This catalogue accompanies the exhibition Hans Haacke 1967
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Curator: Caroline A. Jones

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Front cover: MIT Sky Line 1967 back cover: Flight 1967

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ACKNOWLEDGMENTS  

HANS HAACKE 1967  
INTRODUCTION TO THE WORK OF HANS HAACKE  
ARTIST STATEMENTS  
EPHEMERAL WORKS  
CHECKLIST  
BIOGRAPHIES

DAVID FREILACH  04
CAROLINE A. JONES  06
EDWARD F. FRY  29
HANS HAACKE  46
HANS HAACKE  54
HANS HAACKE  72
HANS HAACKE  77
ACKNOWLEDGMENTS

Throughout the past year, as the Massachusetts Institute of Technology celebrated its 150th anniversary, the MIT List Visual Arts Center has presented a series of exhibitions that bring to light the Institute’s extraordinary artistic heritage. This re-presentation of Hans Haacke’s 1967 MIT solo exhibition is a fitting piece of this exploration.

Hans Haacke has been a force in the artworld for five decades, and it has been our pleasure to work with him to restage these early works that utilize such elements as earth, air, and water. He has kindly opened up his home and archives for multiple visits, graciously providing objects, images, and records.

The idea for Hans Haacke 1967 began with a visit by former List Center director Jane Farver to Haacke’s 2008 exhibition at Paula Cooper Gallery in New York City. Realizing that the artist, whom she had known for years, was taking photographs in the gallery, they chatted and she learned that Haacke had first shown some of the work at MIT decades earlier. He sent photographs to Farver, who shared them with MIT art historian Caroline Jones, who set about to determine exactly what had been shown in the original presentation.

We are so grateful to Jones, who is Director of the History Theory + Criticism of Art and Architecture program in MIT’s Department of Architecture, for her extensive research, writing, and sheer enthusiasm in organizing this exhibition and catalogue, which includes not only the works seen at MIT in 1967 but a selection of photographs of Haacke’s systems works produced around that time. This is the third project Jones has so generously undertaken with the List Center.

List Center Gallery Manager Tim Lloyd, who makes every exhibition look its best, spent months making sure the various components of these works, many of which needed to be refabricated, came together seamlessly. He was assisted by Alexander Hilton Wood, an MIT graduate student in History Theory + Criticism, who used his interests and skills in research, computer-aided design, and project management to bring this project to completion, and Meegan Williams, who used her considerable skills on several of the silk pieces. MIT graduate student S. Faisal Hassan provided invaluable research assistance for the curator, as did MIT Museum archivist Laura Knott.

This catalogue includes the first English-language publication of Edward Fry’s essay on Haacke that was intended for the canceled Guggenheim exhibition of 1971. Caroline Jones was able to track it down at the University of Pennsylvania Special Collections with the assistance of Aaron Levy, Executive Director of Slought Foundation. We appreciate the permission of Sandra May Ericson and the Fry estate to publish it here. This publication was ably edited by Joseph N. Newland, O.E.D., and designed by Jean Wilcox of Wilcox Design.

Special acknowledgment is also offered to the generous lenders of art, including the artist; Paula Cooper Gallery, New York; the Art Gallery of Ontario; and the MIT Museum.

Funding for Hans Haacke 1967 has been generously provided by the Barbara and Howard Wise Endowment for the Arts, the Council for the Arts at MIT, the Massachusetts Cultural Council, and Consulate General of the Federal Republic of Germany.

I owe a great debt of gratitude to my List Center colleagues, who are skilled professionals who handle their roles so well. To Registrar Diane Kalik, Educator and PR Officer Mark Linga, Gallery Manager Tim Lloyd, Gallery Assistant John Osorio-Buck, Administrative Assistant Barbra Pine, Curator João Ribas, Public Art Curator Alise Upitis, Web Assistant Dani LaFountain, Gallery Attendants Karen S. Fegley, Magda Fernandez, Kristin Johnson, Bryce Kaufman, and Suara Weltzoff, and interns Jill Fisher, Alex Jacobson, Beryl Lam, Emily Manns, Megan Reinhardt, Andrea Rosen, Shelby Spaulding, and Angelina Zhou, thank you so much for your dedication and hard work to make Hans Haacke 1967 such a success.

And lastly a heartfelt thank you to former director Jane Farver, for initiating this project and teaching me so much about museums and the arts.

David Freilach, Acting Director
September 2011
Hans Haacke 1967 has three goals: to provoke a reconsideration of late sixties “systems art” in general, to reposition Haacke as a key participant in that discourse, and to reconstruct the 1967 exhibition of his systems art at MIT. Each “re-” signals a vexed relation to both past and present. First, systems thinking has become so pervasive that it is difficult to see how instrumental it was to what we now refer to as “relational,” “situational,” and “social” modes of art-making. Second, Haacke’s involvement in non-human systems has been occluded by his own social turn, codified after the trauma of the Guggenheim Museum’s cancellation of his planned one-person show in 1971 and canonized as institutional critique. Third, the reconstruction of any historical exhibition is fraught, despite the proliferation of “restagings” in these first decades of the twenty-first century. As curator Bill Arning warns, “what we cannot reconstruct is the technological innocence of the original audience for this work.”

Comprehending Haacke’s systems thinking in its full historical moment, and installing that “moment” in an exhibition in 2011 may be impossible—but that merely fuels my polemic: the work shown at MIT in 1967 was significantly different from the highly social work to which the artist turned shortly thereafter. There is a widespread presumption that Haacke’s systems art was merely the trial run for later institutional critique. I propose instead that Hans Haacke 1967 looks back to a last, exquisite apogee of techno-utopianism. In 1967, “natural” systems would be captured for art with an elegant minimum of technology in order to eradicate sentiment and contemplate non-human agency. If the work from this time embraced the non-human, it did so in order to minimize the traditional exclusivity of “fine art,” which seemed to require an education in the humanities. The viewer’s participation was actively solicited, even though the “systems” being investigated were not (yet) social ones. Hans Haacke 1967 itself results from the broader social systems we now understand to be an incontrovertible aspect of art’s work. As recounted in David Freilach’s catalogue acknowledgments, it was Haacke’s chance encounter with Jane Farver in 2008 that reminded us of his 1967 MIT exhibition. When I proposed to restage it, just what “it” was became an open question. An answer of any kind would have been impossible without the artist’s patient collaboration, deep archives, and installation photographs; also crucial was the intense intellectual and material involvement of Alexander Wood and S. Faisal Hassan (fabrication and research assistants, respectively) as well as the gallery’s superlative exhibition designer Tim Lloyd. Just what was in Haacke’s one-person show, which opened on October 24, 1967, at MIT?

Haacke’s exhibition had no thematic title. Organized by Department of Architecture professor Wayne Andersen, newly hired to chair MIT’s Committee on the Visual Arts, it was intended for MIT students as well as a wider public. Its unorthodox objects—bubbles sliding through a large water level, immiscible liquids sloshing between Plexiglas sheets, “rain” percolating through small holes in transparent plastic acrylic, silk chiffon flowing in ribbons and waves, a parachute suspended in air, a “weather cube”—were like no art these viewers had seen before. Yet Haacke’s works gave impetus to a century-long
aspiration of MIT designers: to transform academic Beaux-Arts traditions (chiaroscuro, rendering, the sketch) through protocols of engineering (structural analysis, material innovation, mechanical drawing). This desire was at its most intense immediately following World War II, when Gyorgy Kepes was brought in to reform teaching of "the Drawing," replacing the pencil with a wide range of technological media, and confirming the Institute's broad goal after the war to ameliorate fears of the technologies its own faculty had made possible (radar no less than the atomic bomb).6 These years witnessed MIT's founding of a new school of humanities, arts, and social science, an ecumenical chapel, an art gallery, and altogether new curricula in architecture—all part of the growing consensus that technology alone could not solve the problems humans were creating.7 Haacke was brought into this context, his presence brokered by MIT's architecture school, founded a century before to meld "fine art . . . and technological science,"8 which resonated nicely with an exhibition of "systems art."

In that brief moment before the student-led revolts of 1968, Haacke's air and water works opened at the Institute's Hayden Gallery, even as the artist's mentors, Zinco Group9 artist Otto Piene and "Systems and Art" theorist Jack W. Burnham, were planning to arrive as the first generation of fellows at MIT's new Center for Advanced Visual Studies (CAVS).10 Very much in Piene's spirit, Haacke kicked off his exhibition with a parade of students shepherding MIT Sky Line (1967)—helium balloons linked to a single nylon cord—to be sent aloft between the shockingly new student center and Eero Saarinen's new auditorium and chapel. This choreography left the Beaux-Arts columns of old MIT behind, aiming for the new postwar "functionalist" architecture linked to technology and engineering.11

MIT Sky Line was ephemeral, and lasted only a few hours (as did its earlier prototype, a Sky Line Haacke staged in Kinetic Environment 1 and 2 in New York's Central Park earlier in the year). But despite his obvious homage to Piene (whose work he "greatly admired" for the "human time patterns" unfolding in his motorized Light Ballet12), Haacke was signaling at MIT his departure from the Zinco's sometimes mystical gestures. In Sky Line, the balloons were seemingly just vehicles for launching a technical drawing into the sky. Play was now partnering with the abstraction of systems.

Systems pervaded MIT. Fed by MIT professor Claude Shannon's information theory and codified at the famous Macy Conferences in New York from 1946 to 1953, systems and cybernetics stretched from Jay W. Forrester's applications in social science to the major contributions of Norbert Wiener in mathematics and Vannevar Bush in computational engineering. Wiener, a galvanic presence at MIT until 1964, published Cybernetics in 1948, with a revised second edition put out by MIT Press in 1961. It's safe to say that once Ludwig von Bertalanffy's General System Theory was published by the literature and art firm Braziller in 1968, the artworld had its textbook bibles for a systems revolution.13 Andersen's invitation to Haacke confirmed the momentum, reinforced by Kepes's appointment of Burnham to CAVS shortly thereafter.

Jack Burnham was linked closely to both Haacke and Piene; when Kepes's first letter was sent to him in June 1967, its opening sentence—"I learned about your work from Otto Piene"—reveals a probable link to Haacke, who'd known Piene since the late 1950s, and Burnham since 1961.14 Burnham in turn sent Kepes an essay he had published on Haacke's work a few months before as a supplement to the journal Tri-Quarterly, and offered to teach a course on the subject of "Systems and Art."15 While at CAVS, Burnham included Haacke in more generic essays on "Systems Esthetics" in 1968 and "Real Time Systems" in '69, both published in Artforum. Deeply enthused about "systems," Burnham described Haacke's work in 1967 as a kind of "natural medicine" for humans beleaguered by rapid-fire industrialized capitalism. Commenting on Haacke's preference for simple technologies in mobilizing his systems, Burnham wrote:

"Today in the engineering of complex systems the problem is to make the man-machine relationship as smoothly functional as possible. . . . For this reason—and for more practical ones—Haacke's devices are purposely kept simple and technically unelaborate . . . [They are] fragile systems not stable objects."16

The necessarily new forms associated with "systems" were difficult to submit to aesthetic judgment. Unlike "kinetic art," under whose rubric Haacke had first come to MIT,17 systems offered little in the way of "composition." (Haacke recalls that already by the late 1950s he had become "intrigued by non-compositional developments" in European and American art.)18 Moreover, systems' interactivity was not a matter of knobs and buttons. "In some cases I was asked only to look," wrote Burnham in 1967 of his visit to Haacke's studio, "as a box would do its 'work' with no human intervention."19 In the MIT student newspaper reviews of the 1967 show, the phrase "kinetic sculpture" yields explicitly to "systems." As The Tech reported:

Haacke rejects the name "sculpture" for his works. He calls them "systems," noting that they "have been produced with the explicit intention of having their components physically communicate with each other, and the whole communicate physically with
the environment. . . . Changes are desired and are part of the program—they are not due to the shifting experience of the viewer.”

Systems called to stranger discourses of feedback, recursive loops, automatic functions, and autopoesis. Most remarkably, even if they sometimes needed human agency to set them in motion, Haacke’s systems in 1967 were positioned explicitly as being outside standard aesthetic discourses involving emotion, interpretation, culture, and memory. Haacke’s earliest “systems” were in some measure outside the human altogether.

This is the paradox—that mere months before his turn to the social, Haacke was capable of arguing for a systems art that was wholly independent of the humans perceiving it. (Although the artist now quotes Lenin, “everything is connected to everything else,” at the time his priority was to argue against the banality of “art appreciation.”) Rather than prosthetic “extensions of man” in the 1960s theories of Canadian English-professor-turned-media-guru Marshall McLuhan, Haacke’s technologies anticipated the 1980s work of German literary-theorist-turned-media-guru Friedrich Kittler—less enhancements of a coherent human body than propulsions to the post-human. Even Burnham, who had proposed to consider the artist’s “natural medicine” in terms of a tradition of “organic rapport” with nature (à la Thoreau), was “shocked” at Haacke’s abrupt response, when the artist wrote:

I hate the nineteenth century idyllic nature loving act. I’m for what the large cities have to offer, the possibilities of technology and the urban mentality. Plexiglas, on the other hand, is artificial and strongly resists either tactile sensuality or the ‘personal touch’. Plexiglas, mass-production—Thoreau—they don’t really fit together.

Haacke’s rejections, as in Kittler’s later attempt at “driving spirit [Geist] out of the humanities,” may have been responses to Fascist appropriations of these very tropes (nature-loving, blood, soil, and spirit). Certainly the failure of the great German philosophical tradition either to prevent or comprehend the atrocities of World War II caused a crisis among all thinking Germans. There was also a generational disgust at the traditional discourses of “empathy” that still haunted art criticism. For whatever reason, by 1967 Haacke was reaching for a newly dispassionate art. As he recently recalled his position: “I rejected the traditional thinking of the romantic, and rejected the psychological, which exudes the magic of all art criticism.”

The canonical Condensation Cube (first conceived in 1963, and executed in 1965) reveals the barometric operation of the systems Haacke wanted to employ. The fact that a larger version was exhibited under the title Weather Cube at MIT in 1967 troubles some interpretations that place this work either with the 1960s cubic objects of Minimal art (courting what Michael Fried called “objecthood”), or along the path to full-blown institutional critique (as theorized by Benjamin H.D. Buchloh). The current re-installation allows us to re-open the case of Haacke’s most famous cube. Constructed of the synthetic glass substitute thermoplastic acrylic (poly[methyl 2-methylpropenoate], developed by a German
In the 1930s, researched during wartime for airplane windshields, and later marketed in the US under trade names such as Plexiglas, Lucite, or Perspex, the cube’s flawless transparency extends to its chemically fused facets. A tiny hole drilled in a top corner allows the introduction of water to a depth of about an inch in the bottom of the box. Crucially, the box is less an object than a device for staging a slowly unfolding sequence of events. As in the cloud chambers made by Victorian physicists for mimetic experiments, the water in Haacke’s Weather Cube forms a microclimate system. Although Haacke now demurs that “weather” is no different from “condensation” (“they are the same thing”), I would argue for their difference. Condensation is commonly experienced on the surfaces of a nearby object (at a Minimalist scale); weather happens atmospherically (at a systems scale). To model condensation is a modest aspiration; to model weather aims at the orders of the world.

In 1967 Burnham could already see how these “weather” boxes would connect with Haacke’s wind devices, with global implications: “The Earth itself could be looked upon as a great wind making device forming patterns of evaporation, rain and humidity over its surface as a kind of enormous condensation container.” Unaware of anthropogenic climate change, Burnham shared Haacke’s view of the impersonality of “weather” in 1967, whereas the reinstallation of Haacke’s systems in 2011 may prompt reflections on collective responsibility.

Accepting its familiar title, Condensation Cube, is to tame this broader set of implications, as water circulates through several of its available states: beginning as liquid, evaporating into mist, and slowly condensing again into liquid droplets that form orderly yet subtly random patterns that run down the sides as rain.

Even within the heady context of systems art that first enveloped it at MIT, the self-sufficiency of this system can be called into question. Around which inputs and outputs is the system defined? What is black-boxed, and what interrogated as functional? Most importantly for my argument here, what are its boundaries—Does the system include us? The artworld? The larger climate? For Haacke in 1967, just beginning to explore extremely diffuse systems of animal and environmental life, the boundaries of the system in question still excluded the human. The miniature model, and the closed universe it implied, called up the magic of autonomous art:

... in spite of all my environmental and monumental thinking, I am still fascinated by the nearly magic, self-contained quality of objects. My water levels, waves and condensation boxes are unthinkable without this physical separation from their surroundings.

Details reveal the artist’s efforts to maintain that “physical separation.” The distilled water introduced into the various Plexi structures must be treated with copper sulfate to prevent unwanted biotic “systems” from blooming. Similarly, the tiny hole drilled at the top must be managed to prevent humidity from escaping—covered either by clear tape or a set screw in order for the condensation “system” to continue to function. Art history’s canonization of Weather Cube as Condensation Cube is largely unreflective about these aspects of the work, sometimes reducing the work to an object, or at best celebrating it as the container of processes “completely independent of the viewer’s perception” (as Buchloh correctly relays Haacke’s intentions).

In complicating these received views (and in the spirit of systems theorizing), I suggest that what we call Condensation Cube would be unlikely to display its internal weather theater without two inputs from outside the box. First, there must be light shining into the interior (as Haacke himself admitted)—light that cannot then escape, becoming heat (the “greenhouse effect”) and causing the water to evaporate into the air trapped inside the box. Second, the box’s exterior must become cooler than this interior, whether as a result of internal cooling or the natural cooling of its surrounding after sunset. It is only this differential of a cooler exterior that propels condensation to occur, but only after the differential of a hotter interior has allowed evaporation to precede it. It is no accident that the piece exhibited at MIT as “Weather Cube” entered art history as “Condensation Cube”—reinforcing the smaller scale of an object that could be moved about.
The tension between environmental versus object implications is even more problematic with other works, lost since 1967 but now refabricated. The title of Double-Decker Rain (1963) for example, implies that the decks “contain” the rain as an isolated or self-generated system, an impression furthered by the few reproductions in major Haacke monographs. The documentation of Clear Flow (1966) conveys the same autopoiesis, the patterns of its bubbles seemingly self-generated. Only the process of reconstruction brought out that the photographs capture an evanescent moment in these systems, when the fluids in the box are struggling to return to homeostasis. Indeed, this and other works depend on being agitated by human hands, which are required to begin the process by turning the box upside down like an hourglass.

This introduces the crucial component of participation, which interested Haacke deeply at the time (see his first published statement from 1965 reprinted herein: “make something which the ‘spectator’ handles, with which he plays, and thus animates.”) Clearly intending to question the passivity of vision (note the scare quotes around “spectator”), Haacke produced hand-manipulated Plexi-and-water pieces even before making the self-contained Condensation Cube— as, for example, with Rain Tower as early as 1962 (see p. 31). He often photographed visitors peering at these works (presumably after agitating them), and believed such interactions would transform them in important ways. It is this paradox I want to emphasize—how Haacke struggled to keep the human from impeding the autonomy of these fluid systems, yet recognized the importance of the art in restoring humans’ own equilibrium (via empathetic “systems” he was not acknowledging as part of his concern). Notably, particularly in the early published photographs, we are rarely shown the visitor actually holding, turning, pushing, or handling a piece (a decorum broken by Eric Pollitzer in his 1965 photograph of the artist himself moving Wave, for which see p. 17.) Even when discussing his contribution to a conceptual art show in which he put a gallery humidity detector on display, Haacke insisted there was no input from the human—although it is precisely the sweat, heat, and vaporous breath of crowds that the device is ordinarily used to monitor.

The human could watch; the human might even push a system into motion, but the system’s unfolding was independent of the human in 1967. Such autonomy, ideally, would exclude even the machine: “I would want all the machines to disappear and for the sails or balloons or whatever to become completely autonomous.” How can we understand the artist’s resolute desire to circumscribe the human or the machinic from the system, when cybernetics itself originated in an application of mechanical feedback theories to psychological human processes? Was Haacke alone in reading systems art as black-boxed from the human, at least before 1968?

SYSTEMS’ GENEALOGY

At MIT, the yearning for systems goes back to its nineteenth-century origins, when architect William R. Ware and Institute President William Barton Rogers drew on the beaux arts (as taught in Europe) but instituted techne—the art of crafting, of making, of innovating and engineering. As Ware put it in his outline for the program in 1865:
The trouble is technological; there is a want of system and method, and of means for general collection, and a general diffusion of their results.

That anxious “want of system and method,” and the view of technology as its solution, would continue with the Institute’s placement of Kepes at CAVS and Haacke at the Hayden. Haacke’s show thus played to a much longer obsession, but it was important that it took place at the hinge of the late sixties—an epoch later described by Burnham as the “great hiatus between standard modernism and postmodernism.” Systems might initially have promised Burnham a kind of “natural medicine” inoculating art lovers against industrial alienation, but Haacke’s show of luminous, autopoetic works unfolded in 1967 amid a burgeoning military-industrial complex—just months before students’ principled attack on that much larger “system” forced MIT to implement massive change. Having been introduced to systems thinking by Burnham, Haacke had read Bertalanffy and Wiener and was familiar with the theory’s imbrication in protocols of military command, control, and communication. Only later would this attribute of systems render the label of “systems Art” unappealing.

Since Haacke’s Systems Art initially posited that the human subject was only an instigator or perceiver of a system that excluded her, we are confronted with a curious logic—that the very extension of systems and cybernetic theory into the human sciences coincided with Haacke’s removal of humanist traditions via Systems Art. Of course, eliminating human error (which “empathy” could be seen to be!) had always been the very point of systems. As Burnham would later summarize its force: “Ultimately . . . systems theory may be another attempt by science to resist the emotional pain and ambiguity that remain an unavoidable aspect of life.” If resisting sentimentality, romanticism, empathy, and “the personal touch” meant turning to systems, did it also mean rejecting the environmental politics of Thoreau? Haacke’s systems in 1967 oscillated between “natural medicine” and an edgy aesthetic of technological and urban orders.

The very ambiguity of Haacke’s early Systems Art—concern for nature’s operations combined with a critique of traditional humanism—are both available in the genealogy of systems theory. But by making systems into art, Haacke began to confront those theories’ very instrumentalizing logic. It may even be that the installation of these pieces at MIT brought such ambiguities to a head for Haacke, clarifying how the necessarily social component of “art” systems precisely allows art to do more than forestall further systematization. Certainly his growing understanding of “systems” as a component of US military practices increasingly gave the artist pause, especially after 1970. Indeed, a few months after MIT he would ruminate that “an artist is not an isolated system.” This was given force in 1969, when he helped found the Art Workers Coalition in January and included in his show at Howard Wise Gallery the first poll of a gallery’s viewers: a residence and birthday inquiry that “invited them to create a self portrait and look at themselves in a (sociological) mirror.”

The confrontation between systems and the social is attested by Haacke’s archive of unpublished early photographs, which frequently show families engaging the works in the 1967 installation. And almost all of MIT’s student newspaper articles show visitors enjoying works that were elsewhere described as autonomously boxed. The “magic” of objects that Haacke still craved remained inert without humans setting some of these systems in motion. And although the artist was extricating himself via systems from his past with the Znos, the kickoff for the MIT show was clearly linked to their Happening-type events. Scores of student helpers were marshaled for filling, tying, and tethering the balloons of MIT Sky Line (p. 8), and for the different experiments with weather balloons in the great dome of MIT’s main entrance. Here Haacke planned to suspend an enormous sphere (partially inflated with helium), forty feet wide, in the center of the dome. Like a massive version of the Sphere in Oblique Air Jet (1964) on view in the gallery, the balloon was supposed to float mysteriously over a giant fan in a classical demonstration of the Bernoulli principle. But despite advice from MIT meteorologist Erik Møllo-Christensen, the sphere drifted, developed a leak, and had to be removed. Well after the show’s opening, Andersen got four smaller weather balloons to float on airshafts from fans housed in the four corners of the dome lobby (see The Tech photograph p. 21). Such “weather” was messily mechanical, and exuberantly social.

Grass also revealed the social parameters of systems edging their way into Haacke’s 1967 procedures. Known to art history as Grass Grows (and previously dated to Cornell’s Earth Art show in 1969 for its first articulation), this work originated at MIT as Grass, a...
“system” rather than a “work” of earth. As a system, the pile was intended to demonstrate phenomena over time: “Haacke exhibit features systems of ‘grass,’ ‘ice’”). Historically excavating its full system means that the 1967 Grass would have to include dubious students shoveling dirt into a pile, commercial manufacturers selling winter rye seeds, and even more dubious maintenance workers watering and tending the crop planted in the heap. (According to Andersen, the janitorial staff ultimately “adopted” Grass and fought to defend it from students’ “hacks.”) These social components of the systems on view proved difficult to control. The Tech reported that Ice Stick was marked by “the effects of many warm hands,” and noted “Grass has taken a heavy beating and is pockmarked with footprints.” But the larger social systems around these works could both outline the parameters of art and celebrate Haacke for enlarging them, as in the quip reported from administrator Marietta Millet: “These people who walk on sculpture—really!”

The humor in Millet’s response stems precisely from the exhilarating freedom Haacke’s systems produced for art, with change welcomed by the artist who “deliberately designs his ‘systems’ to evolve in time and be affected by time.” Revealing his new interest in sociology, Haacke responds cautiously to their questions: he “would have to define art” in order to classify these works as such; but “the display of his work does qualify as an ‘exhibit’ due to the fact that it is being held in Hayden.” (It is the institutional circumstances, not its status as “art,” that produce the works as an “exhibit.”) The final query as to whether his systems really have “artistic significance” yields Haacke’s most telling response: “It all depends on the people (who view the work),” he said.

EPHEMERAL SYSTEMS
After a year in Philadelphia (1961–62, when he met Burnham) and another in New York (1962–63), Haacke abandoned painting and printmaking for much less conventional media. Photographs Haacke took of his studio in Cologne (in 1964 and 1965) already show this freedom—in experiments edging onto windowsills, on spots of outdoor ground, or even...
extruding as soapy foam from columnar machines—an exploration of water he later abandoned.59 Proposals for “Zinn on Sea” in August 1965 included the mass of seagulls that he would not have occasion to produce until Live Airborne System three years later.60 (For images of these and other ephemeral projects, see pp. 55–70.) Moving back to New York in the fall of 1965, the artist began to question the very categories of “sculpture” and “kinetics.” The roof of his Bowery studio became a laboratory for Systems Art.

Confessing to Burnham that he liked the separation and autonomy of art, but also longed for “something unconfined, like the ocean, the desert, Grand Canyon, or even . . . interstellar proportions,” Haacke utilized the “free” urban space of his rooftop as a corner of the cosmos.61 Water in Wind from 1968 is photographed from high, low, and in color, to capture a rainbow forming in the prism of droplets in Haacke’s spray.62 Casting ice, and photographing it “freezing and melting” in 1969, he also piled chunks of urban snow into an impressive rooftop mound as dusk fell in the city. He explored the liquid state of water by photographing its trickles from a perforated hose in the 1969 Cycle; again, the “urban mentality” frames the set up (which would be repeated in Tokyo Trickle, and Trickle, Maenz Gallery, 1970 and 1971, respectively). Site began to play a role, and geometry to waver—in 1970, Bowery Seeds replaced the monoculture of MIT’s Grass with something airborne and weedier; Spray of Ithaca Falls . . . in 1969 was austere compared to the chaotic urban garden he produced in Boston with water hoses and spray nozzles in Fog, Dripping, Freezing in ’71.

Their full titles suggest the discourses about site specificity and process that were produced in Boston with water hoses and spray nozzles in ’71.53 Proposals for “Zinn on Sea” (the signal for blast-off readiness in the space age) in time for the Guggenheim opening. as Luke skrebowski, a sympathetic scholar of this piece, has imagined it:

“Kinetics.” The roof of his Bowery studio became a laboratory for Systems Art.

Haacke’s Guggenheim Grass Grows. The Guggenheim, “reveal” an institutional critique—but I have struggled to explore the internal boundaries that Haacke’s “systems aesthetic” originally entailed.

An ephemeral work described by one curator as “essentially parodic” reveals these boundaries precisely—Norbert: “All Systems Go” from 1970–71.63 Named for Norbert Wiener yet referring to systems rather than cybernetics, the work featured a pet mynah bird which Haacke was attempting to train to say “all systems go.”64 It was inspired by Wiener’s claim in Cybernetics: A Control and Communication Theory that “All Systems Go” in the 1940s. Haacke was interested in the ways in which the language of systems was used to describe the human condition. In his work, the “systems” referred to the systems of pollution produced by people.

Significantly, these are systems of pollution produced by people. Crucially, by the time of the 1972 Krefeld exhibition, Haacke was willing to merge documentation with action—the Rhine Water Purification Plant transformed the Flexi containers of autopoetic “weather” into housings for filtration systems that at once “represented” the discharge from the Krefeld sewage plant, and actively intervened to reduce it.65

This full-blown recognition of the “social” in systems was fueled by Haacke’s own increasing political concerns, and by the politicization of his work following the cancellation of his Guggenheim museum show in 1971.66 The now (in)famous tipping point, Shapolsky et al., Manhattan Real Estate Holdings, a Real-Time Social System, as of May 1, 1971, is a breathtakingly different kind of “system,” social to the core. But the explicit politics of this work (which Haacke was also living, as a cofounder of the Art Workers Coalition and an advocate for artists’ work/live and resale rights) has eclipsed the ephemeral process-oriented systems he was still producing after Grass at MIT—the beginnings of Guggenheim Beans (later realized as Directed Growth in Krefeld) and Guggenheim Rye in the Tropics, both “unfinished” but documented in the museum’s sculpted Frank Lloyd Wright interiors. Yes, it could be claimed that these dirt-based systems, brought into the alimentary but still white and antiseptic galleries of the Guggenheim, “reveal” an institutional critique—but I have struggled to explore the internal boundaries that Haacke’s “systems aesthetic” originally entailed.

Skrebowski argues that “[the 1969] Chickens Hatching makes direct use of the possibilities presented by cybernetic systems [while the later] Norbert... seems to negate them.” As Skrebowski argues: “[in Norbert] cybernetic theory... is mocked, its optimistic feedback-steered vision of human progress undermined... in [the] sardonic refrain of a trained mynah bird.” This reading aligns with Buchloh’s view of systems work as inherently critical, but I want Norbert to foreground a different problematic. What is the boundary that defines the “system,” outside of which are set up the terms for its critique? The boundary that Haacke consistently vexes is the boundary he continually redraws: the elite container of artworld signification is the boundary he continually redraws: the elite container of artworld signification as a separate system from the real world—a world in which Haacke buys the mynah bird, sets up a feedback loop (quite literally) in which he endlessly plays a tape of the intended utterance and waits to reward the bird if it should ever say it, until such time as the system (as I am seeing it, with much larger boundaries than Haacke finds useful) can be presumed to be homeostatic, with the bird named Norbert primed to utter “All systems go” for the now symbolic reward system of the artworld itself, transferred from the artist’s hand to the bird’s beak to the viewer’s ear. The fact that this particular mynah bird proved “dumb” and the Guggenheim canceled the exhibition does not change Haacke’s core requirements: the artworld would be the one system whose boundaries would have to remain intact, to contain the changing contents of other systems—whether the abstract droplets in Condensation Cube or the riotous patterns of colored papers—color-coded according to status as fully paying visitor, member, student, etc.—“ballots” in the MoMA Visitors’ Poll (from the 1970 Information show: ballots inserted, I note, from outside the box, p. 25). Haacke continued to think of these as systems, but they were now permeable to the social—and the artworld would never quite be the same.

Earlier processes seem to “evolve without the viewer’s empathy” at MIT could hardly jibe with a new reality in which the personal had become political. The constant was Haacke’s conviction, set down on paper as he was preparing the MIT exhibition in 1967:

“A system is not imagined, it is real.” Haacke 1967 will make a different real from the systems of air, ice, and water on view; we are more likely to think about the hydronic burners burning at a distant site to fuel Ice Stick, the global climate implied by Condensation Cube, or the absurd inefficiencies of Artificial Rain and Transplanted Moss. Clearly, the ephemeral works’ titles were already shifting to emphasize the human agency behind “artificial” climates and “transplanted” biota; the full social turn was not far behind. If we can no longer sustain the earliest belief that the systems of Systems Art are “absolutely independent” of humans, we can still take up Haacke’s initial offer of an artworld space, time, and provocation to contemplate their unfolding.

NOTES
1. For example, curator Helen Molesworth and artist Allan Kaprow’s “reinvention” of Van der Leck’s 1926 installation Haacke & Wirth Gallery in New York, and the relabeling of Haacke’s own Wide White Ava in 2006, exhibited in his solo exhibition Hans Haacke—Arbeiten 1959–2006 at Deichtorhallen, Hamburg, 2006, and in 2008 at the Paula Cooper Gallery, discussed below. (Reprints and reconstructions are made as required for each exhibition.)
2. Bill Arning, public discussion before the opening of Van der Leck’s Deichtorhallen, Hamburg, 2006, and in 2008 at the Paula Cooper Gallery, discussed below. (Reprints and reconstructions are made as required for each exhibition.)
3. For help with archives at MIT, staff members Alex Updike and Laura Knott were indispensable; as were the staff at the Archives of American Art, Smithsonian Institution, in Washington, DC, and at Haacke’s present gallery, Paula Cooper. The final element in the project’s germination was intellectual—funded by the MIT 150th anniversary, we organized a forum for thinking about systems in the present and questioning systems in the past. Here I want to thank David Mindell, Lisa Kinney, Tod Machover, and all the brilliant colleagues and facilitators who made possible the symposium “Systems, Processes, Art, and the Social” on February 4, 2011, at MIT, with presentations by Ben Aranda, Michelle Kus, John Berth, Matthew Ritchie, and Matt Wignall.
5. The poster designed for the exhibition by John Cama read simply: “Hans Haacke / Hayden Gallery / MIT.”
6. “We are eager to make the Drawing (for want of a more complete word) a strong and integral part of the school.” William Wurster to Gyorgy Kepes in Wellfleet, MA, August 1945, Gyorgy Kepes papers, Archives of American Art.
Grass Grows
(first installed at MIT in 1967 as Graze), shown here in 1988 conical version.

Grass Grows

Six. MIT's most notable contributions came with the development of the “heroic” or “late modernist” work of historicist architects, as detailed in Peter Galison, Image and Logic: A Material Culture of Microphysics (Chicago: University of Chicago Press, 1997).

Seven. See Notions of Architecture: Computer, Media, and Corporate Space (Cambridge, MA: MIT Press, 2003), and Dutt, A Second Modernism.

Eight. As summarized by Mark Wigley, “Prothetic Theory: Disciplining of Architecture,” Akselrod 15 (August 1991): 14. Founded by the MIT School of Architecture, William R. Ware positioned “the history of architecture, the theory of architectural ornamentation, the laws of proportion, of harmony and of geometrical and naturalist decoration” as humanist fine arts, while placing “mechanic arts employed in building, supervising, specifications, contracts, lighting, heating, ventilating, heating, etc.” on the scientific side of architecture. William R. Ware, letter to John Burnham (inventory of the Massachusetts Institute of Technology), April 27, 1965, 2, as cited by Wigley, “Prothetic Theory,” 256–57.

Nine. Crucial to Haacke’s development and open for deeper historicist than can be accompanied here, the Zero Group was founded in West Germany in the late 1950s and at its zenith collaborated with groups in the Netherlands, Paris, Italy, Eastern Europe, and even Japan. The current summary of its history can be found on the Zero foundation website, http://www.zerofoundation.de (accessed June 2010): “In 1958, at their studio at Gießhau-Brauerei in Düsseldorf, Heinz Mack and Otto Piene founded Zero. In 1961, Günther Uecker joined the group, and in 1962, Zeeb, Waldemar.”


Thirteen. Although Haacke begins with an ameliorating “Good old Duchamp” and acknowledges “Hieronymus’s commeats in me,” his rejection of Burnham’s transcendentalism is complete.


Sixteen. As he acknowledged in the interview Burnham published in 1967, Haacke felt that the slower rhythms of his systems work was healing for the participant: “It is more related to what human beings have known in terms of natural motion. I watched many people during my exhibitions. I was surprised and happy to see them loosening up after handling some of my objects.” Burnham, “Hans Haacke Wind and Water Sculpture,” 19.

Seventeen. As Burnham observed in “Hans Haacke Wind and Water Sculpture,” 19, “Is this art? It is a question to which we can only reply, ‘It is not enough: Order and Survival in Early Ecological Art,’” as quoted in Michael Fried, “Art and Objecthood” (1967), anthologized in his Art and Objecthood (Chapel Hill: University of North Carolina Press, 1980), 232–41.

Eighteen. As the Tech write-up on Haacke’s 1964–66 Water Sculpture and Grass Grows notes, “He had a car, I didn’t have a car. We made a trip down to this college and met Jack Burnham. And since then we were in touch.” Burnham introduced Haacke to the concepts of systems theory in the work of Wiener and von Bertalanffy, and confirmed Haacke’s notion of Dusmbdram “ready mades” capable of describing this systems work.


Twenty-One. Haacke to Burnham, letter sent prior to April 1967, as quoted by Burnham in “Hans Haacke Wind and Water Sculpture,” 19.

Twenty-Two. Haacke begins with an ameliorating “Good old Duchamp” and acknowledges “Hieronymus’s commeats in me,” his rejection of Burnham’s transcendentalism is complete.


Twenty-Five. Haacke interview, March 26, 2009 (ts 13), Haacke recalled (typescript 12): “I met him [Burnham, in 1967], he had a car, I didn’t have a car. We made a trip down to this college and met Jack Burnham. And since then we were in touch.” Burnham introduced Haacke to the concepts of systems theory in the work of Wiener and von Bertalanffy, and confirmed Haacke’s notion of Dusmbdram “ready mades” capable of describing this systems work.


Twenty-Seven. As he acknowledged in the interview Burnham published in 1967, Haacke felt that the slower rhythms of his systems work was healing for the participant: “It is more related to what human beings have known in terms of natural motion. I watched many people during my exhibitions. I was surprised and happy to see them loosening up after handling some of my objects.” Burnham, “Hans Haacke Wind and Water Sculpture,” 19.


Thirty-Two. Buchloh, “Hans Haacke,” 218. Buchloch’s thoughtful piece on Haacke has certainly been the most influential since the writing of Jack Burnham and Edward Fry in the late 1960s.

Thirty-Three. This is not a reading, though he was clearly less interested in the visual and cultural relations of Haacke and Burnham’s work, see David Sheskin, “Haacke’s Hanseatic Modul: Rites of Passage on the Western Frontier.”

Thirty-Four. As Burnham acknowledged in the interview Burnham published in 1967, Haacke felt that the slower rhythms of his systems work was healing for the participant: “It is more related to what human beings have known in terms of natural motion. I watched many people during my exhibitions. I was surprised and happy to see them loosening up after handling some of my objects.” Burnham, “Hans Haacke Wind and Water Sculpture,” 19.


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Haacke, interviewed by Burnham, “Hans Haacke Wind and Water Sculpture,” 20. 41.  Indeed, Haacke’s decision not to use “Systems Art” in the
Haacke, interview by Burnham, “Hans Haacke Wind and Water Sculpture,” 14. 42.  By the time of its realization the exhibit at Venice had
indeed become rather incidental in a sequence of works of nearly sixty
Haacke has emphasized to me (email, August 31, 2011) that the avowed intention here, and will be part of society at large, interacting with it. That
probably became dear to me in the mid-sixties, but I had a sense of it already during the 1969 Documents—referring to the photographs to look at visitors, art handlers, and curators in that show (now published in Walter Grasskamp, Hans Haacke: Fotodokumentation 2, 1975; Museum für Gemäldesammlungen Siegen, 2011). Underlining the socio-
logical perspective he was rapidly developing in 1970 was the color-coding of the birds in the våtmark
Haacke’s concept offered by Skrebowski, “All Systems Go” (2006); a revised and expanded version of a talk given in 2005 as Tom Miller’s
Open Systems: Retracting Art, (1970).” 63.  This stock signifier of romantic beauty is interpreted rad-
ically differently by Haacke in 1969 than in the 1990s prac-
Haacke’s systems work, evident in constructions that Haacke made using highly reflective mirror foil on wooden forms, while still in Cologne.
The Art Workers’ Coalition began when Haacke and others
organized to support the protest against the Vietnam War, which Haacke without applying himself to that line of work. On January 9, 1969, from the 1969 MAWA show
The Machine at the End of the Aesthetic Age in resonance with Mai Trung Fry in Paris and in its continuing war in Vietnam. The coalition disbanded in 1971, but its legacy was reviewed by activist collaborators in the 1980s such as Acts Meeting for Cultural Change, Group Material, Guerrilla Girls, the Women’s Action Coalition, Act Up, and others.
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