Call #: B846 .L57 2005
Location: 4

TN: 53827
Borrower: VA@
Patron: Golumbia, David

ILL#: 46556238
In-Process Date: 9/30/2008 06:36:59 PM
Max Cost: $40IFM
Odyssey Library: YES

Journal Title: Atomic light (shadow optics) /
Volume: Issue: Month/Year: 2005 Pages: 81-103, plus notes 178-185
Article Author: Lippit, Akira Mizuta.
Article Title: Lippit, Akira Mizuta.,; An Atomic Trace (Chapter 4)

NOTICE: The Copyright Law of the United States (Title 17, U.S. Code) governs the making of photocopies or other reproductions of copyrighted material.

FIRST CLASS MAIL
FROM: ILL, Leyburn Library
204 W. Washington St
Washington & Lee University
Lexington, VA 24450

TO: Alderman Library ILL VA@
University of Virginia
Newcomb Road
Charlottesville, VA 22903-2498
4. An Atomic Trace

In 1951 the abstract painter Willem de Kooning commented on the radical visuality unleashed by the atomic bomb. The advent of atomic light signaled, for de Kooning, the absolute transformation of visual representation.

Today, some people think that the light of the atom bomb will change the concept of painting once and for all. The eyes that actually saw the light melted out of sheer ecstasy. For one instant, everybody was the same color. It made angels out of everybody.¹

An atomic visuality, forged in the spectacular visuality of the atomic or A-bomb, an A-visuality. De Kooning’s reflection on the atomic detonation and its effect on visual representation is marked by religious excitement and confusion. The sadistic metaphysics of his account, the cruel suggestion of redemptive ecstasy in the monochromatic annihilation, conveys de Kooning’s uneasiness in front of the atomic spectacle. His language charts
the limits of figuration before the visual event that may have changed "the concept of painting once and for all." "The eyes that actually saw the light," those who witnessed and understood (or were converted), also lost their vision; in the sacrificial logic of de Kooning's passage, the witnesses exchanged their eyesight for a sublime visuality: the eyes of those witnesses "who saw the light melted out of sheer ecstasy." Ecstatic, outside, blinded. The last form of light, perhaps, that anyone needed to see. The last light of history, according to de Kooning, or the light at the end of history.

"For one instant, everybody was the same color." Which is to say that for an instant, there was no more color in the world. The same transcendent colorlessness illuminated everyone. The catastrophic light of atoms suffuses all people in an overpowering light, which stains each individual body with the purer color of colorlessness. In contrast to the dark light imagined by Tanizaki Jun'ichirō, a secret luminosity that emerges from the depths of the Japanese body, atomic light bathes the body from without, erasing the differences of color and hue that surface each human body. An annihilating, catastrophic light renders the world raceless.

The atomic light, says de Kooning, "made angels out of everybody." Everyone is touched, transformed, but no one survives the force of an atomic metaphysics. De Kooning's anxious rhetoric attempts to account for a spectacle that changes the terms of specularity as such. A spectacle in excess of the capacity of any individual to recognize it as spectacle, or even to see it. De Kooning's angelic, wrathful light of atoms suspends for a moment, but also forever, the economies of visibility and visuality—melting in ecstasy the eyes of those who saw, blending all colors into one, and making everyone angels. A phantom temporality that passes in an instant, in a flash; that leaves behind a historicity scarred and haunted, like Chris Marker's protagonist, by an image, an image of time, torn from its place in history. A timeless image of timelessness. It inscribes an end of visuality, an aporia, a point after which visuality is seared by the forces of an insurmountable avisuality. The atomic blast that melted the eyes of angels brought forth a spectacle of invisibility, a scene that vanishes at the instant of its appearance only to linger forever in the visual world as an irreducible trace of avisuality.

At the time de Kooning sought to fix his understanding of the atomic spectacle in words, to develop an idiom for radical and transformative visuality, another examination of invisibility and avisuality was under way in Japan. A series of minor films based conceptually on H. G. Wells's 1897 novel The Invisible Man, but more immediately on the prewar and wartime American films that featured the figure of an "invisible man," emerged in
the postwar Japanese cinema. In the context of an imposed and internalized prohibition against war references, particularly to the atomic bombings, the tõmei ningen films in Japan suggest an attempt through popular and fantastic genres to explore the conditions of visuality in the aftermath of World War II.

Adachi Shinsei’s 1949 *The Invisible Man Appears (Tõmei ningen arawaru)*, a film version of *The Invisible Man* set in postwar Kobe, opens with a scientific competition between two young chemists: each believes that he can discover a method of rendering the human body invisible. The difference between their rival projects lies in the logic that informs each conception of invisibility. One scientist proposes to contract the body’s molecular structure to the point of complete density: the opaque body will appear invisible through the paradox of absolute visibility, effecting a kind of human black hole. The other seeks to reorient the body’s cellular structure so as to allow light to pass through it like a sieve, making the body appear transparent and thus invisible to human sight. Opacity and transparency frame the dialectic of invisibility, establishing the thresholds of the visible body. Moving in opposite directions, the forces of optical density and dispersal arrive at the limits of visibility, at the thresholds of visuality. According to the terms of this film, invisibility is defined as both the absolute condensation of visible matter and, conversely, its diffusion. Total materialization and total dematerialization institute the same crisis in visuality. At stake in the competition is a woman’s hand: the victorious scientist will earn the right to marry the daughter of the two mens’ mentor, who supervises the laboratory. (The senior scientist proposes a prize for the winner; the younger scientists immediately suggest their mentor’s daughter, Machiko. Just as quickly, he agrees. The inverted oedipal exchange suggests the fluid economies of sexuality and science circulating in the film’s diegesis.) The eros that fuels their contest foreshadows the inevitable convergence of light, death, and jouissance.

A half century earlier, another woman had offered her hand for the realization of a scientific experiment and became an emblem for transparency. Berthe Röntgen’s x-rayed hand in 1895, marked by the exteriority of her wedding band, signaled the entry of light into the human body and the illicit marriage, as it were, of radiation and photographic culture. In the late-nineteenth- and mid-twentieth-century narratives of radiation, the desire to probe the secrets of visual order determined an uncanny rapport between visuality and sexuality, science and art, light and darkness, fantasy and power. The destructive effects of those radiographic histories are embodied in the figure of Dr. Nagai, the doomed protagonist of Oba Hideo’s 1950 film *The Bell of Nagasaki (Nagasaki no kane)*. He is already suffering from radiation poisoning, contracted from his overexposure to
X-rays, when the atom bomb destroys Nagasaki on 9 August 1945. Another palimpsest appears in the untraceable X-ray image that opens Kurosawa Akira’s 1952 film *To Live* (*Ikiru*). As Mitsuhiro Yoshimoto notes, this image, this view of human interiority has no origin in the film’s diegesis. No proper history or referent. Yoshimoto calls this floating, unbound X-ray, an “impossible image.” Or again in the X-ray film that follows the credit sequence of Teshigahara Hiroshi’s 1966 film *The Face of Another* (*Tanin no kao*). The protagonist, Okuyama, whose face has been disfigured in a laboratory fire, is seen in an X-ray. Referring to the accident that has left him faceless, Okuyama says: “Everything is too particular. If this had been an effect of human destiny or caused by a war wound or something of that nature, then I might still have been saved.” The lethal force of X-rays is recapitulated by the atomic radiation, which echoes the capacity of catastrophic light to penetrate the body and erase the distinction between inside and out, body and environment, images of destruction and unimaginable destruction. X-rays and atomic radiation are linked in a secret narrative, bound by a logic that is historical, overdetermined, and destined—and, at the same time, incidental, accidental, and arbitrary. Wells brought forth his invisible man from the shadow of the X-ray in 1897; he makes explicit reference in his novel to the “Röntgen vibrations.”

Adachi’s *Tômei ningen araware* conveys in its title the paradox of invisibility and transparency as positive modes of visuality. Invisibility functions not as the negation of visibility but as a form of visibility given to be seen, but unseen. Visual but invisible. The transparent or invisible man arrives and appears (*araware* carries both meanings), suggesting a visuality of the unseen, the arrival of a form of invisibility located within the spectrum of visibility. An invisibility or avisuality that takes place within the frames of the visible, as the condition of possibility of the visual as such. The title implies a semiotics of avisuality, a mechanism for rendering the very invisibility of the invisible at the center of the visible world, to paraphrase Trinh T. Minh-ha.

As the two scientists begin their race to the thresholds of the visible world and the erotic lure that signals from the other side, they learn that their mentor-patriarch has already developed a formula for effacing the human body from the visible world. He has chosen to keep his discovery secret until he finds an antidote to reverse the effect of invisibility. The elder scientist has elected to pursue total transparency rather than opacity and makes clear his preference for the young disciple who has chosen the similar route. The father-scientist’s choice of an intellectual heir and future son-in-law tints the dialectic of invisibility with a faint but distinct metaphysics of light. In the context of the film, transparent luminosity comes to be aligned
with figures of cleanliness and propriety, while opaque density comes to exemplify those of obsessive ambition. (An argument against the concept of absolute density states that even if the body became invisible under such conditions, it would still cast a shadow. Absolute condensation would result in a shadow without a body, a residue of corporeality that stains the invisible body. A shadow of invisibility, and invisibility as shadow.) Several years after the American film industry experimented with the representation of invisible beings and four years after the atomic bombings of Hiroshima and Nagasaki, which ended World War II, Japanese film audiences were exposed to this attempt to configure a phenomenology of the transparent.

As the film unfolds, its narrative disrupts the contest between the rival modes of invisibility. Members of a criminal organization kidnap the senior chemist and then his disciple, Kurokawa, forcing the latter to ingest a stolen dosage of the compound. He vanishes. With his image held hostage by the underground organization, the transparent scientist turns to a life of crime. A side effect of the potion, disclosed by its inventor, is a proclivity for violence and aggression (kyōbō). As the forces of invisibility begin to consume Kurokawa's existence, he develops symptoms: vengeful rage and jealousy, and the desire for power. Kurokawa returns to the visible spectrum at the moment of his death, after threatening his enemies with a euphemism for his own condition, "I'll erase you from this world forever." Kurokawa is in both senses atomic, an atomic force and dispersed; he is himself an atomic weapon. His rival's research—his search for a material super-density—might have reversed the effects of transparency by providing a way to shade his transparent body, forcing it back to the spectrum of visible matter. One mode of invisibility counters the other, an antidote invisibility or invisible antibody. Kurokawa dies in the ocean, his bodily form slowly resuming its shape in the water. His death is wrapped in a sublime glow: the overexposed glare of the sun suffuses the image and shimmers on the water's surface. Kurokawa returns to the world underwater, in a ray of luminosity. Kurokawa's once invisible figure has become what Daniel Tiffany calls "the radiant body: the body whose radiant and volatile substance is disclosed only by a nuclear event, the body disappearing in the catastrophic medium of the atom."10 The formula for invisibility is represented in the 1949 film as a liquid, which is consumed orally. In 1954, when Oda Motoyoshi introduced a new version of the invisible man, The Invisible Man (Tomei ningen), the liquid became a ray and the allusion to World War II moved from an oblique to a direct reference.11

The year 1952 marked the end of Japan's occupation by Allied forces and the end of one form of political censorship; a new cinema had begun to emerge by 1954. Between the two films, invisibility assumes two distinct
forms: one political, the other phenomenological. Because representations of and references to the war were restricted during and after the war, first by the Japanese government and then by the occupying forces, Japanese artists and intellectuals adopted a variety of rhetorical strategies to address the war and its aftereffects. In the case of postwar Japanese cinema, one finds a consistent recourse to allegory, which determines a representational space otherwise remarkably void of war references. Beyond the political restrictions that shrouded the war, the subject of atomic radiation and its lingering effects in Hiroshima and Nagasaki posed another layer of complex avisuality. The bombings that ended Japan's imperialist activities had introduced a form of invisible warfare or, rather, a form of warfare that circulated through a dense matrix of visuality, displacing any access to a stable referent. At Hiroshima, and then Nagasaki, a blinding flash vaporized entire bodies, leaving behind only shadow traces. The initial destruction was followed by waves of invisible radiation, which infiltrated the survivors' bodies imperceptibly. What began as a spectacular attack ended as a form of violent invisibility.

The movement from the American to Japanese films effects several significant changes, including the translation of the word invisibility as transparency (tômei) in the Japanese versions. The Japanese language has a word for invisibility, fukashi. In Murayama Mitsuo's 1957 film The Invisible Man Meets the Fly (Tômei ningen to hae otoko), the distinction between the terms tômei and fukashi is repeatedly underscored. A scientist developing a powerful ray repeatedly corrects uses of the term tômei kôsen (transparent ray), insisting on the word fukashi. Despite this and almost by
default, tômei comes to mean invisible. While both terms imply a diminished form, the nuances of each type of imperceptibility vary. Invisibility suggests a range of phenomenal states, from a material dispersion to radical absence. It implies a metaphysics of the body, an absence at the very core of one’s presence. With transparency, the body is there but traversed—violated, like Daniel Paul Schreber’s body, by a driving radiance. The rhetorical difference is meaningful when placed against the historical backdrop that separates the American and Japanese films—the war between the nations and the atomic bombings that ended it.

James Whale’s 1933 film The Invisible Man similarly features two young scientists, a senior scientist and his daughter, Flora, and a love triangle between the brilliant scientist, his lesser counterpart, and the daughter, who is attracted to the radiance of genius. The invisible man, Jack Griffin (played by Claude Rains), has experimented with the dangerous (and fictitious) substance “monocaine,” derived from a plant in India, which draws out color and also induces madness. Because the invisible body retains its other physical functions, it is susceptible to the environment, to forces of exteriority such as weather and to the ingestion of food and liquids. Griffin explains that he is vulnerable to rain, mist, and smog; to “smoky cities,” “dirty fingernails,” basically, ash, dust, and cinder; and especially after meals. A brush against the elements, which adhere to the surface of his skin, and an exposure of the complex dynamic between inside and outside, realized by eating, undoes the effect of invisibility. Invisible corporeality depends, in this instance, on the suspension of normal relations between inside and outside. In this state, the body disappears between worlds, existing neither within nor without the world. Exposed by the encounter with exteriority, which stains the body’s surface, and with interiority, which reveals a form of deep invisibility, the invisible body is worldless, otherworldly, between the material and phantasmatic worlds of representation. The living, invisible body remains suspended in this realm of avisuality until death. In a trope that recurs throughout the invisible man phantasm, only death restores the body to a state of visibility. At the moment of death, the body returns to the visible world. Each death scene is almost always preceded by a final representation of invisible movement, tracked by footsteps on the ground, followed by a collapse, death, and the return of the visible human figure. In Whale’s film, Griffin returns to the visible spectrum inside out: first his skull returns, his skeletal interiority, followed by his exterior surface. An X-ray image mediates the return from invisibility to visibility—a death in reverse,” says Michel Chion.

Wells’s novel adds further details to the conception and staging of an invisible body. In the original, “the stranger,” as yet unnamed and unidentified, reveals himself to a frightened crowd. Wells describes the first
exposure, the presentation of the invisible, avisual figure before a crowd of hostile spectators. "You don't understand," he said, 'who I am or what I am. I'll show you. By Heaven! I'll show you.' Then he put his open palm over his face and withdrew it. The centre of his face became a black cavity."19

The confusion between "who I am or what I am" constitutes the crisis initiated by invisibility; in this instance, identity is absorbed by visuality, and invisibility determines ontology. At the center of the crisis is the absent face, the "black cavity," which marks the space of the stranger's being—the obscure empty space of his face. The human face, the exterior surface of the body and metonymy of humanity, serves as the site of a specular avvisuality. What is shown but not seen, or seen only as an avisual spectacle, establishes a phantom dialectic that drives the trope of invisibility. "Then he removed his spectacles, and every one in the bar gasped," the narrative continues. "It was worse than anything.... They were prepared for scars, disfigurements, tangible horrors, but nothing!"20 All imaginable horrors are exceeded by the unimaginable horror of invisibility. Effacement surpasses the horror of any material disfiguration. His face fully unveiled, the stranger represents the exemplary spectacle of avvisuality: he "was a solid gesticulating figure up to the collar of him, and then—nothingness, no visible thing at all!"21 He is, says Albert Liu, "a figure of Acéphale."22

Among the strange features of Wells's novel is the fact that the invisible man, Griffin, was, in some ways, already invisible, or at least transparent, almost translucent, almost "albino" before his experiments with optical density and chemical invisibility. A virtually colorless whiteness. Becoming invisible seems to have originated in Griffin elsewhere, prior to his decision to seek invisibility. To his interlocutor, Kemp, Griffin begins a scientific explanation of his efforts "to lower the refractive index of a substance, solid or liquid, to that of air."23 "Light," says Griffin, "fascinated me."24

Wells's imaginary science begins with a racist invocation: Griffin relates to Kemp, "I went to work—like a nigger."25 From albino to nigger, Griffin's transformation across the spectrum of light travels through the registers of race, adding to the idiom of light, the metaphors of racial identity. The pure science of Griffin's account is stained by his idiom; his recourse to the language of racism introduces a tremor that runs throughout the novel: the unstable value of the figure of light. Of his initial breakthrough, Griffin states, "I had hardly worked and thought about the matter six months before light came through one of the meshes suddenly—blindingly!"26 As actual light, race, and the metaphors of thought, the trope of light creates a dense rhetoric at the center of Wells's fiction, itself a kind of "black cavity."

"Visibility," Griffin continues, "depends on the action of the visible bodies on light. Either a body absorbs light, or it reflects and refracts it, or
does all these things. If it neither reflects nor refracts nor absorbs light, it cannot itself be visible.” Griffin introduces the foundation of his discovery, the claim that human beings are essentially transparent. To Kemp’s objection, “Nonsense!” Griffin replies:

Just think of all the things that are transparent and seem not to be so. Paper, for instance, is made up of transparent fibres, and it is white and opaque for only the same reason that a powder of glass is white and opaque. Oil white paper, fill up the interstices between the particles with oil so that there is no longer refraction or reflection except at the surfaces, and it becomes as transparent as glass. And not only paper, but cotton fibre, linen fibre, wool fibre, woody fibre, and bone, Kemp, flesh, Kemp, hair, Kemp, nails and nerves, Kemp, in fact the whole fabric of man except the red of his blood and the black pigment of hair, are all made up of transparent, colourless tissue. So little suffices to make us visible one to the other. For the most part the fibres of a living creature are no more opaque than water.

“The whole fabric of man,” according to Griffin, is held together, but more important, made visible by the only opaque aspects of the human body: “The red of his blood and the black pigment of hair.” In Griffin’s account the human body is like paper, a network of fibres and essentially transparent. Another convergence of the body and book (Freud and Tanizaki), the body as book, a book of the body, an archive of the body written, as it were, on the surface of the body itself.

Griffin’s attempt to master optical density requires a way to drain the color from blood and pigments. His first success comes when he learns how to change the color of blood from red to white without affecting its functions. A colorless blood. “It came suddenly, splendid and complete into my mind. I was alone; the laboratory was still, with the tall lights burning brightly and silently. In all my great moments I have been alone.” Solitude, interiority, and invisibility are bound by the trope of luminosity that runs throughout Griffin’s account. “One could make an animal—a tissue—transparent! One could make it invisible! All except the pigments—I could be invisible!’ I said, suddenly realising what it meant to be an albino with such knowledge.” Griffin’s move toward invisibility, solitude, and madness had already begun; “an albino with such knowledge,” he was already withdrawing from the world of visibility.

Even before the completion of his experiment, Griffin’s proclivity for secrecy renders him socially invisible. As a “provincial professor,” Griffin found it difficult to avoid the constant “prying,” which drove him toward greater secrecy and finally disappearance. “And after three years of secrecy and exasperation, I found that to complete it was impossible—impossible.”
Griffin needed absolute secrecy; he needed to fuse the social and phenomenal dimensions of invisibility and disappear entirely.

The final task of Griffin’s project involves removing the residual color and pigmentation from “the transparent object whose refractive index was to be lowered between two radiating centres of a sort of ethereal vibration.” Griffin’s compound consists of a mixture of vibrations (radiation) and ingested liquids (strychnine). Between the “ethereal vibrations” of two radiating centers, first a piece of fabric and then a cat are erased, “like a wreath of smoke.” But in the case of the cat, not entirely. The experiment failed in two areas. “‘These were the claws and the pigment stuff—what is it?—at the back of the eye in a cat. You know?’ ‘Tapeum.’ ‘Yes, the tapeum.’” (The Oxford English Dictionary describes the tapeum as “an irregular sector of the choroid membrane in the eyes of certain animals [e.g., the cat], which shines owing to the absence of the black pigment.”) After some time, the cat vanishes except for its eyes: “After all the rest had faded and vanished, there remained two little ghosts of her eyes.” The “black cavity” of Griffin’s face has been replaced with the phantom eyes of the animal, which looks at the madman from the vantage point of the invisible. The lines that separate interiority from exteriority, surface from depth, visibility from blindness, and even human from animal being have collapsed. From the invisible world, the cat regards Griffin with only its eyes: with the eyes that remain like the Cheshire cat’s grin.

Eventually Griffin subjects himself to the experiment and succeeds. Under the “sickly, drowsy influence of the drugs that decolourise blood,” Griffin looks into a mirror and sees his face, “white like a stone.” The albino has begun to lose the last traces of his human coloring and begins to suffer “a night of racking anguish, sickness and fainting.” Then, after a night, the pain passes.

I shall never forget that dawn, and the strange horror of seeing that my hands had become clouded glass, and watching them grow clearer and thinner as the day went by, until at last I could see the sickly disorder of my room through them, though I closed my transparent eyelids. My limbs became glassy, the bones and arteries faded, vanished, and the little white nerves went last. I gritted my teeth and stayed there to the end. At last only the dead tips of the fingernails remained, pallid and white, and the brown stain of some acid upon my fingers.

An effect of invisibility, it seems, is a perpetual vigilance, the inability to close one’s eyes, since the eyelids, now transparent, no longer block one’s vision. Griffin experiences his vanishing body like an X-ray image. The interiority of his body, exposed to his unobstructed gaze, reveals itself before vanishing. An autopsy.
Griffin’s inability to arrest his vision follows the general collapse of his surfaces and the lost border between inside and out. As described in the film version, Griffin has to resist eating in public because, he says, “to fill myself with unassimilated matter, would be to become grotesquely visible again.” As a result of his invisibility, the inside of Griffin’s stomach has become visible to the outside. Anything that enters his stomach can be seen until digested. Griffin’s avusuality has turned him, like an X-ray image, inside out. Similarly, his outside, the surface of his invisible body, is vulnerable to the elements. “Rain, too, would make me a watery outline, a glistening surface of a man—a bubble,” he says. From the exposed interiority of his stomach to the unassimilable exteriority of his skin, Griffin’s invisibility has turned him into a contrast of extremes, depth and surface, interiority and exteriority, with no mediation. Fog too traverses his body: “I should be like a fainter bubble in a fog, a surface, a greasy glimmer of humanity.” In the withdrawal of the surface, Griffin exists without a balance between inside and out; everything his body comes into contact with remains irreducibly foreign and unassimilable, exposing the invisibility of his body. Contact with the world renders Griffin avisual.

The second and final autopsy returns at the novel’s end, on the occasion of Griffin’s death. As with most invisible man narratives, the protagonist’s body returns to view only after he dies, marking an exchange between life and visibility. In death, the process of invisibility reverses itself: “Everyone saw, faint and transparent as though it were made of glass, so that veins and arteries and bones and nerves could be distinguished, the outline of a hand, a hand limp and prone. It grew clouded and opaque even as they stared.” Griffin’s body returns to the visible world from his hand, “limp and prone,” an emblem, perhaps like Berthe Röntgen’s iconic hand, of monstrous visuality and death.

And so, slowly, beginning with his hands and feet and creeping along his limbs to the vital centres of his body, that strange change continued. It was like the slow spreading of a poison. First came the little white nerves, a hazy grey sketch of a limb, then the glassy bones and intricate arteries, then the flesh and skin, first a faint fogginess, and then growing rapidly dense and opaque. There lay, naked and pitiful on the ground, the bruised and broken body of a young man about thirty. His hair and beard were white,—not grey with age, but white with the whiteness of albinism, and his eyes were like garnets.

The fog flows from Griffin’s body, which appears to emit its own weather as it becomes visible. Like a developing X-ray photograph, like Freud’s dream of Irma’s interiority, Griffin returns to his normal state of transparency, “the whiteness of albinism,” an index of his race. Griffin resumes
his place in the visible world where he began, with less color than most. White skin and red eyes.

One effect of invisibility, thematized in the various invisible man scenarios, establishes a relationship between invisibility and madness, and the subsequent desire for power. Power is most often expressed as the ability to cause swift and undetected destruction. In predicting his ascent to global domination, both the film and novel versions of Griffin invoke "a reign of terror." Invisibility, or more precisely the ability to determine one's relation to and place within the visible spectrum, is linked to power, to the possibility of absolute power, which leads to destruction, self-destruction, and ultimately madness. The fantasy of sovereignty triggers the homophone of destruction: from "a reign of terror" to a terror that falls from the sky, like rain, black rain. The sense of total destruction unleashed by atomic war initiated a fort/da effect: the closer one moved toward Hiroshima and Nagasaki, the more those topologies receded. At the hypocenter of destruction, a fundamental density left the event invisible. Only its effects, ruined buildings, vaporized bodies, frozen mechanics, and the abstract measurements of lingering radiation (along with other empirical facts—the number of deaths, the heat in degrees at ground zero, etc.) provided an archive of its having taken place, there. Not the destruction of the archive, but an archive of destruction. Like the dialectic between condensation and dispersal, the atomic bombings introduced a visuality of the invisible, a mode of avisuality. They heralded a form of unimaginable devastation, in contrast to more recent forms of warfare, which, for distant (televisual) observers, produce only images. Instead, the atomic bombings produced symbols—as opposed to images of war—which drove the representation of atomic warfare from fact to figure, toward the threshold of art. The so-called mushroom cloud, which has come to embody the perverse organicity of atomic war, functions as a displaced referent for the obliterating force of atomic weaponry.  

Paul Virilio suggests an inextricable relationship between atomic warfare and light, nuclear destruction and photography. "Many epilogues have been written about the nuclear explosions of 6 and 9 August 1945," he says, "but few have pointed out that the bombs dropped on Hiroshima and Nagasaki were light-weapons that prefigured the enhanced-radiation neutron bomb, the directed-beam laser weapons, and the charged-particle guns." Weapons of light that introduce new modes of visuality and initiate, like de Kooning's atomic light, crises of visuality. Destructive light and the destruction of light as such.
The phenomenon of invisibility at Hiroshima and Nagasaki has become an essential aspect of its representation in the photographic media. It marks the return of 1895 in 1945, when the discovery of X-rays introduced images of material transparency and fused the function of radiation to photography. What was less apparent in 1895 was the extent to which the new rays facilitated the realization of certain drives intrinsic to photography. The photographic project had always involved more than the mere duplication of nature or the accurate representation of the visible world. Within the depths of what one might call the ideology of photography was a desire to make the invisible visible, but also to engender a view of something that had no empirical precedent. Something never before seen. Like the eruption of four-dimensional matter in a Lovecraft narrative, X-ray photography brought forth, from the depths of the human body, something that had not yet existed—an image of the human body as other, irreducibly foreign, and in its photographic materiality, invisible. Tearing through the opaque materiality of bodies, X-rays transformed photography from an exercise in realism—the production of indexical images—into an allegory of aviscuity.

X-ray photography produced a view that exceeded the conventional frames of photography, destroying in the process the limits of the body, the integrity of its interior and exterior dimensions. The body appeared inside out, inside and out, simultaneously. There and not there. Like the invisible men and women of the cinema, X-rays produced a transparent body and reproduced the body as a form of transparency. By passing radiation directly through the body, using it as a kind of radiant filter, X-ray photography exposed the body, in its most intimate, interior depth, as beyond the threshold of visibility. X-rays suggested the arrival of a true scientific revolution, a reorganization of the visible and physical universe.

Not only was the X-ray harmful to the human body, causing extreme forms of sunburn, it actually altered the body’s internal structure. This precursor to the metamorphic effects of atomic radiation at Hiroshima and Nagasaki exposed the destructive potential of invisible radiation, but also the photographic properties of the human body. It suggested the essential invisibility contained within the depths of the human body and the photographic image. The symptoms that resulted from overexposure to radiation revealed an uncanny resemblance to photographic processes, suggesting that the body itself could function like a photograph. Thus transformed, the body became a part of the apparatus, absorbed, as it were, by the glare of the photograph.

What was intimated in the radioactive culture of the late nineteenth and early twentieth centuries erupted at full force in Hiroshima and
Nagasaki: if the atomic blasts and blackened skies can be thought of as massive cameras, then the victims of this dark atomic room can be seen as photographic effects. Seared organic and nonorganic matter left dark stains, opaque artifacts of once vital bodies, on the pavements and other surfaces of this grotesque theater. The “shadows,” as they were called, are actually photograms, images formed by the direct exposure of objects on photographic surfaces. Photographic sculptures. True photographs, more photographic than photographic images. Virilio recounts the photographic legacy of the atomic bombing:

The first bomb, set to go off at a height of some five hundred metres, produced a nuclear flash which lasted one fifteenth-millionth of a second, and whose brightness penetrated every building down to the cellars. It left its imprint on stone walls, changing their apparent colour through the fusion of certain minerals, although protected surfaces remained curiously unaltered. The same was the case with clothing and bodies, where kimono patterns were tattooed on the victims’ flesh. If photography, according to its inventor Nicéphore Niepce, was simply a method of engraving with light, where bodies inscribed their traces by virtue of their own luminosity, nuclear weapons inherited both the darkroom of Niepce and Daguerre and the military searchlight. What appears in the heart of darkrooms is no longer a luminous outline but a shadow, one which sometimes, as in Hiroshima, is carried to the depths of cellars and vaults. The Japanese shadows are inscribed not, as in former times, on the screens of a shadow puppet theatre but on a new screen, the walls of the city.
There can be no authentic photography of atomic war because the bombings were themselves a form of total photography that exceeded the economies of representation, testing the very visibility of the visual. Only a negative photography is possible in the atomic arena, a skiagraphy, a shadow photography. The shadow of photography. By positing the spectator within the frames of an annihilating image, an image of annihilation, but also the annihilation of images, no one survives, nothing remains: “It made angels out of everybody.”

Nothing remains, except the radiation. At Hiroshima and Nagasaki, two views of invisibility—absolute visibility and total transparency—unfolded under the brilliant force of the atomic blasts. Instantly penetrated by the massive force of radiation, the hibakusha were seared into the environment with the photographic certainty of having been there. In the aftermath of the bombings, the remaining bodies absorbed and were absorbed by the invisible radiation. These bodies vanished slowly until there was nothing left but their negatives.

Japan’s postwar invisible man films reveal numerous traces of an atomic referent, from overt references to cryptic allusions. In *The Invisible Man Meets the Fly*, the counterpart to the invisible man is a human fly, the hae otoko, who strikes from nowhere, perceptible only by the buzzing sound he emits while in flight. The biological experiment that produces “the fly”—which involves a shrinking solution that renders the individual small and light enough to fly undetected in the air—was developed, according to the film, by a Japanese secret weapons unit during the war. The nightclub owner Kuroki, who controls the formula, seeks to exact revenge on those who conducted experiments on him. He has enslaved another man as his "fly," ordering hits on former colleagues in the Imperial Army. During one attack on a woman, the hae otoko stalks his victim before descending on her from above and behind. While being pursued by her invisible attacker, she glances anxiously upward looking for the source of the sounds that hover around her. As he strikes her, his shadow and feet appear suddenly, dropped from the sky. “The fly,” says Albert Liu, “acts like and is a figure of the ray to the extent that its remote directedness arrives with a sting, a touch.” Like the air raids of World War II, the fly assaults his victims from above; the only sign of his presence a distinctly audible hum. The disturbances in visuality introduced by the fly (actually a microscopic, atomic human being) and the invisible man are supplemented by another sense, sound. Avisuality is also heard and should be heard acronymically as an audiovisuality, an AV, a visuality. The metallic faintly industrial sound of the hae otoko suggests insects and airplanes, monstrosity and warfare.

In each film invisibility produces tropes of visuality and a visuality, modes of perception in response to the structure of invisibility. Mobile cameras
and empty mise-en-scenes, camerawork through vacant space, similarly induce a supplementary sense, even sensuality, in the invisible man films. Another trope is that of blindness: the inability to see with one’s eyes, but also as a metaphor of ambition and madness. Of the complex transversality between invisibility and blindness, Wells’s invisible man says of his condition, “I felt as a seeing man might do, with puffed feet and noiseless clothes, in a city of the blind.” An inverse form of invisibility, blindness signals the inability to see what is nonetheless there, somewhere, in the visible spectrum. In Oda’s version of The Invisible Man, only a young girl, Mariko, who has been blinded in the war, perceives the invisible man, who is himself a victim of medical experimentation by the Imperial Army. Although she cannot see, Mariko can sense his presence in the “air”; she can distinguish the good from the bad, the kind from cruel, each person exudes a unique atmosphere (me ga mienakutemo, kuki de wakaru no). Blindness, a frequent motif in postwar Japanese cinema, can be seen as an allusion to the blinding flash, or pika, as the atomic explosions were euphemistically called. Eyes melted in sheer ecstasy, as de Kooning says. Like the Greek oracle, the blinded girl cannot see what others see, but can perceive what others cannot. She transcends the physiology of blindness with a form of extrasensory vision. She is, in this sense, visionary.

Of this genre of films, The Invisible Man most openly assails militarism in general and Japanese militarism in particular. It seeks to find, like the sacrificial rhetoric of de Kooning, a form of Christian redemption in the atrocity of war. “A truly Christian light,” says de Kooning, “painful but forgiving.” Nanjō Takemitsu, the invisible man, is a product of the special attack corps and insists that the Japanese military stole his human figure (sugata). When he reveals his invisibility to a reporter whom he has befriended, Nanjō says, “Let me show you this model, created by the military state.” Unlike Griffin, the bandaged invisible man who unravels, Nanjō effaces himself, wipes his face from the surface of visibility. The human face, says Giorgio Agamben, “is only opening, only communicability. To walk in the light of the face means to be this opening—and to suffer it, and to endure it.” Faceless, Nanjō has become an opening without communicability, an abyss. An opening through which only the forces of his affect—anger and faith—pass. Nanjō’s anger is tempered by his faith, a theme that runs throughout the film. In the end, he finds peace in self-sacrifice. At the moment of his death, Nanjō returns to the visible world.

Nanjō’s face remains a complex trope throughout The Invisible Man. He has been effaced (by the Japanese military), has been made faceless (by the radiation), but nonetheless wears a painted face throughout much of the film. He faces the world with and without a face. “The face does not coincide with the visage,” says Agamben. “There is a face wherever something
reaches the level of exposition and tries to grasp its own being exposed, wherever a being that appears sinks in that appearance and has to find a way out of it.\textsuperscript{55} Even a being with no visage can be exposed, can grasp “its own being exposed”; even a being with no visage has to find a way out of its appearance. Nanjō appears and is exposed; he must find a way out of the avisuality that he faces, that faces him, and that constitutes the surface of his invisibility. Nanjō’s face is superficial, a pure surface, removable and capable of effacement, invisible and avisual.

Such is the abyss that opens beneath Nanjō’s invisibility. On the face and the abyss that it surfaces, Agamben writes:

\begin{quote}
Inasmuch as it is nothing but pure communicability, every human face, even the most noble and beautiful, is always suspended on the edge of an abyss. This is precisely why the most delicate and graceful faces sometimes look as if they might suddenly decompose, thus letting the shapeless and bottomless background that threatens them emerge.\textsuperscript{56}
\end{quote}

Behind every face, but also beneath it, surges the “shapeless and bottomless background that threatens” it. The face is a surface that keeps the formless inside from erupting; it is the surface of formlessness, bound to the formless matter, the formless interiority it covers. Gilles Deleuze and Félix Guattari add: “The face constructs the wall that the signifier needs in order to bounce off of; it constitutes the wall of the signifier, the frame or screen. The face digs the hole that subjectification needs in order to break through; it constitutes the black hole of subjectivity as consciousness or passion, the camera, the third eye.”\textsuperscript{57} The trope of the invisible man creates a disturbance at the very site of signification. Without the screen of the face, the invisible man is rendered pure interiority, transparency, a “black hole.” Nanjō’s invisibility is a form of interiority, of formless interiority; a mode of formless avisuality. “The only face to remain uninjured,” adds Agamben, “is the one capable of taking the abyss of its own communicability upon itself and of exposing it without fear or complacency.”\textsuperscript{58}

To expose one’s face, for Agamben, means to confront the outside, to allow the formlessness of one’s interiority to communicate with the surfaces that constitute exteriority. This communication involves a deep commitment to “de-propriation and de-identification”: one must become other, you must become other.

My face is \textit{outside}: a point of indifference with respect to all of my properties, with respect to what is properly one’s own and what is common, to what is internal and what is external. . . . The face is the threshold of de-propriation and of de-identification of all manners and of all qualities. . . . And only where I find a face do I encounter an exteriority and does an \textit{outside} happen to me.\textsuperscript{59}
The face is a constitutive surface, the limit between inside and out. A design. It communicates, or extends a communicability, between the formless invisibility of the abyss—inside and behind—and the exteriority of another. In this sense, the face, which always threatens to “suddenly decompose,” represents another surface of avisuality. You are there, this face, facing, but only when you have depropriated and deidentified all that is yours, that is you—when you have moved outside. You are formless when you face the outside, when you are outside.

Yomota Inuhiko has suggested that the figure of an invisible Japanese soldier may be an allusion to Koreans who were forcibly conscripted into the Japanese Imperial Army and then abandoned after the war. They were subsequently erased from the registers of a visible history. If so, then the Japanese and secretly Korean-Japanese characters are invisible in the sense of Ralph Ellison’s nameless “invisible man.” Ellison’s novel Invisible Man, which shares its name with Wells’s novel but without the definite article, was begun in the summer of 1945 and published in its entirety in 1952. Some portions of the book were published in 1947 and 1948 in Magazine of the Year, fifty years after the publication of Wells’s novel. The history of Ellison’s Invisible Man from 1945 to 1952 coincides with the Allied occupation of Japan. It begins, according to Ellison, with the premise that the “high visibility” of African Americans “actually rendered one un-visible.”

The paradox of avisuality.

From Wells’s “albino chemist” who worked “like a nigger” to Ellison’s unnamed black protagonist whose invisibility is “a peculiar disposition of the eyes” of others who “refuse to see” him, the two forms of invisibility elaborated by the two novels, set apart by fifty years, extend the dialectic of invisibility to another degree of crisis. “I am a man of substance, of flesh and bone, fibre, and liquids,” says Ellison’s narrator, “—and I might even be said to possess a mind. I am invisible, understand, simply because people refuse to see me.” Alluding to the homonymic figure that precedes him and gives him his pseudonym, Ellison’s invisible man explains: “Nor is my invisibility exactly a matter of a biochemical accident to my epidermis.” His invisibility is not a material feature of his body, yet it is. His invisibility is entirely an effect of his body, which radiates invisibility, its own invisibility. Like Tanizaki’s darkness, which is not a negation of light but a positive and material opacity, the invisible man is constituted visually as invisible; he lives in the visual world as invisible. Ellison’s novel, says Fred Moten, establishes “at its heart” a “hypervisibility.”

Ellison’s avisual figure distinguishes himself from the literary “spooks” and film versions of invisible men, perhaps also from the phantom trans-
parenity of film itself: “No, I am not a spook like those who haunted Edgar Allan Poe; nor am I one of your Hollywood-movie ectoplasms.”69 Neither literary nor filmic, the invisible man’s world is suffused with light. He lives in a “hole” in New York City: “My hole is warm and full of light. Yes, full of light. I doubt that there is a brighter spot in all New York than this hole of mine.”70 A light that fills the hole and enables the invisible man to maintain his invisibility. In contrast to Tanizaki’s shadow house, the invisible man’s house shines. But the effect is not dissimilar; both houses allow their occupants to see the darkness. The invisible man says:

I now can see the darkness of lightness. And I love light. Perhaps you’ll think it strange that an invisible man should need light, desire light, love light. But maybe it is exactly because I am invisible. Light confirms my reality, gives birth to my form.71

Light confirms the invisible man’s reality and gives him his form: “Without light I am not only invisible, but formless as well.”72 In the depth of his hole, seared by light, the invisible man fights the abyss of formlessness by embracing the very light that renders him invisible. He is a phantasm; his invisibility allows him to evade death and linger, in this world, as a phantom. His is a politics of the phantasm, a politics of deep avisuality that allows the invisible man to follow Clifton and “plunge outside of history.”73 Into a hole through a crack in the surface of the visible world. The invisible man is a projection.

A violent projection that inverts the visual order of invisibility. In the scene of his confrontation with the shadowy white Brother Jack, himself a phantasm perhaps of Wells’s invisible protagonist Jack Griffin, the invisible man performs his invisibility, his resistance to the surveillance of others, by disabling the other’s capacity to see depth.

Suddenly something seemed to erupt out of his face. You’re seeing things, I thought, hearing it strike sharply against the table and roll as his arm shot out and snatched an object the size of a large marble and dropped it, plop! into his glass, and I could see water shooting up in a ragged, light-breaking pattern to spring in swift droplets across the oiled table top. The room seemed to flatten. . . . I stared at the glass, seeing how light shone through, throwing a transparent, precisely fluted shadow against the dark grain of the table, and there on the bottom of the glass lay an eye. A glass eye. A buttermilk white eye distorted by the light rays. An eye staring fixedly at me as from the dark waters of a well.74

Brother Jack’s face has been disfigured, “disemboweled,” the invisible man says; “his left eye had collapsed, a line of raw redness showing where the lid refused to close, and his gaze had lost its command.”75 His eye a
projectile, its socket a hole or crack on the surface of his face that leaves his inside exposed. Behind Brother Jack’s eye, an opening to the other world that the invisible man has been unable to locate. In this *punctum*, the laws of visibility collapse. Everything is now visible on the surface; all modes of visibility—visibility and invisibility, perception and hallucination, and vision and blindness—are at work in the world rendered monocular, flat: “The room seemed to flatten.” A shadow world, flattened, every mode of visibility there, on the surface. And like de Kooning’s ecstatic, melted eye, Brother Jack’s “buttermilk white eye distorted by the light rays” stares “fixedly at [the invisible man] as from the dark waters of a well.” From elsewhere, beneath the surface, the other side of Brother Jack’s face. An eye that saw the light of atoms, that has been seared by the force and heat of atoms, by the intense radiation of an atomic figure that radiates a dark invisibility.

If the invisible man is an invisible figure, a figure of invisibility, then he is so as an atomic figure and trace. An infinitely divisible “I” and “I am” and an irreducible trace of the I. His voice an echo of his invisibility, his invisibility an echo of his voice, the phonic materiality of his body. Atomic and anatomic, at once. A visual aurality and aural visibility, like the “flash-boom” (*pikadon*) seen and heard over Hiroshima and Nagasaki. Seen and heard, in some grotesque emulsion, simultaneously and in sequence, one after the other, one inside the other. Aurality inscribed visually, visibility made audible. The invisible man is a visual, audiovisual, in the sense of an impure ensemble, Moten’s “ensemble of senses,” what he calls the “aural aesthetic.” 76 This aural aesthetic,” says Moten, “is not the simple reemergence of the voice of presence, the visible and graphic world.” 77 It is rather a crack, a sonic event, which opens onto the visual surface. “How could the silent trace of the incorporeal crack at the surface fail to ‘deepen’ in the thickness of a noisy body?” asks Deleuze. 78 (“Scream inside and out,” says Moten, “out from the outside, of the image.”) 79 The invisible man’s hypervisibility erupts in the novel—explodes, one could say—as the disembodied voice of the narrator, but also as a sonic boom and blast rendered visual. “How could we not reach the point,” Deleuze asks, “at which we can only spell letter by letter and cry out in a sort of schizophrenic depth, but no longer speak at all?” 80 Fractured, divided, schizoid, the invisible man’s voice, all of his voices, supplant his invisibility, not as compensation for a deficiency, for a lack of visibility, but as a dimension of his invisibility. 81 A visible voice that can “no longer speak at all.” A phonic atomism.

The invisible man describes a scene, shortly after he has been subjected to a series of electrical shocks, in which he is overwhelmed by the “schizophrenic depth”: 
A man dressed in black appeared, a long-haired fellow, whose piercing eyes looked down upon me out of an intense and friendly face. The others hovered about him, their eyes anxious as he alternately peered at me and consulted my chart. Then he scribbled something on a large card and thrust it before my eyes:

WHAT IS YOUR NAME?

A tremor shook me; it was as though he had suddenly given a name to, had organized the vagueness that drifted through my head, and I was overcome with swift shame. I realized that I no longer knew my own name. I shut my eyes and shook my head with sorrow. Here was the first warm attempt to communicate with me and I was failing. I tried again, plunging into the blackness of my mind. It was no use; I found nothing but pain. I saw the card again and he pointed slowly to each word:

WHAT... IS... YOUR... NAME?

I tried desperately, diving below the blackness until I was limp with fatigue. It was as though a vein had been opened and my energy siphoned away; I could only stare back mutely. But with an irritating burst of activity he gestured for another card and wrote:

WHO... ARE... YOU?

Something inside me turned with a sluggish excitement. This phrasing of the question seemed to set off a series of weak and distant lights where the other had thrown a spark that failed. Who am I? I asked myself. But it was like trying to identify one particular cell that coursed through the torpid veins of my body. Maybe I was just this blackness and bewilderment and pain.82

"One particular cell," one atom, that is, particle or building block, inside a body composed of many. The invisible man's identity, his nameless and unnameable identity, unfolds inside a phantasmatic body that is not his. "Maybe I was just this blackness." The blackness that he is, which he plunges into and dives below, the "film without volume which envelops" him, to use Deleuze's phrase, constitutes and bewilders him.83 He is a phantasm, an avisual phantasm, indistinguishable from the blackness that surrounds him, that he moves into and out of. His voice formed from this blackness, not as the negation of whiteness but as the avisuality of a sonic tremor.

Born in the "summer of 1945," Ellison's unnamed invisible man enters the world at the end of World War II, traversing its final moments and erupting from the shadows of history. From the shadows, a shade that forms
on the surfaces of history as an atomic trace. An atomic trace of the collapse of anatomy; a crack on the anatomic surface. An end of deep biology. He is a phantasm of a phantasm, a shadow of shadows, who plunges into and out of history, forward and backward into a timeless history, a history without history. At the end of history, the never-ending end of history, of a history without end, infinite and divisible, the invisible man leaves an atomic trace. The invisible man is the figure of this history, its angel. He represents an inverse visibility that arrives with the war’s end; a hypervisibility that renders the world blind, for an ecstatic instant colorless, making in that photographic moment and punctum, “angels out of everybody.” An atomic tRace, to use Dragan Kujundzic’s idiom.84

On the eve of the fiftieth anniversary of the end of the World War II, two spectacles scratched the visual surface of the war, the surface of its specularity and spectrality. As the Smithsonian Institution’s erasure of the Enola Gay exhibit commemorating the end of World War II rendered the atomic bombing of Hiroshima politically and phenomenally invisible, two avisual echoes of World War II shook Japan in 1995. The Kobe earthquake, on 17 January, and the 20 March sarin gas attack on Tokyo’s subway system by members of the Aum Shinrikyō (Supreme Truth) cult projected a shadow of the war at the epicenter of the anniversary.85 Seen as a return of the repressed atomic bombing, the displaced or deferred spectacles forced the nation to revisit the primal scene of postwar Japan. The Kobe earthquake, Shinoda Masahiro remarks, reintroduced long-dormant images of wartime Japan.86 The magnitude of destruction sent tremors through the historical and mnemonic archives, provoking a nervous anamnesis across Japan. The use of invisible sarin gas by Asahara Shōko, the cult’s blind leader, evoked not only the Nazi genocide of World War II and Japanese war crimes but also the threat of an invisible toxin, released into the atmosphere, into the air. The two disasters seemed to force their way into the visible world, returning like memories that were simultaneously familiar and foreign, traumatic, unheimlich. Fifty years later, the return of these displaced catastrophic images, along with the Smithsonian Institution’s decision to erase Hiroshima, rendered the atomic arena phantasmatic and avisual.

Since 1945 the specter of invisibility has haunted the atomic bombings of Hiroshima and Nagasaki. The unimaginable nature of the destruction has produced a proliferation of concrete and abstract, literal and figurative tropes of invisibility that move toward the atomic referent. The visual materiality of the tropology is marked by erasure and effacement, by a mode of avisuality that destroys the lines between interiority and exteriority, surface and depth, visibility and invisibility. Avisuality is the possibility of the spaceless image, the impossible figure of that which cannot be figured, an image of the very facelessness of the image. It opens onto a site
of the atomic spectacle that is irreducibly ecstatic, other—archival. Avisuality is, perhaps, the only true semiotic of the archive. Its only figure, or sugata. In the archive of atomic destruction, at its center, in the place where it takes place, inside and out, transparent and invisible, the spectacle of the impossible signifier burns, *cinefied*: radiant, specular, avisual.
60. Ibid., 26n. Freud mentions this point of contact between the Pept.-Cs. and the brain in “Moses and Monotheism: Three Essays” (1939). While describing the topographical configuration of the psychical apparatus, Freud appears to disavow the relation between psyche and anatomy: “I will add the further comment that the psychical topography I have developed here has nothing to do with the anatomy of the brain, and actually only touches it at one point” (Sigmund Freud, “Moses and Monotheism: Three Essays,” in The Standard Edition of the Complete Psychological Works of Sigmund Freud, ed. and trans. James Strachey [London: Hogarth, 1964], 23:97; emphasis added). The two systems do touch at only one point.


64. Dulac, “Visual and Anti-visual Films,” 34.


66. Deleuze, Logic of Sense, 103–4 (original emphasis).

67. Ibid., 93.

4. An Atomic Trace


2. The unnamed protagonist of Chris Marker’s 1962 film La Jetée survives a nuclear war by clinging to the memory of a woman he had seen just before the bombs struck. Aided by this image, which the film’s narrator describes as “a scar,” the protagonist travels back through time to be with her. Marker’s film is composed for the most part of still images, which make the transition from present to past, memory to reality, and image to life, a movement from one static image to another.

3. Hollywood produced several versions of the invisible man (and woman) films before and during the war, from 1933 to 1944. The most famous of these is James Whale’s 1933 adaptation of H. G. Wells’s novel The Invisible Man, which features Claude Rains. Others include The Invisible Man Returns (1940), The Invisible Woman (1941), Invisible Agent (1942), and The Invisible Man’s Revenge (1944).

5. In the registers of postatomic urban planning and architecture, Edward Dimendberg describes the imperative to disperse as a key element of urban defense against nuclear assault. "Postwar urban planners noted that of the war’s two atomic weapon targets, the number of deaths at Nagasaki were half those at Hiroshima, a consequence of the dispersed urban population. 'In an atomic war, congested cities would become death traps,' write Edward Teller and two fellow nuclear physicists in *The Bulletin of Atomic Scientists* in 1946.... Fear of density pervaded much planning discourse of the early 1950s and in its most extreme form equated urban concentration tout court with susceptibility to military attack" (Edward Dimendberg, "City of Fear: Defensive Dispersal and the End of Film Noir," *Any* 18 [1997]: 15).

The dialectic of concentration and dispersal, excess visibility and vulnerability, seems to circulate from body to city in the immediate aftermath of the atomic war.

6. The relationship between extreme eros and the pursuit of science figures prominently, according to Jerome F. Shapiro, in atomic bomb cinema. He says, "In such films there is usually a scientist who postpones marriage to devote himself to scientific experiments that usurp the laws of nature" (Jerome F. Shapiro, *Atomic Bomb Cinema* [New York: Routledge, 2002], 45).


8. Teshigahara’s film, based on Abe Kōbo’s 1964 novel about a faceless man, also references Georges Franju’s 1960 *Eyes without a Face (Les yeux sans visage).*


11. The invisible or transparent man in *The Invisible Man* has been thus rendered as a result of experiments conducted by the Japanese Imperial Army on its own soldiers. His rage against militarism in general and Japanese militarism in particular signals the move toward an explicit reference to the events of World War II and a departure from the fantastic and allusive nature of the earlier *The Invisible Man Appears.*

12. A number of films made after 1952, such as Mizoguchi Kenji’s 1953 *Ugetsu (Ugetsu Monogatari)* and Honda Ishirō’s 1954 *Godzilla (Gojira),* are frequently read as allegories of World War II, as attempts to render what otherwise defies description. It is perhaps important to remember that as a rhetorical device, allegorical structures never restore a unity to the work, but rather continue to divide the work from itself, against itself, producing, in the process, a series of phantom trajectories that move away from the manifest content of a work. Thus outside facts or stated intentions (by authors, for example) cannot always verify the presence of an allegorical subtext, ultimately. Allegories are often intimations, unconscious, or invisible, culled, as it were, from an inaccessible referent.
13. It is also worth noting, perhaps, that the gendered subject “man” has changed to the neutral “human being” (ningen), although the invisible or transparent beings remain men in the Japanese films. This erasure of the gendered figure in the title is interesting in part because the economies of sexuality and eros continue to play an active role in the Japanese films. In a subplot of the 1949 film, a member of the all-female Takarazuka revue appears in a number of scenes, including a cabaret performance in which she portrays a masculine figure. Later, the Takarazuka star, Mizuki Ryūko, who is also the younger sister of Kurokawa, the invisible man, masquerades as the invisible man—in bandages and sunglasses—in an effort to rescue the kidnapped scientist.

An erotic cabaret performance also appears in the 1954 version at a nightclub named “Kurofune,” or “black ship,” which was the name given by the Japanese to Commodore Matthew Perry’s American ships when they approached the shores of a then closed Japan on 8 July 1853. (One hundred years before The Invisible Man on 31 March 1854, the United States and Japan signed a treaty opening some of Japan’s ports to American vessels.) The black ships came to be seen as, among other things, symbols of an eroticized foreignness, blending a libidinal interest in and fear of the other. In The Invisible Man Meets the Fly, the owner of the nightclub Ajia (Asia) is named Kuroki. This installment of the series also features extensive erotic cabaret performances. Some form of the word black, kuro, appears in each of the three invisible man films.

14. Murayama later directed fantastic TV programs, including Ultraman, Ultra Q, and Ultra Seven.


16. Two notions of interiority are at work, physical and psychological. Monocaine appears to unite those two forms of interior human space. It suggests a “single, unitary, and atomic” element, says Albert Liu (letter to author, March 2004).

17. The exchange of visibility for life remains an unexplained trope in most “invisible man” works. Once rendered invisible, the afflicted organism regains visibility only at the moment of death. This synchronicity, repeated in the novel and
film versions, puts into play an economy of visuality and life, a bio-optic circuit that establishes invisibility as a temporary condition, unsustainable, in the end, as a mode of living.

20. Ibid., 146 (original emphasis).
21. Ibid.
22. Liu, letter to author.
24. Ibid., 207.
25. Ibid. Later in the novel, Wells/Griffin refers to his landlord as “an old Polish Jew in a long grey coat and greasy slippers” (217).
26. Ibid., 207 (emphasis added).
27. Ibid., 208.
28. Ibid., 209–10 (original emphases).
29. Ibid., 211.
30. Ibid.
31. Ibid.
32. Ibid., 213–14.
33. Ibid., 214. An invisible cat also appears in *Tômei ningen arawaru*.
34. Ibid., 215.
35. Ibid., 219.
36. Ibid.
37. Ibid., 236.
38. Ibid., 236 (emphasis added).
39. Ibid.
40. Ibid., 274.
41. Ibid., 274–75.
42. In a 1955 report “Chorioretinitis Produced by Atomic Bomb Explosion,” Dr. Jacques Landesberg describes the case of an Army second lieutenant who witnessed an atomic explosion test at Yucca Flats. Despite instructions not to look directly into the explosion, the soldier peered over his shoulder at the blast and saw “a very bright, white, blinding light.” For several days afterward, he experienced partial blindness in one eye. On closer examination, doctors discovered a retinal burn. “The shape,” writes Landesberg, “is roughly that of an inverted mushroom” (*Archives of Ophthalmology* 54 [October 1955]: 539–40). In an otherwise strictly scientific idiom, Landesberg allows for this figure. The “mushroom,” it seems, had burned itself directly onto the soldier’s eye.
44. The function and properties of writing as a form of staining play a critical role in the dynamic of atomic representation. Freud speaks of psychoanalysis as a kind of staining of the unconscious, a gesture that brings into relief its invisible contours. In a similar manner, one finds “scenes of writing,” as Derrida might call
them, in a number of postwar Japanese films. In many such instances, the act of writing brings the invisible form to light, while the act of erasing, which frequently accompanies it, thrusts the body back into the recesses of darkness. In The Invisible Man, the transparent person “passes” his days as a circus clown. This form of body writing or painting allows him to participate in the visible world as invisible. When he decides to reveal his true form to a journalist, he wipes the makeup from his face, in effect, erasing himself from sight.

45. Virilio, War and Cinema, 81. Of the relation between war and perception, Virilio says, “The history of battle is primarily the history of radically changing fields of perception. . . . War consists not so much in scoring territorial, economic, or other material victories as in appropriating the ‘immateriality’ of perceptual fields” (7, original emphasis).

46. In this sense, the Japanese “fly” resembles more closely the irradiated shrinking man of Jack Arnold’s 1957 film The Incredible Shrinking Man than it does the insect-human hybrid of Kurt Neumann’s 1958 film The Fly. During World War II, the U.S. military experimented with “bat bombs,” incendiary devices attached to living bats, which were designed to ignite fires in Japan. The plan was to drop bat bombs over Japanese cities and then trigger the bombs once the bats had sought refuge in wooden Japanese homes. After several unsuccessful tests, the project was suspended and ultimately rendered obsolete with the advent of the atomic bomb. The Department of the Navy called the bat bomb experiments “Project X-Ray.”

47. Liu, letter to author.

48. In Audio-Vision, Michel Chion considers The Invisible Man one of the first great sound films. “The impact of The Invisible Man,” says Chion, “stems from the cinema’s discovery of the powers of the invisible voice. . . . The speaking body of Wells’s hero Griffin is not invisible by virtue of being offscreen or hidden behind a curtain, but apparently really in the image, even—and above all—when we don’t see him there” (126, original emphasis). Chion calls such an “invisible voice” acoustic—phantom sounds whose sources are not visible. They participate in the visible world as invisible, linking audio to vision through displacement. Griffin’s “downfall and death,” says Chion, “is linked to his common fate of visibility”; the collapse of his avisuality marks his return to the visible world and his death (127).


50. Wells, Invisible Man, 223.

51. The insufficiencies of language are etched into the very appellation of the atomic moment. The authors of The Day Man Lost: Hiroshima, 6 August 1945 explain: “Those who did not hear the bomb called it pika—‘the flash’; those who did hear it called it the pikador—‘the flash-boom’” (Pacific War Research Society, The Day Man Lost: Hiroshima, 6 August 1945 [Tokyo: Kodansha International, 1972], 238). The recourse to a mimetic, onomatopoetic language underscores the radically photographic effects of the atomic explosions—they have left their imprints on a language that is unable to describe them.

52. In Atomic Bomb Cinema, Jerome F. Shapiro notes Honda Ishirô’s use in
Godzilla of wounds to the eye and figures of blindness as symbols of war. Of the one-eyed scientist Serizawa, Shapiro writes: “According to Mr. Honda, in my interview with him in 1990, Serizawa’s missing eye is—at least to 1950s Japanese audiences—an emblem, or stigma, of his wartime experience and suffering” (273). The wounded eye would have been understood as a signifier of the war.

54. Giorgio Agamben, Means without End: Notes on Politics, trans. Vincenzo Betti and Cesare Casarino (Minneapolis: University of Minnesota Press, 2000), 92 (original emphases). “The face is at once the irreparable being-exposed of humans and the very opening in which they hide and stay hidden” (91).
55. Ibid., 91.
56. Ibid., 95.
57. Gilles Deleuze and Félix Guattari, A Thousand Plateaus: Capitalism and Schizophrenia, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 168 (emphasis added). “Or should we say things differently? It is not exactly the face that constitutes the wall of the signifier or the hole of subjectivity. The face, at least the concrete face, vaguely begins to take shape on the white wall. It vaguely begins to appear in the black hole. In film, the close-up of the face can be said to have two poles: make the face reflect light or, on the contrary, emphasize its shadows to the point of engulfing it ‘in pitiless darkness’” (168, original emphases).
58. Agamben, Means without End, 95.
59. Ibid., 99–100 (original emphases).
60. As commented by a member of the discussion at the symposium “The Face of Another: Japanese Cinema/Global Images” (Yale University, 2002).
61. For more on the invisibility of Koreans and other minorities in Japan after the war, see Lisa Yoneyama, “Ethnic and Colonial Memories: The Korean Atom Bomb Memorial,” in Hiroshima Traces: Time, Space, and the Dialectics of Memory (Berkeley: University of California Press, 1999), 151–86. Yoneyama describes the memorial for Korean victims of the atomic bomb, erected in Hiroshima in 1970, “as one of the very few visible reminders of the tribulations and suffering of those minorities interpellated as Koreans” (153).
62. The absence of the definite particle, “the,” erased in Ellison’s version may refer to another mode of invisibility that divides the subject itself and from itself. Invisibility in Ellison’s usage refers to one’s visibility, but also the infinite divisibility, perhaps, of the individual. No longer indivisible, which is to say, singular, an invisible man is also no longer individual. He is divisible, atomic. Ellison’s invisible man functions as a pseudohomonym for Wells’s invisible man. Buried within the letters that constitute the expression “invisible man” is the quasi-anagrammatic sentence “I am.”
63. Ellison was a merchant marine on sick leave when the war ended. Ellison’s Invisible Man begins, in a sense, with the end of World War II, in its wake.
64. Ralph Ellison, Invisible Man (New York: Vintage, 1980), xv. Fred Moten says, “The mark of invisibility is a visible, racial mark; invisibility has visibility at its heart. To be invisible is to be seen, instantly and fascinatingly recognized as the unrecognizable, as the abject, as the absence of individual self-consciousness, as a
transparent vessel of meanings wholly independent of any influence of the vessel itself” (Fred Moten, *In the Break: The Aesthetics of the Black Radical Tradition* [Minneapolis: University of Minnesota Press, 2003], 68). Moten invokes a deeply corporeal invisibility that “has visibility at its heart.” What is invisible in Ellison is deeply material, racial, and superficial and is “instantly recognized as the unrecognizable.” Ellison’s figure moves in an avisual economy, where he is figured and perceived as invisible. In his analysis of Ellison’s *Invisible Man*, Moten links music, sound, and noise to invisibility, rendering the impossibility of seeing (or of listening) in Ellison to a persistent displacement of sense, what Moten describes in the black avant-garde as an “ensemble of the senses.” Visibility returns in the acoustic, which “is seeing,” Moten says, and makes the abject visibility of the invisible, avisual (67, original emphasis).


66. Ibid. In her chapter, “Materializing Invisibility as X-ray Technology: Skin Matters in Ralph Ellison’s *Invisible Man*,” Maureen F. Curtain argues against an exclusively metaphoric reading of invisibility in Ellison’s novel. Curtain argues for the sustained activity of X-rays in the novel, operating as a trope, figure, and technology that insists on the invisible man’s invisibility as a “bio-technical phenomenon.” She says: “Invisibility signals not the end of materiality, but rather only the disappearance of the skin” (Maureen F. Curtain, *Out of Touch: Skin Tropes and Identities in Woolf*, Ellison, Pynchon, and Acker [New York: Routledge, 2003], 43).


68. Moten, *In the Break*, 84. Again, in Moten’s idiom, the invocation of the heart, a figure that opens onto a corporeal and phantasmatic geography.


70. Ibid., 6 (original emphasis).

71. Ibid., 6 (original emphasis).

72. Ibid., 7. The invisible man continues: “To be unaware of one’s form is to live a death. I myself, after existing some twenty years, did not become alive until I discovered my invisibility” (7).

73. Ellison, *Invisible Man*, 438. After witnessing Clifton’s murder at the hands of a New York City policeman, the invisible man asks: “Why did he choose to plunge into nothingness, into the void of faceless faces, of soundless voices, lying outside history?” (439). The invisible man comes to understand Clifton’s plunge outside history.

74. Ibid., 474 (emphasis added).

75. Ibid., 474.

76. Moten, *In the Break*, 201.

77. Ibid.

78. Deleuze, *Logic of Sense*, 156.


81. Moten’s *In the Break* is an extended treatise on the avisuality of “blackness,” a phenomenon exposed in the collapse of the audiovisual divide or screen, which Moten locates in “the Black Radical Tradition.” In his moving analysis of the
disfigured face of Emmett Till, revealed at his open casket funeral and captured in the photographs that documented it, Moten argues for the impossibility of separating photography from phonography. "Emmett Till’s face is seen," Moten says, "was shown, shone. His face was destroyed (by way of, among other things, its being shown: the memory of his face is thwarted, made a distant before-as-after effect of its destruction, what we would have otherwise seen). It was turned inside out, ruptured, exploded, but deeper than that it was opened" (198). The opening of Till’s face, the injustice and violence it exposes, unleashes a sound, a cry, an echo of the "whistle" that sealed his fate, the irrepressible and visible sound that Moten calls "black mo’nin." He says: "Looking at Emmett Till is arrested by overtontal reverberations; looking demurs when looking opens onto an unheard sound that the picture cannot secure but discovers and onto all of what might be said to mean that I can look at his face, this photograph" (198). The rupture of Till’s face, "turned inside out," turns the world inside out: image and sound, photography and phonography, this world and its other, utopia, are rendered visible. Everything is made visible, especially the sound of black mo’nin’. It is the acousmatic visuality of this photograph.

83. Deleuze, Logic of Sense, 10.
84. Dragan Kujundzic and David Theo Goldberg organized a symposium titled TRACES: Race, Deconstruction, and Critical Theory" at the University of California, Irvine, Humanities Research Institute in April 2003. On the relationship between race and all of the erasures that constitute its histories, Kujundzic and Goldberg say, in their announcement: “These traces conjure memory in advance: at once urgent and untimely, they expose themselves and take a chance with time. If apartheid, as Derrida pointed out nearly twenty years ago, will come to be the name of something finally abolished, the site of a history faded in memory, much as antisemitism came to be for critical theory, then racelessness comes to be the future of a present whose racial traces are at once silenced and silently mark social life worlds, the rearview vision of the future. But, Derrida reminded us never to forget, ‘hasn’t apartheid always been the archival record of the unnameable?’ Confining and abandoned to the silence of this memory, the name will resonate all by itself, reduced to the state of a term in disuse. The thing it names today will no longer be, but the tomorrow it suggests calls for critical engagement now. ‘TRACeTs’ accordingly is a wager about the future of the present.”
85. Partially blind cult leader Asahara Shōko predicted that the world would be destroyed by nuclear weapons in 1999.
86. Shinoda’s narrator compares images of destruction at Kobe in 1995 and throughout Japan in 1945 in Moonlight Serenade (Setouchi münraito serenade, 1997).

5. Excription/Antigraphy

1. Stan Brakhage’s 1971 film The Act of Seeing with One’s Own Eyes chronicles the activities of a Pittsburgh morgue, following in graphic detail the various aspects and stages of multiple autopsies. This film establishes at the locus of the

Notes to Chapter 5