanations, capture what goes on there through a series of traces.

This kind of speculation in *The Pencil of Nature* is what I mean by the serious aspirations of some of the earliest photographers. The condition it assumes is the inherent intelligibility of the photographic trace—a condition that in turn depends on those terms of 19th century thinking that I have been rehearsing: the physiognomic trace and its revelatory power; the power of light to transmit the invisible and imprint it on phenomena. For these things to be linked at all requires the marriage of science and spiritualism. We know this was a ceremony performed in many quarters in the period under discussion, and we know this union had many offspring. I am arguing that the initial conception of the photograph, as such, was one.

But where does that leave Nadar? He was after all not of Talbot's, or Balzac's, generation. The "primitives of photography" were his fathers and teachers, not his siblings. To judge from both his memoir and his photographic practice, the "metaphysical" expectation left Nadar in a condition of a certain ambivalence. Deeply aware of the photograph's status as a trace, he was also convinced of its psychological import. That he was removed from a spiritualist reading of this import is obvious, not only from his treatment of Balzac's Theory but also from his singular refusal to participate in the deathbed portrait industry. Yet if he rejects the premise of this expectation, there are certain ways in which Nadar is interested in both acknowledging and using it as a theme: one of the very few deathbed commissions Nadar consented to was to photograph the deceased Victor Hugo, himself a frequenter of séances; and, for the subject of the first of his series of underground photographs, he chose the catacombs of Paris, where skeletons heaped one on top of the other trace in archeological fashion their own record of death; and, as if to pay this theme a special kind of homage, he begins his memoir with the Theory of Specters.

To criticize a subject is not necessarily to annihilate it. Sometimes, as with Kant's *Dreams of a Spirit Seer*, it is to carry it, transformed, into a new method of inquiry. And for Nadar the question of the intelligible trace remained viable as an *aesthetic* (rather than a real) basis for photography. Which is to say that it is a possible, though not a necessary condition of a photograph that it render phenomena in terms of their meaning.

Nadar's early ambitions in this respect can best be documented in a series of photographs that he took when he and his brother Adrien Tournachon were still working together. Called "Expressions of Pierrot: A Series of Heads," this suite of

Nadar. Victor Hugo on His Deathbed. *1855*.



images was entered into the photographic section of the 1855 Exposition Universelle where it won a gold medal. Depicting the face of Charles Debureau as he assumed the various facial gestures from his repertory of "expressions," the series of photographs becomes the record, and the doubling, of the mime's enactment of the physiological trace. Recent scholarship (I am referring to Judith Wechsler's study *Physiognomy, Bearing and Gesture in 19th Century Paris*)[19] focuses attention on the relationship between the science of physiognomy and the art of pantomime that was being drawn toward the middle of the 19th century. This means, for example, that in the plays he was writing for Debureau, Champfleury assumed the possibility of a performance that would fuse the physiological specificity of the character-revealing trace with the highly conventionalized gesture of the traditional mime.[20]

19. To be published by Thames & Hudson, London.
20. In the same years both Gautier and Duranty were writing with a similar relationship in mind. Professor Wechsler has kindly called my attention to this material which is presented and analyzed in her study, referred to above.



Adrien

Now clearly, to render the physiognomic trace by way of the mime is to pass this phenomenon through an aesthetic filter. For by the nature of his role as performer, the mime must transform the automatism of the trace, its feature as a kind of mechanical imprinting, into a set of willed and controlled gestures, into the language that Mallarmé would later designate as "writing."[21]

The explicit relationship between the mime's aestheticizing of the trace and photography's own, similar, highly self-conscious performance is drawn in the images of Debureau. In one of these, signed Nadar Jeune (Adrien Tournachon), the mime appears with a camera, miming the recording of his own image. In this work light, photography's own form of "writing," plays an important part. For while the mime is enacting his role in the image, a set of shadows constellate across his body as a simultaneously perceived and read subtext.

First, in the area of the head, Debureau's face, whitened by make-up, is further flattened by harsh lighting. This effect, added to the sharp shadow, which detaches the face visually from the underlying mass of the skull, intensifies the face's character as mask. A surface which, then, both belongs to the head and can nevertheless operate independently of it, the face-as-mask is the ground on which the physiognomic trace is rendered as a sign. To perform the physiognomic trace, Debureau had not so much to act as to artificially recompose his face—to achieve the thin lips of avarice, for example, in an ephemeral gesture that embodies physiognomy by "speaking it."

Second, the costume of Pierrot worn by the mime becomes the white field onto which cast shadows are thrown, creating a secondary set of traces that double two of the elements crucial to the image. One of these is the Pierrot's hand as it points to the camera; the other is the camera itself, the apparatus that is both the subject of the mime's gesture and the object of recording it. On the surface of the mime's clothing, these shadows, which combine the conventional language of gesture (pointing) and the technical mechanism of recording (camera) into a single visual substance, have the character of merely ephemeral traces. But the ultimate surface on which the multiple traces are not simply registered, but fixed, is that of the photograph itself.

This idea of the photographic print as the ultimate locale of the trace is at work in this image in two different ways, and on two different levels of articulation. The first is on the level of the subject matter: the mise-en-scène of the image, so to speak. The second operates through a reflection of the role of the cast shadow: the operational fact of the image.

On the first level, we confront a performance of reflexiveness in which the mime doubles in the roles of photographer and photographed. Posed alongside the camera, he weaves that peculiar figure of consciousness in which the line that

21. In his analysis of Mallarmé's essay "*Mimique*," Jacques Derrida examines this notion of the mime's gesture as a kind of writing, which becomes, in Mallarmé's words, "*. . . soliloque muet que, tout du long à son âme tient et du visage et des gestes le fantôme blanc comme une page pas encore écrite.*" See, "La double séance," in Derrida, *La dissémination*, Paris, Editions du Seuil, 1972, p. 222.

Adrien Tournachon. Charles Debureau. *c. 1854.*

connects subject and object loops back on itself to begin and end in the same place. The mime enacts the awareness of watching himself being watched, of producing himself as the one who is watched. It is a doubleness that could not occur, of course, in the absence of this photograph of it. It is only because Debureau is the actual subject of the image for which he plays photographer, only by performing for the photographic mirror, that the issue of doubling arises. Obviously, were Debureau to perform his action on a simple stage, there would be no effect of doubling. He would merely be playing "photographer." Only if he were to play his gesture in front of a mirror would he be able simultaneously to enact the capture of his own image. But even then he would be rendered as two separate players: the one in "life" and the one in the mirror. The photographic print, because it is itself a mirror, is thus the only place where an absolute simultaneity of subject and object—a doubling that involves a spatial collapse—can occur. The print is here defined, then, as a logically unique sort of mirror.

At the second, operational level, the theme of doubling and mirroring functions in relation to the shadows cast on Debureau's clothing. I have said that those shadows thrown by two separate objects (camera and gesture) combine on a physically distinct surface to produce a specific relationship, a meaning that points to the double persona of the mime. But the cast shadow itself is a type of trace that is the operational double of the photographic one. For the photographic trace, like the cast shadow, is a function of light's projection of an object onto another surface. In this image of Debureau, the idea of the mirror is carried into the semiological fabric of the work: the photograph is a mirror of the mime's own body in that it is a surface that will receive the luminous trace as a set of displaced signs, and more importantly, will constitute itself as the place in which their relationship can constellate as meaning.

Thus the aspirations working in this photograph are to surpass the condition of being the merely passive vehicle of the mime's performance. They are to depict the photograph itself as a complex sort of mirror. Echoing the theme of doubling through the agency of cast shadow, the photograph stages at one and the same time its own constitutive process as a luminous trace and its own condition as a field of physically displaced signs. Which is to say that doubling is not here simply recorded, but recreated through means internal to the photograph, through a set of signs that are purely the functions of light.

In Talbot's brief speculation woven around the "Scene in the Library," the camera obscura emerges as a double metaphor for both recording mechanism and mind. In the photograph of Debureau, the connection implied by this metaphor is projected through the image of the mirror, itself a metaphor for that reflexive seeing which is consciousness. If the trace (the shadow) can double as both the subject and object of its own recording, it can begin to function as an intelligible sign.

In using terms like "consciousness" or "reflexiveness" to speak of this photograph of mime and camera, I am of course invoking the language of

modernism. And this may seem unwarranted, given the direction that most photography was to take during the bulk of Nadar's lifetime. But in rehearsing the attitude towards the trace that was peculiar to an age that was simultaneously fascinated by science and spiritualism, I am trying to construct a very particular framework within which to set this image. The analytic attitude of which this photograph is a document has a very special genealogy, one that is relevant only to photography's own means of forming an image.

The kind of cultural frame that could have produced this photograph, that could have made the image of a mime next to a camera so extraordinarily resonant, is not only lost to us, but was, one feels, largely unavailable to Nadar as he wrote his memoir. Or at least it had become accessible to him only in memory. But Nadar's urgency in trying to recall that mood reminds us that aesthetic media have surprising histories just as they have uncertain futures: difficult to predict, impossible to foreclose.



Edward We



Impromptus on Edward Weston: Everything in its Place

HOLLIS FRAMPTON

The greatest potential source of photographic imagery is the human mind.

Leslie Krims

By all means tell your Board [of Trustees] *that pubic hair has been definitely a part of my development as an artist, tell them it has been the most important part, that I like it brown, black, red or golden, curly or straight, all sizes and shapes.*

Edward Weston, in a letter to Beaumont Newhall, 1946

In 1960, a few days before Christmas, a midwestern museum mounted, for the first time since 1946, and three years after the artist's death, a major retrospective of the photographs of Edward Weston. I had been sojourning in Ohio for some months, and decided to see that exhibition before returning to New York. I arrived in the early afternoon of the only day I had allotted myself, to discover that over 400 prints were on view. Finding those few hours too short a time to spend with the work, I hastily changed my plans, and stayed in town for another day.

The flight that I would otherwise have taken, inbound from Minneapolis, collided in midair over Staten Island with another aircraft. The sole survivor, a ten year old boy, fell two miles into the streets of Brooklyn. I well remember a newspaper photograph from that day: the broken child, surrounded by ambulance attendants and police, lay on the pavement in front of an *iglesia pentecostal* called Pillar of Fire.

Since then, I have never been able to decide whether Weston tried to kill me, or saved my life. For reasons more abstract, I suspect that many photographers, over the past thirty or forty years, have felt the same way.

*

If the recording process is instantaneous and the nature of the image such that it cannot survive corrective handwork then it is clear that the artist must be able to visualize his final result in advance. His finished print must be created in full before he makes his exposure, and the controlling powers . . . must be used, not as correctives, but as predetermined means of carrying out that visualization.

Edward Weston. China Cove. *1940.*

Out of the Ages we seem to have retained no more than a few hundred saints. But modernism in the sciences and in the arts seems to bring forth secular saints at the drop of a hat. Sainthood for artists seems to derive from a terse refusal to address oneself to questions about one's work, disguised as a moral aphorism.

Among major sculptors, Auguste Rodin and David Smith will never achieve sainthood; but Constantin Brancusi, who is on record with no more than ten prose sentences, achieves a sanctity that tends to make his work invisible, tacitly admonishing against critical examination. Somewhere in the firmament, at this very moment, the cunning Roumanian soul announces once more that Direct Cutting Is the True Path to Sculpture, and choiring angels sing hosannas around him.

The roster definitely includes such mortifiers of the flesh as Jackson Pollock, Mark Rothko, and Alban Berg, who qualifies as a kind of crazy saint, like Mechtild von Magdeburg. Those not yet fully canonized, but definitely among the beatified, include Martha Graham, Diane Arbus, Georgia O'Keeffe, and a number of other candidates to whom no miracles have yet been attributed (not even the minor one of resuscitating otherwise stagnant academic careers). Wherever there are saints, there must also be heresiarchs like Marcel Duchamp and John Cage, and heretics. For this last category I would like to recommend Michael Snow and the photographer Leslie Krims.

Heresiarchs are chiefly of interest to other heresiarchs; whereas saints are of interest to everyone who, aspiring to sainthood, recoils before the heretical suggestion that any work of art that can be killed by critical scrutiny is better off dead. As for the rest of us who toil upon the sands and seas of art, we are just Workers, and our myth is still "under construction," though it dates at least to J. S. Bach, who once answered a question with the words: *"Ich musste leissig arbeiten."*

If still photography has produced a single saint, then that one is indisputably Edward Weston. St. Edward is one of your manly, businesslike saints, like Ignatius Loyola, who received his vocation only in maturity, after a time of roistering and soldiering. In Weston's case, the two halves of that career seem constantly to be superimposed. The assertion perpetually quoted, that The Photograph Must Be Visualized in Full Before the Exposure Is Made, is scarcely an example of the complex wit of a grand aphorist. Rather, it comes to us as a commandment, brooking no reply or discussion. The Weston Codex abounds in such utterances, any of them a match for Brancusi.

The tone is invariably resounding, reassuring, and, above all, utterly proscriptive. We recognize it in the advice of a Japanese master of *sumi* painting, who tells us that the ink is best ground by the left hand of a fourteen year old virgin (presumably she must be right-handed!), as in Ad Reinhardt's animadversions on pure spirits of turpentine and the preparation of canvases: it always proposes an amelioration in its proper art—and always gives rise, eventually, to a mean and frigid academicism.

As we cut direct in wood or stone or metal, we are told, we must surely be on the True Path to Sculpture. If we can but learn to Previsualize the Photograph in Its Entirety, then we can be certain that we have mastered the first prerequisite to ascending the photographic Parnassus. To so much as hear the words of the commandment magically curses the hearer: he can neither obey nor disobey; for to disobey is to forfeit the very possibility of making art; and to obey is to declare oneself, at best, a disciple of the Master. The very possibility for work, for the construction of a praxis, has been preempted. Perhaps the photographer would be better advised to shoulder a tripod, and walk inland until someone asks if it is a prosthetic device. It was in some such fashion that sculptors, for a time, transformed their chisels into tools to dig in the earth.

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> *Since the nature of the photographic process determines the artist's approach, we must have some knowledge of the inherent characteristics of the medium in order to understand what constitutes the aesthetic basis of photographic art. . . . The photographer . . . can depart from literal recording to whatever extent he chooses without resorting to any method of control that is not of a photographic (i.e., optical or chemical) nature.*

There is this to say about the possession of a thinking apparatus (what we call a mind, in this case): one cannot not think; even to attempt to do so, is painful. But it is also difficult to think; and it is the more difficult because one has got to think about something in particular.

In the act of listening to music, of hearing, apprehending it, one thinks, vigorously, without thinking about anything in particular; so that one is given the pleasure of exercising the instrument of thought without the pain of having to direct that exercise toward anything that is not, as it were, already taken into thought, that is outside the instrument itself. Whence, then, the "universality" of music. We might pause to ask what we mean when we say we understand a piece of music. Presumably we mean something different from what we mean when we say we understand a spoken utterance or written text in a natural language.

There is one sort of understanding that we can attribute to both: a grammatical and syntactic understanding which we have from real-time analysis of the harmonic structure, the rhythmic structure, of a piece: the retrieval, let us say, of a generating dodecaphonic row, and the manner in which that row is manipulated in order to produce what we hear . . . which seems to resemble the process of understanding a sentence by parsing its grammatical structure. In order to understand a natural language artifact in this way, we must strip it of all specific reference: for "Jack ran," we might write, "proper noun/verb intransitive." Thus far, our understanding of language is like our understanding of music: or this is the largest part of what we mean when we say we understand music—whereafter,

the musical work is immediately transparent to its mediating culture. Music is a code stripped of everything but its own specifications.

But that is not all that we mean when we say we understand a natural language artifact. In that moment when one suddenly comprehends, encloses within one's own thought, a work in music . . . or a mathematical theorem . . . the sensation is not that of having determined the referent of a word (an immediate, but minor, gratification that language offers). Rather, one experiences the sensation of being struck by thought itself.

It has been possible to say that pictorial spaces, the spaces generated and inhabited by the visual arts, may be parsed: that it is possible to recover from these artifacts a "grammar," a "syntax," and indeed more: a "diction." Images are socially comparable to music, in that an uncertain understanding of them can and does cross psycholinguistic boundaries. It is possible to strip painting of everything but its own specification. After we have got rid of the *putti*, bananas, tigers, naked women, it is nevertheless still possible to have painting: a code stripped of all but a description, a "metapainterly" specification of grammar, syntax; what was called Style has often amounted to no more than statistics on the *potential* size of a "diction."

It would seem impossible to strip the photograph in the same way, because the photograph, in assuring us of the existence of its pretext, would appear to be ontologically bound to it: Nature (that is, everything on the *other* end of the lens), is all of grammar, all of syntax, Diction of dictions, alpha and omega, Oversign of Signs. If we attempt to strip the photographic image to its own specifications, we are left, in the case of the projected image, with a blank screen, with a Euclidean surface; if we strip the photographic print, we run aground upon an emptied specification that is no longer a photograph. It is only, and exclusively, a piece of paper.

Why do we undertake to strip the photographic code? To determine the absolute, irreducible set of specifications for a code is a typically modernist enterprise in the arts. Expunging item after item from the roster of cultural imperatives, we come, eventually, to a moment when the work at hand is no longer recognizably picture or poem; in this moment, we know that we have mapped at least a single point on the intellectual boundary of what must constitute an image or a linguistic artifact. During this century, music, painting and sculpture, dance and performance, have entered into this process of self-definition . . . a process, moreover, into which film has recently invested new and massive energies. We find, for instance, an entire body of work which has been seen as a critique of cinematic illusionism, testing whether illusionist space itself is properly part of the grammar of film, or only part of its diction: I refer to the work of Paul Sharits.

This enterprise has not, however, been systematically pursued with seriousness, or anything approaching rigor, in still photography, which has therefore tended to remain isolated, an enclave within modernism, a practice atavistic in its

unselfconsciousness, a magnificent but headless *corpus,* an aesthetic brute whose behavior is infallible, perfectly predictable, and doomed by its own inflexibility. At this extremity, then, it is only fair to point out that Edward Weston was virtually the first photographer to make an effort to define the bare set of specifications for a still photographic art.

Weston adopted a strategy that is perfectly familiar to us, proposing to identify the work of art with its own material rather than with its pretext. This reduced his problem to that of determining the nature of the material, and in turn suggested a second common strategy, that of circumscribing as drastically as possible the list of attributes of the photographic material. If we are not always convinced that Weston thought through his posture with utter clarity, nonetheless we must take care to note the severity with which he applied his chosen set of axioms in his artistic practice.

Still, to identify the photograph wholly with its own material could not completely satisfy Weston, and indeed it cannot satisfy us, because the photograph is, in fact, like language, doubly identified: once with itself, and once again with its referent; thus, modernism has had to set for itself a second grand problem, namely, to strip the *pretext* of the visual image or the referent of the linguistic artifact to its own proper set of specifications as well.

The very presence of a natural language utterance in the world already asserts two things: that something is being said, and also that some Thing is being said. It is not difficult for us to perceive in the mature writing of Samuel Beckett, of Jorge Luis Borges, of Alain Robbe-Grillet, a determination to strip the Thing that is being said, the referent of the discourse, to its own set of specifications, by making the very substance of the text refer to the materiality of language. We may trace the origins of this latter process of definition, within literature, through Joyce and Valéry to Mallarmé and Flaubert. It goes without saying that the work of specifying not only the possibility of saying, but also what may be said at all, is long and arduous, so that we never received from his own hand the delicious project that Flaubert had hoped to begin after the completion of *Bouvard et Pecuchet,* that is, the writing of a novel about Nothing. But how is an artist who would attempt to recover both the bare specifications for a photographic image and the bare specifications for the photographic pretext to proceed with the second task? We cannot make a photographic image that is a picture of nothing.

But perhaps there is a way out, after all. Literary modernism in its latter development adopts a strategy which we might call *displacement,* whereby temporal and causal connections within the text are systematically forced out, made virtually irrelevant, their claims annihilated, by "equating" the literary text with an illusionist pictorial image. Again and again, we find texts that amount to nothing other than minute descriptions, in flat, declarative sentences, of spaces, of objects disposed within those spaces, of the surface and volumetric attributes of those objects. In Beckett, in Robbe-Grillet, in Borges, we are accustomed to notice, at first, that nothing appears to be happening. Causality and temporality having

been dispossessed from the text, we are left free to enjoy the gradual construction of that space within our consciousness which the text will occupy, as we experience the process of *reading* in a time, that of the spectator, which is explicitly and entirely disjunct from the atemporality of the text itself.

I would suggest that we might detect in Weston's photographs the nascence of a similar strategy of displacement. The possible set of pretexts for a photograph is reduced to a set of abstract categories deliberately taken wholesale from illusionist painting—Portrait, Landscape, Nude, *Nature Morte*—which, taken together, make up a rigid spatial typology. Weston repeatedly abjures the "snapshot," with a vehemence that enlarges that term to encompass most of the photographs that have ever been made. In the midst of a century and a half of photographic activity, during which the frame has been populated by an overwhelming profusion of spaces, as its rectangle has become that indivisible point, that Borgesian *aleph* within which we see all the universe, that blank arena wherein converge at once the hundred spaces that Paul Klee longed for, this is extraordinary. The incessant reiteration of such a decision throughout a vast body of work finally transcends the polemical.

We must also remember that there may be strategies more elegant and powerful for accomplishing the same end, that are simply and permanently rendered inaccessible by Weston's a priori refusal to manipulate, to lay a hand on, his photographs, confining his bodily intervention to their subjects, his objects. Such strategies, however, are not to be discovered, like smooth, round stones on a beach, and dropped into an overcoat pocket. They must be invented. Some have reasoned that they are all of invention.

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> *In the time the eye takes to report an impression of houses and a street the camera can record them completely, from their structure, spacing and relative sizes, to the grain of the wood, the mortar between the bricks, the dents in the pavement. . . . In its ability to register fine detail and in its ability to render an unbroken sequence of infinitely subtle gradations the photograph cannot be equalled by any work of the human hand.*

To the sparse list of spatial caricatures annexed from representational painting, Weston appends one further item: he photographs *surfaces*; and, as well, he sometimes so deprives deep spaces of their perspectival indicators that they appear to us as surfaces during the appreciable interval required by our effort to reinstate, from scanty evidence, the lost pretextual space. Arguing from a narrow experience of painting (which includes, as we know, the Mexican muralists Rivera and Orozco) he presupposes that he can permanently evade the troublesome paradoxes of illusionist painting, with its perpetual oscillation between inferred



Edward Weston. Burned Car, Mojave Desert. *1937*.

depth and aggressive materiality, by suppressing its recognizable marks of craft, of manual labor; by mechanizing the act of making, he would evacuate the marker, put him resolutely out of the picture. The photographed surface, and it is always an insistently "interesting" one, replete with entropic incident, is at once ennobled by and corroborates the condescendingly lapidary surface of the photographic print, which stoops to conquer everything under the sun.

Twenty years ago, one heard it boasted in New York that some painters had achieved work that "looked like" nothing else except painting. If we are willing to set aside such concerns as scale, chromaticity, and thumbprint evidence of human intervention (and the Abstract-Expressionists must have been willing to do so, else they would not have admired Aaron Siskind's contemporaneous photographs of surfaces) then we confront a double irony: that Weston, exclusively equating painting with its procedures, and disregarding its appearance, had made photographs that proleptically were to resemble paintings to be made a generation later; and painters had finally achieved, in that future, work that looked like photographs that had been made twenty years before. If Abstract-Expressionism echoes and amplifies the expectations of Symbolist poetry, aspiring to prove that the materials of the art could be depended upon to bring forth paintings as surely as language itself secretes the poem, then these antique photographs must charm by virtue of their authenticity, suggesting that the broad side of a barn is at least as likely to produce the appearance of art (which is nothing if not appearance) as all our strivings and conundrums. The photographic act, furthermore, gathers to itself a certain prizeworthy power: with a swiftness and parsimony that makes the utterance of a single word seem cumbersome, it accomplishes its ends in an instantaneous, annunciatory gesture. Finally, Edward Weston meets an aphoristic requirement: he does not stop photographing when the dinner bell rings, but only when he reaches the edge of the frame.

For all that the photographer's frame derives from the painter's, regurgitating it whole, and shares with it a fundamental rectilinearity, differences between the two remain to be accounted for. The painter's frame marks the limits of a surface which is to be filled with the evidences of labor; the photographer's frame, sharing the accustomed rectangle with the standardized opportunities of painting and, also, with those of the printed page, resuscitates its own distant origins in post-and-lintel fenestration: it purports to be, not a barrier we look *at*, but an aperture we look *through*. Most bodies of work in still photography may readily be seen as picaresques whose denuded protagonist is none other than the abstract delimiter of the frame, bounded in a nutshell but traveling through infinite spaces howsoever fate, or desire, or vicissitude may command; while, from the very first, Daguerre's dioramas entertain the notion of a photographic imagery as big as life, photographs have largely remained small, contenting themselves in matters of proportion (or what is called aspect ratio) and ignoring those of scale.

The frame presents itself to the painter as a set of options and to the

photographer as a constellation of severe constraints. Photographic materials "come" in sizes and proportions dictated by industrial conveniences disguised as cultural givens, and limit the secondary ratio between the absolute size of an image and what can reside within our field of vision at normal reading distance . . . much as the arbitrary width of the canvasmaker's weft and the nominal dimensions of urban architectural spaces have, within recent memory, set a limit upon the scalar ambitions of painting.

And yet, it is not quite correct to say that Weston's photographs of surfaces "look like" Abstract-Expressionist paintings, not even at those relative viewing distances from which both subtend a visual angle small enough to transform them into unitary signs centered on the retina. Rather, they resemble monochrome *reproductions* of such paintings, or, better still, reproductions of meticulous renderings, by a trompe l'oeil painter, of Abstract-Expressionist canvases, done in miniature, with the sensuous delicacy of line and minute attention to the suppression of painterly surface of an Ingres.

And yet Ingres, although he is an illusionist of volumes and of a strict subset of the properties of surfaces (color, and yieldingness or hardness) effaces most of the tactile indicators that we ordinarily associate with his cherished pretexts, the nude female body and such other caressables as blossoms, pelts, fabrics: an irreducible iconography of eroticism. But it is a detactilized eroticism. Our pleasure in the work derives not at all from any suggestion that we might enter the space of the painting (we are blandly excluded from it) and touch its pretext; what Roland Barthes would call the *jouissance* that we may have from an Ingres painting arrives when, with a certain indrawing of the breath, we suddenly comprehend that there are ecstasies of restraint as well as ecstasies of abandon.

Ingres's line, in his drawings, is nominalized, standardized, and displayed upon a surface of industrial featurelessness, as if produced by a machine of extreme precision designed to do something else entirely, which generates the drawing that we see to document a proof that that other thing is being, indeed has been, accomplished. Were such drawings to be made by human beings it would be necessary to train away the stubbornness of the drawing hand, replacing it with the patient, infinite exactitude of the tip of the tongue.

Weston repeatedly asserts that the qualities of the photographic print are dependent upon, derive from, qualities of the artist's perception at the moment of making, of exposing a member of that unique class of objects, the photographic negative. This must imply, in what Weston likes to call "lay language," that the photograph can never be fully intelligible without reference to the photographer; and it presents us, as spectators, with a dilemma: we can neither discard these precious scraps of paper whose immanence, whose copious presence, enters a strong claim on our attention . . . nor can we ever hope to understand them fully. Do Weston's photographs somehow look different now that he is gone? We can never know. But it seems clear that in the hour of his passing they did not, for

instance, turn crimson and explode. What, then, is it that the artist may be supposed to share with his photographs?

The photographic image, for Weston, affirms the existence and enforces the persistence of its immediate pretextual object and thereby of its grand pretext, namely, the space in which that object subsists. The artist reaffirms his own existence through gradually replacing the space of the given world with the inventory of spaces of all the photographs he has made. It may be that Weston's refusal to emancipate his images from the patriarchal house of his own perceptions amounts to nothing more than the simple declaration of a territorial claim.

The artist is fugitive; the photographs aspire to the monumental permanence of empty signs; the rectangle of the frame is made a stage upon which the photographer mounts a high drama of contingency, disputing with his chorus of things the absolute ground of existence. The photographs mutually affirm the claim of the artist and the existence of his object. Neither lobe of this simultaneous affirmation is impaired by the absence, or exalted by the presence, of the other. Through the mediating power of illusion Weston may coinhabit, with a host of strangers, dumb things, lovers, Space Itself. The photographer, Event that he must know himself to be, can join in the easy commerce of spatial intercourse with his pretexts, because he has conferred upon them the status of Eternal Objects, drastically redefining their claim, as aggressive as his own, upon the crucial territory. It is remarkable that Weston never quite gets around to making an honest woman of his own aesthetic doctrine, forever insisting upon his right to deny it, and yet united with it in that special, inextricable bond reserved for longstanding commonlaw relationships.

Eroticism, in all its implicit and explicit forms, is a particular mode of knowing; more than that, it is a school of thought that insists not only upon the physical body of the object of desire, but also upon what we might call its temporal body; gesture, habit, modulation, establish, in time, within the mind of the knower, a *virtual* space whose contours are those of the temporal body of the known; and, if all goes well, it is this creature of time that becomes the true object of desire. What are called things, which behave not and are susceptible only of corruption, are without such temporal bodies and so we habitually confer them, endlessly manufacturing brief experimental fetishes out of doorknobs and paperweights. The dish ran away with the spoon.

If it so happens that nothing, including ourselves, can fully be known until it is somehow made the object of desire, and if our knowledge must forever be mediated by codes and by illusions, then the still photograph, as expounded by Weston, in perpetuating a single instant in time, must remain, for all its repletion of knowables, a defective way to know, leaving something to be desired. Savages naked in the dawn of mechanized illusion though they may have been, the aborigines of that continent we call the 19th century must have sensed this, else they would not have struggled so to bring into the world a cluster of artistic means which we still call cinema, a compound way to know the temporal body of the

world. Film was born into that silence bequeathed it by the still photograph, saving its first cries for the end of its adolescence. Is Eros mute?

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> *The photograph isolates and perpetuates a moment of time: an important and revealing moment, or an unimportant and meaningless one, depending upon the photographer's understanding of his subject and mastery of his process. The lens does not reveal a subject significantly of its own accord.*

In a celebrated passage in *The Critique of Pure Reason,* Immanuel Kant concludes that the three categories available to human reason are Space, Time, and Causality. Weston is everywhere concerned, as are so many other still photographers, with the annihilation of time. The image is to subsist, not in a time, but in all of time, taking for its duration the supreme temporal unity of eternity. In reclaiming the noun from the depredations of the verb, Weston snatches his beloved things from the teeth of causality, orphically rescuing them from the hell of entropy; and, orphically again, at the snap of the shutter, as if at the utterance of a word or the incantation of a song, causing these opacities to compose themselves into durable and serene hieratic geometries, Euclidean rather than Pythagorean, worthy of Eduard Tissé.

In so detaching these apparitions from causality and from time, Weston binds them to his own purposes, immobilizes them, transfixes them in an airless Space, rendered aseptic as if by a burst of lethal radiation. At the moment of their eternalization, Weston delivers his things to himself and to us, much as William Carlos Williams once said that he wanted his words "scrubbed, rinsed in acid, and laid right side up in the sun to dry."

That generic space, so prepared, is one with which we have been familiar for some time. It is composed only of visibilities embedded in their own vicinities, uniformly and brilliantly illuminated. The factual surface upon which they are to be made available to us, by the processes of projective geometry, is featureless, but nonetheless distinctly present, firm but slightly yielding, either perfectly black or perfectly white, according to the needs of the moment. It is, in short, the surface of a dissecting table upon which all the most intimate secrets of the object are to be laid bare. It is a space within which, or surface upon which, we have long since come to expect to find beauty in chance encounters. Weston's self-confessed and notorious tendency to serendipity inflects the quality of these encounters, by extending their range: if there are neither umbrellas nor sewing machines, there are eggslicers and bedpans, and their strangeness repunctuates the prose of rocks, trees, animals, and the human body, into a syntax that argues at once for the intolerably familiar and the gratifyingly alien.

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Photography must always deal with things—it can not record abstract ideas—but far from being restricted to copying nature . . . the photographer has ample facilities for presenting his subject in any manner he chooses. . . . The photographer is restricted to representing objects of the real world, but in the manner of portraying those objects he has vast discretionary powers.

What is there, by now, to be said of that grand category, Space Itself, a careful invention that comes to us from two thousand years of occidental diligence in science and art, within whose awful dominion reasonable facsimiles of all things that are may be disposed and arrayed?

Stripped to its specifications, this Space may be described in the following ways: it is infinite, but it may be bounded; the position of any point within it may be perfectly described with reference to only three mutually perpendicular axes; it is structureless, perfectly uniform throughout its extent, and may be regularly subdivided; it is inert, colorless, odorless, tasteless; and it is absolutely empty. It was created for a single purpose: to recertify the existence of things released from, purified of, the contingencies of our other two splendid fictions, Causality and Time. When we bother to perceive it, we do so chiefly through only two senses: those of sight and hearing.

Finally, it may contain, enclose, define only one thing: Matter. Stripped to its specifications, matter has two qualities. First of all, you guessed it, it occupies space. Furthermore, it does something else: it has mass; but that is no concern of ours, any more than causality and time are concerns of Weston's. Things are that they are.

Matter is what we cannot avoid, because, out of sight and earshot, it is never out of mind, self-verifying to the deaf and blind; because, for us, a thing is real or it is not, in measure as it is palpable. Whatever is "out of touch" cannot ever be fully present to consciousness, because things must be verifiable by all our senses. Failing even a single sensory test, we are obliged to assume that we are in the presence of an illusion; or else that something has gone badly wrong, and we are "seeing things," or "hearing things." Thus the voiceless visual illusion, colorlessly volumetric, can never, for Weston, sufficiently testify to, perfectly enunciate, that irradiated vacuum within which alone things may be definitely measured off against Cartesian coordinates, and thereby proved to exist. It is as though the artist were obliged to discard his convictions about the prior existence of the things of the world, to rebuild them upon a rigorous philosophical foundation, before he may permit himself the luxury of assuming them as pretextual objects. Otherwise, there is always the danger that the illusion of volume may break down, defaulting to the material paper surface upon which the illusion transpires.

Edward Weston. Snag, Point Lobos. *1930*

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Lobos. *1930*

Hence, then, the overwhelming importance for Weston of the rendering of tactile surface detail. Not even the commonplace set of visual marks that we decode, by reflex, into tactile sensations . . . accessories, so to speak, that are invisibly packed in the box with every new camera . . . are enough to content Weston. He must have more than the smooth and rough, the wet and dry, hard and soft, the dense and the friable; he must contrive, if he can, to bring to his images the hot and the cold, the hirsute and the glabrous, the rigid and the limp, the unreceptive and the lubricious.

Then, in order to preserve the purity of Space against the premature conclusions of desire, to maintain some equipoise in this torrent of retinal concupiscence, Weston falls back upon ancient strategies: like sculpture, like painting, like drawing, the photographs decontextualize (metonymically truncating, but seldom aputating); they typify; they render anonymous, faceless.

Only the utmost conviction of the authenticity of the illusory context of a space guarantees the continuation of that space, sustains it, at once holds open its portals and maintains its elastic limits; so that it may be entered, may be possessed, without endangering the requirement that the one who enters, possesses, shall always be able to find his (yes, *his*) way out again.

Thus we discover, in these images, a certain cryptic symmetry among ends and means. If the pursuit of an illusion of space suggests a heightened rendering of the tactile, and its capture necessitates a pervasive, generalized eroticism, the artist finally has forced upon him a monumental paradox: driven to the utter mastery and possession of an abstraction as extreme as Space Itself, Weston is invincibly propelled toward the sexualization, the genitalization even, of everything in sight.

Finally we can begin to say what it is in Weston's photographs that at once attracts and repels us as our attention slowly oscillates, repeatedly penetrating the space of illusion, and withdrawing to the visibility of the projective surface. The photographs, as physical objects, are of a voluptuousness that rarely falls short of the exquisite. At the same time, they are only scraps of paper, held in the hand: typical nameless merchandise of the industrial age. That is the distance the photographer sets between himself and us.

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An intuitive knowledge of composition in terms of the capacities of his process enables the photographer to record his subject at the moment of deepest perception; to capture the fleeting instant when the light on a landscape, the form of a cloud, the gesture of a hand, or the expression of a face momentarily presents a profound revelation of life.

Somewhere in a book whose name I have forgotten, Alfred North Whitehead proposes to correct two items of vulgar terminology. What we call things, he says,

we should in fact, refer to as Events. A little more or less evanescent than ourselves, things are temporary, chance encounters and collocations between and among particles of matter or quanta of energy each of which, engaged in a journey through absolute space and relative time, has compiled a history that is not yet finished.

Contrariwise, what we call ideas should, according to Whitehead, be renamed Eternal Objects, since their perpetuation, while owing something to such events in the universal history of matter as this present mind which thinks or deciphers, and this absent hand which writes, are, once formulated, independent of the local frailties of matter, standing at once within and without it. An Eternal Object, furthermore, is more than what is to be inferred from the static description of an event; it is a behavior conducted by an event, or, perhaps, it is an event's notion of how to get other events. I do not remember whether or not the recurrent patterns we call myths qualify as Eternal Objects, contingent as they are upon such momentary proclivities of matter as sexuality, curiosity, or irony. But what we call Language, understood as the maximal set of language-like codes that includes music, the natural languages, mathematics, kinesics, and pheromones, qualifies as a prime candidate for the status of Eternal Object.

Current neurophysiology and sociobiology regard the pheromone (a hormone-like medium that travels outside the body, and is decoded by the olfactory apparatus without being consciously perceived as an odor) as a protolinguistic sign operating in a single verbal mode: the jussive. Who receives the pheromonal message simply acts upon it, instantly, with the enthusiasm of a crocodile. Kinesic signals, purely neuromuscular in their expression and thus independent of glandular fallibility, represent, in this cartoon, a more intricate and parsimonious concatenation. Birds do it, laughing all the way. We might speculate, extrapolating from such principles, that the modes of the verb evolve in the order: jussive, imperative, optative, hortatory, conditional, subjunctive, declarative. The last named suspends, in a shared intellectual space between a message's sender and receiver, a representation of a mutually imagined object, unqualified with regard to what the sender expects the receiver to do about it.

Since every natural language known to us comprehends some equivalent of every one of these modes, but some cultures are without mathematics, or figuration, we may further speculate that a certain maturity of the declarative mode is prerequisite to language-like Objects more ambiguous than natural language itself. Mathematicians, for instance, may be understood to assess the beauty and elegance of a proof according to whether or not it achieves full declarativeness, suspending itself within the space of the mind in a posture that requires of us nothing less than perfect recognition.

Like the pages of mathematical journals, Edward Weston's photographs present themselves to us bristling with indecipherable meanings, exhaling the certitude that somebody, somewhere, made this thing that is before us and understands it. To the uninitiate, the mathematician's whole page amounts to a

single, indecipherable *numen*; to the initiate that opacity blossoms into discourse.

Weston's photographs entice us to discourse as well, promising, can we but learn to read their entrails, to deliver us, in their own voices, those absolute names of things that are identical with things themselves. Once so seduced, we can never fully withdraw; but neither can we fully enter, because the space of the discourse is not our own. The mysteries are offered, but the rites of passage are withheld.

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> *The appeal to our emotions manifest . . . is largely due to the quality of authenticity in the photograph. The spectator accepts its authority and, in viewing it, perforce believes he would have seen that scene or object exactly so if he had been there. . . . It is this belief in the reality of the photograph that calls up a strong response in the spectator and enables him to participate directly in the artist's experience.*

Whatever our apparent situation among the imaginary lines within their projective geometry, all of Weston's photographs present themselves to us at the same psychological distance, that is, in extreme closeup. Apostrophizing the significance of every last particle of matter, these images characteristically tell us more than we want to know; and yet, at the same time, they remain hopelessly distant, their glazed surfaces interposing, between spectator and spectacle, a barrier as impassable as language. As often as not, peering at or through or into these photographs, I have felt like a curmudgeon with my nose pressed to the window of a candy store whose goodies are offered at the single price of unconditional surrender. Take it or leave it. It remains to be seen, however, whether this violent polarization of distances inheres unconditionally in the materials and processes of photography as a universal constant, like the speed of light, or is to be understood as a benchmark and limit of Weston's art.

While they share with such other banalities of our culture as the printed page and the architectural facade a commonplace rectilinear planarity, painting, film and photography differ among themselves with regard to the distances that they invoke and enforce for both maker and spectator, and it might be worth our while to examine this family of distances from a strictly material point of view, as Weston would exhort us to do.

The most elementary of these distances is that remove, normally subject to severe anatomical limitations, between the painter and his canvas, which once tended to limit the absolute size of the painted surface to that which could be seen whole, at arm's length, while standing foursquare in front of it. Thus we might imagine that the brief ascendancy of the roughly isotropic painting of mammoth dimensions proceeded from an impulse to exceed anatomical scale without making the painter walk too far or overstrain his imagination, and that such seeming tactics of physical distancing as Jackson Pollock's paint-slinging and

Yves Klein's use of a flame thrower amounted to temporary strategies, transforming the vast surface of the workplane into a miniature and extending across the interval of an enlarged studio the long arm of painting itself.

The spectator's distance from painting is of an elasticity normally limited only by the size of the architecture, except in such rare cases as James Rosenquist's *F-111*, whose panoramic format turns inside out the normal perceptual situation of monolithic sculpture, and offers the spectator the odd sensation of being scrutinized, from every side at once, by a reptilian gaze. Should we step within the confines of the velvet rope, the physical surface reassures us spectators that it is made up of nothing more alarming than kindly, benevolent old paint, which, as we already know, covers a multitude of sins.

The spectator's distance from film is more difficult to discern with clarity, because he stares at once at two surfaces: a physical one, which he had better not see, upon which is mapped, at high magnification, the virtual image of a barely intelligible little shred of picture-bearing stuff, the film frame . . . and a temporal surface, which does not exist, but whose construction defines and circumscribes his work as a spectator. A fundamental illusion of cinema is that the image itself, carrier of illusions, is "there," before us. It is not. Both physically and temporally, it is behind us. In film, the spectator's future is the artist's past. Within extremely wide limits, film images engage the spectator in a mutable dialogue on the nature and meaning of scale; but they are inherently sizeless. Thus the very notion of the spectator's distance from them must remain problematical.

Held in hand or hung on a wall, the photographic print is normally examined at a distance that is defined culturally rather than metrically. I refer to what is called "reading distance." A photograph takes up about as much lebensraum as a quarto page; in particular, Weston's prints, and those of his epigoni, hang on for dear life to that great gift of Eastman Kodak, the industrial 8 × 10 format, as though it were their pants, or derived from the golden section, or mosaically prescribed, like the chubby but sacred 1.33:1 aspect ratio of the cinema frame. Thus the photograph forever recollects, collides with, shares the space of another generalized and grossly meaningful mediator: the printed word. In fact, most of the photographic images we see are not photographs at all, but halftone reproductions accompanying text, indentured servants in the house of the word, usurping that white space of the page which Mallarmé was at such terrible pains to establish as an equivalent to the emptiness of blue air occasionally traversed by the projectiles of spoken utterance.

Now the printed page is not something that is to be examined every which way, but yields its meaning as we scan its serial collocation of signs in a carefully fixed order. In neither sense of the word is written language to be taken literally, for in pausing to examine typographic figures we lose the "sense," withdraw our culture, and become aware of seeing the page for what it really is: inherently meaningless marks inscribed upon a flat surface. These marks are, moreover, quite small and the reading of them requires of us a blindness, achieved through long

training, to everything that lies outside the fovea of the eye. To read is to constrict physical vision to a microscopic point.

If we were to attempt to examine an image in this same way, we would find ourselves traversing that image, in darkness, with a flying spot of light, reading it out as it were a line at a time; it is interesting to note that the video image analyzes and resynthesizes its pretext in precisely this way, literally equating real spaces with the pages of a book. Clearly, though, looking at photographs in this way gets us nowhere fast. Photographs are small enough to be taken in whole, and yet large enough to afford the eye meandering and peripatetic opportunities which extend, like those offered by painting, over the entire area of the image.

Most of Weston's photographs, however, like most photographs that have ever been made, do not even try to account for the entirety of their rectangle. Typically they simply center a recognizable, bounded, and nameable icon within that rectangle and let the rest of it trail off into pictorial indeterminacy. It is as though the photographer were, and insisted that the spectator be as well, blind to everything outside the center of the eye . . . as though the hypertrophied single sign had invaded the space of the text, like an isolated symbol ballooning to occupy a whole page. In the historically recent superimposition of the space of the photograph upon the space of the page, a polluted, hybrid space has arisen which offers, on the one hand, to return the printed book to the intelligible magnificence of the Lindisfarne Gospels, and, on the other hand, reduces pictorial space to a membrane in whose neighborhood we are increasingly likely to find something neither more nor less complex than a written word or a letter of the alphabet.

(The Greco-Roman form of the capital letter "A" recalls, in profile, the elevation of a pyramid, that is, the tomb of a Pharaoh, whose central chamber, when finally penetrated, is invariably found to be empty.)

In photography and film, the artist's physical distance from his work can never be satisfactorily quantified, because the actual surface upon which the work transpires cannot be located, or even identified, with certainty. Aside from the vague sense in which a film emulsion may be understood to be defaced, optically deformed, and even that by remote control, the still photographer's negative or the filmmaker's row of sequential images cannot properly be regarded as the "actual" work; both are, rather, complex tools uniquely constructed for the job at hand, the negative amounting to something like a foundryman's mould, and the filmstrip, to an intricately specific notation to be performed automatically by a canonical machine. Neither negative nor filmstrip are normally seen by the spectator, who is unlikely, in most cases, to find them comprehensible, or their qualities crucially relevant to his experience of the work. What the spectator looks at, whether it be paper print or projection screen, is a standardized, nominally flat blankness, whose vicissitudes are immaterial to an understanding of the work, since they can never uniquely determine its appearance.

Weston, finding in the physical world no surface that he can point to with certainty as his workpiece, is at pains to construct one: a doubled imaginary plane,

one face of which lies within the artist's consciousness and the other within the spectator's, upon his own side of which he projects, "previsualizes," a print that is to be finished in more ways than one. Weston's acute concern for the print, the grave libidinal importance he attaches to it, comes from this: it is no mere expendable sheet of paper which he marks, but an entity within the mind of another which he delineates and authorizes.

In so relocating the site of the photographer's work, Weston effects a divorce between photography and painting more consequential than the separation announced in his refusal to "manipulate" the print. The painter's artifact is a unique material object which, once impaired in the slightest, is permanently destroyed, and lost forever to consciousness. The photographer's print, prodigy of craft though it may be, is a potentially indestructible scenario whose paramount quality is its legibility. Thus the photograph is made to resemble the word, whose perpetuation is guaranteed by the mind of a whole culture, safe from moth and rust; and the photographer's art becomes the exercise of a logos, bringing into the world, by fiat, things that can never escape. Is this what Weston means when he uses the adjective "eternal"?

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Conception and execution so nearly coincide in this direct medium that an artist with great vision can produce a tremendous volume of work without sacrifice of quality.

A photographer as prolific as Weston enjoys a peculiar and appalling opportunity, that is, to reduplicate the world in a throng of likenesses and possess it entirely. It is true, of course, that one cannot photograph all cabbages, but one can photograph one and generate from the negative a potentially infinite supply of prints, happy in the certainty that one will never run out of cabbages. No levity, no mere question of connoisseurship, can be involved in the selection of the precise cabbage to be photographed. It must be undefiled, incorrupt; no verb may intrude to pollute, delete in the slightest from, the fulsome purity of the noun. Into the workshop of the photographer who would remanufacture the world, only one or the other of two verbs may come, and it is obliged to wipe its feet at the door: *take* or *make*. Take your choice.

The new universe, furthermore, must be, to put it mildly, more manageable than the old one. The noun must be modularized, made compact. By the operation of an algorithm that would seem to derive more from Lewis Carroll than from Procrustes, every noun must be shrunk or stretched to fit within the 8 × 10 rectangle. Were it a question of preserving the physical bodies of things, one might imagine them hollowed, bleached, pickled, and put up in endless rows of little glass jars, limp and folded like one of Salvador Dali's "cuticles." But the taking and storing of likenesses is ever so much more compact.

There is, in the spectacle of Weston's accumulation of some sixty thousand

8 × 10 negatives, something oddly funerary. It is as if one had entered the tomb of a Pharaoh. The regal corpse, immured in dignity and gilt, is surrounded on every side by icons of all that he will need to take with him into eternity: there must be food to eat, girls to fuck, friends to talk to, toys to play with; trivia and oddities to lend homely verisimilitude to that empty place; earth to walk upon and water to give the eye a place to rest; skies to put a lid on it all; other corpses to remind one that things have, indeed, changed; junk and garbage and rubbish to supply a sense of history; animals living and dead to admire, gawk at, or avoid; vistas to wander through when the spirit is weary.

Certain comical perils attend the assemblage of this riot of nouns. Failing the accomplishment of the sorcerer, one is in danger of being inundated like his apprentice. Is Weston, a typical modernist of the generation of the '80s, like Ezra Pound, "shoring fragments against his ruin"?

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> [The discriminating photographer] *can reveal the essence of what lies before his lens in a close-up with such clear insight that the beholder will find the recreated image more real and comprehensible than the actual object.*
>
> *Ipse dixit!*

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It is now more than thirty years since Weston made his last photograph, and twenty since he escaped permanently from the domain of Time, joining the illustrious dead, and becoming an ancestor. But many of us cannot own him as an ancestor of ours. His splendors as a carnal parent are beyond contention; but as an *intellectual* parent, he amounted, finally, to one of those frowning, humorless fathers who teaches his progeny his trade and then prevents them from practicing it by blackballing them in the union. We are under no obligation to put up with this sort of thing.

But since some sort of choice must be made, I would state a personal preference for a chimera . . . a hybrid of Venus Geneatrix, who broods over the mountains and the waters, indifferently donating pleasure and pain to everything that lives, and Tim Finnegan, who enjoyed everything, and most of all his own confusion, and ended with the good humor to preside happily over his own departure . . . whose picture in the family album is no photograph at all, but an unfinished painting on glass, at once apparent within and transparent to this very space in which we live and work and must try to understand.

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> *He especially liked to find the coded messages, the surfaces behind surfaces, the depths below depths, that gave ambiguous accounts of the*

nature of things. He loved the Atget photographs that looked into store windows in Paris and combined the world within with confusing reflections of the world without. It was the kind of conundrum he found irresistible.

Charis Wilson

Order is, at one and the same time, that which is given in things as their inner law, the hidden network that determines the way they confront one another, and also that which has no existence except in the grid created by a glance, an examination, a language; and it is only in the blank spaces of this grid that order manifests itself in depth as though already there, waiting in silence for the moment of its expression.

Michel Foucault, *The Order of Things*

Possibly straining fairness, these notes tend to insist upon the typical photographs and manifestoes of Weston's maturity, largely disregarding the maverick work in which he transgresses against his own doctrine. This latter category, while it is not as copious as Weston says it is, does include a considerable part of his last work, which proposes to supersede everything that had gone before. If it is so that the spectator or reader may understand more from a work than the artist understands, it is also true that he may understand other. For the consequences, in this writing, of exercising that last kind of understanding, I offer no apology. The quotations interspersed throughout are taken from an article, "Techniques of Photographic Art," by "E.Wn.," written in 1941 and published in the *Encyclopaedia Britannica* of that vintage.

Houston/San Juan/Buffalo, 1977–78

Five Notes for a Phenomenology of the Photographic Image *

HUBERT DAMISCH

1. Theoretically speaking, photography is nothing other than a process of recording, a technique of *inscribing*, in an emulsion of silver salts, a stable image generated by a ray of light. This definition, we note, neither assumes the use of a camera, nor does it imply that the image obtained is that of an object or scene from the external world. We know of prints obtained from film directly exposed to a light source. The prime value of this type of endeavor is to induce a reflection on the nature and function of the photographic image. And insofar as it successfully eliminates one of the basic elements of the very idea of "photography" (the camera obscura, the camera), it produces an experimental equivalent of a phenomenological analysis which purports to grasp the essence of the phenomenon under consideration by submitting that phenomenon to a series of imaginary variations.

2. The reluctance one feels, however, in describing such images as photographs is a revealing indication of the difficulty of reflecting phenomenologically—in the strict sense of an eidetic experience, a reading of essences—on a *cultural* object, on an essence that is historically constituted. Moreover, the full purview of a photographic document clearly involves a certain number of "theses" which, though not of a transcendental order, appear nevertheless as the conditions for apprehending the photographic image as such. To consider a document of this sort like any other image is to claim a bracketing of all knowledge—and even, as we shall see, of all prejudice—as to its genesis and empirical functions. It therefore follows that the photographic situation cannot be defined a priori, the division of its fundamental components from its merely contingent aspects cannot be undertaken in the absolute.

The photographic image does not belong to the natural world. It is a product of human labor, a cultural object whose being—in the phenomenological sense of the term—cannot be dissociated precisely from its historical meaning and from the necessarily datable project in which it originates. Now, this image is characterized by the way in which it presents itself as the result of an objective

* First published in *L'Arc* (Paris), 1963.

process. Imprinted by rays of light on a plate or sensitive film, these figures (or better perhaps, these signs?) must appear as the very *trace* of an object or a scene from the real world, the image of which inscribes itself, without direct human intervention, in the gelatinous substance covering the support. Here is the source of the supposition of "reality," which defines the photographic situation. A photograph is this paradoxical image, without thickness or substance (and, in a way, entirely unreal), that we read without disclaiming the notion that it retains something of the reality from which it was somehow released through its physio-chemical make-up. This is the constitutive deception of the photographic image (it being understood that every image, as Sartre has shown, is in essence a deceit). In the case of photography, however, this ontological deception carries with it a *historical* deceit, far more subtle and insidious. And here we return to that object which we got rid of a little too quickly: the black box, the photographic camera.

3. Niepce, the successive adepts of the Daguerreotype, and those innumerable inventors who made photography what it is today, were not actually concerned to create a new type of image or to determine novel modes of representation; they wanted, rather, to fix the images which "spontaneously" formed on the ground of the camera obscura. The adventure of photography begins with man's first attempts to retain that image he had long known how to make. (Beginning in the 11th century, Arab astronomers probably used the camera obscura to observe solar eclipses.) This long familiarity with an image so produced, and the completely objective, that is to say automatic or in any case strictly mechanical, appearance of the recording process, explains how the photographic representation generally appeared as *a matter of course*, and why one ignores its highly elaborated, arbitrary character. In discussions of the invention of film, the history of photography is most frequently presented as that of a *discovery*. One forgets, in the process, that the image the first photographers were hoping to seize, and the very *latent image* which they were able to reveal and develop, were in no sense naturally given; the principles of construction of the photographic camera—and of the camera obscura before it—were tied to a conventional notion of space and of objectivity whose development preceded the invention of photography, and to which the great majority of photographers only conformed. The lens itself, which had been carefully corrected for "distortions" and adjusted for "errors," is scarcely as objective* as it seems. In its structure and in the ordered image of the world it achieves, it complies with an especially familiar though very old and delapidated system of spatial construction, to which photography belatedly brought an unexpected revival of current interest.

(Would the art, or rather the craft, of photography not consist partly in allowing us to forget that the black box is not "neutral" and that its structure is not impartial?)

* The play here is on the French word for lens: *objectif*.—ed.

4. The retention of the image, its development and multiplication, form an ordered succession of steps which composed the photographic act, taken as a whole. History determined, however, that this act would find its goal in reproduction, much the way the point of film as spectacle was established from the start. (We know that the first inventors worked to fix images and simultaneously to develop techniques for their mass distribution, which is why the process perfected by Daguerre was doomed from the very outset, since it could provide nothing but a *unique* image). So that photography's contribution, to use the terms of classical economy, is less on the level of *production*, properly speaking, than on that of *consumption*. Photography creates nothing of "use" (aside from its marginal and primarily scientific applications); it rather lays down the premises of an unbridled destruction of utility. Photographic activity, even though it generally takes the form of craft, is nonetheless, in principle, industrial; and this implies that of all images the photographic one—leaving aside its documentary character—wears out the most quickly. But it is important to note that even when it gives us, through the channels of publishing, advertising, and the press, only those images which are already half consumed, or so to speak, "predigested," this industry fulfills the initial photographic project: the capturing and restoration of an image already worn beyond repair, but still, through its physical nature, unsuited to mass consumption.

5. Photography aspires to art each time, in practice, it calls into question its essence and its historical roles, each time it uncovers the contingent character of these things, soliciting in us the producer rather than the consumer of images. (It is no accident that the most *beautiful* photograph so far achieved is possibly the first image Nicéphore Niepce fixed in 1822, on the glass of the camera obscura—a fragile, threatened image, so close in its organization, its granular texture, and its emergent aspect, to certain Seurats—an incomparable image which makes one dream of a photographic *substance* distinct from subject matter, and of an art in which light creates its own metaphor.)

Photography *en abyme*

CRAIG OWENS

Brassaï's portrait of a group of young Parisians at the *Bal des Quatre Saisons* may at first appear, like most photographs, to be a straightforward transcription of an observed reality, as if the image had already existed in the world before it was suspended in the photograph. We might therefore be tempted to raid it for clues to the inner lives of its sitters, or for memories of a long-since vanished Parisian milieu. However, the longer we contemplate the image, the more remote that kind of information becomes. A complex web of internal reduplications deflects attention away from that which, despite the status of photographs as imprints of the real, remains external to the image: the reality it depicts. Psychological and sociological details are thus displaced by the network of internal relationships between subject, mirror, and other, which structures the image.

Two groups of two couples each are the ostensible subjects of the photograph. The first occupy what reads as the "real" space of the image and are doubled by their own mirror images, while the second, except for the fragmentary detail of a bare arm cropped below the elbow, are present *only* in reflection. Doubled and yet, paradoxically, represented but once, the latter appear to have been dispossessed of their corporeal beings. Their reflections, severed from any physical connection with an object, attach themselves to the first group, so that each of the figures seated on the banquette finds a second, virtual double in the mirror reflection of the other. Details of costume, pose, and gesture reinforce this impression: the young man flanked by two women drapes one arm over the shoulder of the woman to his left, a gesture that is reiterated by his mirror counterpart, who wears an identical hat. The blank expression of the woman to his left is repeated by her counterpart; further, both seem to use the same coiffeur. On the right, two other women demonstrate the same oblique gaze, one in apparent flirtation, the other to observe the making of the photograph. (This gaze also reiterates the angle of Brassaï's shot, thus implicating the photographer within the scene, as both witness and flirt.) The sequence of duplications is brought to closure on the right by two men who wear identical tweed caps and echo each other's distraction. (Brassaï cropped the figure on the extreme right out

Brassaï. Group in a Dance Hall. *1932*. © *Brassaï*.



of subsequent prints, thereby eliminating this, the weakest link in the reduplicative chain.)

Because of the absolute symmetry of the two groups, the couples seated on the banquette appear as if poised between parallel mirrors mounted in series, so that the distance--both physical and psychological—that separates them in reality is collapsed. Space thus drained from the image, the effects of doubling may no longer be located within the space of the world, but only within the flatness of the photograph. The double image appears to have been generated by an act of internal du*pli*cation, a literal folding back of the photograph upon itself—the mirror suggests not only reflection, but also a literal crease in the surface of the print. To double by folding, however, also implies the leaving of a deposit or trace on the surface thus manipulated, as in those familiar symmetrical imprints of blotted ink. Thus, the duplication that occurs within this image suggests the specifics of the photographic process itself.

The image includes yet another, more obvious depiction of photography. It suggests the analogical definition of the photograph as a mirror image, that

informs a great deal of the criticism of photography, especially that dating from the nineteenth century.[1] Because the mirror image doubles the subjects—which is exactly what the photograph itself does—it functions here as a reduced, internal image of the photograph. The mirror reflects not only the subjects depicted, but also the entire photograph itself. It tells us in a photograph what a photograph is—*en abyme.*

In the vocabulary of literary criticism, the phrase "*en abyme*" describes any fragment of a text that reproduces in miniature the structure of the text in its entirety. Introduced by Gide in a passage of his *Journal* from 1892, the phrase originally described the reduplicative strategy of his own work—like the "supplement" in Rousseau, it tells us in a text what a text is:

> It pleases me to find, in a work of art, the very subject of the work transposed to the scale of its characters. Nothing illuminates the work better, or establishes its proportions more clearly. Thus, in some paintings by Memling or Quentin Metsys a small, somber convex mirror reflects the interior of the room in which the depicted scene is set. Also, Velasquez' *Las Meninas* (but in a slightly different way).[2]

Not only are Gide's initial examples of this textual device drawn from painting; all of them implicate the optical properties of mirror reflection. In painting, however, mirrors rarely function as analogues for the painting itself and Gide, sensing this—"none of these examples is absolutely accurate"—substituted another analogy drawn from heraldry. The perfect emblem for the procedure was itself already an emblem:

> What would be more accurate, what would state better what I wanted in my *Notebooks,* my *Narcissus* and in *La Tentative,* is a comparison with that procedure in heraldry which consists of placing a second shield within the first—"*en abyme*".[3]

The necessity of coining a new critical term marks the radical break with the past signified by construction *en abyme.* Gide's intention was not to describe a textual device that had a historical existence, but to dissociate his own texts from all previous literary production.[4] Thus, the use of a visual device of ancient standing—that of a miniature blason suspended within another blason, whose

1. Photography, in its earliest manifestations, was frequently referred to as "Daguerre's mirror." Certainly the silvered surfaces and lateral reversals of early Daguerreotypes supported this analogy. As early as 1839, Jules Janin, introducing the invention, urged his reader to "imagine that the mirror has retained the imprint of every object it reflects, then you will have a more complete idea of the Daguerreotype." Quoted from Heinz Buddemeier, *Panorama, Diorama, Photographie,* Munich, Wilhelm Fink, 1970, p. 207. Richard Rudisill's *Mirror Image* (Albuquerque, University of New Mexico, 1971) contains, as its title suggests, copious documentation for the photo-mirror analogy.
2. André Gide, *Journal 1889–1939,* "Pléiade," Paris, Gallimard, 1951, p. 41.
3. *Ibid.*
4. Gide did cite *Hamlet, Wilhelm Meister,* and *The Fall of the House of Usher* as texts employing the device, but only to immediately disqualify their candidacy.

external contour and internal divisions it replicates exactly. If, in subsequent commentaries, the heraldic metaphor has fallen into disuse, the phrase which designates it has gained currency, in spite of an unconscious reversion. Perhaps because it suggests the familiar case of mirrors mounted in series to produce an infinite suite of specular effects, the *mise en abyme* and the internal mirror have become synonymous. So that it is defined, at least in its literary manifestations, as any internal mirror reflecting the totality of the work that contains it, either by simple reduplication (a fragment of a work demonstrating a relationship of similitude with the work that includes it), by reduplication to infinity (a fragment demonstrating a relationship of similitude with the work that includes it and which itself includes a fragment demonstrating . . .), or aporistic reduplication (a fragment supposedly including the work which includes it).[5]

One reason for Gide's desire to distinguish the *mise en abyme* from classical examples of reduplication may have been the resistance to the concept which many of those texts demonstrate. Classical reduplication—in paintings as well as written texts—is rarely infinite, but almost always brought to closure, suspended. The classical attitude towards the possibility of infinite reduplication is perhaps best exemplified by Husserl in a passage from his *Ideas* which also relies upon a visual demonstration:

> A name on being mentioned reminds us of the Dresden Gallery and of our last visit there: we wander through the rooms, and stand before a picture of Teniers which represents a picture gallery. When we consider that pictures of the latter would in their turn portray pictures which on their part exhibited readable inscriptions and so forth, we can measure what interweaving of presentations, and what links of connexion between the discernible features in the series of pictures, can really be set up.[6]

The philosopher would, however, reduce this experience to a specific case of representation. For Husserl, every representation is a representation *of:* representations "present themselves as the modification of something, which apart from this modification would be there in its corporeal or represented selfhood."[7] In the case of potentially infinite reduplication, Husserl claims that we can penetrate through the series of levels until we arrive at a final one, at which the seemingly infinite play of reduplications is arrested: "the glance penetrates through the noemata of the series of levels, reaching the object of the last level, and there holding it steady, whilst no longer penetrating through and beyond it."[8] It is this "last level" that classical theories of representation attempt to locate. They ground the representa-

5. For a historical treatment of the *mise en abyme* in literary theory, see Lucien Dallenbach, *Le récit speculaire: essai sur la mise en abyme*, Paris, Seuil, 1977.
6. Edmund Husserl, *Ideas*, trans. W. R. B. Gibson, New York, Collier, 1962, p. 270.
7. *Ibid.*, p. 269.
8. *Ibid.*, p. 271.

tion in its object; multiple reduplications are simply a smoke screen which may blur the outlines of the object, but can never obliterate it entirely.

Gide, however, described a textual phenomenon that is closer to the infinite play of substitution of the Derridean *mise en abyme*, as it informs the philosophy of *differance*, supplementarity. . . . In an early text (*Speech and Phenomena*), Derrida cited Husserl's Dresden Gallery passage, commenting:

> Certainly nothing has preceded this situation. Assuredly nothing will suspend it. It is not comprehended, as Husserl would want it, by intuitions or presentations. Of the broad daylight of presence, outside the gallery, no perception is given us or assuredly promised us. The gallery is the labyrinth which includes in itself its own exits: we have never come upon it as upon a particular case of experience—that which Husserl believes he is describing.[9]

For Derrida, the *mise en abyme* describes a fundamental operation of the text—it is synonymous with textuality. It can therefore have no existence outside of texts. Since it cannot be ascribed as a property to objects, it cannot be grounded in them. The Derridean abyss—"when one can read a book within a book, an origin within the origin, a center within the center"[10] and, we might add, a photograph within a photograph—underlies the techniques of deconstructive reading, which describes, among other things, the way in which representation is staged within the text.

> An entire theory of the structural necessity of the abyss will be gradually constituted in our reading: the indefinite process of supplementarity has always already infiltrated presence, always already inscribed there the space of repetition and the splitting of the self. Representation in the abyss of presence is not an accident of presence; the desire of presence is, on the contrary, born from the abyss (the indefinite multiplication) of representation, from the representation of representation, etc.[11]

The effects of the abyss—the indefinite play of substitution, repetition, the splitting of the self—are evident in Brassaï's photograph. The mirror accomplishes both the identification with the Other and the specular dispossession which simultaneously institutes and deconstitutes the subject as such. What is more, the implicit analogy between mirror and photograph ascribes these functions to photography as well. (The splitting of the subject by its photographic doubling was also depicted by Lartigue in a photograph, contemporary with Brassaï's, of the *demi-mondaine* Renée Perle in the intimacy of her dressing room.

9. Jacques Derrida, *Speech and Phenomena*, trans. David B. Allison, Evanston, Northwestern, 1973, p. 104.
10. Quoted in Dallenbach, *Le récit speculaire*, p. 216.
11. Jacques Derrida, *Of Grammatology*, trans. G. C. Spivak, Baltimore, Johns Hopkins, 1976, p. 163.

In this image, the subject turns her back upon the camera and inclines narcissistically towards her mirror image. Beside her on the dressing table is a fashion photograph for which she once posed. That photograph within the photograph functions as a second mirror which reflects, in turn, Renée herself, her mirror image, and Lartigue's photograph of her. The caption that accompanies this photograph in *Diary of a Century*, "Renée Perle contemplating the face of the most beautiful woman in the world," underscores the subject's narcissism. Through the use of a transitive verb to describe a reflexive action, it also literally describes the structure of the photograph.)

The abyss resonates throughout Brassaï's oeuvre. In his photograph of a gala soirée at Maxim's, in which an ornate Art Nouveau mirror frames exactly the same scene as Brassaï's viewfinder and is reiterated by a second mirror in the depths of reflected space, we encounter infinite reduplication. In another image, a wedge is driven through the intimacy of a lovers' embrace by two mirrors that abut one another at right angles—the two are alienated by their reflections, consigned to two separate, self-enclosed realms. Still another image, depicting the aftermath of a quarrel, shows exactly the same location as the *Group in a Dance Hall* and reiterates the three species of doubling—by the photograph, the mirror, and the other—which structure that photograph. Here, a man is doubled by his own reflection in the mirror, while his female companion is doubled by another woman's reflection which floats nebulously in the mirror above her. A small square glass cleat that marks the intersection of mirror panels obliterates one of the reflected woman's eyes, suggesting a possible psychological reading (mutilation, male fantasy, etc.). However, it is the internal structure of the image—the network of relationships that constitutes it as double—that makes any such interpretation possible. Meaning, therefore, does not reside in details of expression or gesture that are simply registered by the photograph. Rather, it is a property of the photograph itself.

Brassaï's fascination with mirrors has been explained as a derivative from painting, from Cubism in particular; and biographical data—his friendship with Picasso, his early aspirations to a painting career, and his obvious absorption of the Parisian milieu into which he was transplanted—has been mustered in support of this claim.[12] However, no appeal to painting is sufficient to unravel the photographer's predeliction for reflective surfaces and complex mirror duplication. Not only does an appeal to Cubism reduce the mirror effects to a multiplication of perspectives and thus deny these images their specifically photographic character, it also ignores the frequent recurrence of the mirror in photographs throughout the history of the medium. Its first appearance as a self-conscious device coincides with that moment at which photography began to depict its own possibilities and conditions in its images.

The work of the Victorian photographer, Lady Clementina Hawarden,

12. See Colin J. Westerbeck, Jr., "Night Life: Brassaï and Weegee," *Artforum*, XV (December, 1976), 34–45.

Brassaï. Lovers' Quarrel. *c. 1932*. © *Brassaï*.



represents one of the earliest such attempts. (Most of Hawarden's work may be dated to the late 1850s, and the first half of the '60s.) Her obsession was the double portrait; as frequently as not, however, these images are constituted by a single subject doubled in reflection, as in a photograph that has been posthumously captioned "At the window." Here the subject seems to be suspended between two possible objects of contemplation—the view out the window and her own image in a mirror. She seems to incline towards the latter; the reticence of the image reinforces this impression. Thus, what is depicted is the process of becoming self-reflexive. The tension in the image between the different spectacles offered by the



Lady Clementina Hawarden. At the Window. *c. 1864.*

window and the mirror restates a structural tension within the medium—between photography as extrovert, a view onto the material world, and the photograph as a self-enclosed image of its own process. The inclinations of the subject depicted in this image are those of the photograph itself.

The mirror functions not only to reflect the subject; it also quite consciously pictures that metaphor which defines photography as a mirror image. The mirror reads as an image *en abyme.* The cropping of the print to echo the profile of the mirror firmly establishes this intention. This visual identification of mirror and photograph establishes a complex play between subject, mirror, and camera: not

only is the subject doubled twice (by mirror and camera), but the mirror image, itself a double, is redoubled by the photograph itself.

If we speak of this image, and of others like it, as reduplicative, it is because *reduplication* signifies "to reproduce in reflection" and thus describes that kind of mechanical reproduction by analogy we impute to both mirror and photograph. Ordinary usage, however, does not register differences of degree between *duplication* and *reduplication.* The latter might be expected to be contingent upon a previous act of duplication, and thus to result in what is actually a tri- or quadruplication of an original object or quantity (the ambiguity results from the possibility of taking either the original or its double as the object of the second doubling). However, the excess implicit in the concept of reduplication has been sublimated. *Duplicate* and *reduplicate* have been reduced to synonymy; both refer to a single signified: "to double." The reduction to doubling fails not only to account for the "pli" or fold implicit in both; it also strips the prefix in *reduplication* of its signifying function. Its relationship with its stem is now that of a mirror to its object—a doubling without any corresponding semantic increment. So that *reduplication* harbors within its semantic folds the concepts of tautology, of redundancy.

However, in those disciplines which take language as their object—philology, rhetoric, and structural linguistics—*reduplication* is a technical term that describes a specific phenomenon. In classical rhetoric, *reduplication* was a species of *repetition,* distinguished by the reiteration of a word or phrase within the same part of a sentence or clause. Its function, like all forms of rhetorical repetition, was emphatic. *Reduplication* has at times been identified with the etymologically parallel figure *anadiplosis* (*ana,* again + *diploun,* to double) in which the final word of a phrase is repeated at the beginning of the next. *Anadiplosis* thus establishes a mirror relationship between two segments of a text, the classic example being Voltaire's

Il aperçoit de loin le jeune Téligny,
Téligny, dont l'amour a mérité sa fille.

in which the second line stands as a mirror reversal of the first. That such a figure should have been designated as a *re*doubling suggests the classical view of language as a mirror of the real; hence the repetition of a word or phrase doubles that which is itself already double.

Classical philology describes a similar phenomenon, occurring not at the level of the sentence, but at that of the word. Linguistic, as opposed to rhetorical, reduplication (the term is again a technical one) involves the repetition of identical or quasi-identical syllables, commonly at the beginning of a word; the English *murmur* and the French *bonbon* are two examples. Such reduplications have been explained as motivated signs, originally expressing repeated or intensive action or, in some languages, plurality. In the analysis of structural linguistics, however, reduplication does not demonstrate motivation (a relationship of

analogy between a sign and its referent); on the contrary, it indicates, if not arbitrariness, at least the conventional nature of an utterance.

Roman Jakobson, discussing the frequent occurrence of reduplication in infantile language, suggests that it may well be the sign of the subject's entry into a symbolic order:

> At the transition from babbling to verbal behaviour, the reduplication may even serve as a compulsory process, signalling that the uttered sounds do not represent a babble, but a senseful semantic entity. The patently linguistic essence of such a duplication is quite explicable. In contradistinction to the "wild sounds" of babbling exercizes, the phonemes are to be recognized, distinguishable, identifiable; and in accordance with these requirements, they must be deliberately repeatable. The repetitiveness finds its most concise and succinct expression in, e.g., *papa*. The successive presentations of the same consonantal phonemes repeatedly supported by the same vowel, improve their legibility and contribute to the correctness of message reception.[13]

If repeatability is a necessary condition of those units out of which language constructs sense, then reduplication is, at its most fundamental level, the very sign of that repeatability. It signifies that an utterance is not simply a "wild sound," but that it is emitted according to a code, and thus conveys an intention to signify. Although repetition does not guarantee semiosis, it does suggest its presence and thus becomes, for Lévi-Strauss at least, the "signifier of signification":

> Even at the babbling stage the phoneme group /pa/ can be heard. But the difference between /pa/ and /papa/ does not reside simply in reduplication: /pa/ is a noise, /papa/ is a word. The reduplication indicates intent on the part of the speaker; it endows the second syllable with a function different from that which would have been performed by the first separately, or in the form of a potentially limitless series of identical sounds /papapapapa/ produced by mere babbling. Therefore the second /pa/ is not a repetition of the first, nor has it the same signification. It is a sign that, like itself, the first /pa/ too was a sign, and that as a pair they fall into the category of signifiers, not of things signified.[14]

Reduplication first occurs at the transition from babbling to linguistic performance, at the moment of the infant's entry into the symbolic order, which is contemporaneous with the mirror stage. Thus the dispossession of the subject by the mirror is also a law of language, and linguistic reduplication might also be a sign of the capture of the subject by an image.

13. Roman Jakobson, "Why Mama and Papa?" *Selected Writings, I*, The Hague, Mouton, 1962, p. 542.
14. Claude Lévi-Strauss, *The Raw and the Cooked*, trans. J. and D. Weightman, New York, Harper & Row, 1970, pp. 339–40.

In the concluding paragraphs of *The Raw and the Cooked*, Lévi-Strauss extended Jakobson's observation to onomatopoeic words; in this instance, reduplication functions to distinguish purely imitative sounds from signs. If the arbitrary character of most words is sufficient to indicate their status as signs, "onomatopoeic terms, on the other hand, are always ambiguous in nature because, being founded on a resemblance, they do not clearly indicate whether the speaker, in pronouncing them, is trying to reproduce a noise or to express a meaning."[15] Reduplication, then, functions to indicate that such utterances are indeed signs, and not gratuitous or merely imitative noises. Linguistic reduplication, the anthropologist concludes, may be used as an explanatory model for the structure of myths. Just as language chooses its phonemes from a practically unlimited range of natural sounds, so too myths draw upon the whole realm of natural phenomena for their subject matter. These phenomena are not the object of myths, rather, they are their instruments of signification. The multiple isomorphisms that constitute myths function like linguistic reduplication: "the distinctive character of myths . . . is precisely emphasis, resulting from the multiplication of one level by another or several others, and which, as in language, functions to signify signification."[16]

While the linguistic character of myths has been amply demonstrated by structural anthropology, it may legitimately be asked what relevance linguistic reduplication might possibly have to photographs, if the photograph is, following Roland Barthes's "common sense" definition, a message without a code, that is, nonlinguistic. However, the terms in which Lévi-Strauss discusses the phenomenon of linguistic reduplication suggest that it may indeed function as an explanatory model for photographic reduplication as well. Both Jakobson and Lévi-Strauss distinguish the sound emitted randomly or in imitation of another sound from that emitted as language, that is, according to a code. Photography, then, at least as Barthes distinguishes it from other semiotic systems, would seem to correspond to the purely imitated sound:

> What is the content of the photographic message? What does the photograph transmit? By definition, the scene itself, the literal reality. . . . In order to move from the reality to the photograph it is in no way necessary to divide up this reality into units and to constitute these units as signs, substantially different from the object they communicate; there is no necessity to set up a relay, that is to say a code, between the object and its image. Certainly the image is not the reality but at least its perfect *analagon* and it is exactly this analogical perfection which, to common sense, defines the photograph.[17]

15. *Ibid.*
16. *Ibid.* I have substituted my own translation from the French original.
17. Roland Barthes, "The Photographic Message," *Image, Music, Text*, trans. Stephen Heath, New York, Hill and Wang, 1977, pp. 16–7.

Walker Evans. Cary Ross's Bedroom, *New York. 1932.*



What then might reduplication signify within such an image? Does it not, as in language and myth, signify the existence of an underlying intention to signify *through the image,* and thus to the possibility of a photographic language? Might it not indicate, like the reduplicated syllable in the vocable /papa/, that the photograph itself was already a sign? Might it not also contest any reading of photographs according to their subject matter or captions, the reality presented by the photograph being no longer the object of the image, but an instrument of signification? Does it not indeed suggest that we may be able to speak of a *genuine* rhetoric of the image?

The argument that the properties of the photographic image are derived not from the characteristics of the medium itself but from the structure of the real, registered mechanically on a light-sensitive surface, may describe the technical procedures of photography. But it does not account for the photograph's capacity to internally generate and organize meaning. However, it does seem to describe accurately the strategy according to which some photographs procure their authoritative status, those photographs in which a carefully calculated *mise en scène* mutely insists that the image is wholly dependent upon, since derived from, the external. Thus, the radical symmetry of Walker Evans's photograph of Carey Ross's bedroom (made in the same year as Brassaï's *Group in a Dance Hall*).



Walker Evans. Penny Picture Display, Savannah, Georgia. *1936.*

Everything about the image is symmetrical—twin beds, a pair of identically framed impressions of the same Picasso print—everything, that is, except the photograph itself. The oblique angle of Evans's shot works to exteriorize those symmetries, to present them as properties of the real rather than the image. Had these paired objects been photographed head-on, the image would have appeared artificial, staged. Seen obliquely, however, they impute to the material world the capacity to independently create its own symmetries, to mirror itself.

Still, what we recognize in this photograph, despite its claim to transparency, is an image of the photographic process. If the camera angle works to exteriorize symmetry, it also encourages the illusion of a room divided by a mirror, and thus of a single bed and a graphic each doubled in reflection. That mirror is located by a virtual fold in the surface of the photograph along which reality is reduplicated according to the properties of the image. The paired graphics, in addition to contributing to the illusion of a mirror, suggest the duplicability of the photographic print, the theoretically unlimited number of copies that may be engendered by a single negative. Photographs are but one link in a potentially endless chain of reduplication; themselves duplicates (of both their objects and, in a sense, their negatives), they are also subject to further duplication, either through the procedures of printing or as objects of still other photographs, such as

Evans's *Penny Picture Display, Savannah,* 1936. While the illusion of a mirror may be inhibited by the night table and lamp—the only supposedly single objects in the image—these, however, are also doubled by the shadows they cast on the wall. The cast shadows are an additional analogue for photography. Thus, if Evans's photograph depicts a reality outside of the photograph, that reality is nonetheless wholly conditioned by the properties of the image. This scene must have appeared as a photograph even before Evans exposed it.

An experience of the real as if it were a photograph is described by Robert Smithson in his text, "The Monuments of Passaic," in which the artist narrates the events of a day-long photographic excursion to the New Jersey suburbs. Of photographing an ordinary wood-and-steel bridge, Smithson remarks:

> Noonday sunshine cinema-ized the site, turning the bridge and the river into an over-exposed *picture.* Photographing it with my Instamatic 400 was like photographing a photograph. The sun became a monstrous light-bulb that projected a detached series of "stills" through my Instamatic into my eye. When I walked on the bridge, it was as though I was walking on an enormous photograph that was made of wood and steel, and underneath the river existed as an enormous movie film that showed nothing but a continuous blank.[18]

This narrative inverts the terms of a familiar argument about the photograph: that the vicariousness of the image is frequently overlooked, so that the photograph is mistaken for the reality for which it is nevertheless only a substitute. Smithson, standing that argument on its head, calls its bluff. If reality itself appears to be already constituted as image, then the hierarchy of object and representation—the first being the source of the authority and prestige of the second—is collapsed. The representation can no longer be grounded, as Husserl wanted, in presence. For Smithson, the real assumes the contingency traditionally ascribed to the copy; the landscape appeared to him, not as Nature, but as a "particular kind of heliotypy."[19] The result is an overwhelming experience of absence: the abyss.

To some extent, Smithson recapitulates that passage in Fox Talbot's *Pencil of Nature* in which the pioneer photographer recounts his realization that, in Hollis Frampton's paraphrase, "the 'image' he had sought to make is already there."[20] The invention of photography was thus simply a discovery of a physical or chemical means for fixing the discontinuous images of herself that Nature freely offered up. But Fox Talbot was looking into a camera lucida. Smithson confronts not an image, but an object *as if it were an image.* What does it mean, then, to take a photograph of a photograph?

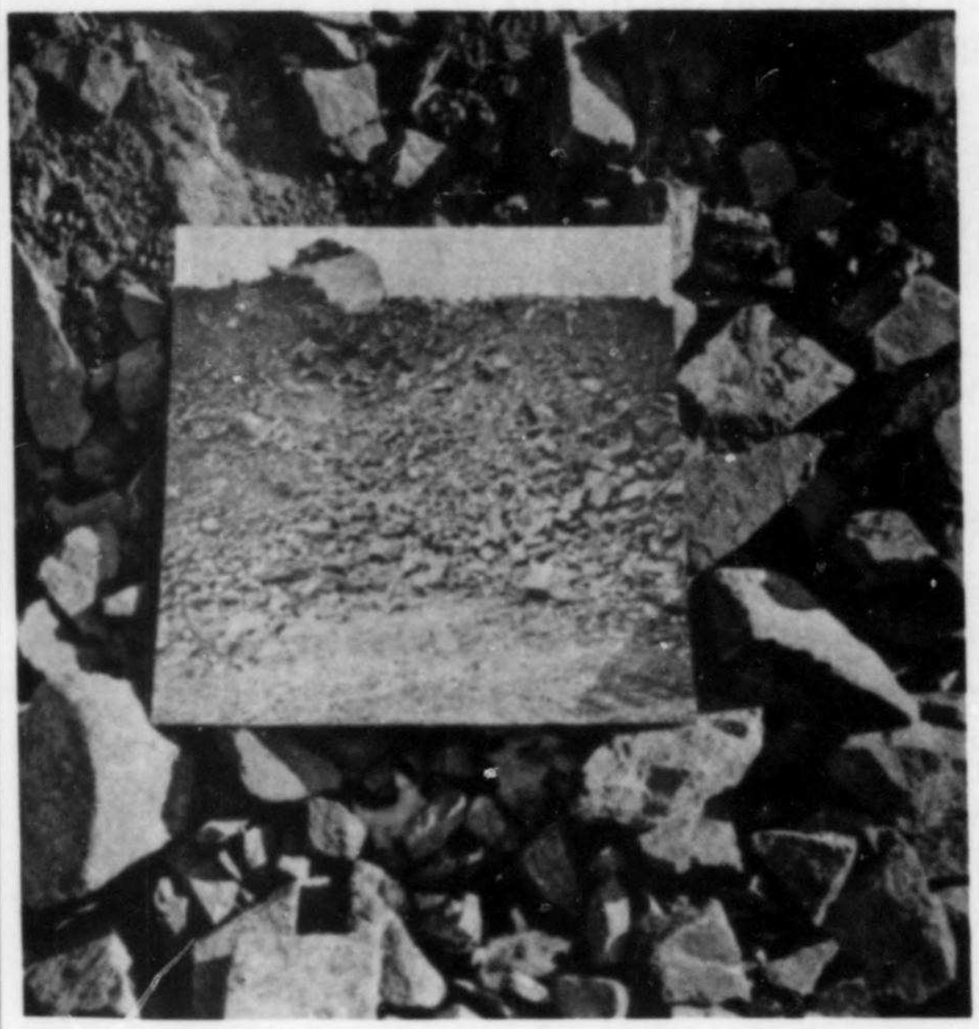
This question is also raised in a series of photographs Smithson made in 1969, and which seem to derive, at least in part, from the experience described in

18. Robert Smithson, "The Monuments of Passaic," *Artforum,* VI (December, 1967), 49.
19. *Ibid.,* 50.
20. Hollis Frampton, "Incisions in History/Segments of Eternity," *Artforum,* XIII (October, 1974), 41.

Robert Smithson. Untitled *(first stop of* Six Stops on a Section, *Bergen Hill, New Jersey). 1969.*









"The Monuments of Passaic." Within the space of these double images, a site and its own photographic likeness are juxtaposed. This *mise en abyme* endows these photographs with an apparatus for self-interpretation; their structure, defined by the juxtaposition of two images of the same motif, gives rise to commentary on the conditions of the photograph itself. Through them, Smithson deflates the myth that photographs are a means of gaining mastery and control over objects, of rendering them more accessible to consciousness. The internal photograph reduces the landscape and distances it from us. Moreover, what is true of the internal image holds for the photograph as a whole. In a photograph, Smithson casts a shadow over the presumed transparency of photographs; he raises serious doubts about their capacity to *convey* anything but a sense of loss, of absence.

What redeems the photograph, however, is its ability to generate and organize meaning *independently of its object*. Smithson frequently published and exhibited photographs of his projects; but after an experience of his double photographs, can we seriously regard *any* Smithson photograph simply as documentation? It is impossible to experience these double images as such. We are wrong to presume that the "work" in this case consists of an action performed (the placing of the photograph in the landscape) and that the photograph is transparent to that action, which it preserves in the tense peculiar to photography, the "having-been-there."[21] However, these photographs are distinguished from documents by the relationship of the internal photograph to the photograph that contains it. Not only does this relationship exist at present only in the photograph, it has *never* existed elsewhere. So that the action Smithson performed was simply an instrument, and not the object, of signification. The photograph *is* the work.

In 1969, Smithson executed a series of "mirror displacements" in the Yucatan peninsula; nine color photographs "document" that project. Although location and materials have changed—Smithson substituted mirrors for the photograph—these images reiterate the photo displacements produced that same year in a New Jersey quarry: a motif and its reflection are juxtaposed within a photograph. Of these displacements, Smithson wrote:

> If you visit the sites (a doubtful probability) you find nothing but memory-traces, for the mirror displacements were dismantled right after they were photographed. The mirrors are somewhere in New York. The reflected light has been erased. Remembrances are but numbers on a map, vacant memories constellating the intangible terrains in deleted vicinities. It is the dimension of absence that remains to be found. The expunged color that remains to be seen. The fictive voices of the totems have exhausted their arguments. Yucatan is elsewhere.[22]

21. Barthes, "Rhetoric of the Image," *Image, Music, Text*, p. 44.
22. Smithson, "Incidents of Mirror-Travel in the Yucatan," *Artforum*, VIII (September, 1969), 33.

Positive/Negative: A Note on Degas's Photographs*

DOUGLAS CRIMP

l'homme poursuit noir sur blanc
Mallarmé

In a passage from a journal kept in his youth, Daniel Halévy relates the events of "a charming dinner party" given on December 29, 1895. Among the guests was Edgar Degas (a regular at the Halévy household until their break over the Dreyfus affair) together with various members of the family, including Jules Taschereau and his daughter Henriette, Madame Niaudet and her daughter Mathilde. After dinner Degas went to get his camera, at which point, Halévy tells us, "the *pleasure* part of the evening was over," and "the *duty* part of the evening began," while everyone submitted to "Degas's fierce will, his artist's ferocity." During this period in the mid-'90s inviting Degas to dinner meant, it seems, "two hours of military obedience." Here is Halévy's description of the posing session that evening:

> He [Degas] seated Uncle Jules, Mathilde, and Henriette on the little sofa in front of the piano. He went back and forth in front of them running from one side of the room to the other with an expression of infinite happiness. He moved lamps, changed the reflectors, tried to light the legs by putting a lamp on the floor—to light Uncle Jules's legs, those famous legs, the slenderest, most supple legs in Paris which Degas always mentions ecstatically.
>
> "Taschereau," he said, "hold onto that leg with your right arm, and pull it in there, there. Then look at that young person beside you. More affectionately—still more—come—come! You can smile so nicely when you want to. And you, Mademoiselle Henriette, bend your head—more—still more. Really bend it. Rest it on your neighbor's shoulder." And when she didn't follow his orders to suit him he caught her by the nape of the neck and posed her as he wished. He seized hold of Mathilde and turned her face towards her uncle. Then he stepped back and exclaimed happily, "That does it."[1]

* This essay initiates a consideration of Degas as a photographer with the assumption that he was, rather than a talented amateur, deeply engaged in making photographs as works of art. The important ramifications of this assumption for both the history of photography and a reevaluation of Degas's late work will be discussed in my forthcoming doctoral dissertation. In that project, I shall undertake also a discussion of the complex technical problems posed by Degas's highly original manipulations of the medium. In this essay I am interested in raising some of the broader aesthetic questions suggested by Degas's photographic oeuvre. I wish to express my gratitude to Abigail Solomon and Bernard Guillot for their help in securing study prints of the photographs.

1. Daniel Halévy, *My Friend Degas*, trans. Mina Curtis, Middletown, Conn., Wesleyan University Press, pp. 82–3.

The remaining entries in the journal make no mention of the print of this photograph, which is a disappointing omission, for one wonders what the sitters would have thought of it. In the Metropolitan Museum there is a copy print of a photograph showing all those things Halévy describes: the piano and the sofa; Taschereau's famous knee, held up and flooded with light; Henriette's head awkwardly forced down onto Mathilde's shoulder; and Mathilde still willfully resisting looking at her uncle. But intruding upon this familial scene, in a way that makes those forced poses rather difficult to unravel, is another shot, shifted ninety degrees off axis from the first. This time it is Mathilde's head that is forced, wedged into the space between Taschereau's shoulder and her own, "other" shoulder. Mathilde has been doubled, split into profile and frontal views, vertical and horizontal positions. She has been forced this time not by Degas's manipulative orders, but by photography's own manipulative possibilities. Her second head



Edgar Degas. Untitled. *1895. (Copy print collection The Metropolitan Museum of Art, Gift of Mrs. Henry T. Curtiss, 1965.)*

is sandwiched there in that impossible space, that impossible position, by another kind of pressure, the kind in which two photographic negatives are sandwiched together and printed at the same time.[2]

This peculiar means of printing forces upon us a double reading; a constant shifting of axes; yet in this oscillation between the one shot and the other, between vertical and horizontal, no resolution is possible. The two shots have been conflated into a single image that divides itself not into two separate scenes, but only into that other kind of split that constitutes whatever legibility the photograph may be said to have: the split between light and dark. We usually think of this condition of the photograph, of its breakdown into light and dark (or the gradation of values from white to black), as a rather straightforward matter. What is light in the world is registered as light on the photographic print; the light of the world establishes photographic legibility; the photograph is, literally, "light writing." But this is, of course, a gross oversimplification. For the process of photography is itself a double operation. Before the light of the world can be registered on the print, it first must undergo a reversal at the intervening stage of the negative. At this point, however, the breakdown is not strictly one of light and dark. It is, rather, one of opacity and transparency. Thus at the stage of the negative; light and dark are not only reversed, they are radically converted. Anything that reflects light in the world registers itself as opacity on the negative, thereby being given the power to obscure, to block out what is dark; while the absence of light—darkness, shadow, obscurity—registers itself as transparency. It is only in this way that the photo*graph* can be *writing*. For as light passes through the transparent negative, it *inscribes* black onto white.

Degas's photograph, itself doubled, may be said to reflect upon this double operation, to implicate the negative in the print. That famous Taschereau knee, so brightly lit in the pose that Halévy describes, is there in all its pristine clarity, masking out Mme Niaudet's black dress. But at that point where Taschereau's shoulder and Mme Niaudet's face both fall partially into shadow, neither resolved into black or white, the two appear simultaneously. Like phantoms they emerge into visibility *through* each other. It is no longer possible, then, to speak of that scene that occasioned this (these) photograph(s); caught in the complex web of the photographic medium, it has been transformed into a hallucinatory, spectral image.

*

The eighth and final Impressionist group show was held in 1886, the same year that Jean Moréas published his manifesto of literary Symbolism in *Figaro Littéraire*. The coincidence of these two events—the one representing a last attempt to assemble the masters of a pictorial style rooted in the precepts of

2. There are two other copy prints of such superimposed photographs in the collection of the Metropolitan Museum, New York.

Naturalism; the other announcing a movement deeply hostile to that Naturalism—is charged with irony. For it was in this very exhibition that the young Symbolist poets and critics found the kind of art with which they would claim an affinity. The bitter factionalism within the Impressionist circle that had led to Degas's exclusion from the previous group show in 1882, had only worsened by 1886, with the result that the most orthodox Impressionists, Monet and Renoir, withdrew completely, while in their place were Gauguin, Redon, and Seurat. Apart from the works by this younger group, it was the suite of pastel bathers by Degas that was singled out by the Symbolist writers for praise. Teodor de Wyzewa, apt to link any artistic manifestation of which he approved to Wagner, included Degas in his category of "Wagnerian painting." Both Joris-Karel Huysmans (whose volte-face from Naturalism had occurred two years earlier with the publication of *A Rebours*) and Félix Fénéon described Degas's works in a dazzling prose style, replete with neologisms and archaisms clearly indebted to the language of Symbolism's central figure, Stéphane Mallarmé. Fénéon's description of one of these bathers with "the hair falling down over the shoulders, the breasts over the hips, the belly over the thighs, the limbs over their joints . . ."[3] is typical of the way in which Fénéon's language creates its own momentum, in this instance metonymic: the initial "hair falling" institutes a chain of body parts falling over one another that defies natural possibility. He thus attempts to parallel the way Degas deforms his subjects by following the internal logic of his pastel medium, often applied over black and white monotypes. Thus, at this early moment of Symbolism, Degas's art was annexed to the movement.

Degas was to show his work publicly only once more, this time in an exhibition arranged by his dealer Durand-Ruel in 1892, and the works that he exhibited could only have reinforced his connections with Symbolism. In 1890, Degas and his friend, the sculptor Paul Bartholomé, made an expedition through Burgundy in a tilbury. Upon arriving in Diénay at the country home of his friend Georges Jeanniot, Degas began working on a series of landscape monotypes inspired by the memories of his journey. Twenty-two landscapes, some of them using these monotypes as bases, made up the Durand-Ruel showing, and it is instructive to consider these works in relation to the declining role of Impressionism in Degas's art. Landscape is, of course, the essential genre of Impressionist painting, carrying with it the condition of working *en plein air*, there to observe and faithfully record the transitory effects of light in nature. Degas, however, was only rarely attracted to the genre and was openly contemptuous of *plein-airisme*, comparing it, in one of his famous *mots*, to the sport of fishing. But in the 1890s, as Monet at Giverny and Cézanne at Aix were passionately rededicating themselves to their projects carried out in front of their cherished natural motifs, Degas too turned to this genre. Yet he appropriated the landscape for entirely different ends. Far from an art of patient and minute observation, Degas's is an art of

3. Félix Fénéon, "Les Impressionnistes en 1886," *Œuvres*, Paris, 1948. Quoted in Sven Loevgren, *The Genesis of Modernism*, Bloomington, Indiana University Press, 1971, p. 59.

evocation, of allusion. And these emerge not from the appearance of an actual landscape, but rather from the conditions of the peculiar medium Degas was using.[4] These monotypes are constituted as a series of traces, of wipes, smears, smudges, blottings. Their textures are those of rags, brushes, fingerprints, and of the oil itself as it flows under the pressure of the printing press. They depict landscapes only insofar as their modulated zones of color and juxtaposed textures might suggest mountains, plains, trees, roads, skies. They are landscapes in which Degas supplanted the visible world with the visionary, but not without first touching ground in the material from which they were generated.

It was only a few years after the creation of these last monotypes and the exhibition at Durand-Ruel's that Degas turned his attention to photography. That he should have done so at a time when his art was conceived in terms so compatible with Symbolism is rather perplexing, for if the Symbolists held Degas's art in high esteem, they despised photography. To them, photography represented everything that was deplorable about the positivist view of reality against which they staged their revolt. "As impersonal and banal as photographs," was the epithet G.-Albert Aurier used for "those numerous abominations" painted in the name of realism.[5] If, as Moréas claimed in his Symbolist manifesto, "the essential aim of our art is to objectify the subjective (the externalization of the Idea) instead of subjectifying the objective (nature seen through the eyes of a temperament),"[6] how could photography be made compatible with that aim? How could photography, seemingly constructed upon the very principle of Zola's aphorism—"art is nature seen through a temperament"—partake of the mystery, the artifice so essential to the Symbolists?

This argument about photography would have been perfectly familiar to Degas. For him, too, art was a question not of nature but of convention: "Art," he insisted, "is falsehood"; while in 1872, he had written in a letter from New Orleans "photography is instantaneousness, nothing more."[7] And according to his niece Jeanne Fevre, "My uncle realized perfectly well the inferiority of this art. Photography is only a mechanical eye. Its major defect is that it neither makes

4. The monotype is a technique of printmaking in which the plate is not etched. It therefore can generate only a unique, or at the most, two prints. Degas, who began making monotypes in 1874, is one of the few artists to have made extensive use of the medium. His obsession with taking more than one impression—evidenced not only by the fact that he usually took a second pull to be reworked in pastel, but also by his reconstituting plates and pulling counterproofs—is paradoxical considering the nature of the medium. His use of colored oil for his landscapes, the latest of his monotypes, is exceptional, most of his work in the medium being black and white. See Eugenia Parry Janis, *Degas Monotypes*, Greenwich, Conn., New York Graphic Society, 1968; and Jean Adhémar and Françoise Cachin, *Degas: The Complete Etchings, Lithographs and Monotypes*, New York, The Viking Press, 1975.

5. G.-Albert Aurier, "Le Symbolisme en peinture: Paul Gauguin," *Mercure de France*, II (1891), 159–64. Quoted in Herschel B. Chipp, *Theories of Modern Art*, Berkeley, Univeristy of California Press, p. 89.

6. Jean Moréas, "Le Symbolism," *Figaro Littéraire*, September 18, 1886. Quoted in John Rewald, *Post-Impressionism*, New York, The Museum of Modern Art, 1956, p. 148.

7. Edgar Degas, *Letters*, ed. Marcel Guerin, trans. Marguerite Kay, Bruno Cassierer, Oxford, 1947, p. 22.



Edgar Degas. Renoir and Mallarmé in Berthe Morisot's Salon. *1895. (Copy print collection The Metropolitan Museum of Art, Gift of Mrs. Henry T. Curtiss, 1965.)*

distinctions nor comprehends. It has neither the capacity to construct meaning nor style." But she adds, "Degas, as a photographer, enabled it to comprehend; surpassing all previous photographers, he made photography *intelligent.*"[8]

*

There is another photograph by Degas for which we have a description, this one by Valéry:

> It shows Mallarmé leaning against the wall, close by a mirror, with Renoir sitting opposite on a divan. In the mirror you can just make out, like phantoms, Degas and the camera, Mme and Mlle Mallarmé. This masterpiece of its kind involved the use of nine oil lamps . . . and a fearful quarter-hour of immobility for the subjects. It has the finest likeness of Mallarmé I have ever seen.[9]

If that photograph of the Halévy relatives is doubled along its vertical and horizontal coordinates at the stage of the negative, this one is doubled in its depth at the stage of the shot, revealing phantoms of another kind. While those nine oil lamps have inscribed the features of Mallarmé (and Renoir) on this print as a fine

8. Jeanne Fevre, *Mon Oncle Degas,* Geneva, Pierre Cailler, 1949, pp. 139–40.
9. Paul Valéry, *Degas Manet Morrisot,* trans. David Paul, Bollingen Series XLV, vol. 12, New York, Pantheon Books, 1960, p. 40.

likeness, they have at the same time effaced the features of Mallarmé's wife and daughter and especially those of Degas. Just at the point where we should see Degas's face as it delights in making this photograph, there is an elision, an absence. What we do see in that mirror is a camera, and behind the camera another mirror, which in turn reflects the first mirror, which. . . . Suspended in the specular infinitude that is this photograph, its author is reduced to a specter. Degas has included himself in his photograph only to disappear, in a way that cannot but remind us of Mallarmé's own self-effacement in the creation of his poetry:

> The poet disappears (this is without doubt the great discovery in modern poetry) and the verse itself projects its own passions through its leaps and bounds; its ecstacy lives alone through its own rhythms; and so verse is born, rather than being imposed or brutally thrust upon us by the writer.[10]

The disappearance of which Mallarmé speaks and which Degas effects in his photograph is one in which the medium itself—its autonomous *being*—overwhelms both its ostensible subject and its author in order to achieve that supreme fiction that was Mallarmé's goal. Thus we might add to Valéry's opinion that, quite apart from containing "the finest likeness of Mallarmé,"—this is a "Mallarméan" photograph.

Perhaps in part as a means of explaining that silencing of the author's voice in favor of the words themselves, Mallarmé employed his analogy with the dance, "that catalyst and paradise of all spirituality." As his famous axiom formulated in the text *Ballets* has it, the dancer is entirely effaced by the dance, in which she becomes pure sign: "The ballerina *is not a girl dancing*" for "*she is not a girl,* but rather a metaphor . . . and *she does not dance,* but rather . . . she *suggests* things."[11] When Mallarmé was preparing an illustrated edition of his prose poems in 1888, he turned to Degas for a drawing. Unfortunately, Degas never produced that drawing, yet the great painter of the ballet seems nevertheless to have taken Mallarmé's essays on the dance to heart. A few years later, when he began to devote himself to photography, he not surprisingly made a number of pictures of ballerinas. His several studio shots of dancers show them in poses familiar from the late pastels, stretching and adjusting the straps of their costumes. Nothing else about these extraordinary photographs, however, could be described as familiar. The only vocabulary with which we might approach them would again be called Mallarméan.

One of them shows a dancer whose strap has fallen off her shoulder to reveal, in an erotic detail unusual for Degas, a partially naked breast. Her pose is perfectly described by the lines of a sonnet written by Degas under Mallarmé's tutelage in the '80s:

10. Stéphane Mallarmé, letter to Emile Verhaeren, January 22, 1888, in *Selected Prose Poems, Essays, and Letters,* trans. Branford Cook, Baltimore, The Johns Hopkins Press, 1956, p. 101. There is a photograph of Verhaeren by Degas in the collection of the Eastman House, Rochester, New York.
11. Stéphane Mallarmé, "Ballets," *ibid.*, p. 62.

pp. 96–7:
Edgar Degas. Posed Ballerina. *Two versions, c. 1895. (Bibliothèque nationale, Paris.)*





Ton bras mince, placé dans la ligne suivie,
Equilibre, balance et ton vol, et ton poids.[12]

That pose suggests, as well, the opening passage of *Ballets:* "In an effortless rise and fall, this creature now in flight, now drowsed in veils, is summoned into the air and seems to hang there, purely Italian in the soft stretching of her body."[13] Indeed, she does seem to hang there, for though she appears to be *en pointe*, her legs have vanished, veiled by the blur of the lower portion of the photograph. And she is suspended not only between rise and fall, but also between appearance and disappearance, between negative and positive.

The several different prints of this photograph in the collection of the Bibliothèque nationale, Paris, demonstrate Degas's highly original experimentation with his negatives, elaborating and extending the kinds of experiments he had carried out in the black and white monotypes ten years earlier. The negative has been flipped in two of the prints to effect a left-right reversal similar to that which Degas often produced in the monotypes by pulling counterproofs.[14] But in these photographs there is another kind of reversal that is impossible to achieve with the monotype medium: they are reversed dark and light, negative and positive. It is rather as if Degas had managed to combine, using the unique flexibility of the photographic process, the two kinds of monotypes he made, the so-called light- and dark-field. Using the light-field manner, the image is made by drawing with ink directly on a clean plate; while the dark-field method requires a fully inked plate from which the image is generated by wiping away to expose areas of light, thus abandoning traditional drawing in favor of chiaroscuro modeling. Degas did attempt to combine these two modes in single prints, for example inking and then wiping away areas of plates that were done essentially in the light-field manner. More curious are those dark-field monotypes in which the chiaroscuro modeling is combined with very sharp drawing done by etching distinct white lines into the ink. In the series of women reading in bed, probably done in the mid- to late 1880s, the combination of wiping (modeling) and etching (outlining) produces a mysterious flicker of light that appears to be both reflected and generated by the figures. In relationship to the reflected light of chiaroscuro modeling, the precise white outline that distinguishes the side of a limb that falls into shadow from the darkness surrounding it reads as a ray of light, as if that limb

12. In its sinuous line, let your slender arm
Gracefully balance your glide and your weight
Degas, *Letters*, pp. 263–4.

13. Mallarmé, *Selected Prose*, p. 61.

14. This interest in mirror-like reversal is thoroughly embedded in Degas's black and white monotypes. We know that Degas often worked on transparent plates in order to view the image as it would appear in the print while he was making it. Another way of doing this, of course, is by holding the inked plate in front of a mirror. Many of the brothel and toilette monotypes depict mirrors, some of which do not reflect anything. For Degas's extraordinary ideas about using the mirror for seeing the model from different positions see the famous passage from *The Notebooks of Edgar Degas*, ed. Theodore Reff, Oxford, Clarendon Press, 1976, vol. 1, p. 134.

were able to produce its own illumination along its edge. Degas has thus destroyed the logical relationship between light and dark in their function of representing an object, pointing instead to the absolute conventionality of the two mutually exclusive modes of representing.

It is a similar destruction of the logical relationship of light and dark, of the way in which light is invested with the power of constructing intelligibility, that Degas instances in his photographs of ballerinas. For the oscillation between light and dark, between positive and negative, operates not only from one print to another; it operates, as well, within each single photograph. In the print in which the right arm and torso of the dancer appear to be normally positive, the shadow of the arm on the wall she grasps appears as a streak of light. Her face, also apparently in shadow, and her "dark" hair are registered as light. At this point, obviously, language begins to fail. How can we any longer speak of light and dark? How can we speak of a white shadow? a dark highlight? a translucent shoulder blade? When light and dark, transparency and opacity, are reversed, when negative becomes positive and positive, negative, the referents of our descriptive language are dissolved. We are left with a language germain only to the photographic, in which the manipulation of light generates its own, exclusive logic.

It is not only in those photographs that are so frankly manipulated at the stage of the negative, however, that Degas forces recognition of the internal functioning of the medium. Among his more straightforward portrait photographs is one of his niece Odette that shows her to be a particularly delightful sitter. Her bright eyes, wide smile, and spontaneous pose would seem quite naturally to elicit the term photogenic. But what exactly do we mean by that designation? What can it mean to say that someone is "suitable for reproduction by light"?

Included among the plates of Fox Talbot's *Pencil of Nature* is a photogram of a piece of lace. We are aware that it is a photo*gram* and not a photo*graph*, however, only because Fox Talbot explains the process of making this print in an accompanying text. Describing as a "*negative* image" what we call a photogram—that is, a direct imprint of an object on light-sensitive paper without the intermediary stage of the negative—he explains:

> In taking views of buildings, statues, portraits, &c. it is necessary to obtain a *positive* image, because the negative images of such objects are hardly intelligible, substituting light for shade, and *vice versa*. But in copying such things as lace or leaves of plants, a negative image is perfectly allowable, black lace being as familiar to the eye as white lace, and the object being only to exhibit the pattern with accuracy.[15]

The negative stage of the photographic process has been omitted in this instance, then, because that conversion of light and dark into opacity and transparency is

15. William Henry Fox Talbot, *The Pencil of Nature*, facsimile edition, New York, Da Capo Press, 1969, n.p.



Edgar Degas. Odette *(niece of the artist). c. 1895.*
(Bibliothèque nationale, Paris.)

already accomplished in the constitution of lace, which is nothing other than pure pattern. Using the double procedure of photography would therefore be redundant. In its double nature as presence and absence, black and white, lace is already resolved into photographic language. It is truly photogenic, and, like the mirror in another way, it is a perfect metaphor for photography.

Now Degas's photograph of Odette is replete with this kind of metaphor, with its lace backdrop, its patterned wallpaper, its illustrated newspaper. Odette herself wears a lace dress. This is a photograph of the photogenic, everything already resolved into black and white. Even Odette's cute smile is so resolved. She is at that age when children lose their baby teeth, and her smile reveals the gaps where two of her incisors are absent. The preponderance of lace in this photograph is a pun on that smile, for the French word for lace is *dentelle,* a diminutive form of the word *dent,* meaning tooth. So Odette's smile is indeed photogenic; already reduced to presence and absence, positive and negative, black and white, it is a wry metaphor for photography.

*

Degas made his photographs during a very brief period of time, for soon after that moment, in 1895, when Halévy spoke of Degas as "ablaze with enthusiasm" for his new occupation with a camera, his eyesight failed. Unable to pursue his work any further, Degas remarked in 1906, "If I could live my life again, I should do nothing but black and white."

Opticeries*

JEAN CLAIR

Classical perspective presupposes an imperiously fixed vanishing point and an optimum distance. It reduces the depth of the real world to the illusion of a flat surface. It presupposes as well the fixed viewer. It is a monstrous, artificial, and, finally, a mythic vision, with something of Cyclops and the Medusa in its nature, flattening the world and turning it to stone. Thus, Sebastien Le Clerc, a theoretician of perspective in the age of classicism, wrote a small treatise in which he attempted to show, with the use of diagrams, that "things that can be seen clearly are seen with but a single eye."[1]

Three centuries later, Duchamp began, in turn, to reflect anew on the problems of vision in perspective, both monocular or flat, and binocular or in relief. In one of the notes he wrote for *A l'Infinitif*, we find:

> A thing to be looked at with one eye
> ——————————with the left eye
> ——————————right———,
>
> . . .
>
> One could base a whole series of *things to be looked at with a single eye* (left or right).[2]

The small glass which is entitled *To be Looked at (from the Other Side of the Glass) Close to, with One Eye, for Almost an Hour* belongs to the category of things to be seen with one eye. The prism with the Wilson-Lincoln effect, sketched

* "Opticeries" is one chapter from Jean Clair's full-scale study of Duchamp's relation to photography. Remarking that Duchamp's notorious aesthetic formula—"The beauty of precision. The art of indifference"—could serve as a definition for photography itself, Clair traces in his book the multiple ways in which Duchamp both used and thought about photography. This begins in 1910 with his interest in Marey's chronophotography and continues throughout his career, involving him in investigations of such little known phenomena as the "Kirlian Effect"—photographs of the electrical "aura" given off by living matter, and leading him to consider his masterwork—*The Bride Stripped Bare by Her Bachelors, Even*—as a "Delay in Glass," a giant photographic plate.

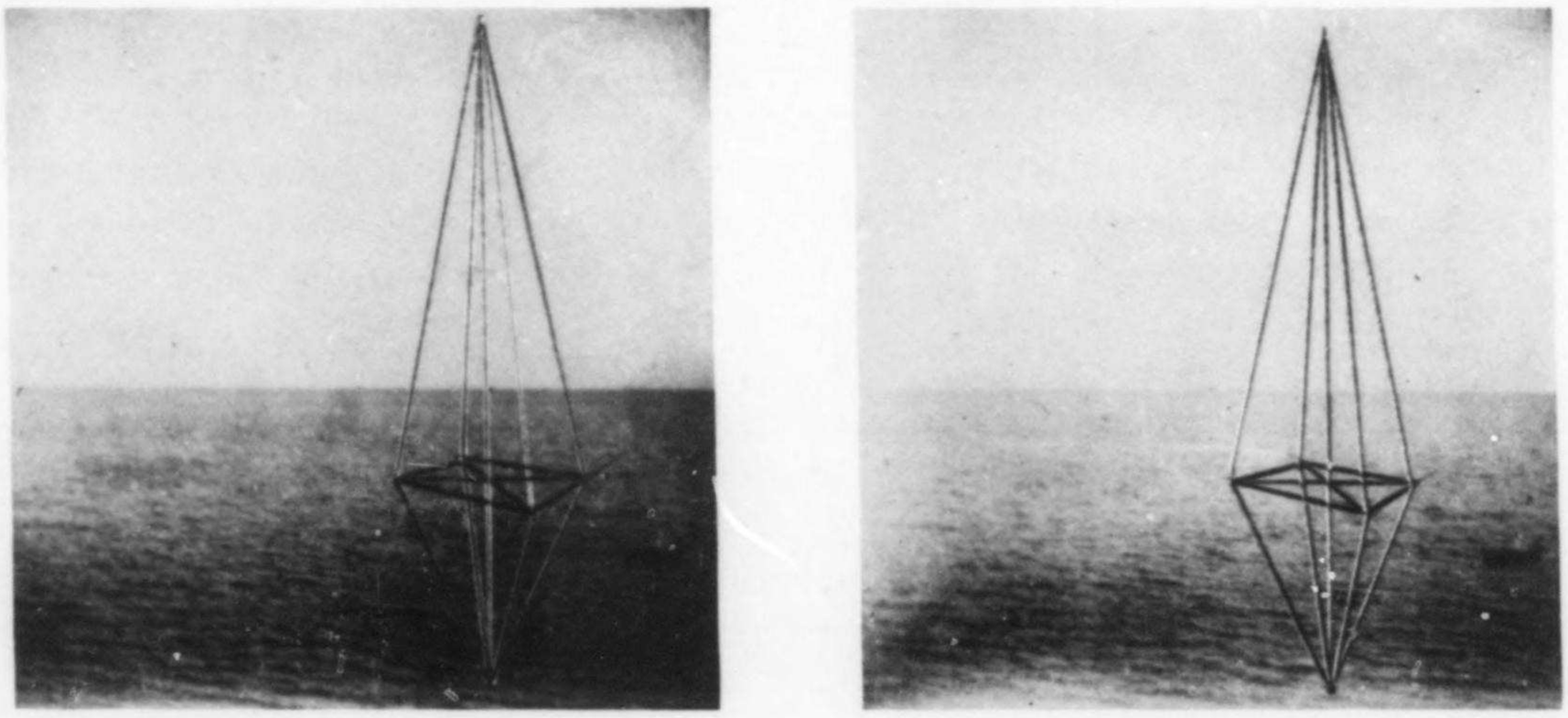
1. Sebastien Le Clerc, *Discours touchant le point de vue, dans lequel il est prouvé que les choses qu'on voit distinctement ne sont vueés que d'un oeil*, Paris, 1679.
2. Marcel Duchamp, *Salt Seller: The Writings of Marcel Duchamp (Marchand du Sel)*, New York, Oxford University Press, 1973, pp. 75–6.

and described in one of the notes of the *Green Box*,[3] belongs to the class of objects to be looked at alternately with the right and left eye. It is a little optical diversion of the sort popular at the turn of the century, composed of two pictures pasted over a prismatic surface in a manner such that the picture, when seen from the left presents one face—that of President Wilson, for example—and when seen from the right, another face—that of Lincoln. The pair usually presented are involved in a religious complementarity, like the Virgin and St. Joseph. Agam has, in our own time, attempted to lend a certain avant-garde tone to games of this sort.

The painting called *Tu m'* is, in a number of ways, to be seen with the left and the right eye alternately, according to a sophisticated play of anamorphic effects, of shadows cast on a plane that is distinct from the picture plane and which protrudes, depending on one's angle of vision, to become a bicycle wheel or a cork-screw.

The case of the *Large Glass* is more complex. The median line of the Bride's dress functions as horizon line for the lower area and as base line for the upper area. The vanishing point and the point of optimum distnce constrain the view, assumed as monocular, of the spectator "who makes the picture." The glass transparency itself nevertheless presupposes something beyond its surface, an entire depth spread out behind it, a room with objects, passing visitors, a whole volumetric, animated shadow theater, addressed to a mobile, binocular vision. Now let us reverse the system of the *Glass*; let us imagine the real world (the exhibition hall, its furnishings and people) reduced to a flat, opaque surface, with the drawing of an abstract diagram now in front of it, advancing toward us. We get something resembling the *Hand Stereoscopy*—or, as in the *Large Glass*, a rectangular space bisected into upper and lower parts—in this case a sky and sea meeting at the horizon, photographed stereoscopically, two successive views taken

3. *Ibid.*, p. 65.



Marcel Duchamp. Handmade Stereopticon Slide. *1918–19. (Collection Museum of Modern Art, New York. Katherine S. Dreier Bequest.)*

with a slight gap which corresponds to that between the human eyes. Because of their extreme distance from one another, one doesn't perceive them in relief; infinity has a flattening effect like that of a perspective projection, so that the far distance is ironed out. On the other hand, the diagram added by Duchamp, which is simply the pyramid of visual rays found in treatises on classical perspective, projects sharply forward from the surface. Rules of perspective used in monocular vision to reduce the three-dimensional world to a two-dimensional surface are employed here, in binocular vision, *backwards,* so that a flat geometric figure produces a virtual image with the effect of an illusory volume.

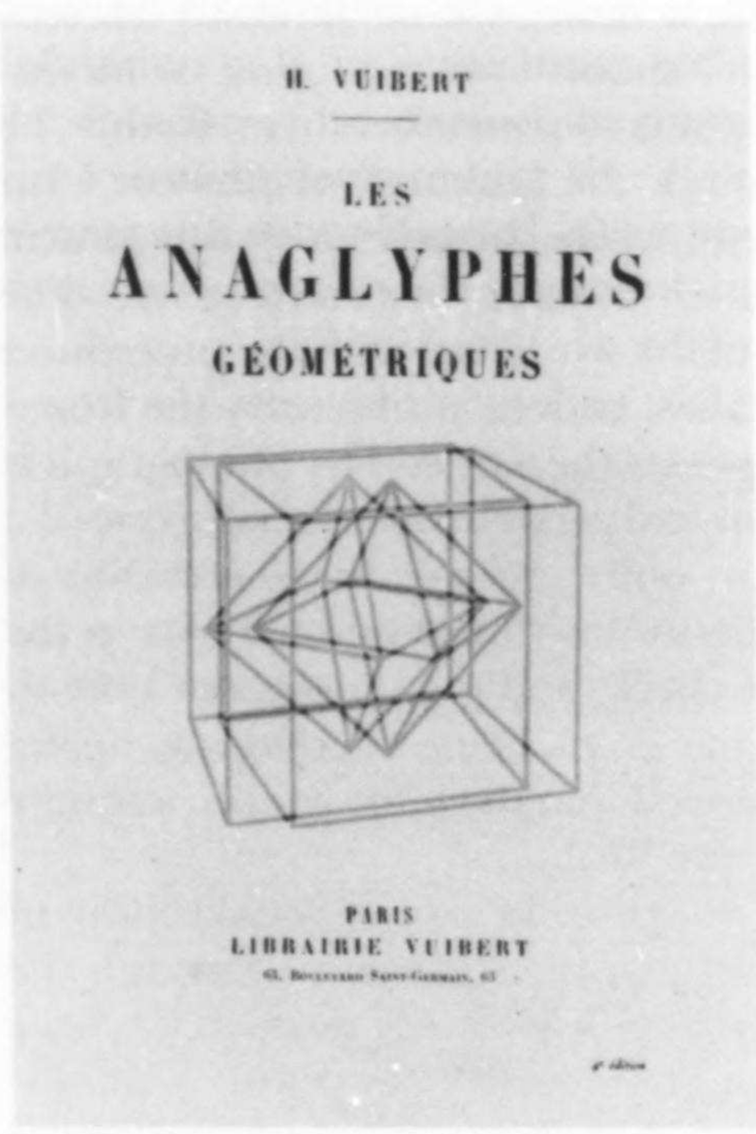
In 1919, when Duchamp began his experiments in stereoscopic photographic vision, its principles were already very familiar. The stereoscopic photograph was invented at about the same time as the Daguerreotype; the process for fixing images on silver plates and that of obtaining the illusion of relief were discovered almost simultaneously. The stereoscopic process conceived by David Brewster was used by Charles Duboscq in France beginning in 1850. Between 1900 and 1920 it became immensely popular (every middle-class family still has an old stereoscope through which the faces of their departed ancestors can be viewed). The decline of the stereoscopic photo after the Second World War is strange indeed, when one considers photography's extraordinary development throughout society just then. The reason may lie in the amateur photographer's desire to take possession of the world through images, a desire whose intensity exceeds his interest in the image as such. The tourist "shoots" places, sights, or monuments, not because he loves those things and wants to remember them. Rather, he tends to appropriate them symbolically through the "taking" of photos. Ultimately, the camera pressed over one open eye, while the other remains closed, becomes a patch blinding vision; it is that which *prevents* one from seeing. The tourist is not really concerned with the reality of the world but with the procedures of the darkroom which, like tombs and mastabas, collect in obscurity the frozen little corpses through which he believes he possesses the world. The photograph is therefore a form of currency whose circulation and accumulation assure one of a grasp on things themselves. As a material paper object, its role in the economy of vision—that is, in the relationship of one's desire for things and persons in the external world—is that of the bank-draft, the check, and the promissory note in the capitalist economy. And if we speak of a photograph being "developed," using a term borrowed from real estate, this means as well that the photograph, a square of treated paper, develops a small holding in the Real.

Now, the stereoscopic photograph does not provide for the bookkeeping of holdings-in-the-real through the accumulation of prints preserved through the years in albums. *Because it has no material reality it does not permit symbolic exchange.* As a virtual image, an immaterial imitation, a totally transparent, all-too-perfect delusion of reality, it does not permit one to trade the substance for the shadow, unlike the material document on paper. There was, therefore, no commercial future in stereoscopy.

It was, however, just that virtuality of the stereoscopic image which could not fail to seduce Duchamp. To Duchamp, who was repelled by the physicality, the odorous coporeality, of painting, by its excessive grounding in the sensory world, the stereoscopic image showed the way to a purely ideal configuration, the intelligible result of a synthesis certainly closer to the brain—and to the working of a *cosa mentale*—than to the retinal effect. (It is known that four persons out of ten cannot perceive stereoscopic photography, being unable to perform the mental synthesis necessary for the illusion of relief obtained through a pair of photographic documents.)

This view would seem to be confirmed by Duchamp's extreme interest by 1920 in another method of obtaining relief, the anaglyph. At this point he abandoned classic stereoscopy as if it were still too strongly tainted with realistic illusion, still too close to naturalism.

It was in 1912, the very year in which Duchamp began thinking about the project for the *Large Glass,* that Henri Vuibert published, through his own bookstore, a curious little work entitled *Geometric Anaglyphs.* In it he set forth the principles of the procedure invented by Louis Ducos du Houron, which consisted in printing, in superimposition, pairs of stereoscopic views, taken in complementary colors.


H. VUIBERT

LES

ANAGLYPHES

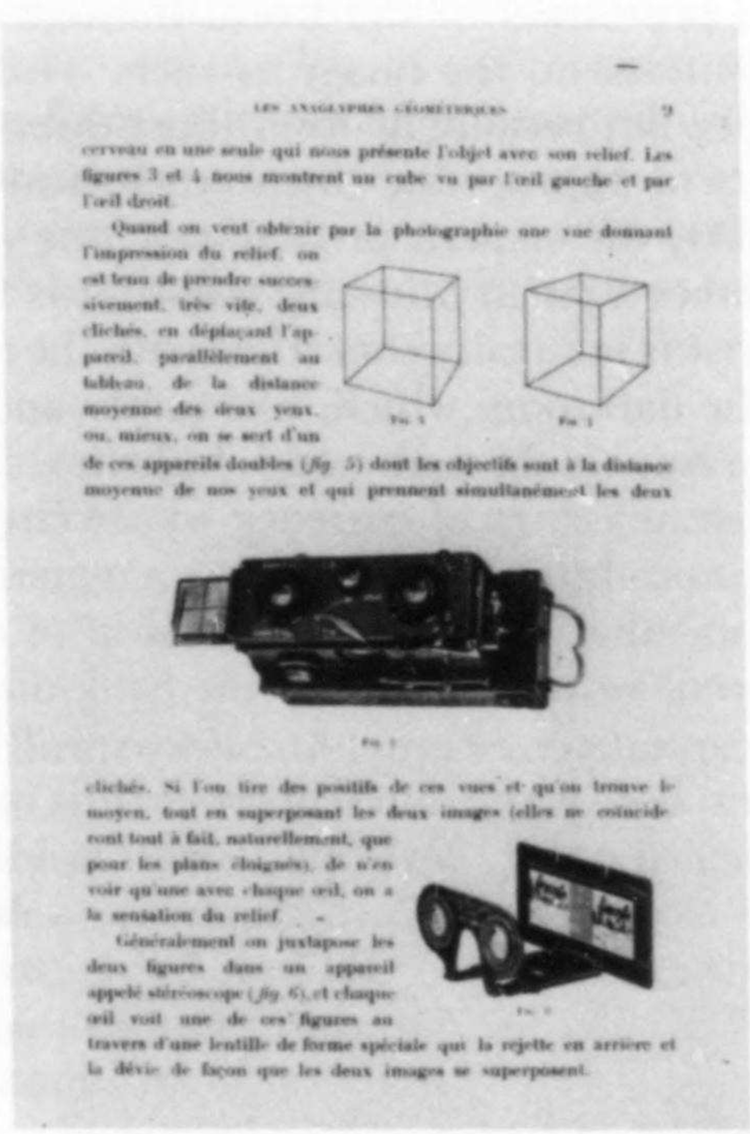
GÉOMÉTRIQUES

PARIS

LIBRAIRIE VUIBERT

63, Boulevard Saint-Germain, 63

4e édition


LES ANAGLYPHES GÉOMÉTRIQUES 9

cerveau en une seule qui nous présente l'objet avec son relief. Les figures 3 et 4 nous montrent un cube vu par l'œil gauche et par l'œil droit.

Quand on veut obtenir par la photographie une vue donnant l'impression du relief, on est tenu de prendre successivement, très vite, deux clichés, en déplaçant l'appareil, parallèlement au tableau, de la distance moyenne des deux yeux, ou, mieux, on se sert d'un de ces appareils doubles (*fig. 5*) dont les objectifs sont à la distance moyenne de nos yeux et qui prennent simultanément les deux clichés. Si l'on tire des positifs de ces vues et qu'on trouve le moyen, tout en superposant les deux images (elles ne coïncideront tout à fait, naturellement, que pour les plans éloignés), de n'en voir qu'une avec chaque œil, on a la sensation du relief.

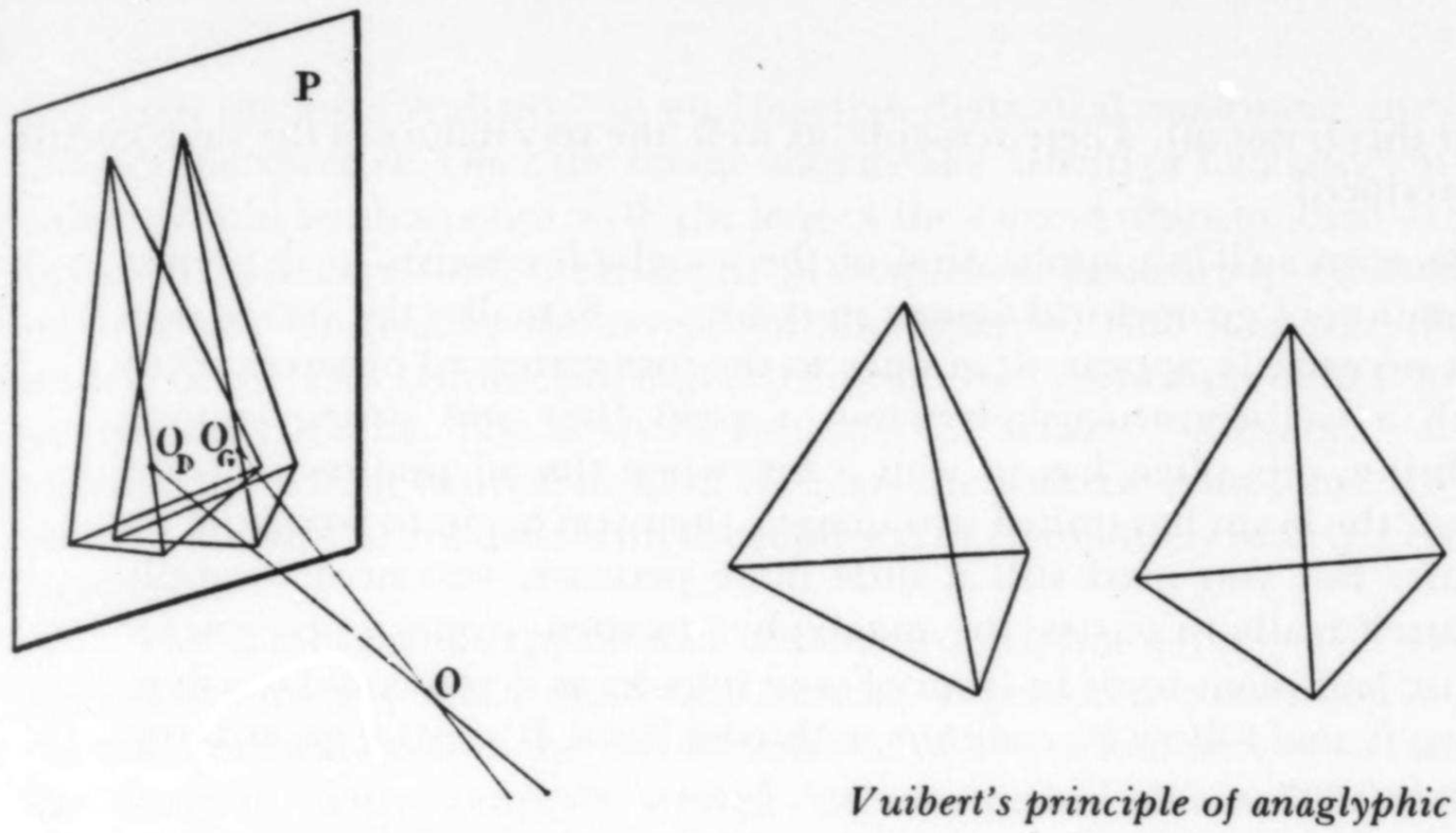
Fig. 3 Fig. 4

Fig. 5

Généralement on juxtapose les deux figures dans un appareil appelé stéréoscope (*fig. 6*), et chaque œil voit une de ces figures au travers d'une lentille de forme spéciale qui la rejette en arrière et la dévie de façon que les deux images se superposent.

Fig. 6

Cover and page 9 from Vuibert's Les Anaglyphes Géometriques, *Paris, 1912.*



Vuibert's principle of anaglyphic vision.

> Suppose we have an anaglyph which has been developed in red and green on a white background. The red image corresponds to the vision of the left eye and the green, to that of the right eye. The result is the following, curious criss-cross: the red rays refracted from the white background reach the right eye, provided with a red filter [the anaglyph being viewed through colored glasses—trans.], but the green rays refracted by the figure developed in green do not reach the eye. This figure, a perspective of the object in relation to the right eye, will consequently appear black on a red background, and for this eye the figure in red, now indistinguishable from its ground, will be effaced. In the same manner the green rays refracted from the white background will reach the left eye provided with a green filter, but the rays produced by the figure developed in red will not reach that eye; the left eye will therefore see only one of these two figures and it will see that figure in black. The conditions of stereoscopic vision are fulfilled, and the result is an impression of relief. The picture's background, when treated in light green for the left eye and in light red for the right eye, acquires, in the resulting image, a neutral, greyish shade which looks white in relation to the dark tones of the object.[4]

Duchamp must have been delighted by that "neutral, greyish shade" which, in eliminating all naturalist connotation from the object reproduced, in reducing it to a monochrome of subtle values, to a sort of coloristic nothingness, to a synthesis of ghostly colors, thereby gave it the very color of intellect. This is the favorite color of a whole intellectual family for whom painting as *cosa mentale* wins over painting as "retinal phenomenon," a family that extends from Leonardo to Seurat, by way of Vermeer. Finally, it should be stressed, this was the color with which Duchamp would render the body of the Bride in the *Large Glass.*

4. H. Vuibert, *Les Anaglyphes géometriques*, Paris, Vuibert, 1912, pp. 10–11.

But this is not all. There remains, as well, the very nature of the stereometric image produced:

> The most striking application of the anaglyph consists in the representation of geometrical figures in space. . . . Actually, the image does not necessarily appear all at once to the inexperienced observer. Even with a well-constructed drawing, a good filter and strong enough lighting, one often has to wait a bit; when the adaptation is made, when the brain has united two images, then you begin to recognize the figure. But you need still a little more patience, you need to apply yourself really to *possess* the anaglyph; a moment comes when you see it rise and plant itself in front of you; it looks as if you could touch it, grasp it, and follow its contours with your hand. It's a strange, striking thing to see.

And Vuibert adds in a footnote:

> The swiftness and perfection of anaglyphic vision depend essentially on the quality of the individual's vision. Some people "see" almost immediately; most people need some practice. Certain people need to *call up* the figure through an act of will; others, finally, never see it. "The anaglyph test" produces very different results in different people: children, outdoor people, often see geometric anaglyphs faster and more completely than mathematicians, and the unsophisticated subject will, in expressing his surprise, produce very picturesque explanations and most expressive gestures.[5]

An astounding passage! Just as Marey's chronophotographs had provided the flat support for an infinite reflection on the relationship between space and time, the two-dimensional object of a meditation on the Eleatic illusion and on the juncture between three- and four-dimensional universes in the extra-rapid exposure of the snapshot, so too anaglyphic vision is described in turn as the equally flat support of a reflection on the relationship between surface and volume, the two-dimensional object of a meditation on the creation of a body from a depthless effigy, and, by further analogy, on the juncture of three- and four-dimensional universes. This is an image created by the viewer—for it is literally "the viewer who makes the picture," as Duchamp assured us—an immaterial image, washed, rinsed, stripped of all retinal and olfactory physicality, emerging gradually into view in the total absence of materiality, like Mallarmé's ideal flower in the total absence of the bouquet. And one needs, according to the principle of postponement of gratification, to have "a little more patience" in order "really to possess"—as with the "Delay in Glass"[6]. . . It's as if photography

5. *Ibid.*, pp. 12–13.
6. "Delay in Glass" is the subtitle that Duchamp gave to the *Large Glass.*

had from the first "realized," in an Hegelian dialectical movement, the system of classical perspective. Once the image obtained by Alberti or Leonardo on the glass surface could be sharpened with the lens of the camera obscura, then fixed with a light-sensitive emulsion, the mimetic principles of classical representation were, so to speak, finished by the arrival of photography. And it is true that by the middle of the 19th century photography meant that painting would stop aspiring to reproduce reality. The aesthetic concepts of "finish," "slickness," of "accomplishment," which flourish around 1850, are the pathetic symptoms of a degenerate art's attempt to compete with the products of an infinitely more precise form of equipment.

The simultaneous appearance of stereoscopic photography held out, as well, the possibility of a subtle dialectical reversal. If perspective consisted in reducing the three-dimensional to the two dimensions of a stretched canvas, so conversely, a flat drawing, when properly treated—or two prints obtained by moving the photographic apparatus parallel to the picture over a distance of about two and a half inches (the average distance between our eyes)—allowed one to obtain a purely ideal tri-dimensional configuration. The ideality of Alberti's perspective diagrams, like those of Abraham Bosse and Nicéron, drawn from the data of the sensory world, now crossed over into the sensory world itself. Intelligibility was no longer inscribed in the signifier (the perspectivist apparatus which produced a reduction of sensory data to regular diagrams); it was transferred to the signified: the sensory image obtained by the synthesis of abstract, regular figures . . .

Few historians or critics in the 20th century were to grasp the importance of this reversal. It is no accident that Maurice Merleau-Ponty in *The Visible and the Invisible* and Jacques Lacan in his eleventh volume of *The Seminar* did so. Having carefully reflected on the laws of perspective and on anamorphic phenomena, both analyzed the visual phenomena with which we are concerned. Lacan, particularly, came to set up a polarity between the domains of "the geometral" and "the visual." The geometral is the optical system used in the perspectivist constructions of painting between the Renaissance and the end of the classical age. Now, "this perspective," says Lacan, "is available to the blind."[7] And indeed a blind man, as suggested by Diderot in his *Letter*, is perfectly capable of following a demonstration of classical perspective without getting lost, simply because he has only to follow . . . the real, material thread stretched through the demonstrator's web (the *interlacing* as Merleau-Ponty calls it). This construction does not, however, give one access to that which is disclosed by light.

> How are we to grasp that which seems elusive in this optical structuring of space? This is the point on which traditional reasoning turns. Philosophers, since Alain (the last and the most brilliant example in a tradition that refers back through Kant to Plato) all deal

7. Jacques Lacan, "La Ligne et la lumière," *Le Séminaire, livre XI*, Paris, Editions du Seuil, 1973. p. 87.

> with the supposed trickery of perception while at the same time they end up demonstrating that perception finds objects where they are and that the appearance of the cube as a parallelogram is generated, precisely, by the spatial break which underlies our perception, that which makes us perceive it as a cube. The whole game, the classical dialectical *presto changeo* over perception lies in its treatment of geometral vision, a vision as-if located in an essentially non-visual space.[8]

Let us imagine, in this "spatial break which underlies our perception," the figure of two polyhedrons drawn flat as they appear to us, one to the left eye and the other to the right. The synthesis of these two flat images will produce an anaglyphic image which will *take place* in a space that is really and purely visual: "something that introduces the element that is elided in the geometral relationship—depth of field, with all its ambiguity, variability and impossibility of mastery."[9]

In this reversal, finally, through which a glance is both achieved and, in the perspectivist system photo-graphed, the real is dissolved and rendered a flat (geometral) document through development in light-sensitive emulsion. And this reversal, in its purely visual relationship to the stereometric image, is then reversed, photo-graphed, printed in return:

> That which essentially determines me visually is the look directed outside. It is through that looking that I enter the light and receive its effect. Which means that light is bodied forth through looking, and that is how—if I may be permitted to use, as I often do, a word while decomposing it—I am *photo-graphed.*[10]

Duchamp was, surprisingly, almost unique among 20th-century artists in his awareness of the importance of this reversal, and he was therefore the only artist to reflect on that science of perspective he described as "so maligned, so forgotten,"[11] though it alone could restore the intelligence lost to painting through "retinal" excess. The experience of the *Large Glass*—organized, as we've seen, through an operational model, if not a mechanism of a photographic type—had eliminated, dissolved, abolished, transcended, *aufhebung*-ed the last possible perspectivist speculations; stereoscopy, in its reversal of the *Glass*'s mechanism provided the incentive he was looking for.

It is therefore understandable that on the very day of his death, October 2, 1968, he was still concerned with the anaglyph, as confirmed by Arturo Schwarz's testimony:

8. *Ibid.*
9. *Ibid.*, p. 89.
10. Jacques Lacan, *"Qu'est-ce qu'un tableau?" Le Seminaire,* p. 98.
11. Pierre Cabanne, *Dialogues with Marcel Duchamp,* trans. Ron Padgett, New York, Viking Press, 1971, p. 38.

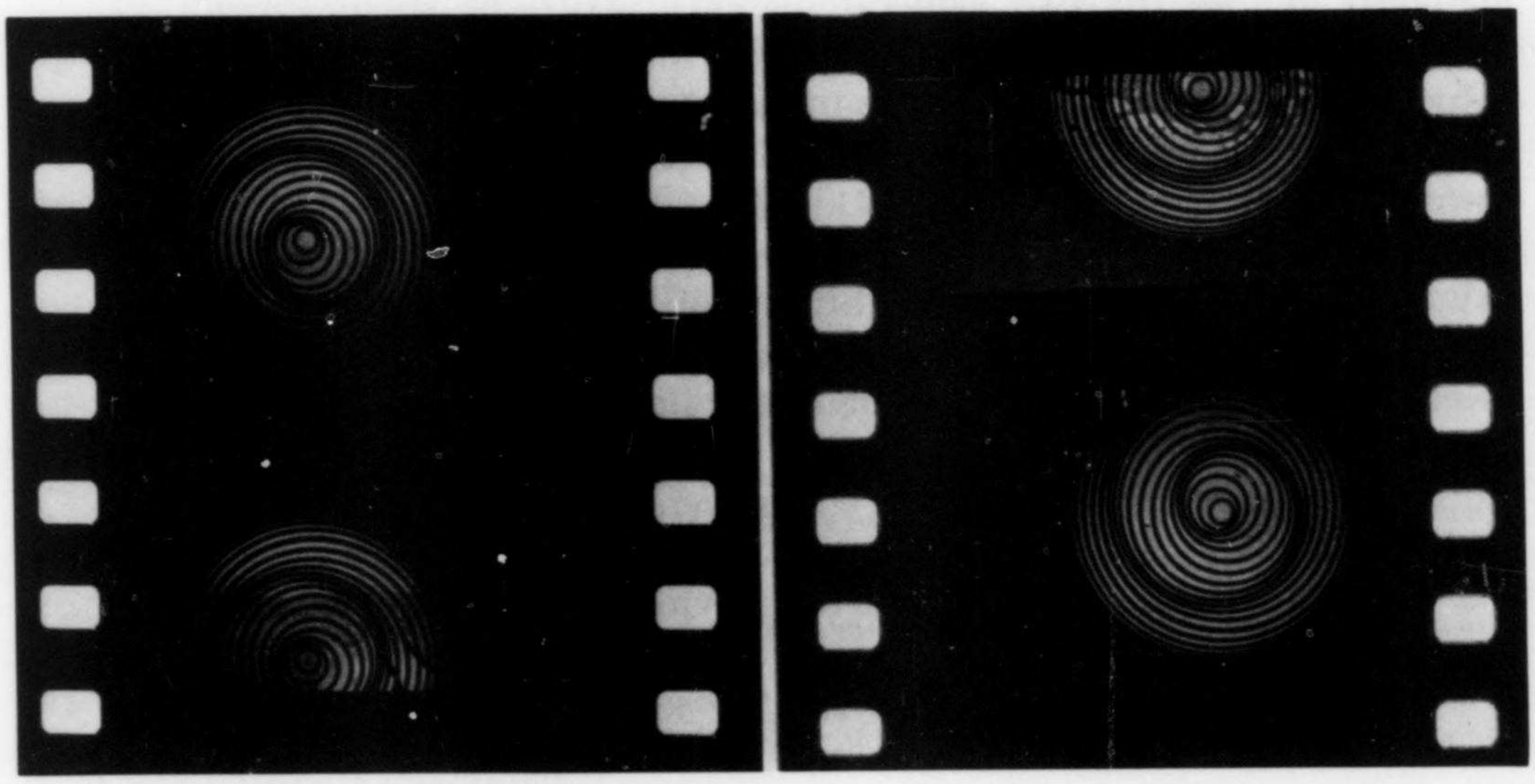
> In the morning he had received my letter with the news that the abridged paperback edition of his monograph had just come out in Italy. Teeny[12] remembers that this made him happy the whole day. The Librarie Vuibert called later that morning—the red and blue colored glasses he had been hunting for weeks to accompany the drawing to be included in the French edition were finally available. After lunch he went out immediately to get them. "He has always been like this, impatient like a child," commented Teeny.[13]

The drawing in question was the *Anaglyph Chimney*, a drawing "in relief" of a Spanish chimney that Duchamp wanted to build in his summer home in Cadaques.

In the meantime, Duchamp had long ago confessed to Serge Stauffer, a correspondent of his, that he had "always liked anaglyphs."[14] Thus in 1925, he tried to include movement in an anaglyphic representation through a film made with Man Ray's assistance. Man Ray has left a description of this enterprise:

> Then Duchamp came to me with projects; he had conceived an idea for making three-dimensional movies. Miss Dreier had presented him with a movie camera, and he obtained another cheap one—the idea was to join them with gears and a common axis so that a double, stereoscopic film could be made of a globe with a spiral painted on it. There was a young mechanic living in my building, out of a job. He drank and quarreled continuously with his wife, Eileen, a fiery little red-headed Irish girl. We paid him in small installments; he finally

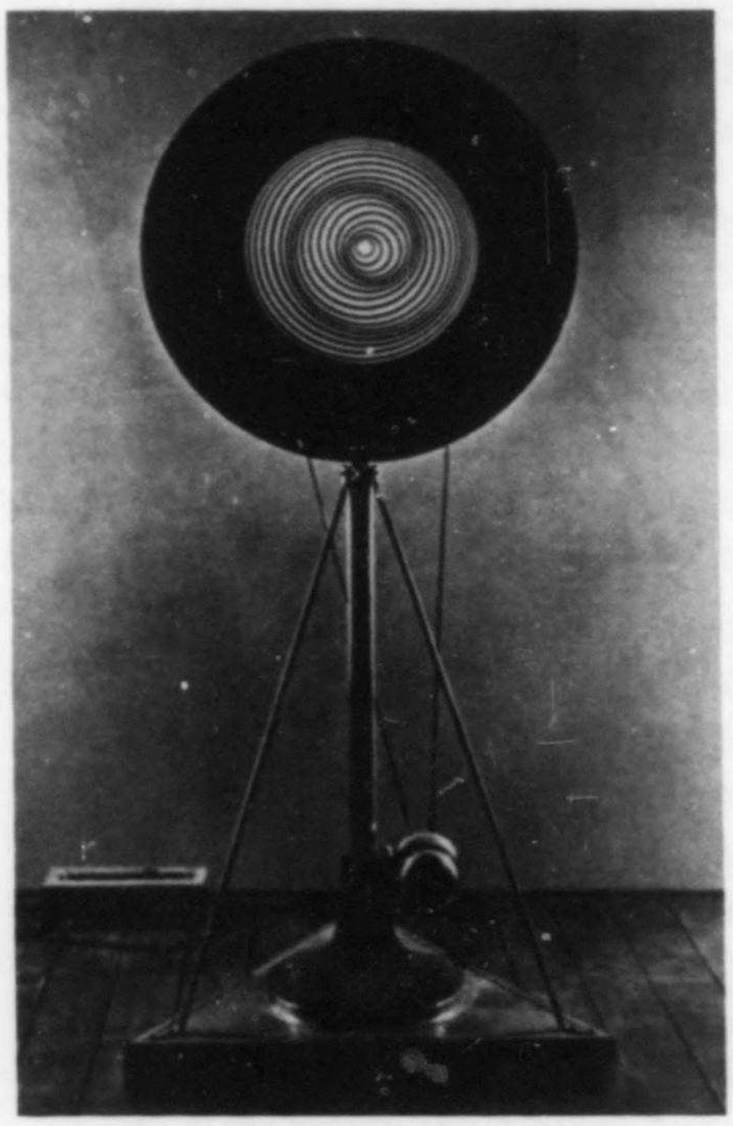
12. Mme Marcel Duchamp—ed.
13. Arturo Schwarz, *Marcel Duchamp*, New York, Harry N. Abrams, 1975, n.p.
14. Unpublished correspondence.

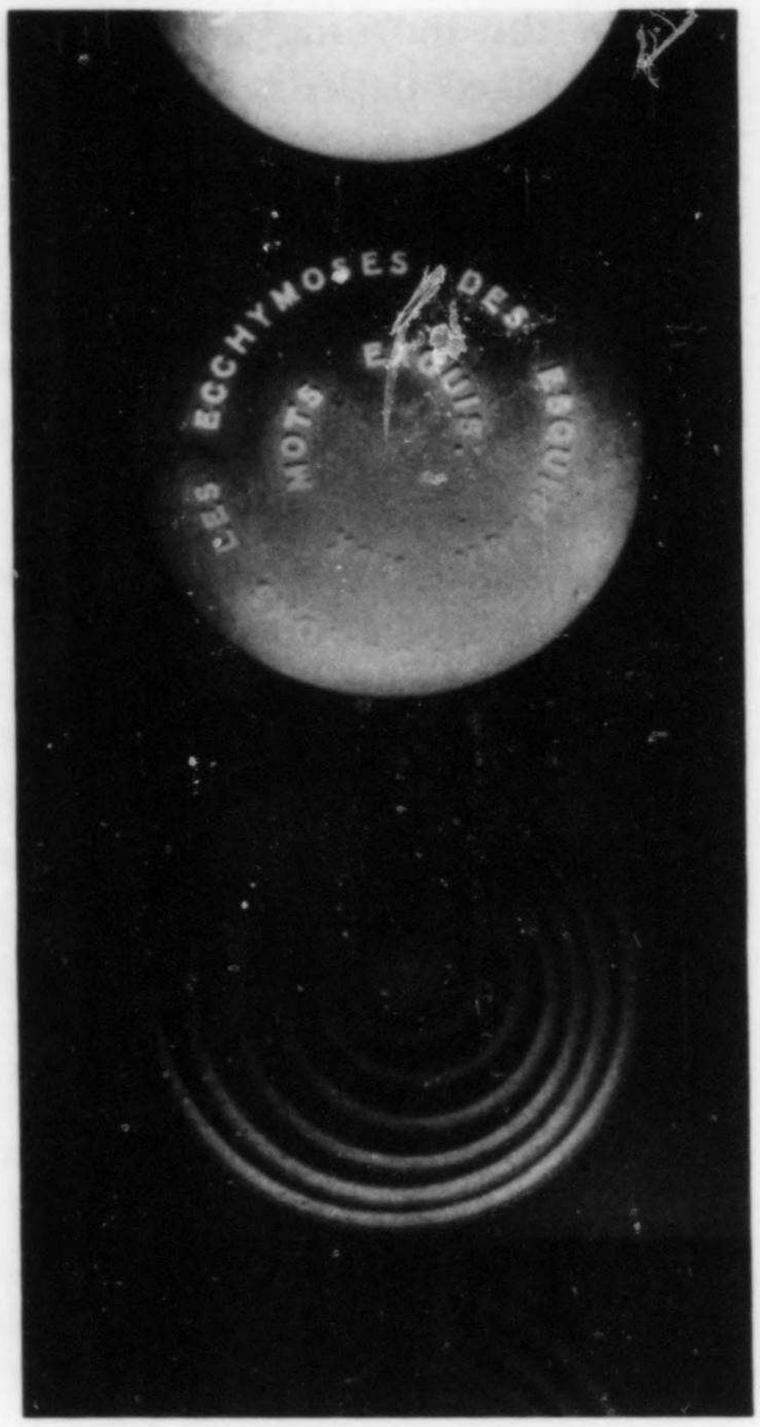


Marcel Duchamp (in collaboration with Man Ray). Frames from an anaglyphic film. 1925. (Collection Arturo Schwarz, Milan.)

Marcel Duchamp (in collaboration with Man Ray and Marc Allégrel). Frames from Anémic Cinéma. *1925–26.*

Marcel Duchamp. Rotary Demisphere (Precision Optics). *1925. (Collection Museum of Modern Art, New York.)*





managed to join the two cameras together. Then he disappeared, leaving his wife alone. Duchamp decided to develop the film himself; I helped him. First, we obtained a couple of shallow garbage-can covers for tanks, a round plywood board was cut to fit, then waterproofed with parafin. To wind the film on these, Duchamp drew radiating lines from the centers and hammered four hundred nails along them. After taking fifty feet of film, we waited for nightfall and in the dark managed to wind the film onto the labyrinth of nails. I had already poured the developer into one of the trays, the fixing liquid into the other. We immersed the board into the first and timed the development, then transferred it to the fixer tank. After about twenty minutes we turned on the light. The film looked like a mass of tangled seaweed. It had swelled and was stuck together, most of it not having been acted on by the developer. . .

Duchamp and I went out to eat. He was imperturbable; if we could save a few feet to verify his experiment, he'd be satisfied. . .

> Duchamp came in towards evening; we did save some film, two matching strips which, on examination through an old stereopticon, gave the effect of relief. To carry on the experiment, capital was needed as well as several other adjustments to make it practical for public presentation; the project was abandoned.[15]

The bits of film rescued from disaster are now in the collections of Man Ray and Arturo Schwarz. Mounted like stereoscopic photographs, they show the same geometric figure treated in green and red according to the anaglyphic process. When they are projected simultaneously and viewed through red and green lenses, they produce the illusion of relief.[16] The figure itself is that of an optical machine made by Duchamp in 1925, *The Rotary Demisphere*, a spiral painted on a wooden half-sphere and set in motion electrically. The comparison of frames from the film with the pattern of the *Rotary Demisphere* establishes them as identical in every respect, making the date of 1920 cited for the film in the Philadelphia catalogue erroneous; it is necessarily later than that at which the machine itself was made.[17] There is additional support for this claim. The use of anaglyphic vision made sense only when Duchamp had to start filming a volumetric object; filming a flat pattern with a double camera would not have produced the effect of relief in projection. The volumetric body in question was the half-sphere—the same object used by theoreticians of the fourth dimension to explain the appearances of the spatio-temporal continuum of n dimensions when manifested (when, to use Duchamp's term, they "appear") in a universe of $n + 1$ dimensions. The spiral's rotary movement, combined with anaglyphic vision, thus provided a natural extension of the speculation based on the bicycle wheel at rest or in movement, and on the documents produced by chronophotography. Here too, from a complex of n dimensions sprang a unit of $n + 1$ dimensions.

In the following year, 1926, Duchamp was to continue his cinematic experiments. Discouraged, apparently, by the difficulty of filming images in relief, he now contented himself with a monocular technique for shooting; the result was *Anemic Cinema*. The title, an anagram, immediately reveals the basic principle of the film: to make an object "turn" on itself, an object that might be a figure or a phrase, turning in a space which was no longer the naturalist space of the disc's revolutions, but the purely mental space of both optical illusion and wordplay. On the screen we see figures of apertures—snail-like spirals, helices, Fibonacci curves[18]—and there too are extensions of the corkscrew whose shadow is cast on

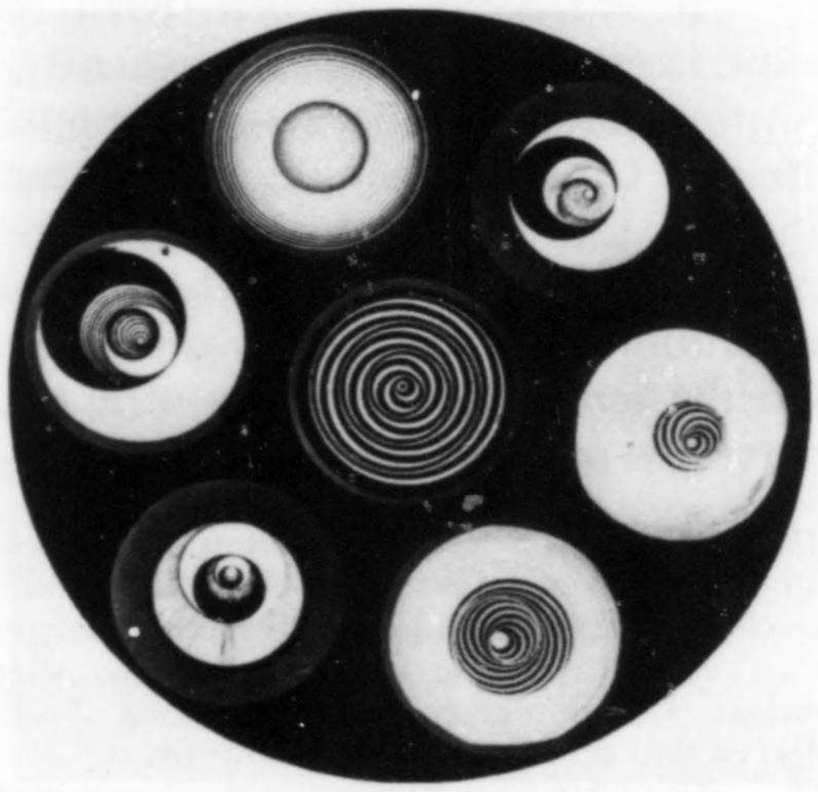
15. Man Ray, *Selfportrait*, Boston, Little, Brown, 1963, pp. 99–100.
16. The presentation of the film's out-takes, by Arturo Schwarz, with a traditional stereoscopic mechanism thus constitutes a misrepresentation.
17. Man Ray has, in another connection, stated that in 1920 Duchamp did not know how to use a camera. The simultaneous photographing of subjects with two synchronized cameras required a great deal of skill on the part of the cameraman.
18. The Fibonacci series is an approximation of the golden section. Insofar as the proportions of the *Large Glass* were based on calculations based on the golden section, the *Rotoreliefs* belong, formally, to the same category of construction.

the surface of *Tu m'* and of the bicycle wheel "screwed" into space. These figures alternate with Spoonerisms whose typographic arrangement, outwardly duplicating their own structure, is circular. Anagrams and metagrams are to discourse what the spiral is to the figure; glyphs and graphs alike coil and unwind about themselves within a space that has no reality.

A new stage of abstraction has now been reached. The domain of that immaterial, though still sensory, space of the stereoscopic or anaglyphic photograph is abolished, replaced by the purely conceptual space, without thickness or depth, of optical and linguistic games. It is, rather, the space which makes these games possible. This is the space so well described by Michel Foucault, in his discussion of Raymond Roussel's as "tropological":[19] a flat space in which words and figures rotate indefinitely, with neither end nor beginning, a space wholly subject to the infinitely glittering effect of meaning, in the definite absence of all meaning.

Ten years later, as we know, Duchamp would resume the use of the spiral figures as the basis of his *Rotoreliefs*. Mass-produced, issued in an inexpensive edition, and placed on a phonographic turn-table, they provided the possibility of an optical art-work for all. Duchamp presented them at the Concours Lépine; there were no takers.[20] Some of the *Rotoreliefs*, like the "Chinese Lantern" or the "Corollas," also suggest photographic equipment, iris diaphragms, and color-charts.

19. Michel Foucault, *Raymond Roussel*, Paris, 1963.
20. Concours Lépine: the annual inventors' show held in Paris.—ed.



Marcel Duchamp. Rotoreliefs. *1923*.

Time Exposure and Snapshot: The Photograph as Paradox

THIERRY DE DUVE

Commenting on Harold Rosenberg's *Tradition of the New*, Mary McCarthy once wrote, "You cannot hang an event on the wall, only a picture." It seems, however, that with photography, we have indeed the paradox of an event that hangs on the wall.

Photography is generally taken in either of two ways: as an event, but then as an odd looking one, a frozen gestalt that conveys very little, if anything at all, of the fluency of things happening in real life; or it is taken as a picture, as an autonomous representation that can indeed be framed and hung, but which then curiously ceases to refer to the particular event from which it was drawn. In other words, the photograph is seen either as natural evidence and live witness (picture) of a vanished past, or as an abrupt artifact (event), a devilish device designed to capture life but unable to convey it. Both notions of what is happening at the surface of the image have their counterpart in reality. Seen as live evidence, the photograph cannot fail to designate, outside of itself, the death of the referent, the accomplished past, the suspension of time. And seen as deadening artifact, the photograph indicates that life outside continues, time flows by, and the captured object has slipped away.

As representatives of these two opposite ways in which a photograph is perceived, the funerary portrait would exemplify the "picture." It protracts onstage a life that has stopped offstage. The press photograph, on the other hand, would exemplify the "event." It freezes onstage the course of life that goes on outside. Once generalized, these examples suggest that the time exposure is typical of a way of perceiving the photograph as "picture-like," whereas the instantaneous photograph is typical of a way of perceiving it as "event-like."

These two ways are mutually exclusive, yet they coexist in our perception of any photograph, whether snapshot or time exposure. Moreover, they do not constitute a contradiction that we can resolve through a dialectical synthesis. Instead they set up a paradox, which results in an unresolved oscillation of our psychological responses towards the photograph.

First, let us consider the snapshot, or instantaneous photograph. The snapshot is a theft; it steals life. Intended to signify natural movement, it only produces a petrified analogue of it. It shows an unperformed movement that refers to an impossible posture. The paradox is that in reality the movement has indeed been performed, while in the image the posture is frozen.

It is clear that this paradox derives directly from the indexical nature of the photographic sign.[1] Using the terms of Charles Sanders Peirce's semiotics, though the photograph appears to be an icon (through resemblance) and though it is to some extent a symbol (principally through the use of the camera as a codifying device), its proper sign type, which it shares with no other visual representation (except the cast and, of course, cinema), is the index, i.e. a sign causally related to its object. In the case of photography, the direct causal link between reality and the image is light and its proportionate physical action upon silver bromide. For a classical post-Saussurian semiology, this would mean that, in the case of photography, the referent may not be excluded from the system of signs considered. Certainly, common sense distinguishes an image from reality. But why does common sense vanish in front of a photograph and charge it with such a mythical power over life and death? It is not only a matter of ideology or of naïveté. Reality does indeed wedge its way into the image. The referent is not only that to which the sign refers, but also that upon which it depends.

Therefore we ought to introduce a slightly different vocabulary from the usual semiological terminology in order to attempt a theoretical description of the photograph. We shall consider the semiotic structure of the photograph to be located at the juncture of two series. (It is not the place here to justify the choice of the word *series*. Let us say only that it is the dynamic equivalent of a line, and that the crossing of two lines is necessary to organize a structural space, or matrix.)

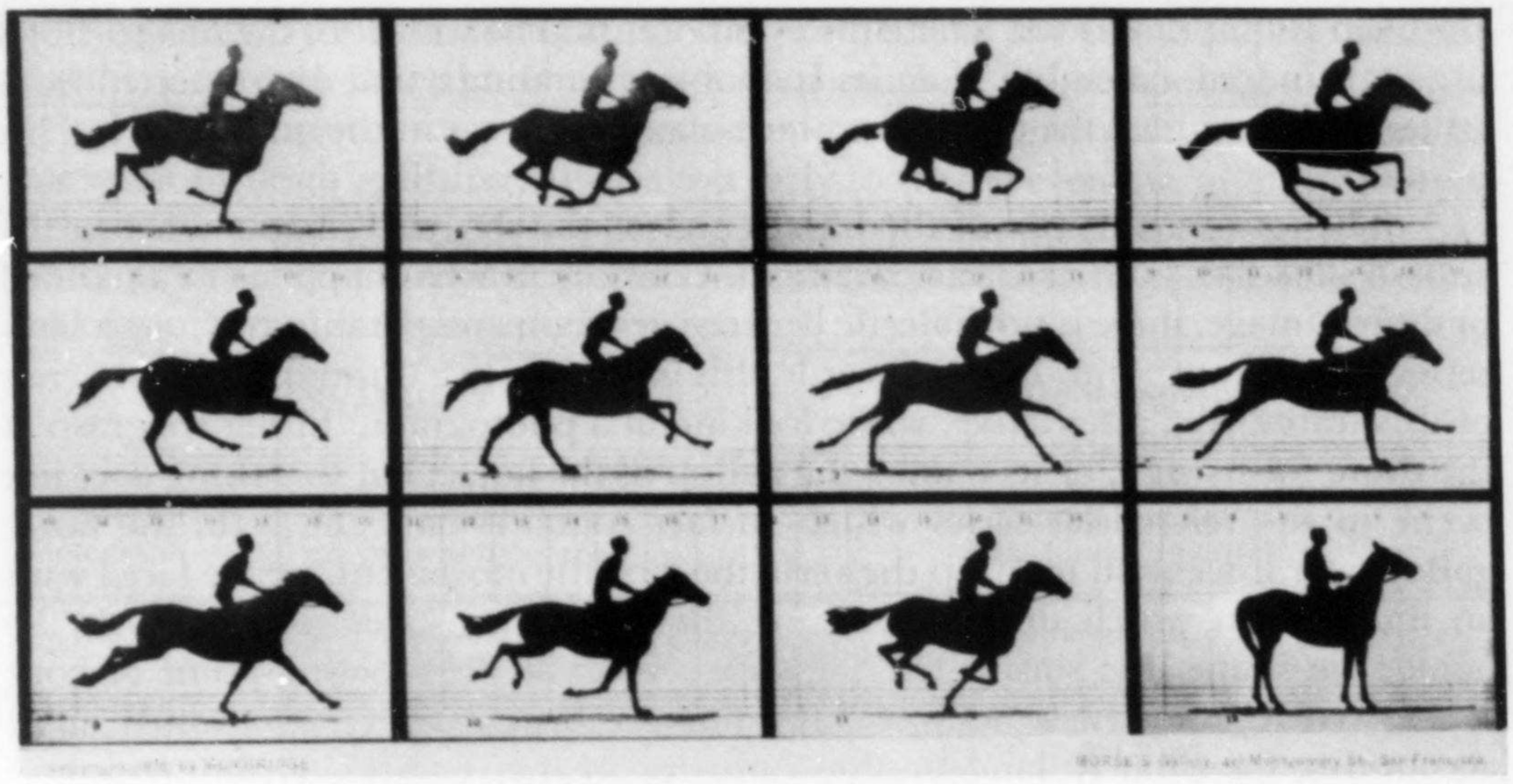
The first series is image-producing. It generates the photograph as a semiotic object, abstracted from reality, the surface of the photograph so to speak. Let us call it the *superficial series*. The second series is reality-produced (one might even say reality-producing, insofar as the only reality to be taken into account is the one framed by the act of taking a photograph). It generates the photograph as a physical sign, linked with the world through optical causality. Let us call it the *referential series*.

We may now return to the paradox of an unperformed movement and an impossible posture. When in the late 1870s, Eadweard Muybridge's snapshots of animal locomotion, especially the studies of the horse's different gaits, came to be known in France and the United States, they occasioned a considerable furor among painters and photographers.[2] Whether or not a horse should be depicted in

1. In a recent article, "Notes on the Index: Seventies Art in America" (*October*, nos. 3 and 4), Rosalind Krauss stressed the importance of the indexical nature of the photographic sign, and its impact on contemporary art since Duchamp. For a general introduction to the semiotics of the index, see Charles S. Peirce, *Collected Papers*, Vol. II, book II, pp. 129–87.

2. See Beaumont Newhall, *History of Photography*, New York, The Museum of Modern Art, 1949, pp. 83–94; Van Deren Coke, *The Painter and the Photograph*, Albuquerque, University of Mexico

Eadweard Muybridge. Galloping Horse. *1878.*



the unexpected, yet "true" postures that were revealed by the infallible eye of the camera, whether or not the artist—including the photographer when he strives for artistic recognition—should remain faithful to nature as recorded rather than interpret it, were the main issues under debate. Yet these aesthetic controversies are symptomatic of what was felt as an unbearable disclosure: that of the photograph's paradoxical treatment of reality in motion.

The 19th century ideology of realism prescribed, among other things, the attempt to convey visual reality adequately. And to that end, photography was sensed—either reluctantly or enthusiastically—as establishing a rule. But with the onset of motion photography, artists who were immersed in the ideology of realism found themselves unable to express reality and obey the photograph's verdict at the same time. For Muybridge's snapshots of a galloping horse demonstrated what the animal's movements were, but did not convey the sensation of their motion. The artist must have felt squeezed between two incompatible truths that can be approached in terms of a contradiction in aesthetic ideology. But basically this contradiction is grounded in the paradoxical perception of photography in general, for which the example of Muybridge is simply an extreme case.

The paradox of the unperformed movement and the impossible posture presents itself as an unresolved alternative. Either the photograph registers a singular event, or it makes the event form itself in the image. The problem with the first alternative is that reality is not made out of singular events; it is made out of the continuous happening of things. In reality, the event is carried on by time, it doesn't arise from or make a gestalt: the discus thrower releases the disc. In the second case, where the photograph freezes the event in the form of an image, the

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Press, 1964, pp. 156–9; Aaron Scharf, *Art and Photography*, Baltimore, Penguin Books, 1974, pp. 211–227.

problem is that that is not where the event occurs. The surface of the image shows a gestalt indeed, emerging from its spatial surroundings, and disconnected from its temporal context: the discus thrower is caught forever in the graceful arc of his windup.

The referential series of the photograph is purely syntagmatic, whereas the superficial series is an absolute paradigm. Contrary to what happens in a painted or drawn image, there is no dialectic between syntagm and paradigm, though both series cross at one point. In other words, this is how we live through the experience of this unresolved alternative, while looking at a photograph: Either we grasp at the thing (or its sign, or its name); the gallop of the horse; but this thing does not occur in the referential series which in fact contains only the verb: the horse gallops. Or if we wish to grasp the verb, the flux, the movement, we are faced with an image from which this has escaped: the superficial series contains only the name, the shape, the stasis. The paradox sets in at the crossing-point of both series, where they twist to form an unnatural, yet nature-determined sign, accounting for what Roland Barthes calls the "real unreality" of photography.[3] The snapshot steals the life outside and returns it as death. This is why it appears as abrupt, aggressive, and artificial, however convinced we might be of its realistic accuracy.

Let us now consider the time exposure, of which the photo-portrait is a concrete instance. Whether of a live or dead person, the portrait is funerary in nature, a monument. Acting as a reminder of times that have died away, it sets up landmarks of the past. This means it reverses the paradox of the snapshot, series to series. Whereas the snapshot refers to the fluency of time without conveying it, the time exposure petrifies the time of the referent and denotes it as departed. Reciprocally, whereas the former freezes the superficial time of the image, the latter releases it. It liberates an autonomous and recurrent temporality, which is the time of remembrance. While the portrait as *Denkmal*,[4] monument, points to a state in a life that is gone forever, it also offers itself as the possibility of staging that life again and again in memory.

An asymmetrical reciprocity joins the snapshot to the time exposure: whereas the snapshot stole a life it could not return, the time exposure expresses a life that it never received. The time exposure doesn't refer to life as process, evolution, diachrony, as does the snapshot. It deals with an imaginary life that is autonomous, discontinuous, and reversible, because this life has no location other than the surface of the photograph. By the same token it doesn't frame that kind of surface-death characteristic of the snapshot, which is the shock of time splitting into *not anymore* and *not yet*. It refers to death as the state of what has been: the fixity and defection of time, its absolute zero.

3. Roland Barthes, "Rhetoric of the Image," *Image/Music/Text*, trans. Stephen Heath, New York, Hill and Wang, 1977, p. 44.
4. The German word *Mal* (which yields *malen*, to paint) comes from the Latin *macula*, stain, from which the french *maille* (mesh) also derives.

Now that we have brought the four elements of the photographic paradox together, we can describe it as a double branching of temporality. 1. In the snapshot, the present tense, as hypothetical model of temporality, would annihilate itself through splitting: always too early to see the event occur at the surface; always too late to witness its happening in reality. 2. In the time exposure, the past tense, as hypothetical model, would freeze in a sort of infinitive, and offer itself as the empty form of all potential tenses.

	SNAPSHOT	TIME EXPOSURE
SIGNIFIER photograph	Abrupt artifact ex: press photograph	Natural evidence ex: funerary portrait
SUPERFICIAL SERIES ("image")	[1]theft of life unperformed movement → possible posture	protracted life
	[2]singular event: gestalt "the gallop of the horse"	recurrent time
	[3]DEATH → not anymore / not yet	LIFE ↻ systole / diastole
	[4]HERE pin-pointed sp[illegible]harpness	NOW potential time: out-of-focus
	[5]TRAUMA: too early blow	MOURNING: Presence (memory) hyper-cathexis
	MANIA	DEPRESSION
REFERENTIAL SERIES ("reality")	[1]fluency of life impossible posture → performed movement	state of death
	[2]continuous happening: flow "the horse gallops"	bygone past
	[3]LIFE: present (or past) tense	DEATH: time absent: O
	[4]FORMERLY	THERE
	[5]TRAUMA: too late anti-cathexis	MOURNING: absence (reality) de-cathexis

Photography not only overthrows the usual categories of time. As Roland Barthes suggests, it also produces a new category of space-time: "an illogical conjunction of the *here* and the *formerly*."[5] To what Barthes says, we can add that this formula adequately describes only half of the photographic paradox, namely the space-time of the snapshot. The space-time of the time exposure would in turn be described as another illogical conjunction: *now* and *there*.

5. Barthes, "Rhetoric of the Image," p. 44.

Here denotes the superficial series as if it were a place: the surface of projection of the photographed event, once it is made clear that the event never occurs there. The surface of the image is received as a fragment of space that cannot be inhabited, since inhabiting takes time. As the snapshot locks time in the superficial series, it allows it to unreel in the other one. *Formerly* denotes the referential series as if it were a time: a past tense enveloped by the present and in continuity with it. *Formerly* refers to a past sequence of events that are plausible but deprived of any location.

Now denotes the superficial series as if it were a time, but without any spatial attachment, cut from its natural link with here. Therefore, it is not a present but a virtual availability of time in general, a potential ever-present to be drawn at will from the referential past.

There denotes the referential series as if it were a place, i.e., the referential past as frozen time, a state rather than a flow, and thus a space rather than a time.

When we bear in mind that these two illogical conjunctions, which we have been trying to specify with the help of opposite models (time exposure vs. snapshot) are at work in every photograph, then we shall be able to restate these models in less empirical terms. To look at a photograph as if it were instantaneous (a snapshot) would mean to apprehend the superficial series as spatial and the referential series as temporal; to look at a photograph as if it were a time exposure would mean the reverse. The significant difference between "instantaneous" and "time exposure" would be the commutation of time and space along the axis of either surface or referent, or reciprocally, the jump in focusing on surface or on referent, along the axis of either time or space.

What does the twist in the categories of time and space imply in terms of psychological response? We are not dealing here with the *reading* of a photograph, which belongs to the field of semiology. Barthes remains in that field when he states that the illogical conjunction of the here and the formerly is a type of *consciousness* implied by photography. But we are dealing with something more basic to the understanding of photography. That more fundamental aspect can be said to be on the level of the unconscious; but of course the unconscious is involved in *reading* too. What is in question here is the affective and phenomenological involvement of the unconscious with the external world, rather than its linguistic structure. It is most probable that the necessity of stressing this aspect once again proceeds from the indexical nature of the photograph.[6]

The word *here*, used to describe the kind of space embodied in the snapshot, does not simply refer to the photograph as an object, a thing endowed with empirical measurements that we are holding, *here*, in our hands. Because the photograph is the result of an indexical transfer, a graft off of natural space, it

6. In her "Notes on the Index," Rosalind Krauss reaches similar conclusions: "Whatever else its power, the photograph could be called sub- or pre-symbolic, ceding the language of art back to the imposition of things." See *October*, no. 3 (Spring 1977), 75.

operates as a kind of ostensive gesture, as when we point with the index finger at an object, to indicate that it is this one, *here*, that we mean. In a sense, the very activity of finding a "focal point"—that is, selecting one particular plane out of the entire array of the world spread in depth before us—is itself a kind of pointing, a selection of this cut through the world at this point, here, as the one with which to fill the indexical sign. Finding the point of focus is in this sense a procedural analogue for the kind of trace or index that we are aware of when we hold the printed snapshot in our hands. Both poles of this phenomenon—the means to the image and the result—have in common a contraction of space itself into a point: *here* as a kind of absolute.

The aesthetic ideal of instantaneous photographs is *sharpness*. Though there is a trend in photography that tends to blur the image in order to express motion, this contradicts the built-in tendency of snapshots towards sharpness, and relates to the practice of time exposure. Some years ago, there was an aesthetic controversy among photographers as to whether a completely blurred photograph of moving objects should be acceptable or not. Those who rejected this practice claimed that there must be one point of sharpness and that this is enough. Theoretically they are right. Photography may not become totally abstract, because that would constitute a denial of its referential ties. One point of sharpness suffices to assert is own space, for the essence of the point is precision.

How does one relate to a space of such precision? One thing is certain: it doesn't give way to a *reading* procedure. For an image to be read requires that language be applied to the image. And this in turn demands that the perceived space be receptive to an unfolding into some sort of narrative. Now, a *point* is not subject to any description, nor is it able to generate a narration. Language fails to operate in front of the pin-pointed space of the photograph, and the onlooker is left momentarily aphasic. Speech in turn, is reduced to the sharpness of a hiccup. It is left unmoored, or better, suspended between two moorings that are equally refused. Either it grasps at the imaginary by connecting to the referential series, in order to develop the *formerly* into a plausible chronology, only to realize that this attempt will never leave the realm of fiction. Or it grasps at the symbolic by connecting to the superficial series, in order to construct upon the *here* a plausible scenography; and in this case also the attempt is structurally doomed. Such a shock, such a breakdown in the symbolic function, such a failure of any secondary process—as Freud puts it—bears a name. It is trauma.

We know of certain photographs to be truly traumatic: scenes of violence, obscenity, etc. However, I wish to claim that the photograph is not traumatic because of its content, but because of immanent features of its particular time and space. The trauma effect is of course a limit, but an internal one, enhanced by the subject matter of the photograph, yet not dependent upon it. As an example, one might recall the famous press photograph from the war in Vietnam, in which we see a Saigon police officer about to shoot a Vietcong soldier. This is certainly a traumatic photograph. But although the traumatism seems to be generated by the



Eddie Adams, South Vietnamese National Police Chief Brig. Gen. Nguyen Ngoc Loan Executes a Vietcong Officer with a Single Pistol Shot in the Head. *Saigon, February 1, 1968. (A.P. Wirephoto.)*

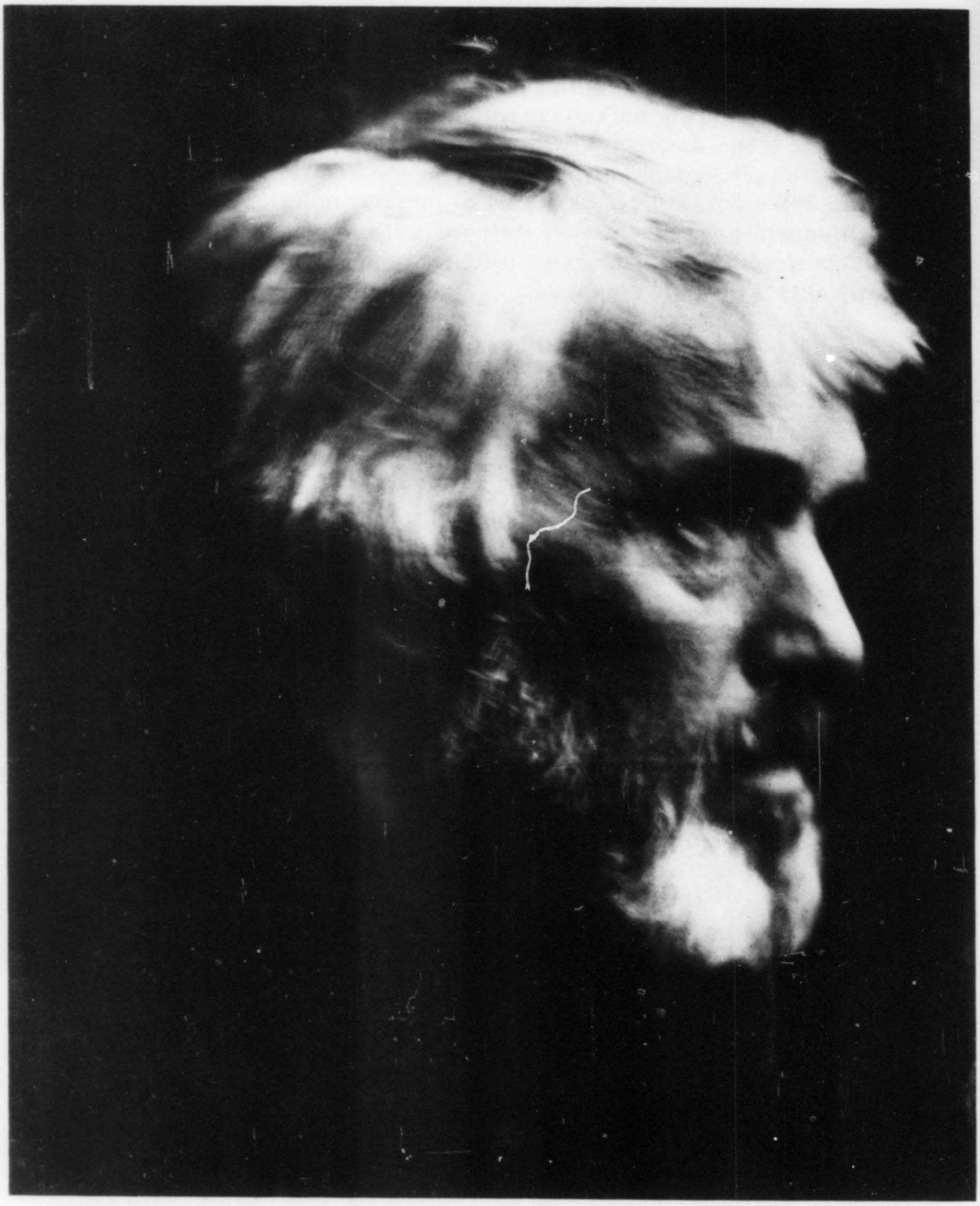
depiction of the atrocities of war and assassination, it depends instead on the paradoxical "conjunction of the here and the formerly": I'll always be too late, in real life, to witness the death of this poor man, let alone to prevent it; but by the same token, I'll always be too early to witness the uncoiling of the tragedy, which at the surface of the photograph, will of course never occur. Rather than the tragic content of the photograph, even enhanced by the knowledge that it has really happened ("We possess then, as a kind of precious miracle," says Barthes, "a reality from which we are ourselves sheltered"), it is the sudden vanishing of the present tense, splitting into the contradiction of being simultaneously too late and too early, that is properly unbearable.

Time exposure implies the antithesis of trauma. Far from blocking speech, it welcomes it openly. Only in time exposure (portrait, landscape, still life, etc.) may photography appear with the continuity of nature. The portrait, for example, may look awkward, but not artificial, as would be the case of a snapshot of an athlete caught in the midst of a jump. When continuity and nature are perceived, speech is apt to body forth that perception in the form of a narrative that meshes the imaginary with the symbolic and organizes our mediation with reality.

The word *now*, used to describe the kind of temporality involved in time exposures, doesn't refer to actual time, since it is abstracted from its natural link with *here: hic et nunc*. It is to be understood as a pause in time, charged with a potential actualization, which will eventually be carried out by speech (or memory as interior speech), and is most probably rooted in the time-consuming act of looking.

The aesthetic ideal of time exposure is thus a slight *out-of-focus*. The blurred surroundings that belonged to the 19th century style of photo-portrait act as a metaphor for the fading of time, in both ways, i.e. from presence to absence and from absence to presence. Whenever photography makes use of blurring or related softening techniques, it endeavors to regain some of the features through which painting traditionally enacts time. The chiaroscuro for example, is not the background of shape, but its temporality. It loosens the fabric of time and allows the protruding shape to be alternately summoned and dismissed. The blurring of the image in photography is the same. The painterly illusionism of depth finds its photographic equivalent in the lateral unfurling of the photograph's resolution, not only its blurred margins, but also its overall grain.[7] It allows the viewer to

7. Since chiaroscuro is the temporality of shape, that part of the painterly illusionism of depth that relies on it (chiaroscuro itself, atmospheric perspective, *sfumato*, etc., as opposed to linear perspective) is ultimately founded on the time-consuming practice of painting. The *taking* of the photograph doesn't allow such a *practice*. Hence the fact that those photographers who aimed at pictorial equivalence repeatedly insisted on preparatory operations and especially on laboratory work, which surround the push-the-button moment of taking a photograph. The aesthetic of blurring brings the photo-portrait closer to the painted portrait, and was defended mostly by the pictorialists. Nevertheless, the process does not imitate painting, but shows that great portraitists such as Cameron, Carjat, Nadar, or Steichen had a remarkable intelligence for the medium. Beaumont-Newhall relates that Juila Cameron "used badly made lenses to destroy detail, and appears to have been the first to have them specially built to give poor definition and soft focus." See, Newhall, *History of Photography*, p. 64.



Julia Margaret Cameron. Thomas Carlyle. *1867.*
(George Eastman House, Rochester, New York.)

travel through the image, choosing to stop here and there, and in so doing, to amplify the monumentality of a detail, or to part from it. The kind of time involved by this *travail* is cyclic, consisting in the alternation of expansion and contraction, diastole and systole.

This particular surface temporality of photography is congenial with the ebb and flow of memory. For a portrait (as typified by the funerary image) does not limit its reference to the particular time when the photograph was taken, but allows the imaginary reconstruction of any moment of the life of the portrayed person. (That is the charm of a photo-album; each photograph is a landmark in a lifetime. But memory shuffles in between landmarks, and can erect on any of them the totality of this life.)

So photography in this instance is a consoling object. This movement in systole and diastole is also the one that runs alongside what Freud called the *work of mourning*. To put it simply, what happens in the mourning period is a process in which the subject learns to accept that the beloved person is now missing forever, and that in order to survive, he must turn his affection towards someone or something else. In the course of this process, substitutive objects, like things that have belonged to the deceased, or an image of the deceased, can help obey the demands of reality. In Freudian terms, this means that a certain quantity of libidinal affect must be withdrawn from the object to which it was attached (*de-cathexis*), awaiting to be refastened to a new object. Meanwhile, the loosened affect temporarily affixes itself to "each single one of the memories and expectations in which the libido is bound to the object."[8] This process Freud calls *hyper-cathexis*. We can assume that the substitutive objects of the deceased can act as representations of these "memories and expectations," and thus, that they are themselves, *hyper-cathected*.

We may suppose—again because of the indexical nature of photography—that there is something like a mourning process that occurs *within* the semiotic structure of the photograph, as opposed to what would happen with other kinds of images, like drawing or painting. A real mourning process can obviously make use of any kind of image as substitutive object. The mourning process then remains exterior to the semiotic structure of the image. But photography is probably the only image-producing technique that has a mourning process built into its semiotic structure, just as it has a built-in trauma effect. The reason is again that the referent of an index cannot be set apart from its signifier. Though it is better exemplified by the time exposure, any photograph is thus prone to a

8. "Reality-testing has shown that the loved object no longer exists, and it proceeds to demand that all libido shall be withdrawn from its attachments to that object. . . . [Its orders] are carried out bit by bit, at great expense of time and cathectic energy, and in the meantime the existence of the lost object is psychically prolonged. Each single one of the memories and expectations in which the libido is bound to the object is brought up and hypher-cathected, and detachment of the libido is accomplished in respect of it." Sigmund Freud, "Mourning and Melancholia" (1917 [1915]), *The Standard Edition of the Complete Psychological Works*, Vol. XIV, trans. James Strachey, London, The Hogarth Press, 1957, pp. 244–5.

process of mourning, whatever its content might be, whatever its link with real events as well. That the portrait be funerary or not, or for that matter, that the photograph be a portrait at all, is a matter of internal limits, which can be no more than emphasized by the subject matter.

Within the semiotic structure of the photograph, the referential series acts as "lost reality," whereas the superficial series acts as "substitutive object." So what the diastolic look accomplishes when it summons the shape and inflates it, is the hyper-cathexis of the superficial series of the photograph; and what the systolic look accomplishes when it revokes the shape and "kills" it, is the de-cathexis of the referential series.

Trauma effect and mourning process as photography's immanent features induce two opposite libidinal attitudes. The mourning process is that of melancholy, or more generally, that of depression. As to the shock of the traumatism, it is followed by a compulsive attempt to grasp at reality. The superficial series being suddenly wiped out of consciousness, it provokes a manic *anti-cathexis* of the referential series, as a defense reaction.

We now begin to understand that the paradoxical apprehension of time and space in photography is akin to the contradictory libidinal commitment that we have towards the photograph. On a presymbolic, unconscious level, it seems that our dealing with the photograph takes effect as an either/or process, resulting in an unresolved oscillation between two opposite libidinal positions: the manic and the depressive.

In Szondi's typology of basic drives (the Szondi-test, by the way, is the only so-called projective test to use photographic material), the manic-depressive dimension appearing in human psychopathology and in human experience has been called *contact-vector*. This is generally understood in phenomenological terms, as representing the fundamental attitudes of our being-in-the-world. According to Szondi and other psychologists, this manic-depressive vector is mostly presymbolic, and is the realm of *Stimmung*, mood. It is also believed to be the terrain in which aesthetic experience, especially visual, is nurtured.

More than any other image-producing practice, the photograph puts the beholder in contact with the world, through a paradoxical object which, because of its indexical nature, belongs to the realm of uncoded things, and to the sphere of codified signs.

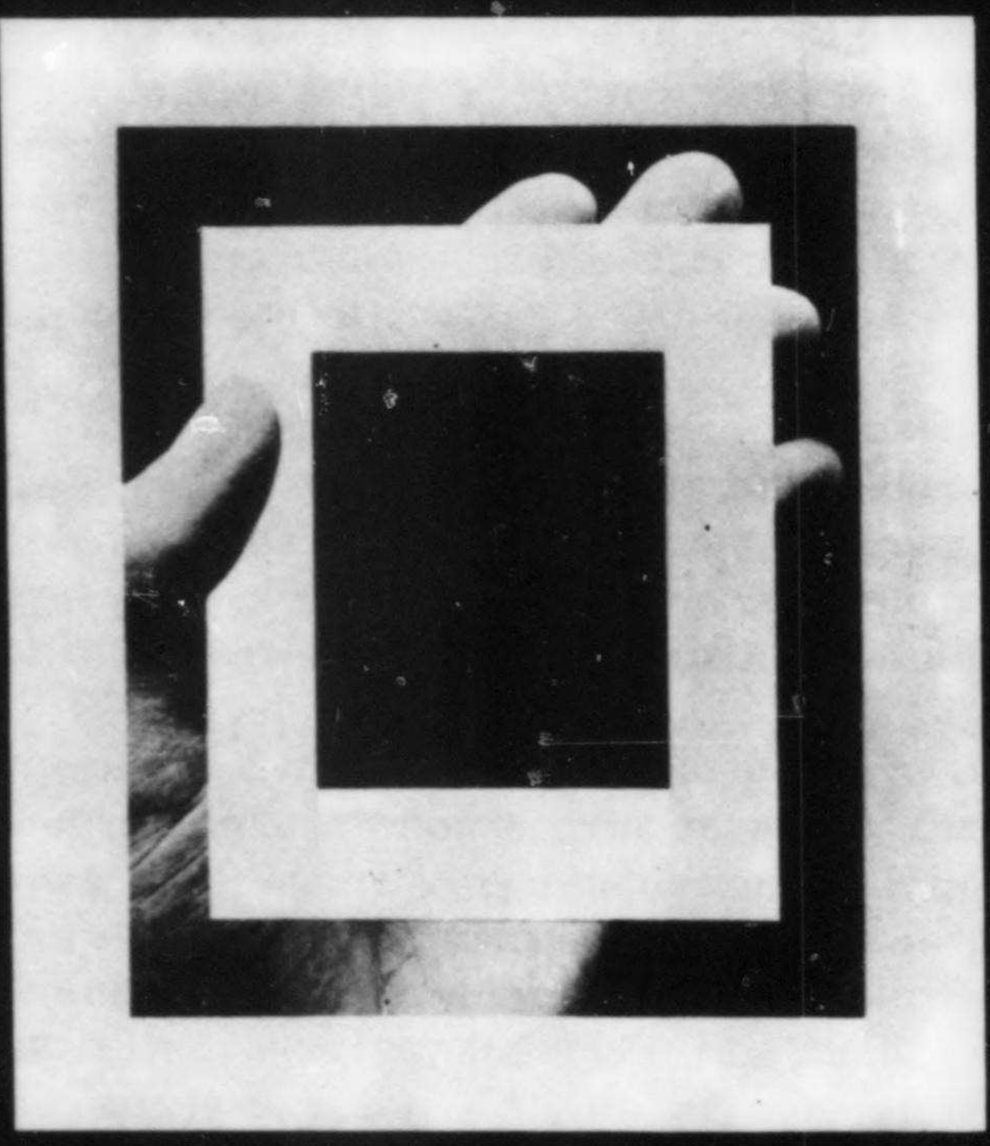
We have discovered the manic-depressive functioning of the photograph by insisting on the didactic opposition of snapshot and time exposure. And we have seen that the trauma and the response to it in form of a manic defense reaction acted as an internal limit of the snapshot's instantaneity; while on the other hand, the mourning process, which partakes of the funerary nature of photography and induces the depressive position, acted as an internal limit on the time exposure. But of course there is no such thing as an empirical definition of snapshot and

time exposure. One cannot decide on a shutter speed that will operate as a borderline between them. These were only didactic models provided by intuition, but they were used to unravel one of the paradoxes of photography. These models do not point to technical or aesthetic standards; their concern is photography in general. Yet they helped to label two opposite attitudes in our perceptual and libidinal apprehension of the photograph. Though these attitudes coexist in front of every photograph, they can be told apart. Moreover, the alternative character of mania and depression suggest that though both attitudes are coextensive, they do not mingle. Photography doesn't allow an intermediate position, or a dialectic resolution of the contradiction.

Hegel's prophecy that art was about to come to an end was published in 1839, the very same year in which Talbot and Daguerre independently made public the invention of photography. It might be more than mere coincidence.

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