Negative Dialectics in the Google Era: A Conversation with Trevor Paglen

JULIAN STALLABRASS

In the last seven years, in a series of performances, publications, exhibitions, and installations, Trevor Paglen has explored the world of hidden military projects and infrastructure. One of his best-known series is *Limit Telephotography*, for which he trained lenses designed for astronomical photography on secret military bases in the U.S., using their very-long-range photographic capabilities to capture images that would otherwise be hidden to civilian eyes. These are the "limits" that lie at the heart of Paglen's project: the limits of democracy, secrecy, visibility, and the knowable. He is one of many artists who have evolved new and various ways of engaging with the military and the secret state in the years following the declaration of the "War on Terror." The work of these artists remains as apposite as ever, as the U.S. and its allies continue to bomb suspected enemies (and anyone else who gets "too close") and to run "black" sites and secret gulags in which people are held (and tortured) beyond the reach of the law. Paglen has made works that raise fundamental questions about what can be known and seen, while simultaneously writing investigative exposés of the shadow state. This interview explores some of the relations and tensions between the two practices.

Julian Stallabrass: Artists making photographs now have to send their work out into a world that is replete with networked cameras, in which publishing a picture online can be done with a few presses of a touchscreen. Tourists at any reasonably well-known spot can be sure that they will find dozens or hundreds of decent photographic records of the place online, so taking their own pictures has become a performative token act. How do artists working in the medium place themselves in and/or against this remarkable proliferation of public images?

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Trevor Paglen: That is a great question, and it's something I spend a lot of time thinking about. There have been a number of discussions about the "future of photography" among fine-art people, and I think that conversation has to do with the question you're posing here. It seems to me that photography is at a bit of a

crossroads. I believe there's still a place for fine-art/gallery work. When you make a nice print and put it on a wall, you're creating a space where people can devote a certain kind of attention to an image or idea. Viewing a photograph in an institution is a much slower process than looking at a Flickr page or a Facebook attachment. The space for paying slow attention is becoming more relevant and significant as our forms of everyday communicating, imaging, and viewing increasingly speed up. As a corollary to this, I've been thinking about photographic materials in a much more "sculptural" way-thinking about how imaging and printing processes can help form the critical "text" of a photograph. I've recently been taking materiality of photography much more seriously, thinking about different processes, the lifetimes of various media, and different printing processes as they relate to socio-historical processes. I've been working with everything from albumen prints to the satellite feeds of Predator drones. The point, for me, is to propose and develop forms of postrepresentationalist photography and imaging wherein both the materiality of a work and its "relations of photography" are intrinsic to what that work is. In other words, I want photography that doesn't just point to something; it actually is that something.

The other part of my answer has everything to do with what you called the "performative" act of photography. I'm sure we both agree that the twenty-first century has been characterized by the huge expansion of photographic machines, imaging systems, and the means of networking them. Here I mean things like digital point-and-shoot cameras and Flickr accounts; local police vehicles outfitted with cameras designed to take a picture of every single license plate that passes by and then to "run" the plates in a police database; Predator drones over Pakistan flown via video by pilots in Nevada, with intelligence analysts in Virginia and commanders in Florida, all part of the same real-time "network." There are an incredible number of examples. These new "geographies" of seeing-machines haven't been dealt with that much by photographers yet, but there's a lot to engage with critically. Of course, what it means to "do" photography in relation to this larger geography of machineseeing might not look like sheet film shot with a view camera. So I think there are a lot of opportunities for photographers to take the "relational" aspects of what they do far more seriously. This is what I was alluding to earlier when I mentioned this idea of "sculptural" or "relational" photography.

Stallabrass: There's a self-conscious tension in your answer between valuing the slowness that comes with the display of the fine-art print in the gallery and practices that embrace the flow of imagery through networked imaging systems. The latter reminds me of the controversy surrounding an Honourable Mention given to Michael Wolff in this year's World Photo Press awards for re-photographing what he called "unfortunate events"—accidents, people collapsing, fires—that happened to be caught on Google Street View cameras. I think the controversy was generated because such acts of appropriation have far less of a history in photojournalism than they do in fine art.



Trevor Paglen. Drone Vision. 2010.

But I wonder about the basic contention that digital images are necessarily consumed rapidly, especially since at galleries now you sometimes see HDscreen displays of photographs. Given the screen technology and the resolution with which digital images are now displayed, there seems no reason why they should not be the subject of sustained attention (and do we know for certain that they are not?). It is true that Facebook (and perhaps Flickr) encourages shorter attention spans, as do all social-media sites that are focused on the flow of images and events. Do we need the physical photographic print and gallery space to slow viewers down? And if so, why does that work?

This is related to an interesting discussion at a recent conference on conflict and photography at University College Dublin at which David Campbell asked why there had been so few deep, textured, complex online works tying together words and images in sophisticated data structures of the type that had been held out as models in the age of hypertext.¹ One answer, it seems to me, is that engagement with digital and social media concerns the capturing of both attention and an ongoing current of material (Twitter is the obvious example of this). Such a process does not seem compatible with the very laborious construction of multiple branching data structures that the hypertext model once promised. So my question is: can you square that circle?

1. "Medium and Message: Conflict Photography in the Digital Era," University College Dublin Clinton Institute, May 2011.

Paglen: Well, to be honest, I haven't thought about the question of viewing as much as you have. It definitely seems to me that the "space" of the museum or gallery or what-have-you has more to do with the kind of attention we pay to artworks than the medium itself. We don't necessarily need the "print" if we want to ask people to slow down, but we do need some sort of space (gallery, museum, etc.) that asks us to pay closer attention to what we're looking at than we might otherwise do (online, for example).

But the overall question of the cultural politics of "viewing" art is something I just haven't spent that much time working out. I have a sense of what works for my own art, but don't really have a meta-theory of it. I'm much more interested in the cultural politics of producing art than the conditions of "consuming" it. I have long understood artworks as congealed social, political, and cultural relations, and that is what I'm interested in exploring. If I have anything to contribute to how we understand cultural production, it probably comes more from a "geographic" perspective than a traditional cultural-studies perspective. In a lot of my works, I try to set up various relations of seeing from which the artwork emerges. If I go out in the desert and spend a week photographing covert military operations, for example, it's quite likely that I'll ultimately end up with something quite formal or



Paglen. Black Site: Kabul, Afghanistan. 2006.

abstract-looking. But the means by which I got to that particular abstraction are crucial to the work. They imply a politics of seeing and of relations of seeing and so forth. I think that there are tremendous and largely unexplored critical possibilities in this approach.

- Stallabrass: That's something that intrigues me about your work, the apparent disjunction between process and visual result. When you photograph secret military installations or black sites from very long distances, using extreme telephoto lenses, in one sense you seem to be spying for citizens against unaccountable power; yet, softened and distorted by heat haze, the results evoke painting or pictorialist art photography in a range of "styles," from Edward Hopper to color-field painting. How do the apparent art-historical references and the process of producing the work come together, and do such art-historical references work towards bringing out the politics and relations of seeing that you talk about?
- Paglen: You're bringing up two really important aspects of my work. On the one hand, we have what we might call the politics of production. By this I mean the kinds of relational practices that are behind the work and go into its making. On the other hand, we have things like the visual rhetoric and aesthetics of an image: here we find more of the questions about spectatorship, art history, and so forth. Taking both sides of this seriously is fundamental to what I do. If we're talking about the politics of production, there are a lot of things going on. On the one hand, I might be camping out on a mountaintop taking photos of a secret military base, determining the location of CIA "black sites" so I can go photograph them, researching front companies used in covert operations, or working with amateur astronomers to track classified spacecraft in Earth orbit. These are all relational practices and they all have various sorts of politics to them. Photographing a secret military base means insisting on the right to do it, and enacting that right. Thus, we have a sort of political performance. Finding CIA black sites means, well, finding secret black sites. Working with amateur astronomers has a politics of collaboration to it, as well as something I think of as "minoritarian empiricism," which has to do with experimenting with radical possibilities of classical empiricism. All this happens long before I even think about making a piece of "art" and putting it in front of other people to see.

When we get into the question of what the image actually looks like, I use a lot of art-historical references as a way to suggest how contemporary forms of seeing (and not seeing) rhyme with other historical circumstances that artists have responded to. I look at a lot of abstract painting as a response to its historical moment. In someone like Turner, we find a vision of what the nineteenth century's "annihilation of space with time" looked like; in Dada or in some of the smarter Abstract Expressionists, we can find responses to some of the twentieth century's greatest horrors suggesting the utter failure of representation in relation to the bomb or the Holocaust, for example. There was something radical and profound—at those historical moments in the kinds of abstractions some of those artists came up with. We've moved way beyond that, however. Some contemporary artists have retreated into a sort of pseudo-Greenbergian abstraction, and I find that really disingenuous.

All in all, I think we're right to be suspicious of representation right now. The days of believing that there's something out there in the word that can be transparently represented by a photograph or image are over. Certainly that notion has been over in philosophy pretty much from the start, but it has taken popular culture and vernacular forms of seeing a long time to catch up. Artists and photographers have always "manipulated" images—there's no way to make a photograph or image without manipulating it, partly because there's no "it" prior to the image. This poses a useful challenge to cultural producers: how to work with images or visual material in a critical way, given a lack of faith in representation. Some folks are talking about affect and nonrepresentational theory (Nigel Thrift, for example, in human geography) as one way of moving beyond representation, and others are taking up different flavors of "speculative realism" and ontology. I've certainly learned a lot from these thinkers, but I often find my thought drifting towards contemporary variations on old-fashioned Frankfurt School critical theory.

I'm obviously interested in, and simultaneously very suspicious of, abstraction. On one hand, I do see the value of abstraction as a critical refusal to speak sensibly. This refusal can be a radical gesture, but it's far more common to encounter abstraction-for-its-own-sake, which is usually a kind of reactionary fetishism or decoration. For me, the difference between the two has something to do with the politics of production I mentioned earlier, namely the means through which a particular abstraction is produced.

Stallabrass: So it seems that the radical aspect of your work lies in the disjunction between the gallery print (say, of a spysatellite trail in a starry night sky, which yields information only to the small minority of people with specialist knowledge) and the social and technical process that goes into making it. I find it interesting that the models you mention for the way the work looks, and for getting at a critique or a refusal of representation, are avant-gardist. Each also deals with waves of technological change and the profound consequences they've had for the experience of the everyday-whether it be steam power, mecha-



Paglen. Nine Reconnaissance Satellites over the Sonora Pass. 2008.



Paglen. Large Hangars and Fuel Storage; Tonopah Test Range, NV Distance ~ 18 miles, 10:44 a.m. 2005.

nized warfare and its transformation of commercial road and air travel, or technologically advanced genocide and the bomb. It could be argued that all established a relation to the technological sublime—an awe in the face of vastly complex systems and their uncontrollable consequences (though in Dada, this was taken parodically). Obviously, the postmodern period often thought of itself as a time of exhaustion and perhaps decadence in which the passive consumption of reproductive technologies (above all, television) appeared to dominate over the romance and fears attached to innovative productive ones. So this is my first question: is your reference back to these older forms a way of saying that we no longer live in such times?

I have a second question. Conventionally, critics have looked at documentary photography and film and bemoaned their inadequacy as means of describing their subjects. But one consequence of the ubiquity of photo and video recording would seem to be that sometimes we get documents that are as adequate as one could reasonably want: the WikiLeaks video of the Apache helicopter murdering Iraqi civilians is a case in point. The document gives context, dialogue, and direct evidence of the slaughter, all of which allow the viewer to see not just the fact of the killings but the operation of the military mechanism that brought them about and the enjoyment of the crew in the exercise of their deadly power.² What relation does your suspicion of representation have to that kind of "documentary" image?

Paglen: The short answer to your first question is "yes." I think most people agree



Paglen. Keyhole 12-3/Improved Crystal Optical Reconnaissance Satellite Near Scorpio (USA-129). 2007.

that any sort of classic avant-gardism is over, but I think there's an underlying impulse in the avant-garde that I find especially relevant today. What I'm interested in isn't really even the critical impulse so much as the productive impulse animating much avant-gardist practice. But again, I want to look at that paradigm of cultural production from a contemporary, postpost-modern perspective.

Throughout my life, I've found much of canonical postmodern art to be very cynical, an artistic echo of Thatcher's "there is no alternative." On the other hand, I'm profoundly influenced by artists such as Gregg Bordowitz, Gran Fury, Group Material, Paper Tiger, and other "postmodern" cultural producers whose work didn't abandon itself to a complacent version of unlimited semiosis, but sought instead to develop forms of radical humanism from postmodernism's critical insights. All in all, I'm not interested in a return to modernism, but I find some of modernism's underlying impulses to be particularly relevant

2. The video may be found in many places online, including: www.time.com/time/nation/ article/0,8599,1978017,00.html (accessed June 13, 2011).

today, which is a historical moment where it's hard to imagine, let alone find, examples of how society might be different. In terms of art making, I sympathize with a revised form of negative dialectics as a response to an image-saturated society.

On your second question, I definitely agree with you that the WikiLeaks gunship footage is as good as we could reasonably want. But if there were a wrongful-death lawsuit with that video as a primary piece



Paglen. Workers Gold Coast Terminal Las Vegas, NV Distance ~ 1 mile. 2007.

of evidence, I wonder whether it would hold up in a courtroom. I'm thinking here of the Rodney King footage—when you repeatedly scrutinize any kind of documentarian media, you can capitalize on the fact that representations don't transparently represent reality-as-it-is. We've seen something broadly similar to the Rodney King footage in the Abu Ghraib photos. Those photos undeniably showed horrible abuse, but the logic of photography is such that the photos couldn't show systemic torture and abuse as political policy. Thus, Donald Rumsfeld could plausibly dismiss what was in the photos as the work of a "few bad apples." We all know this. And yet some forms of documentary constitute, as you say, the best kind of images we could ask for, but the best we can ask for has clear limits to what it can show. Nonetheless, "documentary" images can still become social facts regardless of their ability or inability to reproduce reality.

I take all of this as a starting point. In terms of my own aesthetic vocabulary, I tend towards images that manifest this dialectic. Images that 1) make a truth claim ("here's X secret satellite moving through X constellation," for example); 2) immediately and obviously contradict that truth claim ("your believing that this white streak against a starry backdrop is actually a secret satellite instead of a scratch on the film negative is a matter of belief"); 3) suggest a form of practice that could give rise to such an image ("if it's true that this is a secret satellite, then there's a whole lot more going on behind this image"); 4) suggest all of the above as an allegory for something about twenty-first-century images, knowledge, practice, aesthetics, and politics. Not all of the work I produce fits all of this—it's just a loose way I use to think about what it is I'm doing.

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Paglen. Code Names. c. 2001-.

Stallabrass: That's a fascinating answer, and picks up on many of the issues that came to mind as I look at your work. I notice that you write in your *Aperture* monograph of a dialectical opposition between an image's claim to represent and the undermining of that claim. It's good you specify that further here.³ It's easy to see that Adorno's concentration on the specificity of the object, and the instrumental and contradictory social forces that bring about its misdescription, has an affinity with your work. Beyond that, I wonder: is there something about the military (and the most secretive aspects of the military) that has a further affinity with negative dialectics? Is this part of the point of your listing of hundreds of code names of secret projects?

To make a point that may be less in the spirit of Adorno—for whom immersion in the specificity of an object through immanent critique engages the dialectic—these days artistic focus on the full detail of the object often leads in the direction of the sublime. We see this in a lot of large-scale museum photographs, in which the viewer is overwhelmed by a mass of data that they lack the conceptual tools to make sense of: the "data sublime," we might call it. Your work plays with this feeling brought to another level, because of course much of the point is that we are denied the information to make sense of it. You evoke both the mathematical and the dynamic sublime in your satellite imagery, particularly in images of the night sky and of trails over pristine landscapes that evoke nineteenth-century landscape photographs of the American West. The sublime is often used for conservative purposes: to frame or manage a common social fear (of the masses, quite often, but also more recently of data itself) and offer it up for consumption. How do the sublime and negative dialectics come together in your work?

In another register, your work has a definite performative and subversive side: the reproduction of secret code names is presumably illegal; your *Limit Telephotography* series offers not just evocative images of the operations of secret bases but data—for example, the tail numbers on aircraft. The same could be said of the remarkable mission patches and challenge coins, referring to secret units and operations, that you have collected and photographed. Rebecca Solnit points out that invisibility is a type of shield, while democracy is founded upon visibility⁴—and your work does something to peer under the rock. Surely there are conservatives in the U.S. who would accuse you of treason. Do the sublime and negative dialectics protect you from arrest? How do you decide how much information to offer the viewer, and how much to hold them in awed suspense before the spectacle of the military apparatus?

Lastly, Adorno held out a faint hope that negative dialectics contained a transformative and utopian vision of society no longer divided by conflict and domination. Is there an element of your work that contains such a seed? Paglen: I think there are definite ways that negative dialectics resonates with military and intelligence activities. I've looked at a lot of things that are secret but that have profound effects on culture and politics. Most of the time, I don't exactly know what I'm looking at, photographing, or researching. So I quickly end up in situations where the question is, How do I point to, engage with, and represent something that I don't quite understand? The answer often has to do with trying to represent that epistemological-political gap or in-between space, or that moment of incomprehension. The Code Names piece (a list of classified military operations and organizations) is an example of that. Incidentally, this isn't just particular to the military. Some projects I'm working on now have very little to do with the military, but are still centrally concerned with this question. The epistemological-political "gap" I'm talking about here relates to Jean-Luc Nancy's definition of the sublime as the "sensibility of the fading of the sensible."

As for how the sublime and negative dialectics come together, well, I'm sorry but I have to say I'm not quite sure. I'm not sure I'm the person who can really theorize this—I'm extremely influenced by both concepts, but at the risk of sounding like a stereotypical artist, it's really something I "feel" more than something I can articulate in a cogent philosophical manner.

Do the sublime and negative dialectics shield me from arrest!? Ha-ha... not at all! I'm quite careful about how I go about my work. When dealing with authority, I'm polite but firm. But I've gotten plenty of death threats along with angry military and intelligence officers. That's just the nature of the work, I suppose. In terms of deciding how much to offer the viewer, it's a strange thing. I really think that the materials I research and explore actually tell me how they want to be represented. I know that's an odd thing to say, but it's really been my experience. When I was doing my Ph.D. in geography, I went into the office of my adviser, a really wonderful and incredibly smart man named Allan Pred, who really liked that I was also an artist. I was complaining that I hadn't taken any classes on methodology and didn't have a clue as to what I was doing in that regard. He told me that cookie-cutter methodologies were nonsense and that I should just keep doing my research until my materials told me how to study them. At the time, I probably thought he was a crazy old man, but I think he was absolutely right. Having said that, I've written a couple of books about some of the same things that my artwork is about, and they're pretty standard nonfiction in terms of style and argumentation.⁵ Art can show the world in a particular way—that's what's powerful about it—and the same is true for prose. But they're incommensurate. With my visual work, I try to focus on what visuality does well.

The utopian aspect is the not-so-secret secret of negative dialectics, as I understand it. I think it points in the direction of unfulfilled forms of freedom and justice, but only indirectly and obscurely. This is related to what we were talking about when the subject of avant-gardism came up in our conversation. I really do want to believe in a more just world. I often think of Fanon, who insisted on a "new humanism" without ever really articulating what that might look like. I'm not sure even what it might mean to articulate that as a meta-theory. Perhaps that's the whole point of it—which leaves us again in the space of negative dialectics, no? For me, this is what art can do—orient our seeing and suggest practices in ways that suggest (even negatively) liberatory forms of being—but it's really hard to say what those forms might be.

^{5.} Trevor Paglen and A.C. Thompson, *Torture Taxi: On the Trail of the CIA's Rendition Flights* (New York: Melville House Publishing, 2006); Trevor Paglen, *Blank Spots on the Map: The Dark Geography of the Pentagon's Secret World* (New York: Dutton, 2009).

Aesthetic Strategist: Albert Wohlstetter, the Cold War, and a Theory of Mid-Century Modernism*

PAMELA M. LEE

Each morning, as I walk to my office on the campus of Stanford University, I find my path crossed by the shadow of the Hoover Institution on War, Revolution and Peace. This is not a metaphor. Founded in 1919, the university's residential think tank sits yards away from the Department of Art and Art History, its famous tower looming vertiginously over the humanist proceedings down below. The Hoover is so close to the art building, in fact, that one can glimpse the movements of its various fellows—among them, Condoleezza Rice and George Shultz—while holding forth on matters of aesthetics and politics in the seminar room. The workaday proximity to this think tank never fails to startle: its collective influence has shaped public policy for decades, providing Cold War analyses of the Gulag and the nuclear arms race, position papers on the liberalizing of markets, and media dispatches on the "War on Terror."

But other adjacencies are equally as startling. For what has always struck artists and art historians mining the archives of the Hoover is its astonishingly modernist source material, including, to take just a few examples, letters between Leon Trotsky and Frida Kahlo, rich supplies of Soviet broadsides, and photographs by Tina Modotti. These documents draw a decidedly mixed audience in the reading room, a place where artist-veterans of 1968 sit cheek-by-jowl with Reagan-era functionaries. While this description is meant to dramatize a disquieting tension between the institutional culture of the think tank and its artistic holdings, it is also meant to introduce the topic of the think tank's modernist

* This essay is dedicated to Maria Gough. It is from a manuscript in progress called "Think-Tank Aesthetics: Mid-Century Modernism, the Cold War and the Rise of Visual Culture." My research has benefited from conversations with a Stanford colleague in the Department of Communication, Fred Turner, and the graduate students in the seminar we co-taught in the spring of 2009, "Media Cultures of the Cold War." Thanks also go to Yve-Alain Bois and David Joselit; George Baker; Sam Johnson; Joseph Koerner; Molly Nesbit and James Thomas; Vivian Arterbery at the RAND Corporation, Santa Monica, California; the archivists at both the Rare Book and Manuscript Room, Butler Library, Columbia University; and the Hoover Archive, Hoover Institution of War, Revolution and Peace, Stanford, California. Finally, I wish to acknowledge Henry Rowen, Professor of Public Policy and Management Emeritus in the Graduate School of Business at Stanford and Senior Research Fellow at the Hoover Institution, for sharing his recollections of Albert Wohlstetter at RAND in the 1950s and 1960s with me.



Hoover Institution Complex at Stanford University. 1960.

imbrications and imaginings: the ways in which its research protocols, particularly those related to the beginnings of the Information Age, set the terms for its own brand of "mid-century modernism." In meshing the interests of the hard and the social sciences, these methods would effectively come to license a new approach to the image, one that eclipsed the disciplinary conventions separating fine art from the artifacts of what we now call "visual culture."

To explore these imaginings and the way they connect with the history of art is the point of this essay, which also attempts to cast a genealogical eye towards the implications of these things for digital culture and the methodological interests that have supported its emergence. The essay turns on a figure who may well be the aesthetic strategist par excellence, Albert Wohlstetter (1913-1997), a name undeniably unfamiliar to many art historians but one that is writ large in the chronicles of national security and the neoliberal agendas that are the legatees of the postwar think tank.¹ Wohlstetter was a "defense intellectual," that Cold War species of person engaged in the minutiae of nuclear deterrence—"the delicate balance of terror," as he put it in one of his most influential essays, published in Foreign Affairs in 1958.² In 1951, Wohlstetter, who studied mathematical logic, law, and the philosophy of science at City College, Columbia, and Harvard, became one of the principal consultants for the RAND Corporation, the premier think tank of the Cold War, which counted Herman Kahn and Daniel Ellsberg among its most famous (and infamous) contributors. Along with his wife, Roberta Wohlstetter, a formidable military historian whose work continues to have an impact on foreign policy, he was awarded a Presidential Medal of Freedom by

^{1.} A highly instructive account to this end is S. M. Amadae, *Rationalizing Capitalist Democracy: The Cold War Origins of Rational Choice Liberalism* (Chicago: University of Chicago Press, 2003).

^{2.} Albert Wohlstetter, "The Delicate Balance of Terror," in *Foreign Affairs*, repr. in *Nuclear Heuristics: Selected Writings of Albert and Roberta Wohlstetter*, ed. Robert Zarate and Henry Sokolski (Carlisle, Penn.: Strategic Studies Institute, U.S. Army War College, 2009), pp. 177–213.

Ronald Reagan in 1985 and officially recognized for his distinguished service to the Department of Defense by both Robert McNamara and Donald Rumsfeld. Wohlstetter's classroom influence was likewise noteworthy: beginning as a Ford Professor at the University of California, Berkeley (1962–64), and then as a University Professor at the University of Chicago (1964–80), he served as a mentor to a generation of neoliberal policy makers, war architects, and, in at least one case, World Bank presidents. Among his students were Paul Wolfowitz and Richard Perle.

Such associations have so far failed to register in art history's treatment of mid-century modernism. What we know about "reactionary modernism" in the 1930s has yet to receive a full-dress appraisal. On the other hand, in Sharon Ghamari-Tabrizi's important work on Wohlstetter's colleague Herman Kahn, the historian of science refers to such tendencies as the "Cold War avant-garde";³ and I follow her lead in considering the peculiar "aesthetic" of the postwar think tank not as a matter of appearance, period style, or literal design—the decorative addenda, one might say, of the Cold War—but as an institutionally sanctioned sensibility stemming from its innovative research techniques. Wohlstetter's professional and ideological commitments might seem strikingly different from the emancipatory ethos thought by some to be synonymous with late modernism, but they have both subterranean and explicit relevance for discussions of aesthetics and politics at mid-century, as well as the disciplinary entanglements between art and science by extension.

To be sure, what links such seemingly disparate phenomena is a certain revisionist account of methodology or, more aptly described, strategy. As supported by the demands of operational analysis, the collaborative methods championed by Wohlstetter and his colleagues are now the lingua franca of the contemporary university, where insistent appeals to "laboratory" modes of research are almost as prevalent among humanistic cultures as scientific ones. (Indeed, the currently embattled state of the humanities in higher education owes something to this earlier history in no small measure.) Over half a century ago, however, such approaches were the function of a strategy that has otherwise been repressed in progressive accounts of interdisciplinary research. For Wohlstetter, these methods stemmed in part from an earlier interest in experimental semantics, an engagement that bore an inverted relation to semiotics as taken up in the history of art at mid-century. The convergence between these approaches and information theory sponsored analyses of contemporary culture that were consistent with the geopolitical imperative to "read" signs of the enemy and to discriminate "signals" from the noise and miscellany that was the Cold War semiosphere.

Perhaps most surprising of all, Wohlstetter's "semiological adventure"—to borrow promiscuously from Roland Barthes—suggests an instructive, certainly

^{3.} Sharon Ghamari-Tabrizi, *The World of Herman Kahn: The Intuitive Science of Thermonuclear War* (Cambridge, Mass.: Harvard University Press, 2005).

provocative comparison to an art historian with whom he had a nearly threedecades-long association: Meyer Schapiro.⁴ Schapiro's canonical reading of semiotics, "On Some Problems in the Semiotics of Visual Art: Field and Vehicle in Image-Signs," has been exhaustively discussed by art historians, its author's humanist and materialist proclivities well flagged. ⁵ Yet Schapiro's stake in such material acquires a new valence when submitted to the interests of Cold War method. It can be seen to contravene an intellectual attitude that, as David Rosand notes, "accords full recognition to the ambiguities inherent in such a situation, the responsiveness to the contingent \dots "⁶ The comparison between the strategist and the art historian suggests a contest of meaning over information and its prospects as instrumental reason, and it dramatizes the confusion, misrecognition, and controversy that attend the diverse approaches to semiotic inquiry during the period. It suggests a theory of mid-century modernism, we might say, that is at radical odds with high-modernist verities organized around autonomy and mediumspecificity. Indeed, it is a theory that is more holistic in its appeal to the spectrum of scientific and humanistic inquiry and, as a result, ironically, more totalizing.

The Burckhardtian Man circa 1939

To illuminate all these points, let me begin by recounting what is less known about Wohlstetter than what has already been related in the hawkish encomiums he garnered over the course of a half-century: his modernist and aesthetic sensibilities. To sift through his early papers at the Hoover Institution; to read the testimonials of his RAND colleagues; and to listen to their recollections is to encounter a self-identified "Burckhardtian man," albeit one whose encyclopedic intelligence and aesthetic appetites hewed more closely to the technocratic agendas of the cold warrior than to the humanist ethos of the Renaissance.⁷ These sensibilities are suggested early in the 1930s by his earnest grappling with T.S. Eliot and James Joyce, student work that reveals a young mind thinking through Prufrock's alien-

^{4.} Wohlstetter discusses his admiration for Schapiro in his unpublished oral history with James Digby and Joan Goldammer, "Oral History: Albert Wohlstetter," July 5, 1985, Archives of the RAND Corporation, Santa Monica, Calif. The relationship first came to light to a wider readership in Alex Abella, *Soldiers of Reason* (New York: Harcourt, 2008), p. 68; it is also acknowledged in Robert Zarate, "Introduction," in *Nuclear Heuristics*, p. 8.

^{5.} Meyer Schapiro, "On Some Problems in the Semiotics of Visual Art: Field and Vehicle in Image-Signs," *Semiotica* I (1969), pp. 223–42.

^{6.} David Rosand, "Semiotics and the Critical Sensibility: Observations on the Lessons of Meyer Schapiro," *Social Research* 45, no. 4 (Winter 1978), p. 39.

^{7.} In his oral history, Wohlstetter attests that his "ideal was the *uomo universale*, you know, the Burckhardtian version of the Renaissance man" References to the *uomo universale* crop up in his papers, as in the multiple allusions to Leonardo Da Vinci in his unpublished manuscript on prefabricated housing, written during the time of his leadership at the General Panel Corporation. Digby and Goldammer, "Oral History: Albert Wohlstetter," July 5, 1985, Archives of the RAND Corporation, Santa Monica, Calif. Also see Wohlstetter's unpublished manuscript on prefabricated housing. Albert and Roberta Wohlstetter Collection, Hoover Archive, Hoover Institution of War, Revolution and Peace, Stanford, Calif., Box 147, Folder 10.



Illustration from Life showing RAND Corporation workers meeting in Albert Wohlstetter's home. 1959. Photograph by Leonard McCombe for Time Life Pictures/Getty Images.

ation and riding the galloping cadences of a Stephen Dedalus. They are flagged by his relationship with Konrad Wachsmann and Walter Gropius, with whom he worked at the General Panel Corporation in a program addressing the postwar housing shortage.⁸ And they are decisively registered in his long friendship in Los Angeles with his neighbor Julius Schulman, who photographed Wohlstetter's Laurel Canyon home, designed by Josef Van der Kar, on more than a few occasions. Perhaps the most striking visualization of such sensibilities is a photograph of Wohlstetter's den from the May 1959 issue of *Life* that featured an article devoted to the rise of that postwar institution that had been christened the "think tank."9 Complete with a gathering of recumbent

defense intellectuals, the Eames-style furnishings, vaguely Japonesque aesthetic, and low-slung, open floor plan all telegraph the cool and the new, a universal language of design that served as backdrop to the advanced research initiatives pursued in the think tank.¹⁰ As Alex Abella puts it in his popular account of the RAND Corporation, Wohlstetter was "a constant proponent of what can only be called modernity."¹¹

8. Albert Wohlstetter, unpublished manuscript on prefabricated housing, Hoover Archive.

9. On the origins of the term "think tank," see Andrew Rich, *Think Tanks, Public Policy and the Politics of Expertise* (Cambridge: Cambridge University Press, 2004), pp. xiii–xiv.

10. On the modernist architecture of the RAND Corporation itself, see Michael Kubo's Master of Architecture thesis from the Graduate School of Design, Harvard University, "Constructing the Cold War Environment: The Architecture of the RAND Corporation, 1950–2005," Spring 2006. My thanks to Kubo for his responses to a spoken presentation of this essay.

11. Abella, Soldiers of Reason, p. 67.





The interior of Albert Wohlstetter's house. 1954. Photographs by Julius Shulman. © J. Paul Getty Trust.



Cover of Partisan Review, Fall 1939.

Intriguing as these examples are, the litany raises a rhetorical question: What could be more modern than a defense intellectual? The rise of such an emblematic figure after Hiroshima is continuous with the sphere of administration that is the dialectic of enlightenment. In fact, there's little reason why a faithful guardian of progress, science, and "reason" wouldn't be invested in a Gropius, Eames, or Neutra (Wohlstetter was on personal terms with the latter two). The defense intellectual, after all, is the last arbiter of rationality when reason has all but fled the scene. In the words of Kahn, he is the individual trained to "think the unthinkable"—to think rationally about phenomena that could only travesty the foundation of reason.

Yet none of this explains the oddest affinity by far in Wohlstetter's list of aesthetic engagements, his relationship with Schapiro. The epistolary record documents its beginnings circa 1936 and its end around 1963.¹² The analyst was unstinting in his praise for the great art historian, whom he most likely met when he began studies in law at Columbia around 1934, even serving as his research

^{12.} The difficulty in establishing decisive historical parameters to this correspondence rests with the fact that over 61 boxes of Albert and Roberta's Wohlstetter's papers at the Hoover Institution are restricted. While correspondence is scattered throughout this voluminous archive, the nature of these letters tends to the bureaucratic; there is little in the way of early personal communications available to the researcher. In my work with this collection, I found no letters at all from Schapiro. The correspondence has thus been reconstructed from materials in the Meyer Schapiro Collection, Rare Book & Manuscript Library, Columbia University in the City of New York.

assistant for a brief spell during the period.¹³ The timing of the initial encounter is both curious and suggestive, for Wohlstetter's oral history gives little indication of any activist tendencies beyond familiarizing himself with the rudiments of geopolitics. He described himself, rather, as an "aesthete" when he wasn't otherwise pursuing study in the logic of math and science and the work of the Vienna Circle, C. S. Peirce, and Willard V. O. Quine.¹⁴ As a former RAND associate tells it, however, there is more than good reason to challenge Wohlstetter's recollections of neutrality during this period (at least as he discusses, or rather skirts, the issue in his oral history) as well as the break implied between aesthetics and science that his comments suggest.¹⁵ All the same, his memories of Schapiro underscore how such expanding interests fell well outside the borders of his prescribed curricular métier. "I was finding myself sitting in on all sorts of obscure courses," Wohlstetter recalled, "like Romanesque Monumental Stone Sculpture and French Illuminated Manuscripts as given by Meyer Schapiro . . . and his Impressionist Paintings. . . . Meyer was perhaps the most brilliant lecturer I ever heard."¹⁶

The first-name intimacy opens onto a correspondence stretching over three decades, with letters ranging in topic and temperament from the banal to the thoroughly elliptical. Affectionate greetings pass between spouses Roberta and Lillian; recommendations are made for travel throughout Italy and the continent; invitations are extended to Bennington and Laurel Canyon. Such exchanges might seem pro forma for an art historian renowned for his extraordinarily catholic correspondence or a strategist who could also count Saul Bellow and Sidney Hook as friends from youthful days. The letters are mostly quiet on politics and method as such, but there's more than enough to warrant speculation about the nature of the strategist's aesthetic engagements. A document dating from around 1938—a request for a letter of recommendation—channels something of Wohlstetter's ambitious methodological objectives. Signing off with the eternal refrain of "I hope this won't be a big bother," he proposes to the art historian using the methods of experimental science, syntax, and semantics in a radically new way, suggesting a project that

... would concern the relations between meaning, true, [*sic*] designation, confirmability, inquiry, control and similar concepts. I'd use logistic (and e.g., Carnap and Tarski's syntax and semantics) in the formulation but I'd try working

^{13.} As recorded by Abella in his account of the RAND Corporation, *Soldiers of Reason*, p. 68, and as mentioned by Zarate in *Nuclear Heuristics*, p. 8.

^{14.} Wohlstetter oral history, Archives of the RAND Corporation.

^{15.} The economist Henry Rowen, Wohlstetter's colleague at RAND, is forthcoming about Wohlstetter's political commitments in the 1930s. Rowen, in conversation with the author, May 9, 2011. Stanford University, Stanford, Calif.

^{16.} Wohlstetter Oral History, Archives of the RAND Corporation.

it out in connection with several detailed applications . . . One application is in the field of myth and scientific inquiry. . . . Another application is in the field of value statements as they function in art-historical inquiry and with reference to analyses of particular works.¹⁷

The goal is both to analyze the work of art as if it consisted only of legible and quantifiable data and to draft methods associated with mathematical logic and the semantic interests of the Vienna School (particularly the work of Alfred Tarski and Rudolf Carnap) for the purposes of conducting aesthetic inquiries ("value judgments"). Wohlstetter means to treat art as transparent to the applications of other fields. He likewise proposes, decades before Claude Lévi-Strauss's formative work in structural linguistics, to submit the field of myth to semantic protocols.

In a sense, Wohlstetter's interests anticipated the influential "two cultures" debate that preoccupied scientists, humanists, educators, and policy makers after the Second World War, initiated by C. P. Snow with his famous "Two Cultures and the Scientific Revolution" lecture in 1959—twenty years after Wohlstetter wrote to Schapiro.¹⁸ The gulf between the hard sciences and the soft humanities could be held to be bridged in multiple narratives of the strategist's life, souvenirs of a man as capable of enjoying an afternoon spent driving Le Corbusier around Manhattan as of discoursing authoritatively on Soviet ballistics and Strategic Air Command (SAC). But Snow's thesis, which anchors a widespread debate about what might be called the operational value of the academic disciplines after the war, will return to haunt the end of this essay. Here I cite it to suggest that the noise issuing from such polemics can drown out a third term animating Wohlstetter's work in the late 1930s: his politics. For it is his politics that effectively triangulate his understanding of both science and art and their peculiar relationship at the time.

As it turns out, the first of Wohlstetter's published essays to address international relations appeared neither in the 1950s nor in the foreign-policy reviews that garnered him his reputation as an analyst but in the fall of 1939 in a seminal journal of culture, one with which Schapiro had a storied relationship. The text, "Who Are the Friends of Semantics?," co-written with the logician M. G. White, was published in *Partisan Review*, the historiographic prestige of which cannot go unremarked upon. The issue opens with the grimmest of analyses of the Stalin-Hitler Non-Aggression pact (the editorial "The War of the Neutrals" narrates the shock of fellow-travelers discovering that the Kremlin's "interests are not those of the inter-

^{17.} Letter from Albert Wohlstetter to Meyer Schapiro, undated (1938?); Meyer Schapiro Collection, Rare Book & Manuscript Library, Columbia University in the City of New York, Box 177, Folder 4.

^{18.} C. P. Snow, *The Two Cultures and the Scientific Revolution* (1964; Cambridge: Cambridge University Press, 1998).

national working class") and proceeds to include Clement Greenberg's "Avant-Garde and Kitsch" in its pages.¹⁹ Wohlstetter's jointly written essay immediately follows Greeenberg's text, which is to say, the future strategist could not have found himself in more urgent political—and polemical—company. If Greenberg's contribution famously portrayed the intertwining of ideology and aesthetic form at the beginning of the Second World War, Wohlstetter and White's essay took on the political motivation of the sign and the increasingly contested methods of its analysis as they addressed the agendas of current geopolitics.

One can scarcely resist the none-too-subtle implications of this obscure text from Wohlstetter's early bibliography. In The New York Intellectuals, Alan Wald cursorily identifies the young logician as "a precocious Columbia student" who was a member of a Trotskyite splinter group called "The League for a Revolutionary Party (LFRP)."20 Of course, Wohlstetter's 1930s radicalism, followed by a hard swing to the right after the war, became a well-worn trope of the time, with Daniel Bell and Irving Kristol being two other prominent exemplars.²¹ The more pressing issue for my purposes is the convergence between semiotics and politics advanced in the article. I'll state the obvious: at this historically fraught juncture, semiotics barely resembled what it looks like today in art history-that is, as a ready-to-hand set of tools that might unlock the "meaning" of a work of art in the service of humanist inquiry. On the contrary, internecine debates on the subject revealed a contest of meaning over both means and ends concerning the linguistic orientation of earlytwentieth-century semantics, a conflict over the theory of signs in which Peirce might be read in wholly positivistic terms. Reductively put, these differences often turned on the extent of their universalizing or their culturally specific claims; they will divide further relative to their disciplinary implications.

Wohlstetter's essay "Who Are the Friends of Semantics?" is very much a period piece, grounded in the rigors of the logic and analytic philosophy of the 1930s. It thrashes a then-popular branch of semantics represented by S. I. Hayakawa, Thurman Arnold, and Stuart Chase. In part influenced by the "General Semantics" of the philosopher Alfred Korzybski, the thrust of which described the limitations of human knowledge as being directly a function of the structure of language, all three generalized Korzybski's interests to political discourse, charting the shifting meanings of capitalism, socialism, and fascism circa 1939. (Korzybski's notion that language effectively "enslaved" its subjects given its inherent abstraction was, perhaps, both prescient and timely for his American followers.) Wohlstetter's retort follows on Hayakawa's "The Meaning of Semantics," an article from the *The New Republic* that was itself a response to an earlier editorial in

^{19.} Editorial, "The War of the Neutrals," *Partisan Review* (Fall 1939), p. 5.

^{20.} Alan M. Wald, *The New York Intellectuals: The Rise and Decline of the Anti-Stalinist Left From the 1930s to the 1980s* (Chapel Hill: University of North Carolina Press, 1987), p. 107.

^{21.} On the right turn of the New York intellectuals, see the film *Arguing the World*, directed by Joseph Dorman, Riverside Film Productions in association with Thirteen/WNET, 1997.

Partisan Review. An educator and future California senator, Hayakawa argues that this editorial (which had disparaged Stuart Chase's *The Tyranny of Words*) was a vulgar misunderstanding of semantic principles flowing from the failure to recognize that "all terms derive their meanings... not from definition, but from usage in a context."²² Casting the *Partisan Review* approach as hidebound and doctrinaire, he impugns the "two-valued orientation" to linguistics, dismissing the use of Aristotle's law of the excluded middle to support the notion that all statements are either meaningful ("operational") or meaningless.

In the late 1930s, Hayakawa argues, such a black-white/true-false approach could only spell catastrophe for the maintenance of democratic discourse. "A two-valued orientation," he writes, "is a necessary condition to the congealing of minds and the enslavement of a people."²³ Laying claim to Korzybski's General Semantics and appealing to what he regards as science's embrace of a multi-valued or even infinite-valued orientation, he insinuates that the editors of *Partisan Review* are keeping dubious methodological company where a theory of signs is concerned, all but providing a rationale for totalizing (or, more bluntly put, *totalitarian*) analyses of political discourse.

Unsurprisingly, perhaps, Wohlstetter and White argue that Hayakawa's treatment of semantics and his quasi-scientific recourse to the "infinite-valued orientation" itself amounts to an ideological contrivance, a political apologia that, rather than acknowledging the conflicting schools of socialist thought, "furnish(es) unique scientific support for institutions of democratic capitalism."²⁴ Though articulated through the highly technical language of experimental semantics, the accusation is ferocious: Hayakawa and others ground their defense of capitalism on a gross misreading of socialism. It is in this sense that the spirit of the essay chimes with the editorial of the same issue. The dismal news of the Molotov-Ribbentrop pact demanded an even greater critical vigilance on the part of the journal's readers: to resist the notion that the Stalinist betrayal of the Comintern was a betrayal structural to socialism itself.

We needn't parse Wohlstetter's complaint against Hayakawa too closely. Raised here is a basic question of methodology: how wildly differing approaches to the theory of signs can accommodate a range of cultural, scientific, and political variables, both in the service of denaturalizing ideology and shoring up one's partisan interests. In contrast to the work of Hayakawa, Chase, and Arnold, Wohlstetter and White argue that the true thinkers in experimental semantics are inspired by the International Unity of Science Movement—an early-twentieth-century phenomenon, with epistemological forebears in Diderot and Kant, that "aim(ed) at an integration of science to be illustrated in the collective project of many scientists, the

22. S. I. Hayakawa, "The Meaning of Semantics," *The New Republic* 99, no. 1287 (August 2, 1939), p. 355.

23. Ibid., p. 356.

24. Albert Wohlstetter and M. G. White, "Who Are the Friends of Semantics?," *Partisan Review* 5 (Fall 1939), p. 50.

Encyclopedia of Unified Science."²⁵ Drawing on his study in math and the philosophy of science, Wohlstetter refers to the logical empiricism of the Vienna Circle and the international "Unity of Knowledge" movement that had more recently made it to North American shores in the semiotics of Charles Morris.²⁶ Noting that the research accomplished in this area has been mostly specialized, Wohlstetter heralds its groundbreaking potential in the areas of biology, physics, mathematics, sociology, and economics. He is describing, in other words, a mid-century renovation of enlightenment, a new encyclopedia for a precipitously dangerous time.

It is of more than passing interest that Schapiro had his own intimate relationship to the work of the Vienna Circle in the form of a lengthy and increasingly voluble correspondence with Otto Neurath from roughly the same period, a dialogue that would lead to rhetorical blows between the two on the subject of science and the war.²⁷ For the moment, we need only recall the letter Wohlstetter wrote the year before his *Partisan Review* essay appeared. Asking Schapiro for a reference, he describes his proposed area of research in "the field of value-statements as they function in art-historical inquiry and with reference to analyses of particular works." Insofar as his methodological ambitions inform his postwar agenda, the proposal to apply the tools of logic to the work of cultural production affirms the generalized aims of the Unity of Science movement, tipping the balance—or rather pushing it—toward an empirical quest for meaning and the subsequent policies dictating its control as information.

Interdisciplinarity: Think-Tank Aesthetics

Such a generalized methodology, even in its most inchoate stages in 1939, resonated strongly with the Cold War think tank as a mid-century institution, one that oversaw a peculiar mutation of the interests expressed in the terms *information* and *national security*. After the war, Wohlstetter left both his radicalism and his academic work in mathematical logic behind; but the vestigial impulses of the latter remained in the new science of strategic analysis. At its Santa Monica headquarters, RAND was at the forefront of this phenomenon, and Wohlstetter served as the leading light of what he came to call "opposed-systems" design.²⁸ An acronym for

^{25.} Wohlstetter and White, "Who Are the Friends of Semantics?," p. 51.

^{26.} Few of Wohlstetter's early written notes are accessible at the Hoover Institution; a rare file ("semiotics") includes handwritten notes on the work of American semiotician Charles Morris; another one of Wohlstetter's early publications is a review of a book about C. S. Peirce. Wohlstetter, "Charles Peirce's Empiricism," Wohlstetter Collection, Hoover Archive, Box 111.14. Box 147. 1

^{27.} The debate between Schapiro and Neurath ultimately founders on the question of whether science might rescue humanity from the catastrophic turn of events at mid-century; it is, of course, Schapiro who will express his profound skepticism on the issue. Correspondence: Otto Neurath, Schapiro Collection, Columbia University, Series II: Correspondence. Box 152, Folders 5 and 6.

^{28.} Wohlstetter used the phrase to describe "a kind of study that attempts to discern and answer questions affecting policy—specifically a choice of ends and of means to accomplish ends that stand a good chance of being opposed by other governments." Albert Wohlstetter, "Theory and Opposed-Systems Design" (1968), reprinted in *Nuclear Heuristics*, pp. 123–65.

"research and development," RAND was founded as a joint effort of the U.S. Air Force and Douglas Aircraft less than two months after Nagasaki; it would be legally incorporated to become a nominally independent public-policy institution in 1948.²⁹ Its charter describes the think tank as "a nonprofit corporation formed to further and promote scientific, educational, and charitable purposes, all for the public welfare and security of the United States of America."

But just how such a public-policy institution might influence "scientific, educational, and charitable purposes" is not especially clear from this language, especially given the mystified and highly technical concerns of strategic analysis. Cold War defense strategy could itself be described as a semiotic endeavor—an attempt to decode a shadowy enemy through a raft of signs both militaristic and cultural, including "indexical" traces registered through the new technologies of radar; anthropological analyses of Soviet, Japanese, and German attitudes to authority; and the interactive dynamics observed within the ascendant field of the behavioral sciences.³⁰ In the era of the "go-code," after all, reading such signs was a business of grave, indeed mortal, import.

Extensively discussed within the history of science, the influence of mid-century military strategizing on the emerging Information Age called for a methodology that could answer problems spanning traditional disciplinary boundaries. Operations Research (OR), as advanced by the British during the Second World War for antisubmarine warfare, supported the deployment of what one of its foremost innovators, Patrick Blackett, called "mixed teams": groups in which specialists in one area might work on solutions to problems created in another field. Paul N. Edwards details how work at RAND, particularly its adaptation of OR, developed into the even more accommodating approach of systems analysis: its new analytic tools, as a supporter remarked, were directed "at a range of problems to which there can be no 'solution' in a strict sense because there are no clearly defined objectives that can be optimized or maximized."³¹ Geoffrey Bowker describes these tendencies as

30. For example, Ruth Benedict and Margaret Mead would be invited to become consultants to RAND in 1947 in order to produce an anthropological study on the Soviet character. After Benedict's death the same year, the book *Soviet Attitudes to Authority* would be written by Mead, in conversation with Nathan Leites, a social scientist at RAND and close friend of Mead. Such efforts ran parallel to Columbia's program Research in Contemporary Cultures, an interdisciplinary study group spearheaded in the early fifties by Mead and the anthropologist Rhoda Metraux. A prehistory to the Cold War's anthropological applications is David H. Price, *Anthropological Intelligence: The Deployment and Neglect of American Anthropology in the Second World War* (Durham, N.C.: Duke University Press, 2008). Note that Schapiro Was also in communication with Leites, as suggested by a letter in his archive dated 1949. Schapiro Collection, Columbia University, Box 143, Folder 13.

31. Paul N. Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge, Mass.: MIT Press, 1996), p. 115.

^{29.} On histories of RAND, the standard text is Fred Kaplan, *The Wizards of Armageddon* (Palo Alto: Stanford University Press, 1991). Also see Abella, *Soldiers of Reason*, and the Corporation's own history, *The RAND Corporation: The First Fifteen Years* (Santa Monica, Calif.: The RAND Corporation, 1963). For more recent analyses of think tanks from the perspective of public policy more generally, see Rich, *Think Tanks, Public Policy and the Politics of Expertise.*

the search for a new universal language based on the assimilation and de-differentiation of once discrete areas of inquiry. This Cold War universal language is founded on what he calls "legitimacy exchange": the idea that one discipline might claim power from another and thus enable the "coordination of work across multiple research projects and multiple professional communities."³²

As Wohlstetter himself observed of the workings of the think tank, particularly when it came to "opposed-system design" and what he would later call "Panheuristics," such a language "required the cooperation of several disciplines and, in particular, a kind of close working together of natural science and social science disciplines which remains very unusual, if it exists at all, in universities."³³ The statement heralds the collaborative dimension of such approaches as it trumpets their methodological inventiveness. But Wohlstetter's remarks also implicitly narrate the postwar fate of his beloved *uomo universale*: the Burckhardtian man has now been retooled as cold warrior, his roles generalized and delegated to "mixed teams" of experts. No doubt the clamoring for interdisciplinary work at mid-century was the think tank's appeal to a universalism of a distinctly Cold War variety: the collaboration between, and integration of, historically autonomous disciplines in the name of RAND's strategic analysis.

On all these fronts, it is significant—not to mention surprising—that RAND would take an ecumenical attitude to postwar art, bestowing its institutional imprimatur on advanced aesthetic practice. As Brownlee Haydon, assistant to the president at RAND, remarked in the late 1960s: "We think RAND has something special to offer the creative artist: an intellectual atmosphere and the stimulation of being amid creative individuals working in many disciplines. In this milieu, the artist may find influences on his work apart from the other 'materials' that he may discover in the RAND environment."34 Haydon was speaking to the controversial venture of the Los Angeles County Museum of Art, its infamous Art and Technology Program. As initiated by curators Maurice Tuchman and Jane Livingtsone in 1967, the program displayed the fruits of its collaborative labors in 1971. Pairing forty high-tech "industries" in Los Angeles with artists ranging from Andy Warhol to Jasper Johns to Oyvind Fählstrom, the program enlisted RAND to collaborate with the artist Larry Bell. When the partnership with Bell proved untenable, John Chamberlain stepped in to fill the breach. Chamberlain's interactions with various RAND denizens included the screening of movies during lunch and the interviewing of analysts on the patio, all of which served as the basis for a conceptually driven work—something like concrete poetry-called RAND Piece.

^{32.} Geoffrey Bowker, "How to Be Universal: Some Cybernetic Strategies, 1943–1970," *Social Studies of Science* 23 (1993), pp. 107–27. Also see Fred Turner on Bowker and Peter Galison's discussion of "contact languages" in Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (Chicago: University of Chicago Press, 2006), p. 25.

^{33.} Wohlstetter, "Theory and Opposed-Systems Design," in Nuclear Heuristics, pp. 123-64.

^{34.} Brownlee Haydon papers, RAND Corporation, Santa Monica, Calif. (boxes and files are not numbered).

That such collaborations happened at the height of the Vietnam War hardly escaped the notice of many artists and art critics. Whatever Chamberlain's politics or satirical motivations, the Art and Technology Program was the object of scathing criticism, with the RAND-LACMA collaboration seen as particularly emblematic of this new military-aesthetic complex.³⁵ As Max Kozloff put it in an oft-quoted review, this "multi-million dollar boondoggle" could scarcely absolve RAND of guilt for its pernicious influence in Southeast Asia.³⁶ The criticism is unassailable on political grounds, but RAND's appeal to art, I would insist, was not just a public-relations campaign designed to humanize the institution's deeply troubled public image. Something about the relationship, rather, was structurally consistent with the think tank's own methodological explorations—an increasingly flexible approach to the range of contemporary phenomena that might now include humanistic endeavor.³⁷

Signal to Noise; Figure to Ground

All of which is prologue to some final speculations on Wohlstetter and Schapiro. I want to inhabit the virtual ellipses that haunt their correspondence as they draw down in the early 1960s and to sound the echoes between them relative to a burgeoning information age and the competing interests of semiotic inquiry. Permit me the following disclaimers before I do. The comparison between the strategist and the art historian means neither to rehabilitate Wohlstetter nor to impugn Schapiro. This is not an argument regarding either thinker's priority nor a blanket dismissal of interdisciplinary work born of less militaristic motivation. Rather, the pairing attends to the cognate relationship of such methods from the 1950s through the early 1960s—their shared sense of innovation and urgency and throws into relief the diverging ends of their systems, even if those systems were propelled by similar logic. Indeed, the comparison shores up their mis-

^{35.} On this history, see my "Eros and Technics and Civilization," in *Chronophobia: On Time in the Art of the 1960s* (Cambridge, Mass.: MIT Press, 2004).

^{36.} Max Kozloff, "The Multi-Million Dollar Art Boondoggle," *Artforum* 10, no. 2 (October 1971), p. 72.

^{37.} On the other hand, if the strategic interests of the think tank were organized around its interdisciplinary protocols, it is equally striking that such methods were seized upon as a model for experimental art practice. With his own peculiar interest in systems theory, George Maciunas would describe his proposed school for Fluxus in New Marlborough, Massachusetts, as a think tank in the "study, *research*, experimentation *and development* [my emphasis] of various advanced ideas and forms in art, history, design, and documentation." Given Maciunas' highly vocal antiwar positions of the late 1960s, his referring to an educational model in such terms could only read as a provocation. More pointedly, it is also an appropriation—a veritable gaming—of what RAND had come to represent for many artists in the period, such as those who had staged heated protests at its Santa Monica headquarters in 1965 and demanded an audience with some of its principals. See Craig A. Saper, *Networked Art* (Minneapolis: University of Minnesota Press, 2000), p. 117. On artist demonstrations against RAND and its "dialogue on art," see Francis Frascina, *Art, Politics and Dissent: Aspects of the Art Left in Sixties America* (Manchester: Manchester University Press, 2000), pp. 37–40.

recognition. The strategist's goals were analytic; the art historian's, cultural. Yet it is also the case that the wider embrace of information theory at mid-century informed the postwar rise of semiotics—and an appeal to interdisciplinary research by extension.

Of course, these interests were well in place prior to the war, but the progressive outreach on the part of humanists such as Schapiro to disciplines such as math and logic was accelerated by the imperatives of systems discourse. Plentiful examples abound, each demonstrating its own particular agenda for summoning the language of information. We see this in the emerging Tartu School around 1956, most famously Yuri Lotman's desire to abolish the opposition between the humanities and sciences in his work in cultural semiotics.³⁸ We see it in the publication of Barthes's Mythologies, also in 1956; and the appearance of Eco's Open Work of just a few years later, the title of which is plainspoken in its recruitment of the language of cybernetics but the reception of which would turn largely on its discussion of chance in art.³⁹ At the same time, we observe this tendency in the analyst's will to find a grammar appropriate to the new age, not to mention the Cold War growth industry in institutions that existed somewhere between RAND and the university, places where scholars might explore such new methods of implacably military origin. As one such example, consider the establishment of the Center for Advanced Study in the Behavioral Sciences in Palo Alto in 1954. Supported by the Ford Foundation and several leading RAND associates, it would foster cutting-edge approaches to the social sciences and the humanities, inviting a range of academics from diverse fields to take up residence in its leafy, mid-century redoubt.⁴⁰

For Wohlstetter's part, his strategic meditations constitute attempts to read signs relative to a world of ambiguous signifiers and to account for all possible contingencies in regard to their signification and motivation. Schapiro's semiotic inquiries, on the other hand, take up the oscillation of the sign within the work of art as a means to trouble the overdeterminations of iconography, as when he reads, for example, the literal and metaphorical involutions of the capitals at Moissac as "an arbitrary assemblage of separate signs."⁴¹ Hubert Damisch seizes

38. Yuri Lotman, Universe of the Mind: A Semiotic Theory of Culture (Indianapolis: Indiana University Press, 2001).

39. See Roland Barthes, "The Semiological Adventure," in *The Semiotic Challenge* (Berkeley: University of California Press, 1994). As for Eco's engagement with chance and art, it is instructive that George Brecht cited a 1955 RAND study on random numbers in his well-known tract on "Chance Imagery." Written in 1957, a subsequent version of the essay describes Brecht's meeting with John Cage. Brecht writes that he "had not yet seen clearly that the most important implications of chance lay in his work." George Brecht, *Chance Imagery* (New York: Something Else Press, Inc., Great Bear Pamphlets, 1966), pp. 13, 15.

40. On the interests of the Ford Foundation and the RAND Corporation in establishing such research institutions, see Rebecca S. Lowen, "Private Foundations and the 'Behavioral' Revolution," in *Creating the Cold War University: The Transformation of Stanford* (Berkeley: University of California Press, 1997), pp. 191–223.

41. Meyer Schapiro, Romanesque Art: Selected Papers (New York: George Braziller, 1977), p. 178.

upon the tactic underwriting Schapiro's semiotic work: "he was ever intent on working to present problems in fresh relief and to engage in a dialogue about them with the most widely disparate speakers . . . with the idea of putting the speakers themselves to the test by having them confront an essentially polymorphous and—dare I say it?—perverse object."⁴²

Following Damisch's suggestion, we might put Wohlstetter to Schapiro's test as one such disparate speaker, an outlier to the art historian's world tangling with that essentially polymorphous, even perverse, object. For a defense strategist, the polymorphous—or, more specifically, the polysemic—was the enemy. From the beginning of his career at RAND, Wohlstetter's stock-in-trade was the relative ambiguity of signs—relative because semiotically relational—and the deadly consequences that might result from their misreading. In his influential essay of 1958, "The Delicate Balance of Terror," Wohlstetter's aim was to argue against the thenprevailing wisdom in policy circles—"the nearly universal optimism"—that strategic deterrence between the U.S. and Soviet Union was stable and automatic.⁴³ This rationale, however, effectively derived from what was categorically irrational: the idea that the consequences were just too unthinkable to consider and that committing the act would constitute the greatest insanity. "Some military commentators . . . ," he wrote, "founded their belief in the certainty of deterrence on the fact simply that there are uncertainties." But in analyzing the potential range of accidental misreadings, whether prompted by electronic or mechanical failures or rogue agents ("... finally there can be miscalculations on the part of governments as to enemy intent and the meaning of ambiguous signals"), Wohlstetter conceived of a program that became a bedrock of Cold War defense: fail-safe. Briefly put, the program turned on this potential for misreading and concocted a series of checks to ensure that a military response was warranted. A plane sent off to bomb the Soviet Union, for instance, would be subjected to a number of points along the way, bases that could legitimize the received message or, alternately, abort the mission if the message could not be confirmed.

"Fail-safe" was designed to rein in errant codes and communications: it took up the likely contingency of the spread of misinformation as a very particular genre of mid-century siegecraft. Running parallel to this conceit was a concept Wohlstetter and his wife adapted from information theory but advanced in militaristic terms: the "signal to noise ratio" in the collection and analysis of intelligence data. Claude Shannon's theory of information (and, to a lesser extent, Norbert Wiener's cybernetics) found its strategic application here. Given the threat of a surprise attack of the kind launched by the Japanese and now, potentially, by the Soviet Union, the transmission of sensitive information over a noisy channel would demand interception and decoding. This notion found one of its most cogent articulations in

^{42.} Hubert Damisch, "Six Notes in the Margin of Schapiro's *Words and Pictures*," in "On the Work of Meyer Schapiro," *Social Science* 45, no. 1 (Spring 1978), pp. 15–36.

^{43.} Wohlstetter, "The Delicate Balance of Terror," November 6, 1958, *Foreign Affairs*, reprinted in *Nuclear Heuristics*, pp. 177–213.

Roberta Wohlstetter's 1962 book, *Pearl Harbor: Warning and Decision*, an analysis of American intelligence failures that was awarded Columbia University's Bancroft Prize for American History (and a book that would receive renewed attention in the early years of the "War on Terror"). Roberta Wohlstetter applied the idea to identifying discernible patterns within security analysis "not for want of the relevant materials," as she wrote, "but because of a plethora of irrelevant ones."⁴⁴ Seemingly "irrelevant" information, however, is not equivalent to misinformation, as her husband would explain many years later. What might at first seem mere noise would still have to be treated relative to the constitution of a message. "No signal, in the sense in which it is used in the Pearl Harbor book and the sense in which it is used in information theory," Albert Wohlstetter wrote, "is ever completely ambiguous. . . . [N] o bit of noise is unambiguously noise; it is always possible to hypothesize that some apparently random series of events contains a piece of information, deliberately or actually concealed."⁴⁵

The question of what constitutes "relevant" or "irrelevant" material is in fact the crux of the think tank's interdisciplinary enterprise: the strategist's holistic methodology enabled greater sensitivity to the ratios of information in the production of a message. In a visual context, such ratios might be referred to as a "figure-ground" relation, where the interplay between background and foreground is analyzed as a mutually constitutive process of signification. A peculiar echo of such dynamics can be detected in Schapiro's canonical discussion "On Some Problems in the Semiotics of Visual Art: Field and Vehicle in Image-Signs." The essay was published in 1969, but Schapiro had lectured on semiotics at least since the early 1960s and had been broad-ly invested in linguistics, semantics, and adjacent approaches since well before the war. Appearing in the journal *Semiotica*, the essay grew out of his 1966 contribution to the Second International Congress on Semiotics in Kazimierz, Poland, an organization on whose board he would serve. It included Barthes, Julia Kristeva, Roman Jakobson, Lotman, and Thomas Sebeok, and sometimes published thinkers who worked for RAND, among them Margaret Mead.

As well known as the essay is, Schapiro's text demands to be revisited in the light of the institutional cultures of the Cold War. In part, the art historian is concerned with the "non-mimetic" elements in image-making, beginning with the smooth prepared surface that serves as the ground for figuration, which "made possible the later-transparency of the picture-plane without which the representation of three-dimensional space would not have been successful."⁴⁶ Schapiro remarks that "students have given little attention to this fundamental change in art"⁴⁷: the determination and bounding of such a field is taken for granted, naturalized. Which is to

46. Schapiro, "On Some Problems in the Semiotics of Visual Art," p. 224.

47. Ibid.

^{44.} Roberta Wohlstetter, *Pearl Harbor: Warning and Decision* (Stanford, Calif.: Stanford University Press, 1962), p. 387.

^{45.} Wohlstetter, "Notes on Signals Hidden in Noise," April 6, 1979, Albert J. Wohlstetter Collection, Hoover Archive, Box 115, file 40.

say that the image-field (or more generally, the ground) has been historically treated as little more than a stage upon which narrative or figuration is imagined to alight a transparency without expressive or signifying features on its own.

Yet in acknowledging that "such a field corresponds to nothing in nature or mental imagery" and calling attention to the question of the arbitrariness of the elements that lie virtually on its surface, Schapiro tracks the historical and perceptual meanings of that image-field—the "properties of the ground as a field" throughout diverse cultures and chronologies from the medieval to the modern.⁴⁸ (For example, in classical painting in China, Schapiro writes, "the ground of the image was hardly felt to be part of the sign itself."⁴⁹) He further analyzes issues of size, orientation, the frame, and other nonfigural aspects of the pictorial field ("sign-bearing matter"), such that a shifting relay between ground with such elements is formative for the production of meaning. In drawing a connection between signal to noise and figure to ground, it is instructive to note that Schapiro wrote of the naturalization of this visual device, using the example of children's drawings, in terms that paralleled language acquisition and locution, of the dynamic processes of verbal signification.

What implications might we pull from such approaches, beyond a family kinship of sorts? Again, we are compelled to read between the lines, turning to the last letter from Wohlstetter to Schapiro in the art historian's archive, dated May 1963. On RAND letterhead, the strategist writes the following to the art historian:

I am enclosing an offprint of a paper entitled "Scientists, Seers and Strategy," from the April 1963 *Foreign Affairs.* As you will see, it was designed to be unpopular with all factions of the physicists. You should read Roberta's book even if only to defend yourself, since Roberta, in her speech accepting the Bancroft Award, named you as her chief inspiration and the principal reason up to getting the prize that she regarded Friends of the Columbia library as friends of hers....⁵⁰

Nearly thirty years after the Wohlstetters attended Columbia, the strategist still praises Schapiro for having inspired the couple's work, and he passes along an essay he presumably regards as bearing something of the art historian's stamp. It is a Cold War intervention in the two-cultures debate, the postwar divide between scientific and literary culture articulated in Snow's 1959 lectures. In part written on the occasion of a conference sponsored by the Columbia University Council for Atomic Age

^{48.} Ibid., p. 229.

^{49.} Ibid., p. 225.

^{50.} Albert Wohlstetter, letter to Meyer Schapiro, May 10, 1963, Schapiro Collection, Columbia University, Box 177, Folder 4.

Studies, Wohlstetter's text reflects on the extent to which policy makers need to understand the sciences in order to make informed decisions about strategy. If he finds the two-cultures conceit useful for the questions it raises, he will also see Snow's characterization of postwar science as, in fact, a caricature: among other problems, it fails to address the methodological (particularly interdisciplinary) advances sponsored by the think tank. As Wohlstetter writes, the decision to develop a fission bomb or an H-bomb does "have narrowly technological components but they involve just as essentially a great many other elements," both qualitative and quantitative. Much of the work done in the service of national security, Wohlstetter argues, does "not fit into any of the traditional disciplines of natural science or engineering."51 Referring instead to the interdisciplinary interests of operational research and systems analysis, he argues that "the appropriate methods of study may ... be closer to the methods of some behavioral sciences."52 He then speaks of the balancing act performed in such interdisciplinary investigations and hints at a matter of the personas involved. In an uncharacteristically affective statement, hardly the usual stuff of Foreign Affairs, Wohlstetter writes, "The honest strategist must wear two hats, and this can be something of a personal strain. It can actually lead to quarrels among friends and organizations."53

You have to wonder about those quarrels with friends and organizations. And you have to wonder about Schapiro's response to Wohlstetter's essay—all the more so since the strategist's communication arrived at a brand-new address for the art historian. For the academic year 1962-63, Schapiro was in residence at the Center for Advanced Study in Behavioral Sciences in Palo Alto, that veritable satellite of RANDthink that had hosted the preeminent American semioticians of the day, including Schapiro's associate Thomas Sebeok, the editor of *Semiotica*. Not incidentally, Schapiro also penned an essay that very same year on the two-cultures debate. As the draft of the essay is undated, it's impossible to tell which text preceded which. Does Schapiro's constitute an actual disagreement with Wohlstetter—an opening salvo or a stern, if veiled, rebuke? Perhaps it's none of these things-Snow was required reading at the time after all—but Schapiro's verdict is blunt nonetheless. Entitled "Humanism and Science: The Concept of the Two Half-Cultures," the art historian shifts the balance to those fields typically repressed in the two-cultures equation, fields appropriated by the new postwar dominion of science. "In all matters of policy," he writes, "the responsible minds are guided by the knowledge and views of those whose special business is to understand the field in question. And such knowledge today, whatever the field, is increasingly subject to scientific standards. This is true of the arts as well as of technology and social affairs."54

51. Wohlstetter, "Scientists, Seers and Strategists," *Foreign Affairs*, reprinted in *Nuclear Heuristics*, p. 468.

52. Ibid., 469.

53. Ibid.

54. Meyer Schapiro, "The Concept of the Two Half Cultures," in *Worldview in Painting—Art and Society: Selected Papers* (New York: George Braziller 1999), pp. 158–60.



Fellows and staff of the Center for Advanced Study in the Behavioral Sciences, Stanford, Calif., September 25, 1962. Meyer Schapiro is in the third row, ninth from left.

Schapiro closes his short text with what could be called a value statement on the ways in which postwar science has arrogated humanistic culture. And he reserves particular venom for those scientists (a physicist is his principal target) who claim to commandeer arts that they otherwise "need for recreation and diversion" but somehow imagine they "could produce themselves."⁵⁵ In contrast, Schapiro concludes by praising a "modern liberal culture . . . nourished by the arts, social awareness and criticism, the movements to advance freedom and well-being."

Who knows if Wohlstetter ever read this essay-and in the end it hardly matters. At this point, the communications between the strategist and art historian end. The epistolary trail grows cold. The situation was becoming even more heated at RAND in 1963. Events in Vietnam, over which the think tank exercised an increasingly morbid influence, were on the brink of catastrophe. But perhaps it's also the case that the art historian revived his earlier convictions in light of the think tank's innovative research protocols—though in truth, he never really gave them up. In 1936, around the time he first met Wohlstetter, Schapiro delivered "The Social Bases of Art" to the First American Artists Congress. Following David Rosand's stress on this statement, I conclude with the second line of this famous essay. "Art has its own conditions which distinguish it from other activities," Schapiro wrote. Semiotics enabled Schapiro to distill such conditions to their finest points. For the strategist, on the other hand, the use of such approaches, generalized through the requirements of information, was motivated by agendas that were far more universalizing, or perhaps colonizing: to read, and thus control, an expanding empire of signs.

ALI DUR AND MCKENZIE WARK

1. "A magical and revolutionary device at an unbelievable price."

After a spate of suicides, the Foxconn factory in Chengdu, China, now obliges its workers to sign a document in which, among other things, they promise not to kill themselves. In exchange, they can expect to work extremely long hours for a paltry wage, which they can spend on precious little of any interest, and to live in cramped and often intimidating factory-owned quarters. No wonder Foxconn workers stage strikes, which is unprecedented in the export-oriented component of the Chinese economy.¹

And what were these workers actually producing at this facility? Among other things, iPads. The smooth perfection of Apple's products for their consumers requires submission to a ferocious disciplinary regime for their producers. The iPad is nevertheless an object that speaks to a certain anxiety on the part of Apple and the rest of the emergent ruling class. The iPad is insinuated into everyday life with the primary objective of presenting an ever-ready interface to the Apple store, at which Apple intends to extract a rent from every small business that comes to set up shop. The ambivalent gift for Apple with companies like Foxconn is that while they make the production of sophisticated objects cheap and routine, these qualities threaten to turn Apple's premium-priced objects into mere commodities, in the least glamorous sense of the term.

Beneath the headlines about the Foxconn anti-suicide pact and the tactile glamour of the iPad is a vast and abstract world that is evanescent and intangible but nevertheless more real than any particular fact or thing. As Guy Debord might put it, the spectacle is philosophy made concrete. How then could any aesthetic practice or discourse ever claim to have any purchase on it? This essay pursues a three-fold strategy. First, it looks at a moment in which the Letterist International and its successor, the Situationist International, pointed out the path to a different world, one in which the digital made possible not death on the installment plant

^{1.} On Foxconn, see John D. Kasarda and Greg Lindsay, *Aerotopolis: The Way We'll Live Next* (New York: FSG, 2011), p. 362; Amy Lee, "Inside Foxconn," www.huffingtonpost.com (accessed May 6, 2011). On the boredom of "short-circuit" everyday life for Chinese factory workers in the export sector, see Leslie T. Chang, *Factory Girls From Village to City in a Changing China* (New York: Spiegel and Grau, 2008).

but permanent play, not Apple's home shopping network but the collective appropriation of the trace of history.² Second, it presents a more compressed and abstract account of the terrain under consideration in the form of a dialogue with the philosopher Bernard Stiegler. Third, it suggests a more specific account of the kind of work one might engage in, given both the conceptual stakes involved and the history of their countertactics.

2. Chinese Firewalls

"Plagiarism is necessary. Progress implies it. It closely grasps an author's sentence, uses his expressions, deletes a false idea, replaces it with the right one. To be well made, a maxim does not call for correction. It calls for development."³ This passage from Lautréamont is often taken as saying something about poetics, less often as saying something about temporality. But the author corrects, not back to a lost purity or some ideal form, but forward—to a new possibility.

In the early 1950s, something of a scandal ensued when it was discovered that Lautréamont had purloined some of his most thrillingly poetic passages from textbooks. Some, like literary critic Maurice Saillet, felt the need to defend him in the spirit of linguistic play.⁴ The Letterist International credited him with discovering a more far-reaching method. Their name for it was *détournement*, as in to detour, to hijack, to seduce, to appropriate. And it was no joke. The task was to systematize it and—more to the point—practice it.

If there was a precedent in avant-garde poetics for *détournement*, it came from Paul Nougé, who saw in Lautréamont the inventor of a method. There is, he says, "a certain inclination common to a few minds which leads them to find the elements of creation as close as possible to the object to be created; to the extent that the thing to be desired would come into being by the introduction of a single comma in a page of writing; of a picture, complex in its execution, by the animation of a single stroke of black ink."⁵ The texts Nougé "corrected" ranged from a Baudelaire poem to porn. Some of his corrections were originally published in *Les Lèvres nues*, which also published the text that gave this method its name: "Mode d'emploi du *détournement*" by Guy Debord and Gil J. Wolman.⁶

6. Guy Debord and Gil Wolman, "Détournement: A User's Guide," in The Situationist

^{2.} The paragraphs on *détournement* and New Babylon present in summary form material drawn from McKenzie Wark, *The Beach Beneath the Street* (London: Verso, 2011) and McKenzie Wark, *50 Years of Recuperation of the Situationist International* (New York: Princeton Architectural Press, 2008). The latter also contains a representative selection of images of New Babylon.

^{3.} Comte de Lautréamont, *Maldoror and the Complete Works of the Comte de Lautréamont*, trans. Alexis Lykiard (Cambridge, Mass.: Exact Change Press, 1994), p. 240. See Guy Debord, *Society of the Spectacle* (New York: Zone Books, 1994), para. 207 for Debord's *détournement* of Lautréamont.

^{4.} We are indebted to *The Beautiful Language of My Century* (Cambridge, Mass.: MIT Press, 2007), p. 25. See also Maurice Saillet, *Les Inventeurs de Maldoror* (Paris: Les temps qu'il fait, 1992).

Paul Nougé, Works Selected by Marcel Mariën, trans. Iain White, "The Printed Head," vol. 3, no.
 (London: Atlas Press, 1985). See also Xavier Canonne, trans. Trista Selous, Surrealism in Belgium 1924–2000 (Brussels: Mercatorfonds, 2007), p. 119.

Debord and Wolman's originality consists in understanding form not as literary form, as genre, style, poetics, and so forth, but as material form, as the book, the film, the canvas. Materiality is the key to the lag that allows past culture to shape present culture. While its effects in the architectural domain are mostly negative, there might be some hope in the lag effect of certain other media. But for past works to become resources for the present requires their use in the present in a quite particular way. It requires their appropriation as a collective inheritance, not as private property. All culture is derivative. Debord and Wolman propose not the destruction of the sign but the destruction of the ownership of the sign. "It is necessary to eliminate all remnants of the notion of personal property in this area." *Détournement* offers "an ease of production far surpassing in quantity, variety, and quality the automatic writing that has bored us for so long."

Clashing head-on with all social and legal conventions, [*détournement*] cannot fail to be a powerful cultural weapon in the service of the real class struggle. The cheapness of its products is the heavy artillery that breaks through the Chinese walls of understanding. It is the real means of proletarian artistic education, the first step towards a literary communism.

The text is true to itself. Debord and Wolman took more than a few lines from Saillet's defense of Lautréamont and corrected them. For example, where Saillet spoke of a communism of genius, they write of literary communism. The term "genius" still clings a little to the romantic idea of the text as the product of an individual author's unique gift.

A more crucial *détournement* is from Marx and Engels:

The bourgeoisie, by the rapid improvement of all instruments of production, by the immensely facilitated means of communication, draws all, even the most barbarian, nations into civilization. The cheap prices of its commodities are the heavy artillery with which it batters down all Chinese walls, with which it forces the barbarians' intensely obstinate hatred of foreigners to capitulate. It compels all nations, on pain of extinction, to adopt the bourgeois mode of production; it compels them to introduce what it calls civilization into their midst, i.e., to become bourgeois themselves. In one word, it creates a world after its own image.⁷

The inflation introduced by *détournement* is the development that undermines bourgeois culture in turn.

Capital produces a culture in its own image, a culture of the work as private property, the author as proprietor of one's own soul. *Détournement* sifts through

International Anthology, ed. Ken Knabb (Berkeley: Bureau of Public Secrets, 2006), pp. 14–20; Guy Debord, *Oeuvres* (Paris: Gallimard, 2006), pp. 221–29. All following quotes are from this document.

^{7.} Karl Marx and Friedrich Engels, "Manifesto of the Communist Party," in *Karl Marx, The Revolutions of 1848: Political Writings Volume 1*, ed. and trans. David Fernbach (Harmondsworth: Penguin Books, 1978), p. 71.

the material remnants of past and present culture for materials whose untimeliness can be utilized against bourgeois culture. But *détournement* exploits—rather than elaborates—modern poetics. The aim is the destruction of all forms of cultural shopkeeping. As capital spreads outwards, making the world over in its image, it finds at home that its image turns against it.

Détournement attacks a kind of fetishism, where the products of collective human labor in the cultural realm can become the property of a mere individual. But what is distinctive about this fetishism is that it does not rest directly on the status of the thing as a commodity. It is, rather, a fetishism of memory. In place of collective remembrance one has the fetish of the proper name. *Détournement* restores to the fragment the status of being a recognizable part of the process of the collective production of meaning in the present, allowing it to combine into a new meaningful ensemble.

The device of the *détournement* restores subversive qualities to all the past critical judgments that have congealed into respectable truths. It makes for a type of communication that is aware of its inability to enshrine any inherent and definitive certainty. This language is inaccessible in the highest degree to confirmation by any earlier or supra-critical reference point. On the contrary, its internal coherence and its adequacy in regard to the practically possible are what validate the symbolic remnants that it restores. *Détournement* founds its cause on nothing other than its own practice as critique at work in the present. For the Situationists, the very act of unauthorized appropriation constituted the truth content of *détournement*.

It goes without saying that the best lines in this essay are plagiarized. Or rather, they are détourned. Moreover, many of these *détourned* phrases have been corrected, as Lautréamont would say. Plagiarism upholds private property in thought by trying to hide its thefts. *Détournement* treats all of culture as common property to begin with, and openly declares its rights. Moreover, it treats media not as a "creative commons," not as the wealth of networks, not as free culture or remix culture. Rather, media is an active place of challenge, agency, strategy, and conflict.⁸ *Détournement* dissolves the rituals of knowledge in an active remembering that calls collective being into existence. If all property is theft, then intellectual property finds itself reappropriated in turn via *détournement*.

Détournement has become a social movement, outside of official discourse, in all but name. Here, Situationism stands as a prophetic pointing of the way towards a struggle for the collective reappropriation and modification of media material. Every kid with a bitTorrent client is a Situationist in the making. It's a problem that has not escaped the attention of Apple, for instance, whose iPad is designed to replace both computing and the Internet—those pure products of the hacker sensi-

^{8.} Conflict is the key difference between *détournement* and the Creative Commons approach. See Lawrence Lessig, *Remix* (New York: Penguin, 2008); Yochai Benkler, *The Wealth of Networks* (New Haven: Yale University Press, 2006); McKenzie Wark, *A Hacker Manifesto* (Cambridge, Mass.: Harvard University Press, 2004).

bility, which is not far removed from *détournement*—with a fully commodified and locked-down network.

Détournement is merely a means to an end. Literary communism is a precursor to architectural communism, to the *détournement* of built form and the ambiences it can generate. Poetry made by all, and made for all the senses, comes together in a proposal for the "exact reconstruction in one city of an entire neighborhood of another." Which is what Constant's New Babylon amounts to. He builds in the city of an art practice the neighborhood of Saint-Germain-des-Prés, where the Situationists roamed in the 1950s. New Babylon is perhaps the most comprehensive attempt to conceive of a utopia after Marx at the level of infrastructure.

Constant had photographs made of New Babylon, and a film. He produced a newspaper for it and gave his famous lecture-performances. It was all to conjure into being a landscape that envisioned what was possible right here and now but was held back merely by the fetter of outdated relations of production. It was not a utopia to Constant. "I prefer to call it a realistic project because it distances itself from the present condition which has lost touch with reality, and because it is founded on what is technically feasible, on what is desirable from a human viewpoint, on what is inevitable from a social viewpoint."⁹ The question that lingers is not whether New Babylon was merely a dream but whether actually existing built form is really a nightmare.

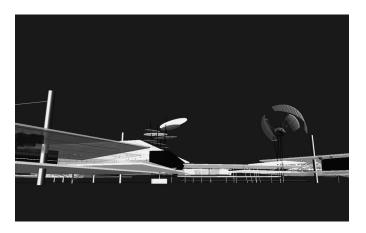
New Babylon is a *détournement*, not of art or literature, but of modern architecture and town planning.¹⁰ Rather than demolish the old world to build a radiant city, Constant cantilevers new spaces up above, leaving both city and countryside untouched. Automated factories are underground; the surface level is

9. Cited in Mark Wigley, *Constant's New Babylon: The Hyper-Architecture of Desire* (Rotterdam: Witte de With and 010 Publishers, 1998), p. 132. This work offers a selection of Constant's texts, and is the standard account of his work.

10. See Simon Sadler, *The Situationist City* (Cambridge, Mass.: MIT Press, 1999); Larry Busbea, *Topologies: The Urban Utopia in France, 1960–1970* (Cambridge, Mass.: MIT Press, 2007).



Ali Dur. Sketch for New New Babylon. 2011.



Dur. Sketch for New New Babylon. 2011.

for transport; and up above, a new landscape for play, a massive superstructure of linked sectors within which everything is malleable, changeable at whim. Considered vertically, as an elevation, New Babylon makes Marx's diagram of base and superstructure literal. Its airy sectors are superstructures, literally. They are made possible by an infrastructure below ground where mechanical reproduction has abolished scarcity and freed all of time from necessity. It is an image of what Constant imagines the development of productive forces has made possible, but which the fetter of existing relations of production prevents from coming into being.

Like many of the time, Constant was influenced by the cybernetic theories of Norbert Wiener, particularly his notion of a second industrial revolution. The human misery produced by the first industrial revolution was movingly recorded by Friedrich Engels after wandering the streets of London and Manchester and it confounded modern artists, who felt compelled to either reject industry or embrace it. But that debate is now moot.¹¹ The first industrial revolution has given way to the second, a revolution in the use of information as a means of control.

Cybernetics emerged out of the advance in logistics achieved by the major powers in World War II, particularly the United States.¹² If its starting points were analog negative feedback loops and their role in maintaining homeostasis, cybernetics soon developed a whole armory of concepts aimed at understanding and deploying the digital as a means of perceiving, conceiving, and controlling environments. It never achieved the status of a science, to which it aspired, but it did set in motion all kinds of practices, of which Constant's is something of a

12. The standard work is Steven Heim, *The Cybernetics Group* (Cambridge, Mass.: MIT Press, 1991); see also Manuel De Landa, *War in the Age of Intelligent Machines* (New York: Zone Books, 1991).

^{11.} Let's have done with Benjamin, Vertov, and all that. Let's permanently and in all seriousness change the name of this journal from "October" to "November," in acknowledgement of the 1989 revolutions, and of the autonomists' slogan, "After Marx, April!"

limit point. He pushes to the utmost the key theme of the cybernetic imaginary: the relationship between control and autonomy.

Cybernetics might just provide the means of mitigating the damage of the first industrial revolution, while building on its enormous expansion of productive potential. Or, it could result in what Wiener called the "fascist ant-state."¹³ Constant takes to heart Engels's formula that communism reduces the state to the administration of things. He locates cybernetics as control below ground, sequestered in a world of administered things. Cybernetics as freedom, as the ability to connect anywhere, anytime, is in play up above. Constant pushes the debate about technicity to both extremes at once: to both total control and total freedom. By pushing the instrumentalizing tendencies of cybernetic control to the limit, freedom from necessity appears in the realm of the possible. New Babylon is, among other things, a spatial solution to a conceptual problem. It is philosophy made abstract.

Constant was not alone in imagining cybernetic automation to be a transformative development, but seeing it in the context of a social revolution put him in more exclusive company: "Well then, how could such far-reaching automation be achieved without social ownership of the means of production?"¹⁴ Automation changes the relations of production, which in turn change social structures. The increase in productivity wrests freedom from necessity, but generates a surplus that needs dissipating somehow. New Babylon addresses the prospect of a new kind of necessity. As Constant says, "Automation inevitably confronted us with the question of where human energy would be able to discharge itself if not in productive work."¹⁵

Beneath the ground, the automatic factories; across the surface, endless highways; and up above, a global network of infrastructures, within which play takes place. Without borders, without centers, without a state, it snakes and forks all over the map. New Babylon "is organized according to the individual and collective covering of distance, of errancy: a network of units, linked to one another, and so forming chains that can develop, be extended in every direction."¹⁶ And above that, figu-

15. Constant, in Wigley, *Constant's New Babylon*, p. 233. Automation was a controversial topic on the left in the postwar period. Constant shares the optimism of those like Serge Mallet that automation led to the development of a truly social production, which nevertheless did not lead to the ideological cooption of labor within capitalism, but on the contrary might give rise to a new form of working-class militancy. See Serge Mallet, *The New Working Class* (London: Spokesman Books, 1975).

16. Constant, in Wigley, *Constant's New Babylon*, p. 161. On wandering, or the *dérive*, see Simon Pope and Claudia Schenk, *London Walking: A Handbook for Survival* (London: Ellipsis Arts, 2001); Francesco Careri, *Walkscapes* (Barcelona: Editorial Gustavo Gili, 2005); on the *dérive* practiced in third nature, see McKenzie Wark, *Dispositions* (Cambridge: Salt, 2002).

^{13.} Norbert Wiener, *The Human Use of Human Beings*, second edition (Garden City, N.Y.: Doubleday Anchor, 1954), p. 52. Wiener was somewhat more pessimistic than Constant: "In a very real sense we are the shipwrecked passengers on a doomed planet. . . . [W]e shall go down, but let it be in a manner to which we may look forward as worthy of our dignity" (p. 40).

^{14.} Constant, in Wigley, *Constant's New Babylon*, p. 234. On the transformation of capitalist relations of production by automation, see David F. Noble, *America By Design: Science, Technology and the Rise* of Corporate Capitalism (New York: Oxford University Press, 1979) and Forces of Production: A Social History of Industrial Automation (New York: Oxford University Press, 1986).

ratively at least, up in the ether, is another network, of communication. Constant intuits at least a few things about what will turn out to be the Internet.

The fluctuating world of the sectors calls on facilities (a transmitting and receiving network) that are both decentralized and public. Given the participation of a large number of people in the transmission and reception of images and sounds, perfected telecommunications become an important factor in ludic social behavior.¹⁷

Through a decentralized network of communication, a nomadic species of play-beings coordinates its frolicking, designs and redesigns its own habitat, and creates a life where "the intensity of each moment destroys the memory that normally paralyses the creative imagination."¹⁸ Constant experiments with a geography for a world beyond spectacle, where *dérive* and *détournement* are generalized practices, and indeed become the same practice. Both physical space and the space of information belong to everybody, and are resources for a life without dead time. It's a world not only made for but made by *homo ludens*. The only question is whether we are, or could become, such beings. New Babylon may very well be a critique of the limits of our species as we know it.

Johan Huizinga offered *homo ludens* as a way of thinking our species being that is outside of the *homo economicus* of political economic discourse. We do not contend with each other to maximize our utility, whatever that means, but for the pleasure of the game, for the renown a good move brings.¹⁹ Huizinga also opposed his figure of *homo ludens* to the *homo politicus* of Nazi jurist Carl Schmitt. For Schmitt, contest cannot be playful; it is to the death. But, says Huizinga, if victory is total, who remains to recognize the victor? Constant's contribution is to propose in spatial form the conditions under which contestation can be playful rather than fatal, by distinguishing contest from control of resources, or desire from need. Automated production makes the surplus available for all, not just the victors. A playful dissipation of surplus energy can then become a pure game, its stakes only recognition, not domination.

"I had given priority to the structural problems of urbanism while the others wanted to stress the content, the play, the 'free creation of everyday life."²⁰

^{17.} Constant, in Wigley, p. 162. On power and networks, see Alexander Galloway, *Protocol: How Control Exists After Decentralization* (Cambridge, Mass.: MIT Press, 2006) and Wendy Hui Kyong Chun, *Control and Freedom: Power and Paranoia in the Age of Fiber Optics* (Cambridge, Mass.: MIT Press, 2008).

^{18.} Constant, "Lecture Given at the ICA, London" (1963), repr. in "The Decomposition of the Artist: Five Texts by Constant," addendum to *Another City for Another Life: Constant's New Babylon*, Mark Wigley, ed., Drawing Papers 3 (New York: The Drawing Center, 1999), p. 13.

^{19.} Johan Huizinga, *Homo Ludens* (Boston: Beacon Press, 1950). Huizinga's book perhaps lacks the liberatory force that was once attributed to it. On the capture of play within the game space of the digital, see McKenzie Wark, *Gamer Theory* (Cambridge, Mass.: Harvard University Press, 2007).

^{20.} Constant, in Wigley, *Constant's New Babylon*, p. 232. A counterpoint here would be Raoul Vaneigem, *The Revolution of Everyday Life* (London: PM Press, 2011).

Looking back, peering through the ruins of the disintegrating spectacle, it appears that Constant was right to be skeptical about the political effusions of the 1960s. New Babylon is the most thorough negation, not of the world of the late twentieth century, but of a world that is only just now coming into being. It is Constant who seems in touch with the real historical development of the twentieth century, and closer to the possibility of leaving it. He understood the transformative power of the second (cybernetic) industrial revolution, and that its consequences would be a vast reconfiguring of space.

In the absence of a social revolution, this transformation of the means of production produced quite the opposite result: New Moloch, rather than New Babylon. Welcome, then, to New Moloch, a global division of functions that banishes the factory to the sites of cheap labor, in China and elsewhere, while massively concentrating control over networks in the overdeveloped world. The fascist ant-state has gone global. In such a world, New Babylon looks less implausible than many of the landscapes that are now supposed to actually exist.

3. Big Pharmaconn

In its disintegrating phase, the spectacle runs on a digital infrastructure. The digital is the means by which all the capacities of the body become proletarianized. To become a proletarian is to be excluded from the process of production as anything but its object. This exclusion has more recently extended beyond material labor to both so-called immaterial labor and also beyond production, to the realm not only of consumption but into the pores of everyday life.

The digital is the conceptual core of what Bernard Stiegler calls grammatization, but which could also be described as a process of abstraction. Stiegler: "Grammatization is the process through which the flows and continuities which weave out existences are discretized: writing, as the discretization of the flow of speech, is a stage of grammatization."²¹ It is a first stop in the exteriorization of memory.

Stiegler strikingly makes Plato the "first thinker of the proletariat." In the *Phaedrus*, Socrates is concerned about the phenomenon of writing as a transfer of memory to an external material form. This concretization of memory, over and against the body, is but one step in a more general process of grammatization-abstraction. Insofar as the industrial revolution vastly expanded the externalization of gesture and the capture of labor in the form of discrete and repeatable steps, it was already digital.

What Wiener and Constant call the second industrial revolution accelerates tendencies already at work. The first industrial age was also the time that produced

21. Bernard Stieger, *For a New Critique of Political Economy* (Cambridge: Polity, 2010), pp. 28–32. See also Jodi Dean, *Blog Theory: Feedback and Capture in the Circuits of Drive* (Cambridge: Polity, 2010).

the great break between the speeds of information and of the movement of everything else. Telegraphy abstracts flows of information from flows of goods, troops, and migrants and produces the start of a whole coordinating layer, over and above all other movements. It allows a strikingly new morphology of everyday life.²² Accelerated flows of information are the medium for the infiltration of everyday life by new forms and speeds of activity. It was not given in advance that these would take a commodified form, and in many cases struggles have raged and still continue as to whether new communicative forms are to be commodity forms or not.

Proleterianization results from abstraction on two axes—time and space—in both of which the digital is the means. Just as the telegraph binds space into abstract unities, so too the archive binds time into abstract temporalities. These two tendencies together create a third nature, made of ordering and flows of discrete and codified information within which the human is always and already embedded. It becomes the unlocalizable locus of valuing and coordinating the features of what once was called second nature, that material world made by living labor that becomes a power against it.

Living labor and its products now find themselves subject to third nature. Third nature as a domain of command and control, not to mention fantasy and spectacle, seizes hold of the second nature of built form and rearranges its morphology in its own image. It directs in turn the instrumentalizing of nature itself. The perception of nature is always a by-product of the social act of its transformation. The industrial age makes nature a resource for its own projects. The second industrial revolution yields new perceptual frames for both second nature and nature itself. Nature now appears as an alien and remote ground for all collective human activity, yet for the first time it can be comprehended as a totality, if not interacted with as such. Nature becomes total spectacle. It is third nature that makes the biosphere thinkable as a totality. This is the context in which a concept such as climate change can be thought in the first place. Climate change is an artifact of the digital apprehension of nature itself.

Such are the powers that the digital calls into being, but it is not given in the digital as a rationality of means that these be its only ends. The problem is not third nature, or the digital, but that to which it is subordinated, namely commodification. Third nature provides a new terrain for the conflict between commodity and non-commodity forms of relation. A whole series of potentials have to be foreclosed for it to be the terrain on which commodification renews itself. This is what remains of some interest in the category of the aesthetic.

Third nature, perfect product of abstraction, has the properties Stiegler refers to as the pharmakon: the undecidable properties of being both poison and cure. Perhaps it is because at heart the digital gives rise not merely to the gramme, the grain, the bitty grit that bespeaks the coming of writing, but something more

22. See Harold Innis, *The Bias of Communication* (Toronto: University of Toronto Press, 2008); James Carey, *Communication as Culture* (New York: Routledge, 2008), especially the essay on telegraphy; and McKenzie Wark, *Virtual Geography* (Bloomington, Ill.: Indiana University Press, 1994). as well. Third nature is not merely digital; it is also algorithmic.²³ It is code not just in the sense of the letter but also in the sense of the definite operation by which one chunk of information is transformed into another. As algorithm, the digital is not merely undecidable in its ends, it is beyond good and evil, an inhuman library of procedures that operate within coded ontologies on libraries whose relation to any external referent is mediated by the procedures of the capturing and archiving of third nature itself.

Third nature has ontological contours, but they are not immediately readable in ethical or political terms. It is subordinated to the logic of the commodity, and yet it is always in part a domain that escapes from the commodity form. Information wants to be free but is everywhere in chains. Its openness to copying and modification creates difficulties for its capture within the closed world of the commodity (of the iPad and the App Store, for example).

Third nature is an enticing and troubling terrain for the ruling class of what we could only describe as overdeveloped capitalism. In principle, it is a time and space that opens towards the possibility of a generalized *détournement*. The commodification of its potentials becomes a quite sophisticated problem. In place of the culture industries, what flourishes there are the vulture industries—Apple, Google, Facebook—that rely on free play within the space of everyday life of millions who nevertheless become abstracted "users." As a slogan for the Sony PlayStation game console once put it: "Live in your world, play in ours." The desires and energies of everyday life have to be channeled into another domain, an old Babylon in new guise, which despite the techno-sheen obeys the old laws of property.

Stiegler sees in this a destruction of libidinal energy and decomposition into drives, a foreshortening of the long loops by which culture has maintained contact with itself across the span of generations, in favor of short and synchronized circuits governed by the fashion cycle. (Pop is the herpes of memory.) Where once what Henri Lefebvre called "moments" could weave in and out of everyday life, crystalizing into their own forms of temporality and memory, they now tend to assume the same form, having been translated into the tempo and temper of commodified third nature.

The digital held out the promise of the reduction in socially necessary labor, but this would have required a mutation in the relations of production that only partially took place and was then reversed. Instead, the "Chinese walls" capital used the second industrial revolution to break down were those of China itself and other administered economies, releasing a flood of cheap labor onto the market. Hence the paradox of the "labor saving" devices of Apple being made in the Foxconn facility, which Apple's own engineers jokingly refer to as Mordor.²⁴ And yet, this font of cheap and willing labor is not infinite. This has all happened

24. Andrew Leonard, "One iPhone to Rule Them All," Salon.com, September 14, 2007, www.salon.com/2007/09/14/sent_to_mordor (accessed November 2, 2011).

^{23.} Alexander Galloway, *Gaming: Essays on Algorithmic Culture* (Minneapolis: University of Minnesota Press, 2006); Alexander Galloway and Eugene Thacker, *The Exploit: A Theory of Networks* (Minneapolis: University of Minnesota Press, 2007).

before. Peasants might find the factory an improvement on rural misery, but their offspring are less impressed. Boredom descends. The suicides at Foxconn are only a bleak and pointed instance of the general rule. The drives can hardly be stimulated and articulated into the short loops of the fashion cycle quickly enough.

Meanwhile, in the overdeveloped world, the proleterianization of everyday life obliterates the intergenerational long loops of mediated memory: the noncommodified gift economies, the sacred exceptions and exemptions from commodified life. But the forward march of the commodity form has to be reconciled with the withdrawal of the state from life-support systems such as health care and education, city planning, housing, not to mention the arts and culture. Not to mention a suppression of wages. Only by an extension of debt and the inflation of speculative bubbles can the "buggy" code of commodified life go on. Production shifts the connection of the drives to purely symbolic ornaments literally stitched on to shoddy mass-produced artifacts, or even to the traffic in pure signs through commodified networks with no material component at all. Digital games prove particularly useful for this last exercise. Games use the competitive drive of all against all to make it appear as if the nonexistent stakes of the game actually exist and have value.

We live in somewhat reduced circumstances, then. Attempts to restore the long loops of intergenerational culture might therefore be correspondingly modest. This does not mean that the desires articulated should also be modest. On the contrary, the more the overdeveloped world restricts desire to the drive for phantom prizes, the more totally the aesthetic realm should negate commodification on the plane of third nature. Despite the attempt to corral all information flows into commodity form, it is in the nature of the digital to make its information available for a generalized *détournement*, outside of the circuits of authorship and ownership. In the digital, *détournement* finally finds the technical means for its realization.

Proletarianization too is a pharmakon. The abstraction of all human capacities, their capture within digital codes, their algorithmic composition within a third nature that eludes all the old walls (even if it is the substance of new ones), is indeed a proleterianization of the world. What is yet to be seen is whether this abstraction might not proletarianize capital as well. Let's take them at their word. Let's "play in their world," even if this is not the kind of play they intended. It is a matter of learning to trifle with games and the drives they entrap in the name of a play that is prior to all games.

New Babylon actually exists, but in negative. The second industrial revolution really did change the entire spatial morphology of the world. So perhaps it is time to use *détournement* to construct a long loop back through the past to transpose it onto the terrain of third nature. That was the modest aim of our project: *New New Babylon*. Of all the strata of Constant's world, the one that came closest to realization is the "top" layer, third nature, the network and networld of the digital itself. But the works he made that anticipate this world are artworks, singular things, and hence somebody else's property. But concepts belong to nobody. Their form, as Plato grasps in the *Phaedrus*, is abstract, and slips through the fingers of ownership and authorship.

4. The Making of New New Babylon

New New Babylon was initially built to exist within Betaville, at the invitation of Carl Skelton, its principal designer. Betaville is an open-source multiplayer environment for urban design, in which ideas for new works of public art, architecture, urban design, and development can be shared and discussed with the kind of broad participation people take for granted in open-source software development.²⁵ Betaville is a 3D environment that in principle could model any city, but the first city available was New York, a city for which Constant never produced maps or models. The first challenge was thus to find the scale of New Babylon's sectors relative to this city, and to propose which parts would play host to such structures.

Betaville was designed as a planning tool, and hence most projects conceived in it are practicable within existing social relations. *New New Babylon* toys with this by showing, within the space of New York, what might be technically achievable, not to mention socially desirable, but is not realistic within existing property forms. This is naturally enough a *détournement* of Constant's deployment of models and drawings in his own time. These did not perform the conventional role of serving as practical tools of representational existence; rather, Constant insists, they are the medium of polemic against the visual language of planning and architecture. They are the models of infrastructure for another life.

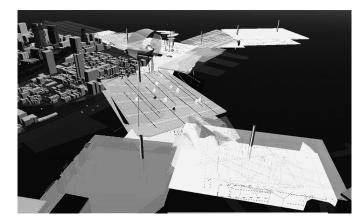
Constant's New Babylon uses ideas of structure and organization that might support a life that actually never existed. In his practice, Constant says, the "modern architect's obsession with a radical transparency that exposes all the detail of

25. Carl Skelton et al., Betaville (Brooklyn: Brooklyn Experimental Media Center, 2011), betaville.net. First demonstrated at the College Art Association 2011 Conference, New York, February 12, 2011.



Ali Dur and McKenzie Wark. The New New Babylon Sector of Betaville. 2011.





Dur and Wark. The New New Babylon Sector of Betaville. 2011.

structure and lifestyle turns into an amorphous sense of interaction between lifestyles too complex and transitory to be simply exposed."²⁶ Colored, scored, and layered compositions of Perspex create a scene of ambiguity. This indeterminacy poses a first challenge for digital *détournement*. Constant's maps, drawings, and models all have separate strategies for suggesting possibilities that have not been rendered in detail, and this had to be carefully crafted in a new medium.

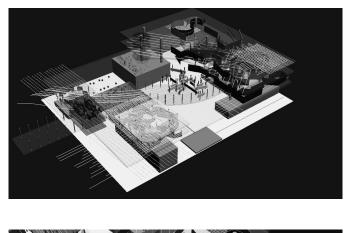
Constant evoked the varied ambiences of New Babylon largely with works in three media, each of which suggested an encounter on a particular scale: aerial views of networks of conjoined sectors in clear outline superimposed on maps; partly transparent, partly opaque sectors or small groups of sectors realized via Perspex, wood, and wire models; drawings, most often in an expressive style,

26. Wigley, *Constant's New Babylon*, p. 50. Constant here hews to the Situationist principle of the minimum necessary construction to create the required amount of seduction.

which invoke the ambiences internal to particular sectors or parts of sectors. *New New Babylon* had to suggest in a unitary digital form the varying degrees of opacity Constant achieved in separate media.

We began with the digital realization of one of Constant's sectors, the Orient Sector. This sector is unusual in that both a model and a detailed drawing in plan exist for it. It would be quite possible to reproduce it with 3D rendering software (in this case 3D Max) in a way that made the whole structure transparent, as one might in an architect's drawing for construction purposes, or make the inhabitable portions of the structure an attractive simulation for a real-estate walkthrough. But the effect we were looking for had to maintain the veil that Constant drew over social relations yet to be realized.

In the Betaville version, *New New Babylon* also had to connect to a particular city. Constant produced maps showing networks of multiple sectors as distributed networks snaking across the landscape of cities such as Paris and Amsterdam. The points at which Constant razed whole city blocks for the support pillars of New Babylon are not arbitrary, and in the case of Paris and Amsterdam they seem





Dur. Détournement of Constant's Orient Sector. 2011.

based on psycho-geographic knowledge of the properties of various quarters. Implanting *New New Babylon* within New York called for a parallel procedure, and while somewhat constrained by Betaville's map, which extends only to downtown Manhattan and Brooklyn, we endeavored to build *New New Babylon* where it would not demolish landscapes we hold in psycho-geographic esteem. From careful measurements of Constant's existing maps, we derived a measure of the scale on which Constant worked, both in plan and elevation, and transposed that to the New York context.

Constant's images and models were just props for proposing another world. True to *détournement*, he achieved this with a minimum of work. He used a small number of standard elements, which he varied and repeated to create an almost unlimited number of possible ambiences. Likewise, digital *détournement* uses Constant's simple and limited principles of macro-scale infrastructural design. *New New Babylon*, like its predecessor, is a conceptual project, a way of thinking, a

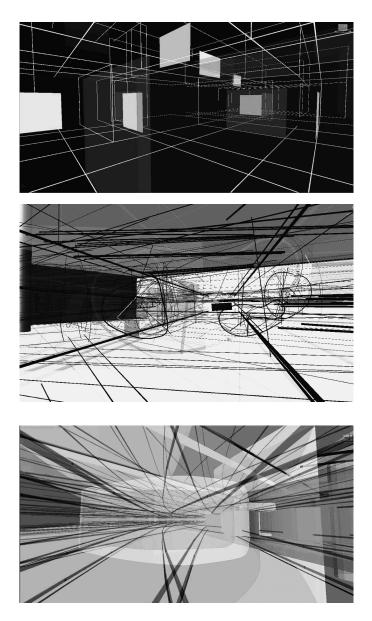


Dur. Manhattan Scale Study for New New Babylon. 2011.

medium that provides anyone with a playground for imagination and desire in any medium. Structural principles are just a means to an end.

After executing the sectors with a simple logic of structure, they are filled with various interiors that become in effect tone generators for ambiences of tension, anxiety, speed, relief, and reverie. In Constant's drawings, each labyrinth gives way to a new one, complexities are followed by openness, panels by lines, prisms by spirals and amorphous forms, stressed interiors by soft lounges. The interiors of *New New Babylon* make use of Constant's plans, freehand drawings, and even his rare paintings as *détourned* elements for the microstructures.

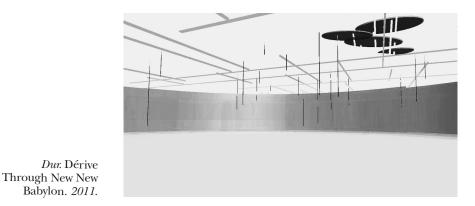
Curiously, we find that Constant's work becomes progressively more abstract the smaller the scale on which one approaches it. It is a kind of inverted naturalism. It is a concrete model of macro-scale infrastructure and social rela-



Dur. Dérive Through New New Babylon. 2011.

tions and an abstract, ambient, and poetic invocation of the particulars of micro-scale daily life. It is, we would wager, even a kind of realism, a realist rendering of what is not actual but is yet real: the virtual that shadows actually existing social and material forms.

The Betaville version of New New Babylon is a navigable 3D model. The video



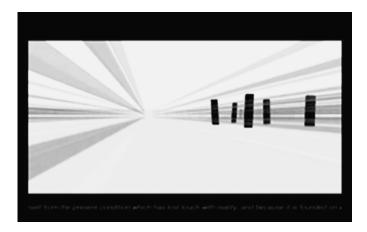
version of *New New Babylon* records a series of *dérives*, or drifts.²⁷ These vary in speed and directness. They deviate from the purposive direction usually experienced in walk-through videos made for real-estate purposes, although the difference may be subtle. They were created using a program called Camtasia to make "live" recordings of *dérives* within the model, and then they were edited in Premier. The video revisits the drifters' fragmented memories, to the extent that one can remember anything in such a rapidly changing realm. Composed short scenes, altered by speed, sight, behavior, and duration all reveal the characteristic attitudes of each space.

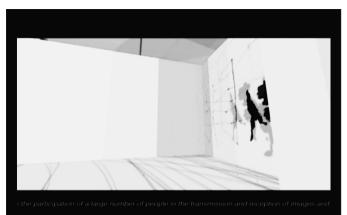
Both the Betaville and video expressions of *New New Babylon* are Creative Commons licensed. In their own small way, they add to the store of that which *détournement* frees from the private-property regime and makes available for collective appropriation. One might add that Creative Commons licenses are themselves a

27. *New New Babylon*, produced by Ali Dur and McKenzie Wark, music by Paul D. Miller, 8 min. (New York, 2011). The premiere screening was at the Festival of Ideas for the New City, Cooper Union, New York, May 5, 2011.

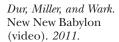


Ali Dur, Paul D. Miller, and McKenzie Wark. New New Babylon (video). 2011.









OCTOBER

détournement—a turning of property law against itself. The journal of the Situationists, *Internationale Situationiste*, was explicitly published without copyright, as was Jacqueline De Jong's *The Situationist Times*. The Creative Commons license is a more subtle and effective tool than the blunt instrument of anti-copyright.

Détournement is the opposite of quotation: it takes past creation as always and already held in common. One may acknowledge certain names from the past, but not the ownership that is assumed to flow from that acknowledgement. The generalization of *détournement* via the digital opens up the question of how intellectual and creative work is to proceed in the light of what is technically possible but merely constrained by existing social relations. *New New Babylon* is a modest contribution to the practice of such labor in the era of generalized *détournement*. The future need not look like the iPad. *New New Babylon* is of course hardly an adequate response to the seizure of the drives within the short circuits of commodified life, but it is the very nonidentity, the gap between what theory can and what an aesthetic work can achieve, that is itself an object of critical thought—and practice.

Epistolary Affect and Romance Scams: Letter from an Unknown Woman*

HITO STEYERL

Her name was Esperanza. A thirty-five-year-old Puerto Rican woman running a construction business and nurturing a great passion for humanitarian ventures. Sadly, her husband had died two years ago. She sent pictures of herself and her little daughter via the online dating platform Match.com in Feb. 2007.¹

At first, Fred responded casually to her letters. But then, he suddenly found himself falling in love with her.

A few months later, he told his family that he was going to leave his wife and their children to live with Esperanza. When his mother asked him if he had ever met her, his answer was no. He'd meet her, in time. By now they were calling each other and chatting. She had canceled their first meeting at the last minute. He had waited at the airport, flowers in hand, trembling more with fear than anticipation.

Looking back, he couldn't understand how he could not have known. She wouldn't turn on her webcam while chatting. One technical problem followed another; communication was ruptured by unannounced sudden meetings. But on the other hand she never asked for money either. Until the day she died.

An official called him from the U.S. embassy in Denmark, where she had traveled on business. She had accidentally been killed in a random shootout between rival gangs.

It was the worst day in Fred's life.

He transferred money to repatriate her body. He was numb with shock. Nothing mattered. None of the multiple problems that arose in the process mattered. He decided that he wouldn't go see her. He couldn't face the idea that their first date would be after her death.

The end of the story was sudden. His friend did research online. No American citizen had been killed in Denmark lately. There had been no shooting. Esperanza had never existed. She was the creature of a group of scammers.

http://www.romancescam.com/forum/viewtopic.php?f=1&t=19587&start=15-p95537 by dxxx on Fri Jun 05, 2009 12:02 pm

CXX

I hope you realize there is no doubt that this is a scammer. As soon as he sent you a Photoshopped stock photo, it was confirmed beyond a doubt. I will treat it as if you are deal-

1. This is a fictional example. Any similarity to actual persons or events is unintended.

ing with a female, but many of these elements may be handled by a male. Although certain elements are always the same with scammers (after all, the ultimate goal is the same—to get your money), there is a variety in other elements. Most scammers we see go for volume and speed—they get their fake profiles out there, approach as many people as possible, and move to the money stage with all of them quickly. This approach is going to lose more people quickly, but since they are (or at least want to be) targeting lots of people at once, they are still making money, even if it is only a couple hundred dollars per victim.

Other scammers opt for a more organized, long-term approach. These are the more skilled scammers, and in my opinion the most dangerous. They will spend lots of time on a particular victim. (...) These "better" scammers are much more aware of IP-address issues, and are more likely to admit to their location or hide behind a proxy to ensure that they do not lose their victim to that simple mistake. If you watch closely, they do make mistakes—but they are generally much harder to spot. (...) Sending a picture without wiping out the EXIF data that shows it is from 2002 was a much more subtle mistake, and the majority of victims would not catch it. (...)

http://www.romancescam.com/forum/viewtopic.php?f=1&t=19587&sid=17266b953 7f5462100007720a196b4c0 - p95509 her dense on Eni Iven 05, 2000 4:57 en

by dxxx on Fri Jun 05, 2009 4:57 am

(...)

xmlns:tiff = "http://ns.adobe.com/tiff/1.0/"
xmlns:exif = "http://ns.adobe.com/exif/1.0/"
xap:CreateDate = "2002-05-07T11:00:16+05:30"
xap:ModifyDate = "2002-05-07T11:00:16+05:30"
xap:MetadataDate = "2002-05-07T11:00:16+05:30"

See something odd there?

Epistolary Affect

On a recent trip to Bangalore, I found myself saying something I didn't fully understand. During a public discussion, Lata Mani, the respected feminist scholar, had asked me about the sensorial, the affective impact of the digital. I answered that the strongest affective address happened on a very unexpected and even old-fashioned level: in the epistolary mode. As a brush with words divorced from actual bodies.

Digital writing—by email or chat—presents a contemporary complication of historical practices of writing. Jacques Derrida has patiently described the conundrum of script: its connection to absence² and delay.³ In this case, the delay is minimized, but the absence stays put. The combination of (almost) realtime communication and physical absence creates something one could call *absense*, so to speak. The sensual aspect of an absence, which presences itself in (almost) real time. A live and lively absence, to which the lack of a physical body is not an unfortunate coincidence, but necessary.

^{2.} Jacques Derrida, Of Grammatology (Baltimore: University of Maryland, 1997), p. 47.

^{3.} Ibid., p. 67.

Its proxy is compressed as message body, translated into rhythm, flow, sounds, and the temporality of both interruption and availability. None of this is "virtual" or "simulated." The absence is real, just as is the communication based on it.

http://www.romancescam.com/forum/viewtopic.php?f=1&t=8784&start=150

Re: scammers with pictures of Mxxxx QT By axxxxxs on Wed Jan 26, 2011 8:05 am

This is a private IP address and cannot be traced.Hostname: 10.227.179.xxx

dont see any problem in meeting, i do believe in meeting and seeing is believing, i can change my flight to you if you wish to meet, i dont see any problem changing my flight to you, tell me how you think we can meet, meeting and seeing is believing to me and id otn care of age and location, what is the name of your closest airport, i can call the airline now to ask for flight changing possibility

This is a private IP address and cannot be traced.

Im cool baby, how are you doing today? Sent from my BlackBerry® wireless device

Do you still want to meet up with me baby?

I dont have msn

do you want to meet me baby? Whats the name of your airport baby? Give me like 1hour baby

Baby, do you live alone? Tell me about your travelling experiences baby Sent from my BlackBerry® wireless device (...)

Im at the airline getting the ticket done Sent from my BlackBerry® wireless device

Honey, im done with the ticklet and i'll email you in like 1hour with the scan copy of the ticket baby Sent from my BlackBerry® wireless device sending it nwo now baby Honey

Digital Melodrama

In 1588, a scam with the romantic title "Spanish Prisoner" was launched for the first time. The scammer approached the victim to tell him he was in touch with a Spanish aristocrat who needed a lot of money to buy his freedom from jail. Whoever helped him would get rich recompense, including marrying his daughter. After a first installment was paid, new difficulties kept emerging until the victim ended up broke and impoverished.

In the digital era, this plot has been updated to resonate with contemporary wars and upheaval. Countless 419 scams—the number refers to the applicable penal-code number in Nigerian law—rewrite daily catastrophe as entrepreneurial plotline. Shock capitalism and its consequences—wars over raw materials or privatization—are recast as interactive romance or adventure novels.

You too may have received a letter from an unknown woman—as Max Ophüls's 1948 classical melodram title had it. In Ophüls's film, a Viennese girl posthumously confesses her unrequited love in a letter. It recounts every detail of her relentless passion for a concert pianist who barely noticed her existence.

In the contemporary digital version, letters from unknown women emerge from all over the globe, afflicted by tragedies personal and political. A cacophony of post-postcolonial tragedies, diluted with generous servings of telenovela. Widows and orphans get swept up by financialized hypercapitalism, natural disaster, and assorted crimes against humanity—and it's you who are destined to sort out their fates.⁴

| Basis | % |
|--------------------|----|
| air crash | 35 |
| car accident | 13 |
| tsunami/earthquake | 3 |
| coup | 22 |
| over-invoiced | 16 |
| undisclosed | 11 |
| Sender | % |
| lawyer | 35 |
| widow | 31 |
| child | 10 |
| bank officer | 24 |

Source: http://www.caslon.com.au/ 419scamnote.htm

Romance scams offer windfalls of love and opportunity, casually asking for bank-account numbers and passport copies. Flight schedules are mixed with instructions for transfer of funds and serially sampled professions of love. Modules

4. Scientific research of online scams has until now been almost exclusively focused on the case of Nigeria (in truth, it seems somewhat disproportionately represented in current research, given the very diverse geographical origin of romance scams). The most extensive and insightful study is Andrew Apter, "IBB=419: Nigerian Democracy and the Politics of Illusion," in *Civil Society and the Political Imagination in Africa*, ed. John Comaroff and Jean Comaroff (Chicago: University of Chicago Press, 1999), p. 270. A case study of several 419 scams is performed in Harvey Glickman, "The Nigerian '419' Advance Fee Scams: Prank or Peril?," *Canadian Journal of African Studies* 39, no. 3 (2005), pp. 460–89. See also Daniel Jordan Smith, "Ritual Killing, 419, and Fast Wealth: Inequality and the Popular Imagination in Southeastern Nigeria," *American Ethnologist* 28, no. 4 (Nov. 2001), pp. 803–26; and Daniel Künzler, "Who Wants to Be a Millionaire? Global Capitalism and Fraud in Nigeria" (paper presented at the Interim Conference of Research Committee 2 of the International Sociological Association, World Social Forum, Nairobi, January 22, 2007), accessed June 3, 2011, http://lettres.unifr.ch/de/sozialwissenschaften/soziologie-sozialpolitik-und-sozialarbeit/team/daniel-kuenzler/publikationen.html.

of sensation are copy-pasted, recycled, ripped. But despite their obvious mass production, these are "the only form(s) of tragedy available to us," as Thomas Elsaesser said about the melodrama.⁵ They drop into mailboxes unsolicited, and suddenly expose themselves to the open.

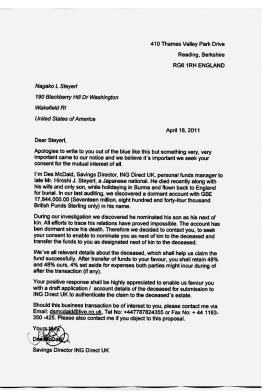
Tragedy as Ready-Made

The genre of melodrama departs from impossibility, delay, submission. It addresses the domestic, feminized sphere. The so-called weepie was a genre that was underrecognized and safely kept apart from cinema-as-art for decades. It was suspect-

ed to perpetuate oppression as well as female compliance.

Yet the melodrama also voiced perspectives that were repressed and forbidden, views that couldn't be expressed anywhere else and remained deprecated, shameful, and dismissed. Over-the-top exaggeration and exoticization opened possibilities to imagine something different from the drab repetitiveness of reproductive labor. Melodramas concoct implausible tales of cultural encounter, racial harmony, and happiness narrowly lost in miscommunication. They insist that the political is personal-and thus trace social histories from the point of view of sentiment.6

But their new personalized digital versions are produced differently. They are no longer just one-size-fits-all



Taylorist studio-based productions, but customized products.

These messages are not only posted but perhaps even post-ist. Post-isms are a symptom of a time that considers itself to be posterior and secondary, a leftover

^{5.} Thomas Elsaesser, "Tears, Timing, Trauma: Film Melodrama as Cultural Memory," in *Il Melodramma*, ed. E. Dagrada (Rome: Bulzoni Editore, 2007), p. 47–68.

^{6.} A seminal text on melodrama still is Thomas Elsaesser's 1973 article, "Tales of Sound and Fury: Observations on the Family Melodrama," in *Home Is Where the Heart Is: Studies in Melodrama and the Woman's Film*, ed. Christine Gledhill (London: British Film Institute, 1987), pp. 43–69.

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of history itself. They assume a general overcoming of everything without anything new to replace worn-out worldviews.

But there is a dialectical twist to this post-dialectical condition. Post-isms conserve the issue they are distancing and claim to have overcome it. Indeed, it is impossible to define any of these terms—post-Marxism, poststructuralism, postmodernism, etc.—without recourse to the terms they claim to have left behind. Distance is achieved despite intimate closeness, or maybe even precisely because of it. The copresence of proximity and distance is inherent to the structure of the prefix "post" itself. "Post" connotes a past, whose meaning is derived from spatial separation. In their earliest versions, the roots of the prefix refer to "behind, after, afterward," but also "toward, to, near, close by"; "late" but also "away from."⁷ Both closeness and separation, absence and presence, form part of the structural aporia of this term.

Romance scams are intimately related to this timescape of simultaneous presence and absence, incongruously bridged by hope and desire. They also perfectly resonate with an undecided temporality, which synchronizes both closeness and separation, past and present, and refuses to let go of worldviews it no longer believes in.

Conceptual Love

This turn to the digital melodrama and epistolary affect comes somewhat unexpectedly. The world of digital feelings had been imagined more robustly before. None of the rather crude initial ideas about cybersex and the merging of the physical and digital worlds has held much sustainable appeal, though. Datagloves, digital dildos, and other equipment deemed suitable for amorous purposes turned out to be cumbersome embarrassments for an age in which data, feelings, and touch travel lightly.

The popularity of the epistolary address is also based on its blatant availability. Text is a makeshift medium, cheap and cost-effective. No complicated engineering is necessary, nor bulky equipment; just basic literary skills and a terminal for hire at an Internet café.

Perhaps the ready-made language of romance scams also expresses a deeper shift in contemporary practices of writing. In parallel to a visual economy of the blurred and raw, an economy of text has developed, which is in many ways as compressed and abstracted as the rags of imagery that crowd the digital realms. Prompted by the legacy of advertising, a Victorian economy of affect merges with the verbal austerity of the tweet message. It is simultaneously blunt and chaste, downsized and delicate, bold and coy. Compressed and evacuated text allows feelings to fill in the blanks. Hollow words bait, retreat, play. Reduction and withdrawal spark intensity.

7. According to the Online Etymological Dictionary: "prefix meaning 'after,' from L. post 'behind, after, afterward,' from *pos-ti (cf. Arcadian pos, Doric poti 'toward, to, near, close by;' O.C.S. po 'behind, after,' pozdu 'late;' Lith. pas 'at, by'), from PIE *po- (cf. Gk. apo 'from,' L. ab 'away from')" www.etymonline.com/index.php?allowed_in_frame=0&search=post-&searchmode=none (accessed November 2, 2011).

http://www.romancescam.com/forum/viewtopic.php?f=1&t=19587&start=45#p109129 Re: GXXX TXXXX

by xxxxxxxxxxx on Fri Sep 18, 2009 8:20 pm

Gxxxx now has another email address, gxxxx@hotmail.com, I am trying to get a picture off her but its like trying to get blood out of a stone.

She knows I am trying to build up a new relationship and has said she will now leave me alone at last and just wants to be friends and just some one to write to which I am okay with that.

Cxx

CXXXXXXXXXXX

Frequent Poster

Posts: 160 Joined: Sat Apr 11, 2009 5:33 pm Location: Lxxxxxxxx

Top

Re: Gxxxx Txxxxx

by wxxxx on Sat Sep 19, 2009 8:38 am

Ok, I don't get it. You KNOW it's a Nigerian scammer using stolen photos of a glamour model, yet you still talk to him, and are willing to be "friends"? This is exactly what your scammer wants, as soon "she" will have some emergency and need money. All you've done is left the door open for the scammer to try again from a different angle. You are aware that almost all (and by that I mean well over 99% of them) scammers are really males and not the females they pretend to be?

Re: Gxxxx Txxxxx by gxxx on Mon Sep 21, 2009 5:52 pm the thing is this "she" you kee

the thing is... this "she" you keep refering to is just a black guy that is still working you. There is NO she ..., just a HE ... There is no Gxxxx... gxxxx

VIP Poster

Posts: 972 Joined: Tue Nov 25, 2008 11:13 pm Location: Canada, eh

Re: Gxxxx Txxxx by gxxxx on Sat Dec 04, 2010 10:18 pm the gxxxxxxx@hotmail.com address on this thread turns up a FB profile by the name of *Nxx Axxxxx Axxxxxx (Axxx Dxxx)*.

Current City: Accra, Ghana High School: West Africa Secondary School '08

lots of friends and notes by this dude

About Nxx I came, I saw, I conquered. Not by Might by the Holy Ghost.

Genuinely a loving guy \ldots I' m intelligent, creative, caring, loyal and love to have fun \ldots i have done some traveling and definitely have that in my plan for the future \ldots camping all the usual things life has to offer.

GSOH & quick witted. Attractive & well groomed, able to handle all social situations with style & a smile.

Sex Male

Interested In Men and Women

Relationship Status Single

The Spanish Prisoner

My name is Fred. I fell in love with Esperanza. She was the love of my life. Nobody understands how I fell for a scam. But I don't care whether Esperanza was real. My love for her was. From my perspective there hasn't been any scam whatsoever. Because even if Esperanza didn't exist as a person, her letters did exist on my screen. Their content may have been a lie; the IP may have been masked, the sender a projection. But the writing itself remains real. No matter who wrote the text: she or he or they. I loved the letters, not the person.

Writing these letters is serious work. Adapting and pasting text modules, planning, keeping books, hitting keys, performing, filing, Photoshopping. Scammers work to entertain their targets' fantasies and provide affective service, custom-tailored to individual desires.

Behind the scams are often organized work units.⁸ Most writers are male, often assisted by female workers to make phone calls or other live appearances.⁹ While the global and postcolonial aspects of these connections have been emphasized in some instances, their overall implications are left unexplored. How do we understand this literary form of deceit in the context of a global political economy based on digital divides and uneven development?¹⁰ There is an underlying moral to at least some of these efforts: the idea to regain the riches plundered by colonial exploitation.¹¹ Leftovers from anti-imperialist ideology incongruously mix with the beauty standards of extreme-makeover TV shows.

9. According to the experiences of scambaiters at www.romancescam.com.

10. Bjorn Nansen, "I Go Chop Your Dollar: The Nigerian 419 Scam and Chronoscopic Time," *Piracy: antiTHESIS* 18 (2008), p. 43.

11. Glickman cites the case of Fred Ajudua, who claimed to be a "black Robin Hood" and "alleged that the frauds were compensation from white men for slavery and colonialism," p. 478. Among other sources of popular culture, Daniel Künzler also mentions the plot of a well-known Nigerian fiction film: "This synopsis mentions one notion quite common in the popular discourse about 419 scams in Nigeria: the greed of the victims. This notion is also central to the huge hit *The Master* by Andy Amenechi (2005) starring famous Nigerian actor Nkem Owoh (also known as Osuofia). Denis (Nkem Owoh) was a migrant to Europe, but has been deported and had to struggle ever since. One day, he meets wealthy Chief Ifeanyi (Kanayo O. Kanayo), who introduces him into the 419 business. . . . As he speaks to journalists, he convinces them that 419s are justified, as foreigners are greedy and have to compensate for slavery and colonialism." Künzler, p. 13.

^{8.} Daniel Künzler claims that Nigerian 419 scammers are rather loosely organized and that usually teams do not exceed five people, though they are often organized transnationally and "project-oriented." Künzler, p. 16.

http://www.romancescam.com/forum/viewtopic.php?f=1&t=1555 What out for scammer cecixxxxx@hotmail.com by Rxxxx on Tue Jul 24, 2007 9:45 pm Calling her self Ceci Thompson

"(...) I checked a scam site and found he/she had used a different address with the same pictures. This time claiming she was Russian. Visa and ticket scams and so on. I confrontet her with this and this is the reply:

"You;re the most stupid man I've ever met All white people will suffer in the hands of Africans, ONE by ONE You all took blacks as slave, NO problem. You shall pay back with all you've stolen from us, ONE after the other. I know a way to catch you, bastard. Have you ever realized that you white people smells like shit? Ask God why? and the answer shall be giving to you by an African you people called Monkey Oh monkey will rule this world, someday Basket in the dirty pit. White frog. You better look for a female frog like you and start giving birth to smelling frogs, stinky. Date: Tue, 24 Jul 2007 20:58:49."

Most obviously, 419 scams develop in connection with larger macroeconomic issues—in the case of Nigeria, a debt crisis in conjunction with the decline in oil prices in the early 1980s and subsequent unemployment and instability.¹² Andrew Apter argues that online scams present a reverse-mirroring of financial protocols of business by replicating the quite fictitious ways of creating (or simulating) value in finance. The lack of a material referent for fictitious value also affects language or representational systems as such: signifiers start to float,¹³ and their connections to referents are unmoored, if not abandoned altogether. The Ponzi schemes of globalized financial capitalism as well as its delusions are being translated into the personalized language of romance. Apter labels the 419 con games as performance art,¹⁴ based on a general rise of visual deception and emptied value forms¹⁵ in politics as well as in an economy based on privatization and speculation. This may also present a reason why so many people fall for the scams: because their inherent principle of delusion constitutes a substantial part of our contemporary political and economic reality.

But the gender aspect of this specific type of performance art is arguably even more mind-boggling than its mirroring of financial protocols. What can one say about (mostly) straight black males impersonating white or mixed straight women, white gay or straight men? Then proceeding to change their color (from white or mixed to black, for example) if caught in the act? All this while sending along ripped pictures of other people, in most cases porn starlets or models.¹⁶

^{12.} Nansen, p. 39. The connection to an oil-based economy is also explored in detail in Apter, p. 270.

^{13.} Apter, p. 299.

^{14.} Ibid., p. 272.

^{15.} Ibid., p. 279.

^{16.} Probably: I've got the brains, you've got the looks: let's make lots of money.

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How does this resonate with the emancipatory promises of self-assigned gender, which abounded in earlier times of Internet theory? Are masquerade or subversion still categories that make sense in this context? Or shall we rather speak about new, hyperprivatized branches of cultural industries that perform one-onone staged dramas or maybe rather personalized mockumentaries based on the narrative form of Ponzi schemes?

The production of romance scams conjures up the image of digital workbenches peopled with rows of literary laborers organized within a flexible division of labor, performing work—or working in performance, just as their counterparts in the "real" financial sector. Their products are serial identities-on-demand, which morph to accommodate every possible client fantasy. Passion-as-labor, which reverse-mirrors the idea of labor-as-passion that is supposed to motivate the ideal workers of the post-Fordist age.

In the meantime, romance scams have spread worldwide, targeting poor or elderly women, in many cases maids, and robbing them of their life savings.¹⁷ Scammers don't mind wrecking the feelings of vulnerable people. They target the refuse of metropolitan dating markets: single moms, outdated flesh, global maids dreaming of princes. The weak prey on the ugly, using words.

As Elvis Presley (and the Bee Gees) sang: You may think that I do not mean the words I say. But words are all I have to steal your heart away.

Creative language

How to do things with words? This puzzled question by J. L. Austin became the title of one of the foundational texts of so-called speech-act theory.¹⁸ Austin argues that words are not purely descriptive representations, but agents able to bring about actions. One of his examples—fittingly in this context—is the marriage ceremony in which vows create the union. But this is a rather weak example in view of the much more grandiose speech acts routinely found in religious texts. Creation as such is performed by speech acts. The phrase "Let there be light" marks the inception of the world for monotheists. Divine utterance is a form of creative terror, terrifying and tantalizing at once.

According to Walter Benjamin, a weaker form of this power has immigrated into the language of humans.¹⁹ The creative force of naming is but a residue of

^{17.} Hazel Parry, "Romeo Conmen Target Lonely Hearts," *China Daily*, Hong Kong edition (September 22, 2010), accessed June 3, 2011, www.chinadaily.com.cn/hkedition/2010-09/22/content_11336643.htm. More information at: dragonladies.org/bbs/viewtopic.php?f=34&t=2696. This website presents Asia-based scams. There is ample evidence of women in China and Malaysia getting scammed, as well as scams that promise contact with Asian women that are usually centered on charging so-called translation fees.

^{18.} J. L. Austin, *How to Do Things with Words*, ed. J. O. Urmson and Marina Sbisà (Cambridge, Mass.: Harvard University Press, 1962).

^{19.} Walter Benjamin, "On Language as Such and the Languages of Man," in *Selected Writings*, vol.1, ed. Marcus Bullock and Michael W. Jennings (Cambridge, Mass.: Belknap Press, 1996), p. 68.

the divine power of utterance. As Michel Foucault noted a bit more drily, the force of order and command keep resonating in human language too.²⁰ The importance and naked force of words cannot be underestimated. Words make worlds. They can destroy them as well.

In the digital realm the power of language is translated into code that activates mechanical performance. The magic of language derived from the speech act of creation gets enlisted into doing things with hardware. Code animates matter and propels it into action. Mechanical language enables us to create new words, new worlds, new languages.

In the case of romance scammers the relative newness of their language paradoxically consists of its completely recycled nature. Of course this language is not novel at all, but well rehearsed by advertisement slogans and soap-opera dialogues. It is the lingua franca of cultural industries of modernity that cater to a domestic labor audience. But hardly has it ever been as fragmented and wrecked as in the scammers' language.²¹ The unabashedly collaged nature of these languages, their obvious partial generation by translation machines, reveals them to belong to a group of globalized languages, which I have previously referred to as Spamsoc.²² Spamsoc—my earlier example was the English-based language on the back of pirated Chinese DVD covers—is a broken language, because it reflects the pressures and gendered fault lines of globalization. Post-postcolonial hierarchies of language and a gendered division of freelance labor, as well as ongoing global conflicts over copyright and digital leverage, form part of the framework in which Spamsoc and its countless derivatives emerge as incoherent mixtures of Wikipedia entries and computer-translated semi-nonsense.

The languages of romance scammers are in most cases locally nuanced, and adopt an overly formal, often stilted language.²³ Their many malapropisms are a laughingstock for so-called spam baiters around the world. But contempt is a much too defensive and resentful reaction. These makeshift lingos express the tectonic tensions of extremely complex geopolitical situations translated into melodrama. Benjamin's reflections on language and translation throw this issue into sharp focus. In the gaps of meaning, the original force of words still shines forth, perhaps no more so than when they have almost rid themselves of content and start to resemble pure stammer and stuttering, void of signification.²⁴

^{20.} See, for example, Michel Foucault, "Truth and Power," *Power/Knowledge: Selected Interviews and Other Writings 1972–1977*, ed. Colin Gordon (New York: Pantheon Books, 1980), pp. 109–133.

^{21.} Nansen, p. 38.

^{22.} Spamsoc is what you get when the word "Spanish" is garbled by an automated scanning device. In the specific example, Spamsoc was given as a subtitle language on a pirated DVD. Hito Steyerl, "Notes About Spamsoc," *Pages* 7 (2009), pp. 59–67.

^{23.} The characteristics of scam-mail language are investigated in Jan Blommmaert and Tope Omoniyi, "Email Fraud: Language, Technology and the Indexicals of Globalisation," *Social Semiotics* 16, no. 4 (2007), pp. 573–605.

^{24.} Walter Benjamin, "The Task of the Translator," in *Selected Writings*, vol. 1, pp. 253–263. "To regain pure language fully formed from the linguistic flux is the tremendous and only capacity of translation. In this pure language—which no longer means or expresses anything but is, as expressionless and creative word, that which is meant in all languages—all information, all sense and all intention finally encounter a stratum in which they are destined to be extinguished," p. 261.

The splendor of creation still echoes in the almost robotic repetition of romantic keywords, within the scrambled, ripped, and collaged debris of meaningless affective vocabulary. It seems as if the mimetic force of language is not only unbreakable, but paradoxically increases with fragmentation and compression.

Thus the new digital post-English languages are not at all deficient; on the contrary, they are from a world to come, a world that we are not yet able to fully understand. The languages of romance scammers are messages from a future in which empty value forms are suspended in permanent free fall as language and value let go of reality within the affective plots of disaster capitalism.

Heart Away

After the funeral, I started to go through All that was needed to settle his estate. Which anyone who has been there knows is a very big pain in the butt; I started seeing bills and WU Receipts, everything was pointing to his future wife. Over the next couple of months of going over his assets, computer files, And bills. He was broke. Losing his house, and behind in his car payments. Credit cards were at limit. He was in a financial mess. I thought where was the woman who was supposed to be here. I started reading letters and going through his computer and everything became known over the next couple of months that she had no intention of Marrying him. She not only put off coming to him twice but also left him at airport twice. Overall, from what I could gather, and prove, he had given her well over thirty Thousand dollars in a little over two years. (...)

She was going to meet me in Hotel Lounge. Therefore, I went down early, had a few drinks, and waited. Then I saw her walk in. I was very impressed and if I did not know better would have fallen in love also, she was very elegant, and looked better then her pics. She had perfect English a lot better then the phone conversations we had. Which later made me think? It was not her on phone. Nevertheless, as we had drinks and talked, I started to tell her about my friend who fell in love with Russian woman and was going to get married, she was very focused on my story, and smiled a lot, Grab my hand, listen to my every word. I finished my story as I told all of you. (But just a basic version) Told her that he had all the arrangements to bring her to America, took care of her in Russia, and she left him, Told her about his death. (..)She was very sadden, said she knew now why I was so shy about her, and her love. However, told me to look (I am here right here with you.) I will never forget those words She said as long as I live. I looked at her, Reached in to my Suit Pocket and handed her a Envelope. She smiled and her eyes sparkled, I think she thought it was giving her money As she opened it, I will never forget the look in her face. There were two Pictures in that Envelope, One of my friend and her in Moscow, and one of his gravestone, along with a request for Visa paper with there names on it.25

25. Extract from "Doc's Story," anonymous report, *The Scam Survivors Handbook* (2010), n.p. Last accessed June 2, 2011, at http://romancescambaiter.com/rstb.html.

Despite the vast differences between scammed and scammers, one feeling unites both. This feeling is hope. While in the case of scammers this hope may be material, in the case of the scammed it may be both emotional and material.

This hope is maybe also indicative of a more general situation. Perhaps the hope invested in epistolary affect is aimed at interrupting the drab temporality of an age of post-s, in which life "always already"²⁶ seems over. Or to explode the repetitive reality of reproductive labor for maids, single moms, and other target audiences of digital melodrama.

Perhaps even more generally, the more unstable and insecure things get, the more hope abounds. If love is not free, hope seems to be. But hope is also the fuel capitalism thrives on, one of its few eternally renewable resources. The American Dream and its countless franchised versions are giant vortices that gain their momentum on hope, and little but hope. Hope is a Trojan horse for deceit and exploitation. It is also the driving element in any quest for change.

This hope may secretly long for a moment of radical and irrevocable change: not so much a revolution as perhaps an unexpected revelation, a sudden twist in the plot. It is the hope that everything could yet be different and change lies at the tips of our fingers.

My name is Esperanza and I am not dead. Contact me at esperanza112@hotmail.com alive

esperanza to dsmcdaid, show details 10:22 AM (0 minutes ago)

Mr. McDaid,

My name is Esperanza and I am not dead.

I am following up on the disquieting letter you sent to my mother-in-law, Nagako Steyerl in Rhode Island, United States on 4-18-2011.You claim that my late husband, Hiroshi J. Steyerl was killed in an accident, which is correct. However, contrary to your erroneous suggestions, I as his wife did miraculously survive the plane crash in Burma. Fortunately, my son did, too. We are now recovering from our terrible injuries in a hospital in Rangoon and hopefully, the dressings will come off next week.

As a heart-broken and destitute widow, I am very surprised to hear that you are planning to bestow my late husbands funds on anybody else than myself as his next of kin.

Therefore I urge you to immediately transfer these funds to my bank account.

sincerely

Esperanza



Ed Ruscha. Actual Size. 1962. © Ed Ruscha.

HITO STEYERL

There is hardly a more famous watercolor than Paul Klee's *Angelus Novus*. Walter Benjamin described its figure as a hapless creature, helplessly carried away by the storm of progress, while staring backward at the ever-growing rubble heap of history.¹ Benjamin's aphorism is well known and quite overquoted, but it has a surprising consequence if we take its spatial arrangement seriously.

For there is no rubble depicted in the drawing. This doesn't mean, however, there is no rubble at all. Since the angel faces us as spectators, and—according to Benjamin—also faces the rubble, the wreckage must be located in the *hors-champ* of the drawing. The rubble is in our place. Or, to take it one step further: we, the spectators, might actually be the rubble. We might be the debris of history, those who somehow made it intact but not unscathed through the twentieth century. We have become discarded objects and useless commodities caught in the gaze of a shell-shocked angel who drags us along as it is blown into incertitude.

Yet the debris caught in the angel's stare might take on a different form today. Are rubble and wreckage not outdated notions for an age in which information can be copied supposedly without loss and is infinitely retrievable and restorable? What would refuse look like in a digital age that prides itself on the indestructibility and seamless reproducibility of its products, an age in which information presumably has become immune to the passing of time? Aren't the scars of history signs of an analog age, one which is irrevocably over? Hasn't history itself been worn out?

No: history is not over. Its wreckage keeps on piling sky high. Moreover, digital technologies provide additional possibilities for the creative wrecking and degradation of almost anything. They multiply options for destruction, corruption, and debasement. They are great new tools for producing, cloning, and copying historical debris. Amplified by political and social violence, digital technologies have become not only midwives of history but also its (plastic) surgeons.

Despite its apparently immaterial nature, digital wreckage remains firmly anchored within material reality. One of its contemporary manifestations is the

1. Walter Benjamin, "Theses on the Philosophy of History," in *Illuminations: Essays and Reflections*, ed. Hannah Arendt (New York: Schocken Books, 1968), pp. 257–58.

toxic recycling city of Guiyu in China, where mainboards and hard disks are being scavenged and groundwater is poisoned. In the digital age, debris is composed not only of destroyed buildings, torn concrete, and decaying steel, although digitalized warfare, the computerization of production, and real-estate speculation produce these items in abundance. Digital wreckage is both material and immaterial; it is data-based debris with a tangible physical component.

There is hardly any better example of such digital debris than spam.² Far from being the exception in online communication, spam is actually the rule. Around 80% of today's email messages are spam. It forms the bulk of digital writing, its essence. And it, too, has a firm grasp on reality. Far from being secondary and accidental, spam is a substantial expression of a period that has elevated superfluity into one of its guiding principles.

To complete Benjamin's spatial equation: if the angel looks at us, we must be rubble. And if at present rubble means spam, this is the label that the angel bestows on us today.

You Shall Be Spam

"Pharmacy 81% Replica 5.40% Enhancers 2.30% Phishing 2.30% Degrees 1.30% Casino 1% Weight Loss 0.40% Other 6.30%"³

The contemporary use of the term "spam" for unwanted electronic bulk communication takes its cue from an appearance in a *Monty Python's Flying Circus* sketch from 1970. This act is set in a café, where two customers ask for the breakfast menu:

All the customers are Vikings. Mr. and Mrs. Bun enter downwards (on wires).

MAN: Morning. WAITRESS: Morning. MAN: Well, what you got? WAITRESS: Well, there's egg and bacon; egg, sausage, and bacon; egg and Spam; egg, bacon, and Spam; egg, bacon, sausage, and Spam; Spam, bacon, sausage, and Spam; Spam, egg, Spam, Spam, bacon, and Spam; Spam, sausage, Spam, Spam, Spam, bacon, Spam, tomato, and Spam; Spam, Spam, Spam, egg, and Spam; (*Vikings start singing in background*) Spam, Spam, Spam, Spam, Spam, baked beans, Spam, Spam, Spam, and Spam.

^{2.} Thanks to Imri Kahn for drawing my attention to this subject. A very helpful text on Spam is Finn Brunton, "Roar So Wildly: Spam, Technology and Language," *Radical Philosophy* 164 (November/ December 2010), pp. 2–8, http://www.radicalphilosophy.com/default.asp?channel_id=2187&editorial_id=29275 (accessed June 6, 2011).

^{3. &}quot;Commtouch Online Security Center," http://www.commtouch.com/Site/ResearchLab/statistics.asp (last modified June 3, 2011).

VIKINGS: Spam, Spam, Spam, Spam, lovely Spam, lovely Spam.

WAITRESS (cont.): or lobster Thermidor aux crevettes with a Mornay sauce, garnished with truffle pâté, brandy, and with a fried egg on top, and Spam. WIFE: Have you got anything without Spam?

WAITRESS: Well, there's Spam, egg, sausage, and Spam. That's not got much Spam in it....

WIFE: I don't want any Spam!

MAN: Shh, dear, don't cause a fuss. I'll have your Spam. I love it. I'm having Spam, Spam, Spam, Spam, Spam, Spam, Spam, Spam, Baked beans, Spam. WAITRESS: Baked beans are off.⁴

Monty Python's sketch is the story of a conquest: Spam—the canned food slowly but decisively invades every item on the menu as well as the whole dialogue, until there is nothing left but Spam, Spam, and Spam. This process is celebrated by a band of Vikings and other incongruous participants. Spam inundates the plot and even the final credits at the end of the show. It's a triumph by repetition, as cheerful as it is overwhelming.

In this act, "Spam" initially refers to the canned meat of the same name. But this meaning is stretched to emphasize verbal reiteration and the uncontrolled replication of the term itself. It is this second meaning that came to be prominent in the realm of newly emergent online practices.

In the 1980s, the term "spam" was literally used as a type of invasion within MUD (multi-user dungeon) environments: people would type the word repeatedly so as to scroll other people's text offscreen. Content didn't matter; bulk did. The word "spam" turned into an tangible material, capable of physically blocking out unwanted information.

Sending an irritating, large, meaningless block of text in this way was called *spamming*. This was used as a tactic by insiders of a group that wanted to drive newcomers out of the room so the usual conversation could continue. It was also used to prevent members of rival groups from chatting . . . for instance, *Star Wars* fans often invaded *Star Trek* chat rooms, filling the space with blocks of text until the *Star Trek* fans left. This act, previously called *flooding* or *trashing*, came to be known as *spamming*.⁵

Spamming thus emerged as an online activity bent on displacing someone or something through verbal repetition. Words were used as extensive objects, which

^{4.} For a not totally accurate transcript of the dialogue in the sketch, see "The Infamous Monty Pythons Spam Skit," www.detritus.org/spam/skit.html (accessed June 3, 2011).

^{5.} Myshele Goldberg, "The Origins of Spam" (2004), http://www.myshelegoldberg.com/ words/item/the-origins-of-spam. "When the *Star Wars* fans got tired of intelligent debate or angry arguments, they went back to their 'spam and tang' logic. 'Whatever,' they would write, '*Star Trek* is just about spam and tang.' Spam and tang Spam and tang. They would copy the same message dozens, hundreds of times, filling up every line in the chatroom so nobody else could type."

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had the potential to push away other words. Nowadays, spam has become more of a commercial calculus. Bulk email messages with commercial or fraudulent intent⁶ flood data connections worldwide and cause substantial economic damage by wasting time and effort. Even though the number of customers acquired through this process is extremely small, it is still a viable business. Needless to say, effortless technological reproduction forms the economic framework of this venture. Spamming is the pointless repetition of something worthless and annoying, over and over again, to extract a tiny spark of value lying dormant within audiences.

Artificial Meat

But apart from these very obvious observations, what other conclusions can we draw? What else does spam as a chunk of contemporary digital rubble tell us about the present? Let's have a closer look.

Before "spam" the word became spam the object, it was, of course, an object already, the item celebrated by the Monty Python's Flying Circus number: the famous brand of canned meat produced by Hormel Foods Corporation. Its dubious composition has earned it many nicknames, ranging from "Specially Processed American Meats" to "Supply Pressed American Meat," "Something Posing As Meat," "Stuff, Pork and Ham," and "Spare Parts Animal Meat." Its elements look extremely suspicious; its essence is ersatz. And its cheapness is why it was included in many dishes in the postwar period, perhaps even too many, as Monty Python's sketch seems to suggest:

WAITRESS: Well, there's egg and bacon; egg, sausage and bacon; egg and Spam; egg, bacon and Spam; egg, bacon, sausage and Spam; Spam, bacon, sausage and Spam; Spam, egg, Spam, Spam, bacon and Spam; Spam, sausage, Spam, Spam, Spam, bacon, Spam, tomato and Spam; Spam, Spam, Spam, egg and Spam; (*Vikings start singing in background*) Spam, Spam, Spam, Spam, Spam, Spam, baked beans, Spam, Spam, Spam and Spam.

VIKINGS: Spam, Spam, Spam, Spam, lovely Spam, lovely Spam.

WAITRESS: . . . Spam Spam Spam egg and Spam; Spam Spam Spam Spam Spam Spam Spam . . .

VIKINGS: Spam! Lovely Spam! Lovely Spam!

Spam was, and still is, a cheap lower-class and army-food staple. It presents an uncanny mix between the natural and synthetic. Both organic and deeply inauthentic, it is an industrial product with some remnants of nature. Meat that has been ground so rigorously that is has leaped perhaps into another type of

^{6.} One of the most interesting examples in this context is the sale of an edition of Andy Warhol's nonexistent work *Spam* in an online auction at http://us.ebid.net/for-sale/reproduction-24x30-andy-warhol-spam-18697408.htm (accessed June 3, 2011).

existence: a deeply phony foodstuff nutritious enough to enable military invasions and sheer subsistence.

Precisely its composite nature makes "spam" an interesting term to consider in political theory, especially within the discussion of biopolitics. For Antonio Negri and Michael Hardt, flesh is a metaphor for a body not inhibited by social or any other restrictions. Hardt and Negri euphorically describe flesh as "pure potentiality" oriented toward "fullness," inhabited by angels and demons,⁷ as well as bristling with a new barbarian counterpower.⁸ Seen as an incarnation of vitality, flesh is imbued with religious and even messianic discourse about redemption and liberation.⁹ It is a post-Nietzschean repository of pure positivity.

In contrast to the heroic description of living flesh, Spam is just humble hybrid meat. It lacks the pompous attributes of flesh. It is modest and cheap, made of bits and pieces, which may be recycled and are staunchly inanimate. It is meat as commodity, and an affordable one at that. But this doesn't mean that it should be underestimated. For Spam addresses the hybridized commodity aspect of forms of existence that span humans and machines, subjects and objects alike. It refers to objectified lives as well as to biological objects. As such, it may speak more of actual conditions of contemporary existence than can purely biological terms.

Spam has been through the meat grinder of industrial production. This is why its fabrication resonates with the industrial (or postindustrial) generation of populations worldwide, who also endured the mincer of repeated primordial accumulation. Cycles of debt bondage, subsequent exodus, draft into industrial labor, and repeated rejection from it have forced people back into subsistence farming, only to reemerge from tiny fields as post-Fordist service workers. Like their electronic spam message counterparts, these crowds form the vast majority of their kind but are considered superfluous, annoying, and redundant. They are also assumed to replicate uncontrollably. These populations are spam, not flesh; made of a material that has been ground for generations by a never-ending onslaught of capital and repackaged in ever new, increasingly hybrid, and object-like forms.

Electronic spam highlights the speculative dimension of these bodies. It is painfully obvious that most products marketed via e-spam are supposed to enhance bodily appearance, performance, and/or health. Email spam is a format that attempts to act on bodies: by cashing in on role models of uniformly drugged, enhanced, super-slim, super-active, and super-horny people¹⁰ wearing replica

^{7.} Michael Hardt and Antonio Negri, "Globalization and Democracy," in *Reflections on Empire*, ed. Antonio Negri and Ed Emery (Cambridge: Polity Press, 2008), pp. 79–113.

^{8.} Ibid., p. 94.

^{9.} Antonio Negri, *The Labor of Job: The Biblical Text as a Parable of Human Labor*, trans. Matteo Mandarini (Durham, N.C.: Duke University Press, 2009), p. 72.

^{10.} Ellen Messmer, "Experts Link Flood of 'Canadian Pharmacy' Spam to Russian Botnet Criminals," *Network World* (July 16, 2009), http://www.networkworld.com/news/2009/071609-canadian-pharmacy-spam.html (accessed June 3, 2011). "In this case, 'Canadian Pharmacy,' hyping itself as 'the #1 Internet Online Drugstore,' is neither Canadian nor a pharmacy. In fact, 'Canadian Pharmacy' doesn't appear to exist as an established Web site but only a shifting hyperlink in a spam message generated by about eight crime botnets."

watches so as to be on time for their service jobs. More than 65% of email spam pushes anti-depressants and Viagra—or rather rip-off pills boasting the same effects—thus selling fantasies of perfectly exploitable bodies; coveted production tools for superfluous crowds. Both forms of spam are post-carnal: they deal with the production of enhanced, altered, artificial, processed, upgraded as well as degraded forms of flesh.

But Spam is not without its own counterpower. In Ed Ruscha's admirable 1962 painting *Actual Size*, a resplendent Spam can is caught flying in a downward trajectory. A glowing trail makes it look like a crossover between a comet and a Molotov cocktail, Spam as a solid object, airborne, combustible, and imbued with kinetic power. Spam tins can be hurled into bank windows. They are sturdy and resilient.

In some cases, culinary applications of Spam also manage to overturn its relations with warfare and deprivation. One example is the Hawaiian use of Spam as a delicacy. Spam became popular during World War II when Japanese were banned from fishing. Thus "Spam became an important source of protein for locals."¹¹ But far from remaining a hallmark of scarcity, it was redeployed as an ingredient for inventive dishes like Spamakopita, Spam Musubi, Spam Katsu, Spam loco moco, Spam fusion fajitas, Spam somen, Spam chutney, Spam Mahi Carbonara, and Spamaroni and Cheese. Similar interpretations of Spam exist in Korea, where Spam spread after being imported by the U.S. military. The German version is called döner kebab,¹² an extremely popular form of orientalist roast Spam impaled on supersized skewers. This dish was invented by downsized Turkish migrant workers in the '70s. Since then it has become Germany's unofficial national dish. These uses of Spam highlight the composition of the constituency of its consumers and (sometimes) improve its appeal to the senses.

But even electronic spam has unexpected affinities to social composition. Indeed, it was initially explicitly defined as a *res publica*, a public thing. One of the first spam filters developed was based on the quite unlikely finding that any email containing the word "republic" would almost invariably end up being spam. (The other dubious keywords being, interestingly, "madam" and "guarantee.")¹³

12. In contrast to pan-Ottoman versions of the dish, the German rendition is generally made of preproduced Spam cones. Eberhard Seidel-Pielen, *Aufgespießt—Wie der Döner über die Deutschen kam* (Rotbuch: Hamburg, 1996), p. 47. Seidel-Pielen claims that the decline of Fordist production systems in German car industries forced many industrial migrant workers to become small entrepreneurs and open snack bars, thus paving the way for Germany's only important culinary innovation in the twentieth century. Döner kebab is supposedly made from many official and unofficial components including cookies, sperm, dog food, and salmonella. He also recounts how young German neo-Nazis would come running to the döner stands even while arsoning migrant workers' hostels during the early '90s post-unification purification campaigns, showing the Hitler salute with one hand and clutching their döner with the other. Alan Posener, "Auch Deutschland dreht sich um den Döner," *Welt Online* (May 30, 2005), www.welt.de/die-welt/article3831396/Auch-Deutschland-dreht-sich-um-den-Doener.html (accessed June 3, 2011).

13. Brunton, p. 4.

^{11.} Michael F. Nenes, "Cuisine of Hawaii," in *American Regional Cuisine* (Hoboken, N.J.: Wiley, 2007), p. 479.

Spam—in its different versions—is thus resolutely public. It is always made from several sources: things and bodies, letters, metals, colors, and proteins alike. Its element is commonality; a mix of components animate and inanimate, as impure as one could possibly imagine.

Spam transforms words into carnal objects, as in Ruscha's painting. This incarnation goes way beyond its religious precedents, though. Let's face it: the incarnation of words today mostly takes the form of spam, spam, and spam.

History

But spam is not only a passive substance, endowed with the power of blocking and crowding. It also brings about very different forms of social organization. It changes the ways in which a group of people is structured and organized in interaction. In Monty Python's sketch, Spam becomes a pivotal term that points not only at a change in the paradigm of labor but also, perhaps, in the form of history itself.

An insert at the very end of the sketch shows a history teacher sitting in a classroom and detailing the invasions of the Vikings:



SUPERIMPOSED CAPTION: "A HISTORIAN"

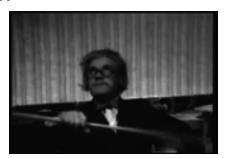
HISTORIAN: Another great Viking victory was at the Green Midget café at Bromley. Once again the Viking strategy was the same. They sailed from these fjords here (*indicating a map with arrows on it*), assembled at Trondheim, and waited for the strong northeasterly winds to blow their oaken galleys to England whence they sailed on May 23rd. Once in Bromley they assembled in the Green Midget café and Spam selecting a Spam particular Spam item from the Spam menu would Spam, Spam, Spam, Spam, Spam.... *The backdrop behind him rises to reveal the café again, the Vikings start singing again, and the historian conducts them*.

This unassuming scene demonstrates how the representation of history itself is transformed by the invasion of Spam. Initially, the historian gives an authoritative classroom-style account of events from a slightly elevated position and with a backdrop of maps.

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But as Spam starts to flood the dialogue, the wall behind the historian is revealed to be a stage curtain. As the skit continues, the curtain is lifted, and the initial café setting reappears behind it.



The historian then produces a conductor's baton and joins in the wild celebratory Spam chorus. First he appears to direct this cacophony, but he gives up on mastery and breaks the baton in two.



Two different modes of address are presented in this short sketch: first, the historian addresses the spectators as if inside a classroom. After the change of scenery the frontal address is abandoned, and our point of view is transformed into a mixture of a customer's and an audience's perspective. While the first mode of address presents a slightly authoritarian educational model, the second is clearly adjusted to a situation of service as performance or performance as service. This shift is catalyzed by the renewed invasion of Spam into the dialogue. Spam

expels the authoritative address and introduces a mode based on service and spectacle, sustained by customers suspended in midair.

The form of temporality inherent in the scene shifts as well: whereas in the beginning there is a clear narrative of invasion and progress, after the curtain lifts there is just the pure spectacle of incongruous, unsynchronized, profoundly multicultural, and salacious performative services. A joint celebration, which has no conductor, leader, or avant-garde, emerges spontaneously.

Spam's takeover transforms a pseudo-scientific account of history (and its "progress") into a performative chaos, in which actors, consumers, Spam, and service workers become indistinguishable. The linear and teleological progression of history, complete with its narration by academic administrators, is disrupted. The unity created by the frontal address of the classroom is gone. The mood shifts from education to celebration.

But the public composition of Spam is not merely about fun and merriment; it penetrates the framework of the production of spectacle, as the final credits, which start rolling immediately after this scene, demonstrate. Spam infiltrates job titles and names of producers and technicians. Exclamations from the service sector are interspersed: "not Sundays/Spam's off, dear." It's not as if Spam has erased labor; rather Spam has erased class by penetrating and invading labor and laborers alike.



Spam is thus given both as the description of labor and its performers. It is an activity, a subject, and an object, as well as an uncontrollably multiplying word that describes all of the former. People clearly are being included into the world of Spam and turned into potentially edible matter. Words are incarnated as objects, and vice versa. And the only slogan that rallies the chaotic Spam and service work/workers is given in the final titles of the sketch:



Service Not Included

This slogan is the inherent promise of Spam. While Hardt and Negri rave about the angelic potential of flesh and its relentless release of desire, the promise of spam is much more prosaic: "service not included" means simply that service should not be free. Even in the digital age, service cannot be reproduced indefinitely. At present, however, the line "service not included" is not a description but a claim that waits to be realized. In the world of service as performance (and performance as service), labor seems to be abundantly free; as if it too could be copy-pasted and duplicated digitally.

Of course, little of this issue is reflected in the piles of repetitive spam matter that clogs mail accounts and data lines worldwide. But why not see its material excess as anticipation of a time when the spam incarnated in service and spectacle workers, as well as in everybody else considered superfluous and dispensable, starts to speak and utters the slogan: service not included? Contemporary electronic spam tries to extract an improbable spark of value from an inattentive crowd by means of inundation. But to become spam—that is, to fully identify with its unrealized promise—means to spark an improbable element of commonality between different forms of existence, to become a public thing, a cheerful incarnation of data-based wreckage.

There is one question left to explore: how does Monty Python's sketch actualize a different form of history? At first glance the question might have been answered by the transformed behavior of the historian who gives up his vantage point of authority to wholeheartedly participate in the creation of chaos. But there is another aspect, too.

Lets return to Klee's painting. There is another mystery in this painting: the angel averts its gaze just slightly; it doesn't look at us straight on.

Is it perhaps distracted by something happening behind it? Could it have been caught at the very moment when the uniform background behind it starts lifting upwards, revealing itself as a stage curtain? Is it about to turn around to join in with a new scene instead of being torn between mourning past demise and a violently displaced future? And what will it order from the breakfast menu?

DAVID JOSELIT

"It's an amazing customer imprint," Mr. Ballmer said. "And Skype is a verb, as they say."¹

In 1967–68 Richard Serra prepared a famous list of verbs.² This compendium of actions—"to roll, to create, to fold, to store, to bend, to shorten, to twist, to dapple, to crumple, to shave," and so on and so on—implies matter as its proper "direct object." You can roll, fold, store, bend, shorten, twist, dapple, and shave lead, for instance, or crumple paper.³ This litany of verbs also includes two sustained "lapses" into nouns, including many gerunds (whose grammatical function is to transform verbs into nouns): "of tension, of gravity, of entropy, of nature, of grouping, of layering, of felting . . . " If the infinitive verb marks a time outside of action ("to rotate" suggests a possibility that need not be acted upon), Serra's nouns imply the dilated moment of an unfolding event—to be "of tension," for instance, means that force is being or has been applied. Indeed, Serra's early sculptures might be defined as matter marked by the exercise of force.⁴

Serra's verb list furnishes a terse blueprint for post-Minimalist sculpture. But it also implies a general theory of transitive art—of art produced through the exertion of force on something, or someone. Since what counts in transitive procedures is not the nature of the material acted upon (such as lead or rubber) but the generation of form through action, Serra's list can easily be repurposed

^{1.} Andrew Ross Sorkin and Steve Lohr, "Microsoft to Buy Skype for \$8.5 Billion," *New York Times* (May 10, 2011).

^{2.} The list was only published in 1972. See Richard Serra, "Verb List, 1967–68," in Richard Serra, *Writings/Interviews* (Chicago: University of Chicago Press, 1994), pp. 3–4.

^{3.} On the other hand, "to create" seems an exceptionally general action smuggled into this list of specific operations: like the last verb in Serra's long list—"to continue"—it is a meta-procedure.

^{4.} Serra is by no means the first artist to propose a transitive model of art wherein force generates form. A modern genealogy for such practices could easily be established that would span the manipulation of readymades (where perhaps "inscription" takes the place of "force") to Jasper Johns, whose paintings index the residue of actions taken upon or "in" them, to the various practices of the late 1950s and '60s in which scoring movements or actions was fundamental, including Happenings and Fluxus. The particular virtue of Serra's list is how clearly, directly, and uncompromisingly it asserts a "transitive" position.

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through a simple change of "direct objects." Relational Aesthetics, for instance, might be said to consist of learning how "to scatter, to arrange, to repair, to discard, to pair, to distribute, to surfeit" groups of people. Or, as I will argue below, the verbs "to enclose, to surround, to encircle, to hide, to cover, to wrap, to dig, to tie, to bind, to weave, to join, to match, to laminate, to bond, to hinge, to mark, to expand" may be applied to the behavior of pictures within digital economies. Such substitutions mark a shift from the manipulation of material (paint, wood, lead, paper, chalk, video, etc.) to the management (or mismanagement) of populations of persons and/or pictures. Under such conditions, "formatting"—the capacity to configure data in multiple possible ways—is a more useful term than "medium," which, all heroic efforts to the contrary, can seldom shed its intimate connection to matter (paint, wood, lead, paper, chalk, video, etc.).

Formatting is as much a political as an aesthetic procedure because the same image may easily be adduced as "evidence" in support of various and even contradictory propositions—determining a format thus introduces an ethical choice about how to produce intelligible information from raw data.⁵ In digital economies, value accrues not solely from production-the invention of contentbut from the extraction of meaningful patterns from profusions of existing content. As the term "data mining" suggests, raw data is now regarded as a "natural," or at least a naturalized, resource to be mined, like coal or diamonds. But unlike coal and diamonds, with their differing degrees of scarcity, data exists in unwieldy and ever-increasing quantities—it is harvested with every credit-card transaction, click of a cursor, and phone call we make. This reservoir of tiny, inconsequential facts, which is sublime in its ungraspable enormity, is meaningless in its disorganized state. Since such data is both superabundant and ostensibly trivial, what gives it value are the kinds of formats it can assume, which may be as wide-ranging as marketing profiles and intelligence on terrorism. Such a shift from producing to formatting content leads to what I call the "epistemology of search," where knowledge is produced by discovering and/or constructing meaningful patterns-formats-from vast reserves of raw data, through, for instance, the algorithms of search engines like Google or Yahoo. Under these conditions, any quantum of data might lend itself to several, possibly contradictory, formats.

The artist Seth Price has implicitly articulated—though never, like Serra, explicitly published—his own "list" of transitive actions appropriate to the epistemology of search. I will focus on three of Price's "routines"—or procedures of formatting—each of which lends itself to subdivision: "to disperse," "to profile," and "of effects." Together, they sketch an answer to the question: what to do with pictures?

5. For me, one of the most powerful examples of the consequences of data formatting is Colin Powell's presentation of supposed evidence of weapons of mass destruction in Iraq to the U.N. in 2003. The question of evidence and documentary truth-value has been a major one in recent art practices. For an important account of this, see Carrie Lambert-Beatty, "Make-Believe: Parafiction and Plausibility," *October* 129 (Summer 2009), pp. 51–84.

To Disperse

Price's best-known work of criticism is probably his 2002 book *Dispersion*, which, like many of his texts, is freely downloadable, making it a model of dispersion as well as a theoretical account of it. In a sense, the title says it all: to disperse is to

shift emphasis from creating new content to distributing existing content. As Price writes, "Suppose an artist were to release the work directly into a system that depends on reproduction and distribution for sustenance, a model that encourages contamination, borrowing, stealing, and horizontal blur."⁶ Several aspects of this passage repay close reading: first, for Price, dispersal diminishes rather than enhances a work's value. As he puts it in a subsequent passage, "what if [the work] is instead dispersed and reproduced, its value approaching zero as its accessibility rises?"⁷ In fact, while it seems logical that scarcity should enhance art's value (and conversely, that

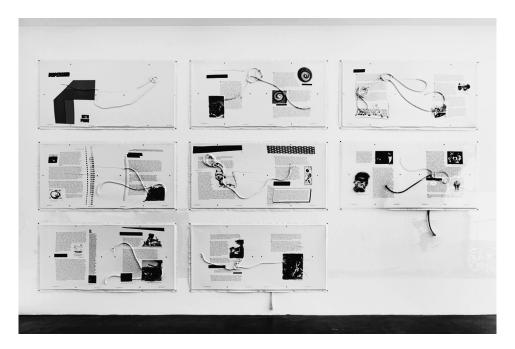


Seth Price. Dispersion. 2002-.

accessibility would cause it to drop to zero), this presumption is incorrect when it comes to actual contemporary image economies (including the art market),

6. Seth Price, *Dispersion* (2002), downloaded from www.distributedhistory.com, n.p.





Price. Essay with Ropes. 2008.



Price. Hostage Video Still with Time Stamp. 2005–.

where the massive distribution of reproductions—whether of the Mona Lisa or Lady Gaga—is precisely what confers value. As Price defines it, however, dispersion is a drag on circulation, a form of counter-distribution, where value is purposely diminished as opposed to accumulated through the dissemination of images.

A list of three transitive actions is included in the passage I quoted above: contamination, borrowing, and stealing. One possible pairing of these three refers to destructive events (i.e., contamination and steal-

ing), and another indicates the illicit or licit transfer of property (i.e., stealing and its innocent twin, borrowing). According to these characterizations, Price sees dispersion as a mode of transfer whose poles are marked by innocuous exchanges (borrowing) and their virulent converse (contamination). As the latter term suggests, dispersion can also carry a biopolitical connotation. And indeed, Price declares it to be "a system that depends on reproduction and distribution for *sustenance*" (my emphasis). Networks, in other words, provide life support for the individual images that inhabit them; and as in the human body, failure of the circulatory system will lead to death.

Finally, Price introduces the condition of "horizontal blur." Blur occurs when something or someone moves too fast from one place to another for it to register optically as a bounded form, making it a privileged figure of transitive action. Price stages such blur spatially in an ongoing series of works begun in 2005 titled Hostage Video Still with Time Stamp made on unfurled rolls of clear polyester film, known colloquially as Mylar, upon which are silkscreened degraded reproductions of an image taken from the Internet of the severed head of the American Jewish businessman Nicholas Berg, who was decapitated by Islamic militants. In these pieces, the physical effects of dispersion are manifested in three ways: first, a computer file—the germ of an artwork, as in many of Price's pieces is rendered nearly illegible, the result of several generations of reproduction, as Price digitalizes, compresses, downloads, blows up, and then screen-prints original footage. Second, while bolts of the printed Mylar are sometimes unrolled flush to the wall, at some point in their installation the material is twisted or tied into crumpled configurations that serve as a spatial metaphor for the ostensibly "immaterial" traffic of images online—as though successive screen views on a monitor had piled up continuously like a disorderly comic strip rather than being constantly "refreshed." Finally, third, the grisly and horrible physical violation of



Price. Hostage Video Still with Time Stamp. 2005–.



Berg is an explicitly biological form of "dispersion," in which a head is parted from its torso. The catastrophe of his decapitation results in the abject wasting of a body. It is the object of a perverse fascination for the artist (and the viewer) that verges on the erotic. As Price writes in another context, "Locating pleasure in benign decay is a perversion, for these structures are useless and wasteful, a spilling of seed, like gay sex, like gay sex."⁸ While some gay people might object to this characterization (I am not among them), Price's romanticizing (and even caricaturizing) rendering of gay desire nonetheless asserts something important: a nonproductive relationship to distribution, the violence of which is aggressively expressed by Berg's decapitation.⁹

8. Seth Price, *Was ist "Los"* [a.k.a. Décor *Holes*] (2003–05), downloaded from www.distributedhisto-ry.com.

9. In an era when demands for marriage rights have become the signature issue within gay activism, the characterization of "gay sex" as nonproductive feels a little nostalgic. I, for one, however, agree that one of the strongest political accomplishments of some gay and much queer activism is a critique of normative forms of *production* for which biological reproduction often served as a privileged model.

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The normative goal of distribution is to saturate a market. Once the dissemination of an image reaches a tipping point, it sustains itself as an icon (celebrity is the paradigmatic model for self-perpetuating images). Price, on the other hand, represents the failure to saturate, a perversion of distribution he calls "dispersion." Dispersion is slow, while standard forms of commercial distribution are fast. As Price puts it, "Slowness works against all of our prevailing urges and requirements: it is a resistance to the contemporary mandate of speed. Moving with the times places you in a blind spot: if you're part of the general tenor, it's difficult to add a dissonant note."¹⁰ Staging different rates of circulation is one type of routine appropriate to art in digital economies—it's a tactic for escaping the "blind spot" that results from moving along at the same rate as the market. Forms of critique that once would have been conducted through dissonant content are here reinvented as variable velocities of circulation. In other words, the core of Price's project has less to do with what he represents—even when that representation is inflammatory, as with the Nick Berg decapitation—and more to do with the transitive actions to which he subjects this content. In Serra's art, transitivity is expressed as force—the force necessary to mold matter. But, following an important distinction that Hannah Arendt makes between violence as the exertion of force and power as the effect of human consensus, we can recognize a difference between Serra and Price's transitive art.¹¹ The latter's object is populations of images rather than quantities of matter: he seeks to format (and not merely "reveal") image-power. One way he does this is to slow down the circulation of images¹²: in Hostage Video Still with Time Stamp, Price curbs the frictionless motion and instantaneous spatial jumps characteristic of navigation on the Internet and allows them to pile up in unruly masses; the gruesome decapitation he represents is also the figure of an acephalous media.

To Profile

There are few things more ubiquitous in contemporary life than profiles: some are composed voluntarily to be posted on social-media sites, but many, and perhaps most, are involuntary, like the data trails left by every purchase, cursor click, and mobile phone call one makes. Silhouettes have existed for ages, but profiling is modern—dating from the nineteenth century.¹³ A silhouette is a bounded

^{10.} Price, Dispersion, n.p.

^{11.} Arendt makes this distinction in her important essay "On Violence," in Hannah Arendt, *Crises of the Republic* (New York: Harcourt Brace & Company, 1972). In this essay, she writes, "*Power* corresponds to the human ability not just to act but to act in concert. Power is never the property of an individual; it belongs to a group and remains in existence only so long as the group keeps together" (p. 143). On the contrary, "*Violence*... is distinguished by its instrumental character. Phenomenologically, it is close to strength, since the implements of violence, like all other tools, are designed and used for the purpose of multiplying natural strength until, in the last stage of their development, they can substitute for it" (p. 145).

^{12.} In my book *Feedback: Television Against Democracy* (Cambridge, Mass.: MIT Press, 2007), I refer to this as "slowing down the trajective."

^{13.} On nineteenth-century forms of aesthetic profiling, see Allan Sekula, "The Body and the Archive," *October* 39 (Winter 1986), pp. 3–64.

shape that sharply delineates an inside from an outside: the information it carries lies entirely in partitioning a field. The verb "to profile" denotes the imposition of such a finite shape onto a set of perceived statistical regularities, as when scientists plot a straight line through an irregular array of data points, disciplining and abstracting inchoate (or sometimes merely imagined) patterns. The implicit violence of such projections is conveyed by the connotation of profiling in police work, where persons who belong to particular groups—be they organized by ethnicity, age, economic status, or gender—are believed to be more likely to commit a crime and consequently are more frequently treated as criminals. Profiling imposes a profile on populations of data (including visual data).

In his highly inventive practice, Price has developed two tactics related to profiling. In one, which is closely related to his strategies of dispersal, he makes large centrifugal works generated from small "icons" drawn from the Internet—each picturing a gesture of touching such as lighting a cigarette, kissing, or writing. These motifs emerge unsteadily, like optical puzzles, on blank expanses of wall bounded by several irregularly shaped "continents" of rare wood veneers laminated behind clear acrylic plastic. Because these giant puzzle pieces, which resemble landmasses in a wall map, are themselves free-form, it is not easy to recognize—let alone to remember the motif they partially delineate (I admit that the first time I saw one, I failed to



Price. Untitled. 2008.

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recognize the generating kernel at all). Michael Newman has beautifully described the effect of these works as that of a "'frame' [that] invites the viewer to project an image into the emptiness, and this emptiness bleeds into the surrounding space of the wall with an extension that is potentially infinite."¹⁴ As in Price's model of dispersion, where the circulation of images is slowed down, in this series of pieces the normative centripetal logic of profiling (which is aimed, as I have argued, at crystallizing a "concentrated" profile from an amorphous field of data) is opposed by a centrifugal form of dispersal, where the possibility of generating an intelligible silhouette is interrupted, slowed, and possibly even arrested. At the same time, the appropriated "icons" upon which they are basedall intimate moments of touching-deracinate face-to-face contact by transforming tactility into absence. Needless to say, this is precisely an effect of digital communication.



Price's second approach to profiling seems the opposite of his first in that it represents whole

as opposed to fragmentary objects. A series of vacuum-form works are molded over things or human body parts (rope, breasts, fists, flowers, and bomber jackets); sometimes they literally encase readymade lengths of rope that might spill out below the vacuum-form surface. These illusionistic reliefs adopt the logic of packaging, where a plastic shell molded to a commodity's contours both protects that commodity and constitutes its seductive surface. But while these profiles may be "whole," they are hollow—functioning as what Price likes to call a "hole." In this sense, they resemble the wood and acrylic wall pieces, where form is organized around a structuring absence. Indeed, the "hole" for Price is precisely not an absence, in the sense of a passive empty space, but an "event" within a rich surface or field of data. A profile is simultaneously empty and full, a hole and a whole. As he states in his largely appropriated book, *How to Disappear in America*:

There is the possibility that in the future people may be identifiable by their purchasing habits. Granted the point-of-sale data collected by computers would need to be immense, yet eventually pattern-recognition software may some day be able to provide authorities with perhaps 100 of the best possible "hits" on people matching your known buying habits. When—if ever—that becomes a reality, you can be sure you won't know about it until it's shown on cable television ...

^{14.} Michael Newman, "Seth Price's Operations," in *Price, Seth* (Zurich: JRP/Ringier Kunstverlag, 2010), p. 44.



Price. Cherries. 2011. Opposite page: Price. Vintage Bomber. 2008.

So alter your buying habits. You need to discard as many predictable patterns as possible. One of the most common mistakes is maintaining old habits. If you're a smoker, stop. If you don't smoke, start. If you enjoy hot and spicy foods, stop purchasing those items and change to mild foods. If you frequent bars, stop. This may seem an unusual step but patterns are predictable. Break them.¹⁵

The theory of profiling is that human subjectivity is a pattern bereft of interiority. The unconscious is a hole.

Of Effects

In *Digital Video Effect: "Holes"* (2003) and *Digital Video Effect: "Spills"* (2004), Price frames found JPEGs and video footage with digital masking effects that generate autonomous "events"; a variety of "holes" (such as round paper punch-outs) open in a black ground to reveal pinpoint views of a horrific image that is only revealed in its entirety momentarily, when the different views fuse together for a split second. A video image spills onto black ground and is succeeded by black amoebic forms that spill back onto the image, rendering it a kind of liquid. The

15. Seth Price, How to Disappear in America (New York: Leopard Press, 2008), pp. 37-38.



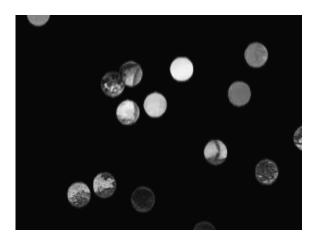
Price. Digital Video Effect: "Holes." *2003*.

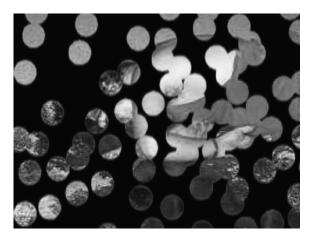
ultimate expression of this amorphous, aqueous (literally mercurial) sort of image comes in *Untitled Film*, *Right* (2006), an endless four-second loop of a wave purchased as stock footage that is nauseating yet mesmerizing. Tim Griffin has described Price's effects in the following terms:

> as a simulation device, the "effect" posits a kind of chronology where there is nonesuggesting some precipitant action responsible for the visual and aural phenomena taking place before the eye and ear. The "effect" creates nothing so much as a rhetorical hole in time, but only in order to fill that hole in advance with some false history or phantom memory for the individual viewer ... 16

Griffin's association of effects with an absent or invisible agency—a hole in time—is not only essential for understanding Price's work, it also points to a broader tendency in contemporary sculpture. In the open "scenarios" of artists such as Liam Gillick, Pierre Huyghe, and Rirkrit Tiravanija, who design environments that may or may not be activated through the presence of scripted or unscripted events, spatial structures are consecrated to hosting social effects. Such principles are also present in the new modes of sculptural composition exemplified by Isa Genzken and Rachel Harrison, where tangential connections between things reverse the centripetal effect of earlier twentieth-century montage and assemblage (to use terms I have applied already to Price), in favor of centrifugal tornadoes of divergent associations.

I wish to supplement Griffin's definition with two additional valences of effect. First, "special effects," as practiced by Hollywood cinema, render narrative as pure motion—often a virtually unbroken trajectory initiated in the opening scenes of a film and coming to rest only with the last credit. Blockbuster plots are

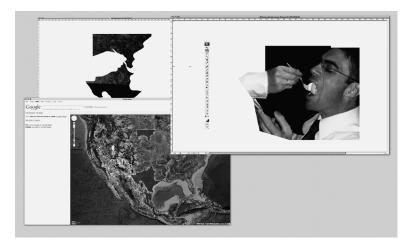






Price. Digital Video Effect: "Holes." 2003.







Price. Redistribution. 2007–. no more than conventional grids: what matters are the texture, velocity, and point of view with which spectators are carried through a standardized sequence of events. Such movies are not so much watched as navigated—like computer games where motion is frictionless, continuous, and defiant of gravity. The "effect," as Hollywood renders it, is almost pure transitivity in the absence of a direct object (unless that object is the spectator herself). Second, effects are literally a posteriori. They are, to put it plainly, consequences that cannot be fully anticipated during the phase of aesthetic production. And here, too, we may note a wider aesthetic shift. Artists like Price are primarily interested not in producing new content but in submitting existing pictures (moving and still) to various "ecological" conditions in order to see how they behave. This is why he can call *Redistribution* (2007–), a videotaped version of the kind of artist's talk given at art schools or museums, a work: in his practice, works are inextricable from their dissemination. It is also why he habitually reframes and remixes his texts, music, and



Price. Untitled Film (Right). 2006.

images, as well as making many of them available online on his website. A contemporary art devoted to circulation, is, of course, a creature of a specific ecology: the market. But instead of either giving up or selling out, Price, like more and more artists, games the market by surfing it. This leads to all kinds of effects: variable velocities, catastrophic jamming, viral proliferation, etc., etc. ¹⁷

17. This is the model of aesthetic politics I attempt to delineate in *Feedback*.

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Coda: Image Power

If one subscribes to Arendt's definition of power as the effect of a public, then populations of images might possess their own species of image-power—by saturating markets, on the one hand, or "going viral" on the other. This implies a shift in how the relationship between politics and art is conceived. Indeed, significant changes have occurred in this critical relationship over the past century—from avant-garde modes of revolution in the early twentieth century to postmodern, or neo-avant-garde, critique in the late twentieth century, to what I would call image-power in the early twenty-first century (a time when divisions between commercial and fine-art images are more and more difficult to draw). This is an art devoted to seizing circulation as a technology of power: *to disperse, to profile*, and *of effects*.

Sutured Reality: Film, from Photographic to Digital

FRANCESCO CASETTI

1. A Digital Revolution?

The advent of the digital image changes cinema's relationship with physical reality.¹ No longer, the story goes, are we dealing with an image based (as with photography on film) exclusively on a direct record of objects placed in front of the camera, the essential link between the world and its representation thus established. The digital image has the ability to offer us a representation of things without ever having need of things themselves, thanks simply to the elaboration of an algorithm.

The consequences of this situation are weighty. Faced with an image on a screen, we no longer know if the image testifies to the existence of that which it depicts or if it simply constructs a world that has no independent existence. Does this spell the end of the realistic nature of the cinema—the end of its ability to show us the world as it is, extending, in a certain sense, its life?

Many scholars, including Lev Manovich and Sean Cubitt, maintain that the advent of the digital pushes cinema further from reality and closer to animation.² Without rehearsing the current debate in depth, the following pages suggest that questions about the relationships between cinema and reality should be situated within a wider history of "realism."

First: from its inception, film theory has focused its attention not only on the peculiarity of cinema as a direct record of the physical world, but also on its capacity to create an impression of reality. In this light, it is important to reconsider the recent attempts to go "beyond indexicality"; cinematic realism does not depend solely on a "trace" left by objects on the filmstrip.

Second: an impression of reality is not simply a feeling experienced by the spectator: it is an effect triggered by a set of discursive practices that film has acquired along its history. Italian Neorealism is the climax of such a develop-

^{*} I want to thank David Joselit and Malcolm Turvey for the long and useful discussions we had during the writing of this text. This essay is dedicated to Dudley Andrew.

^{1.} I use "physical reality" following Siegfried Kracauer; see his *Theory of Film: The Redemption of Physical Reality* (New York: Oxford University Press, 1960).

^{2.} See Lev Manovich, *The Language of New Media* (Cambridge, Mass.: MIT Press, 2001), and Sean Cubitt, *The Cinema Effect* (Cambridge, Mass.: MIT Press, 2004).

ment—and I will extract from it a series of elements that undoubtedly provide a "sense of reality."

Third: these practices are quite successful when the realistic cues are immersed in a discourse. These cues must act as links in the discursive chain, providing an illusory mastery over the discourse while at the same time offering an illusory restitution of reality in its texture and in its density. Resurrecting an old and unfashionable word, I suggest that these cues must provide a "suture." Not every "sutured" discourse is necessarily "realistic"—scientific discourses may be sutured too, even if in a different way. Nevertheless, my argument is that an impression of reality is generated in film through the establishment of a link that simultaneously provides an imaginary discursive coherence and an apparent reestablishment of reality.

Fourth: in moving from analog to digital, we may assume (or better, presume) that the end of the "photographic era" does not necessarily imply the end of a realistic attitude. The absence of an existential link with empirical reality the absence of indexicality—may be compensated for by the presence of proper cues capable of functioning as sutures. Digital cinema is not condemned to the status of animation: its destiny is based not simply on the nature of its signifier but rather on the sum of its discursive practices. It is within these practices that cinema can satisfy its "claim to reality," or fall short of it.

2. Beyond Indexicality

In recent years, a number of scholars have argued that realism in cinema cannot be reduced to "indexicality." Stephen Prince, in a text from 1996, claims that "a perceptually realistic image is one that structurally corresponds to the viewer's audiovisual experience of three-dimensional space."³ He sketches a "correspondence-based model of cinematic representation," highlighting "the ways that photographic images and edited sequences are isomorphic with their corresponding real-world displays." Daniel Morgan, in a contribution of 2006, reminds us that film's orientation toward reality has to be described in different ways: we may say that a "film 'responds to,' 'takes into account,' or 'takes an attitude towards' the reality of objects in the images."⁴ What matters is not the presence of an actual link with physical reality but the "acknowledgment" of what a film as a medium is expected to do and what a film as a work of art chooses to do. In 2007, Tom Gunning argued that "the index may not be the best way, and certainly should not be the only way, to approach the issue of cinematic realism."⁵ Rereading an essay

^{3.} Stephen Prince, "True Lies: Perceptual Realism, Digital Images, and Film Theory," *Film Quarterly* 49, no. 3 (Spring 1996), p. 32.

^{4.} Daniel Morgan, "Rethinking Bazin: Ontology and Realist Aesthetics," *Critical Inquiry* 32, no. 3 (Spring 2006), p. 471.

^{5.} Tom Gunning, "Moving Away from the Index: Cinema and the Impression of Reality," *differences* 18, no. 1 (Spring 2007), p. 31.

of Christian Metz, Gunning suggests that the representation of movement bears an "impression of reality" even stronger than a "trace" of objects laid in front of the camera.

Gunning's insistence on the "impression of reality" is useful. I would add that this concept surfaced in film theories well before Metz (and the Filmologie). In the first two decades of the twentieth century, many theorists shared the idea that film's most relevant feature was its capacity to record reality, offering up a detailed and faithful image of it. In this view, cinema is a form of writing that is able "to arrest the fleeting aspects of life";⁶ it is a device that retraces reality "without hesitation or scruples, that is, devoid of venality, indulgence, or possible errors."7 And yet there were numerous theorists who insisted that cinema does not restore reality to us, but rather that it offers us an impression of reality. "Sitting before the white screen in a motion picture theater we have the impression that we are watching true events, as if we were watching through a mirror following the action hurtling through space. These are only images-small luminous twodimensional images—but they give the impression of reality far better than the scenery and backdrop of any of the best live theaters."8 This impression of reality is also extended to the cinematic representation of dreams and fantasies, to the point that reality and representation become equated on the screen: "everything is true and real, everything is equally true and real': the successions of the images of 'cinema' teach this."9

Attention to the impression of reality would reappear in the following years. In 1948, an influential member of the Filmologic movement, Albert Michotte, devoted an important essay to this topic, analyzing the mechanism of film perception.¹⁰ In the early '60s, Christian Metz (in the essay quoted by Gunning) took up the question again from a phenomenological point of view.¹¹ And later, Jean-Luis Baudry would do the same from a psychoanalytical perspective.¹² I do not wish to retrace the debate here: rather, I want to claim that reality has always occupied a double position in film theory. It may be linked to the source of the image—that which allows the image to be an index—but it can also be an effect of the image—something that emerges from how the image organizes its representation and challenges the spectator. Therefore, in the cinema, reality is both a precondition

^{6.} Ricciotto Canudo, "Reflections on Seventh Art" (1923), in *French Film Theory and Criticism: A History/Anthology 1907–1939*, vol. 1, Richard Abel, ed. (Princeton: Princeton University Press, 1988), p. 296.

^{7.} Jean Epstein, "The Senses I (b)" (1921), in French Film Theory and Criticism, vol. 1, p. 245.

^{8.} Giovanni Papini, "Philosophical Observations on the Motion Picture," *La Stampa* (Turin) (May 18, 1907), pp. 1–2.

^{9.} Georg Lukács, "Thoughts on an Aesthetics of Cinema" (1913), in *German Essays on Film* (London: Continuum, 2004), Richard W. McCormick, Alison Guenther-Pal, eds., p. 13.

^{10.} Albert Michotte, "Le caractére de 'réalité' des projections cinematographiques," *Revue Internationale de Filmologie* 3–4 (1948).

^{11.} Christian Metz, "On the Impression of Reality in the Cinema," Film Language: A Semiotics of the Cinema (New York: Oxford University Press, 1974).

^{12.} Jean-Luis Baudry, "The Apparatus: Metapsychological Approaches to the Impression of Reality in the Cinema," in *Narrative, Apparatus, Ideology*, ed. Philip Rosen (New York: Columbia University Press, 1986).

and a construct. This double status leads us to consider not simply the genesis of the filmic image but, more generally, the "effects" that it triggers.

3. Reality and Discursive Practices

A similar concern may even be found in the theorist who most famously championed indexicality, André Bazin.¹³ (Though, truly, the concept is not Bazin's—it is Peter Wollen's: indexicality as a mark of realism first emerges in his rereading of Bazin through semiotics.)¹⁴ There is no doubt that for Bazin cinema is a perfect fingerprint of reality. Its close communion with reality leads to selfannihilation: in *Bicycle Thieves* (Vittorio De Sica, 1948), the abolition of recitation, plot, and studio setting allows the film to coincide directly with life. Under this aspect, Italian Neorealism is the apex of film's history. Nevertheless, cinema is also a language that uses a series of procedures—such as the long take, the moving camera, or depth of focus—in order to give us the sense of being close to reality. Italian Neorealism, from this point of view, is nothing more than a style with its particular "rhetoric."

In "The Existence of Italy," Frederic Jameson pushes such a contradiction a step further.¹⁵ Either film directly reflects the truth of the world (and therefore possesses no aesthetic attributes) or it is a mediated representation of the world (and therefore its truth is only an "effect of truth"). However, Jameson also attempts to escape this contradiction, and provocatively likens realism to modernism. It is not correct to say that the former is a reflection of the world while the latter is the place where language is openly at work. Even realism is "a form of demiurgic praxis," a site of an aesthetic invention: the depicted world rests on a linguistic work and on the way in which symbolic processes interweave with politico-social ones.

Let us try to take up the challenge offered us by Jameson: we shall attempt to explore the discursive practices that cinema activates every time it presents itself as a realistic art. In so doing, I do not mean that the language of film is the medium's sole meaningful aspect—it just provides a framework that highlights the multifaceted and multilayered nature of the practices that allow the work to achieve a realistic effect.

4. Four Levels—and a Strategy

My hypothesis is that we must situate the relationship between cinema and reality (a complex relationship that spans the positions of "recording things as they are" and "offering a true portrait of things") at a minimum of four levels:

1. The filmic signifier (the material component of a depiction), which, if

^{13.} André Bazin, What Is Cinema? (Berkeley: University of California Press, 1967).

^{14.} Peter Wollen, "The Semiology of Cinema," in *Signs and Meaning in the Cinema* (Bloomington: Indiana University Press, 1969).

^{15.} Fredric Jameson, "The Existence of Italy," in Signatures of the Visible (London: Routledge, 1990).

produced by a direct contact with reality, provides an "existential connection" with it;

2. The filmic representation (what the image depicts, the content of a narrative), which, if organized properly, provides a "verisimilar" world;

3. The filmic enunciation (the very act of depicting something), which, if based on an "endorsement" of what is portrayed, lends truth to the portrait, through so-called veridiction;

4. The community of filmgoers, which may exhibit "trust" toward the filmic depiction.

These four levels bring into play a series of diverse elements. Some involve the way a discourse is organized, i.e., its syntax, while others engage with what a discourse does and causes to be done, i.e., its performativity. Some refer to semantic aspects, others to pragmatic ones, and still others to the social aspects connected to the exercise of language. Some openly respond to the "claim for the real," while others seem to contradict it. What is important is the capacity of a film to deal with the entire set of these components, to re-articulate them according to its purposes and goals, and to cause them to work together. In fact, what establishes realism is the ability of film to "interweave" and to "balance" the different layers in order to achieve a more or less coherent strategy. In other words, what really matters is the efficacy of a "negotiation" among the different elements at stake.

I shall offer some examples of how film, in order to "touch reality," was able to invest such elements and to deploy such a negotiation, by analyzing one of the outstanding moments of its history, Italian Neorealism.

5. The Filmic Signifier and Its Indexicality

The most immediate element at stake in a realistic discourse is the use of an image that has a direct connection with reality as a signifier. A photographic exposure is based on such a connection. From this perspective, realism in film is inextricably tied to indexicality.¹⁶ Nevertheless, an image is a full index not when it is merely "caused by" and "close to" empirical reality but when it displays this "cause" and this "closeness." In other words, a sign is experienced as "ontologically" linked to its referent when, reflexively, it highlights this link.

In Neorealism, we find what I call a "reflexive indexicality" in some specific cues:

1. The ability of the camera to grasp the real. The opening shots of *Bicycle Thieves* and Visconti's *Bellissima* (1951) are two examples: the main characters of interest (Ricci in the former film, Maria in the latter) must be located and accessed by the camera. In the first shot, they are offscreen (literally

16. On indexicality in film, see the relevant Philip Rosen, *Change Mummifies: Cinema, Historicity, Theory* (Minneapolis: University of Minnesota Press, 2001).

"lost"), and it is up to the camera to "find" them, thanks to a pan and crane that "explore" the space.¹⁷

2. The ability of the camera to witness reality "as it is." The "dark" images in the opening sequence of Rossellini's *Open City* (1945) are a good example. They record the condition of limited visibility implied by the actual setting—showing that reality is inaccessible without sufficient natural light.

3. The reduction of mediation. Casting choices provide interesting examples. The "miscast" roles in *Open City* (both Aldo Fabrizi and Anna Magnani were formerly known for their performances in *varietà* and film comedies), and later the use of nonprofessional actors, produce a sense of proximity to life, to everyday reality.

In all these examples the filmic signifier is not only existentially linked to reality—as a trace—but it also displays this link as an intrinsic quality.

6. Filmic Representation and the Verisimilar

At the level of representation, realism springs from a verisimilar depiction. The concept of verisimilitude takes us back to Aristotle: for the philosopher, the verisimilar, as opposed to the necessary, is not simply what happened but what can happen, the "probable"—and what happens is "proof" of what can happen. The shift from "what can happen" to "what happens, in the way in which it happens," and vice versa, is the core strategy of mimesis.

In film, in order to achieve a verisimilar representation, rather than a "necessary" succession of events (that triggers a "mechanical" narrative), we need a "possible" set of events that becomes an "actual" story. In Italian Neorealism, the shift from possible to actual is highlighted in various ways:

1. A hybrid narrative: films often deal with dramatic—i.e., extraordinary situations, simultaneously casting characters taken from everyday life. This combination results in a tragedy with comic components.

2. A non-teleological narrative: in *Bicycle Thieves*, each section of the story is organized toward a goal, which then fades as a new goal arises (the search for work, which becomes the search for the bicycle, then for the thief, and finally for the love of the son). The narrative presents a "flow" of events and a continuous displacement.

3. An inclusive narrative: situations are depicted in "all" their components, without regard to their relevance. Film is a "whole" that holds together a multifaceted reality. An example of this can be found in Rossellini and his trans-political attitude.

4. A shared narrative: stories foreground a common sense of grief for a national tragedy, or a collective memory.

17. Of course, we must not forget that Ricci and Maria are two fictional characters: the camera grasps the bodies of the actors embodying these characters.

On the one hand, all these kinds of narrative are "open" to the entire set of possibilities offered by common experience; on the other hand, they offer a "choice" among these possibilities not determined by any necessity. In other words, a story must gather possibilities, not reduce them to a (mechanical) plot.

7. Filmic Enunciation and Veridiction

The third element in play here is filmic enunciation, i.e., the act or process through which a film is produced as a text. Enunciation does not refer to the concrete work of filmmaking—instead, it is a linguistic realization, a subject's personal appropriation of the set of possibilities offered by a *langue* in order to create her own discourse.¹⁸

As a consequence of an enunciation, the subject is "implied" in her own discourse: her image emerges from the choices she makes, as well as from the type of voice that emerges from the film, from the distance the film maintains from what it recounts, and, especially, from the point of view the film establishes on what it tells or shows.¹⁹ The point of view is relevant, for it "endorses" what is shown; it makes clear whether for the subject of enunciation the depiction is a matter of fact or a simple hypothesis, an impersonal description or an act of personal witnessing. It is thanks to a point of view that a subject defines the "truth" of its own discourse (an act that is called veri-diction: to tell the truth).

A realistic discourse may bear different points of view. A first-person narrative highlights the act of appropriation and the fact that what is depicted is also "lived," while a third-person narrative emphasizes reality's capacity to speak for itself and the absence of distance between a discourse and what is depicted. This leads us to the question of what kind of instance governs Neorealist films. A firstperson narrative? An individual or a collective first-person? An institutional firstperson? A third-person or an anonymous voice? To answer these questions, it is useful to take into account the following elements:

1. The voice-over: many Neorealist films are introduced by a voice-over that "takes part" in the events, but also "gives meaning" to them from outside: *Paisan* (Rossellini, 1946), *Germany Year Zero* (Rossellini, 1948), *The Earth Trembles* (Visconti, 1946), and *Bitter Rice* (Giuseppe De Santis, 1949). Captions often have the same role, as in *The Earth Trembles* and *Germany Year Zero*. Here the point of view brings to the surface a collective or historical "consciousness" that is involved in the events because they belong to everyone.

18. Emile Benveniste, *Problems in General Linguistics* (Coral Gables, Fla.: University of Miami Press, 1971).

19. I have chosen to use the pronoun "she" (or "he") for the sake of clarity. But I should have used the pronoun "it": a subject of enunciation is that which moves the discourse, as much as it is a product of the discourse itself. More precisely, it is just an image of a supposed realizer, as implied in the realization. So "it" works better than a "he" or a "she," in order to designate such an instance.

2. The internal observer: few Neorealist films adopt this solution. Among those that do is *Bicycle Thieves*, which is seen through the eyes of a little boy. Here the point of view is from within the events, and it emphasizes proximity to what happens.

3. The use of documentary footage, as in *Paisan*. Here the point of view belongs to cinema as such, and it foregrounds film's capacity to record reality.

4. The shift from a non-diegetic enunciator to a diegetic enunciator. This solution involves a mobile point of view, which merges a character's consciousness with an external view of the events. As the story progresses in *The Earth Trembles*, for example, we shift from an extra-diegetic instance (captions in the opening sequence) to an infra-diegetic one (the voice-over) to a diegetic one (the sequence in which Ntoni, speaking with the little Rosa, recapitulates what happened to him and gives the events their correct meaning).

These different options define the various aspects of testimony (since we are speaking here of discursive practices, I can write "textimony"). The fourth option is peculiarly interesting: it connects a gaze from outside or above to a gaze from inside—in other words, it embodies a point of view that previously was more comprehensive and more abstract. In this way it enhances both our empathy and our implication in the depicted events.

8. A Social Trust

The fourth element at play in generating effects of the real is the confidence of filmgoers in what they see. This confidence is stronger than the "intentional suspension of disbelief" at work in narrative: it is a positive reliability, the certitude that filmic images "record" and "witness" reality. In order to evaluate such trust, we must analyze the filmic text both in its "perlocutive" components, as a "promise" to its spectators, and in its "metalinguistic" components, as a representation of its own reception²⁰—and then, if necessary, we may also move outside the filmic text, to take into account documents such as reviews, debates, filmgoers' letters, etc. In this respect, possible questions may be raised:

1. Whom/what do we trust? The depicted world or the filmmakers themselves? The flood of statements that usually accompanied Neorealist films before and after their release may be seen as an attempt to imbue the author with ultimate reliability.

2. How is trust represented in the film? An example in the context of Neorealism is the theme of individual and social belief: in *Bicycle Thieves*, we have the loss of all confidence in it; in *Bellissima* we face a state of illusion; and in *Senso* (Visconti, 1954) we discover its deceit.

^{20.} If I understand the concept correctly, the idea of "acknowledgment" suggested by Daniel Morgan could usefully help to describe the play of "obligations" and "expectations" triggered by film as a medium and implied in my description of "trust." See Morgan, "Rethinking Bazin."

9. Negotiations: Points of Contrast and Tensions

A "realistic" film is neither an entity that takes into account all these elements nor one that uses them in an ordered and coherent way. A text is always a site of conflicts, tensions, and even gaps, and a "realistic" text is no exception. How and where could the different elements of filmic realism conflict and collapse?

1. On an individual level, realistic and nonrealistic cues may coexist in close proximity. For instance, at the level of the signifier, indices and icons are placed side by side in *Shoeshine* (De Sica, 1946) with sequences set in the street, which try to capture the "fleeting moment," and sequences set in prison, which transpire in an environment constituted by an almost Piranesi-like set. *The Earth Trembles* does the same by simultaneously employing real settings and a highly stylized (pictorial) composition (i.e., the wives waiting on the rocks for their husbands after the storm). At the level of representation, *Open City* mixes a set of well-structured fictional characters with a non-teleological narrative.

2. The same co-existence of realistic and nonrealistic cues exists between various levels. In *Bellissima*, for example, representation appears to be a faithful "portrait" of everyday life, even as the enunciation is self-doubting (Magnani in front of the mirror asks herself, "What does it mean 'to act? If I pretend to be another . . . ") in a way that ultimately undermines the representation itself.

3. Furthermore, it should be noted that the soundtracks of Neorealist films were never recorded live, but were made up of reconstructed noises and dubbed dialogues. In other words, in Neorealism sound does not have the same character of "reality" that images are assumed to have.

10. Negotiations: Suturing the Contrast

The contrast between a variety of trends and drives at each level and among different levels can be arranged in different ways to evoke the sensation of realism.

a. Dominance: in *Shoeshine*, the sequences eschewing a documentary attitude (the long section of the film set in prison, or the dream sequence of the horse) are almost put in parentheses—and the "realistic" elements (the acting by the boys, the plein air setting) are placed in the forefront.

b. Saturation: in *Paisan*, each episode deals with the problem of the interrelations between Americans and Italians. From a situation based on "misunderstandings" (in the first episode, Carmela and American Joe are unable to have a conversation), we move to a situation of complete understanding and shared experience (in the last episode, Cingolani and Al die together). The progressive attainment of proximity among individuals echoes the increasing closeness of the filmic image to reality. In the first episode, the narrative is still "fictional"; in the last, we get a thorough "documentary." This capacity of representation to "mimic" the signifier results in a sort of redundancy: all elements in the film look like they follow the same trajectory and correspond to each other.

c. Displacement: *Bitter Rice*, and the long debate in the communist newspaper *L'Unità* following the film's release, is a good case study. Leftist militants reacted against what they considered a "false" representation of the world of the rice-paddy workers; though the newspaper's editor-in-chief "condemned" the film, he claimed that its director, a militant communist, deserved his readership's trust. The belief in the veracity of the film was thus re-situated at the level of enunciation and then turned back, re-attributed to the level of representation.

d. Compensation: in *Bellissima* the unrealistic aspects are not hidden; on the contrary, the sequence in which Magnani plays the role of an actress in front of a mirror is highlighted (and echoed by other episodes: e.g., the melodramatic discussion with her husband in front of the neighbors, and the dance and theater lessons of her daughter). Such unrealistic moments have a reflexive function: the "author" is fully aware that a film is based on fiction; nevertheless, he tries to achieve a sense of reality, and the display of fiction renders his difficult task more rewarding. We may enjoy the truth of what is not affected by fiction, but we also enjoy a fiction that displays its own truth.²¹

These different ways of "arranging" contrasts are significant. They bring to the surface a recurring need to find a sense of unity and accord. Moreover, they produce an illusory mastering of the elements displayed by film. And finally, they seem to restore the texture of reality.

We may use the term "suture"—restituting with new connotations a term that originally made its mark in Jacques Lacan's work²²—to indicate the very moment in which the structure of the discourse is "sealed," an instance of cohesion is established, and the density of reality is apparently restored. Even if heterodox, the utilization of the concept here preserves some of its original implications.

The different ways of defusing conflicts that I have enumerated illustrate different forms of suture. In the case of dominance, suture results from the presence of a foregrounded element: the chain of the film components is "linked" through the (illusory) idea that these elements conform to a hierarchy. In the case of saturation, the "suturing element" is the most permanent one because of a sense of the (illusory) coherence of the text. In the case of displacement, the suture arises from an element that provides a mirror in which the text itself can be reflected: the link is granted by the (illusory) idea that text and context have a mutual consistency.

^{21.} Outside cinema, this is the case discussed by Didi Huberman in *Images in Spite of All: Four Photographs from Auschwitz* (Chicago: University of Chicago Press, 2008): the photos taken by prisoners provide a true depiction of the *Lager*, precisely because they are unable to represent it. André Bazin uses the same argument in *What Is Cinema*?: the documentary on the *Kon-Tiki* is a perfect witness, precisely because it does not show the moments of danger (during which the sailors have no time to shoot any footage).

^{22.} Jacques-Alain Miller, "Suture (Elements of the Logic of the Signifier)," Screen 18, no. 4 (1977/78).

Finally, in the case of compensation, the suture is realized by the "sacrifice" of a component, which betrays its apparent role in order to serve an (illusory) overwhelming intention.

This leads us to a paradoxical conclusion: it does not matter what sustains the realistic effect of a film—whether formal devices or thematic components, or even a "sense of medium," a perceptual pattern, etc. What matters is the presence of a multifaceted and multilayered discursive strategy, one that assembles the chain of discourse, thus providing a pervasive sense of mastery and a flawless sense of reality, even if illusorily.

I should add that a suture also responds to a context, which provides a sort of "touchstone" for the effectiveness of the link. And a suture may also work in the opposite direction: the link, if provided by some other element—for example, a dream—could generate an overwhelming sense of unreality: this is the case of the last sequence of *Miracle in Milan* (De Sica, 1951), which, through a strategy of retrospection, makes us read the entire film back as a fairy tale. What is essential is the presence of a link with its (illusory) effects. Style, then, is nothing other than the institutionalization of such a link.

11. Digital

What happens when we make the switch from the analog to the digital? Neorealism provides a sort of "matrix": after Neorealism, we may easily discover other ways to produce reality effects. From the cinema of the 1970s, with its odd narratives and its grainy images, to the "reality shows" of a television pretending to record even the intimacy of our lives, the ways to reach a "sense of reality" outline, literally, a long history. And it is within this history that we may approach the digital.

There is no doubt that many elements undergo a transformation.²³ At the level of the signifier, instead of an image functioning as a "trace" of the real, it is the "product" of an algorithm. Changes also occur at the level of representation: the verisimilar is no longer constituted by the possible that may occur, and does, but rather by the possible that "will occur"—digital representation is always a promise, rather than a statement. And there are changes at the level of social trust: because of the wide utilization of applications such as Photoshop, we "know" that a digital image may not be what it pretends to be.

I will offer three concluding observations. First, unless films produced, or post-produced, or merely released in digital format abdicate the discursive practices belonging to the traditions of cinematic language, we may assume that the usual "suturing points" still function.

Second, we see the widespread "instrumental" use of the digital—i.e., a use that provides what is currently impossible to obtain from analog photography, if

^{23.} On this topic, see Laura Mulvey, *Death 24 x a Second: Stillness and the Moving Image* (London: Reaktion, 2006).

only for the purposes of postproduction. One example is the use of digital techniques to fill the frame with extras, which is less expensive than hiring actors to populate the background. In this case, the strategy is to "minimize" the role of the digital and to "maximize" the effect of reality provided by the representation. We have a suture based on a compensation, thanks to a sacrifice. Here lies the difference between *Gladiator* (Ridley Scott, 2000), a film that is intended to be a realistic epic, and *300* (Zack Snyder, 2006), which does not aim to be realistic in the least.

Third, we may imagine new forms of suture, associated with fields that imply different practices. I will consider just a few possibilities. Since realism is still associated with the idea of a direct gaze at reality (this is why the role of the signifier as an index is so relevant), a "suturing point" may be represented by the presence of "raw shooting" like that provided by surveillance cameras or cell phones. These devices are seemingly still devoted to capturing the world as it is. Upon this presupposition, *Timecode* (Mike Figgis, 2000), with its use of a split screen that reminds us of a wall of surveillance monitors, can claim a strong sense of reality even if based on a very artificial presentation. But realism is also associated with the idea of an image in movement—as Tom Gunning correctly reminds us.²⁴ Consequently, "special effects" that also highlight the mobility of the depicted world may provide a "sense of reality" and suture the set of elements at play. I would suggest, for instance, that, paradoxically, the "flights" in Avatar (James Cameron, 2009), even if quite similar to the "flights" in Second Life, provide a connection with the realistic tradition. What is at play here is raw surveillance and movement. These are just two possibilities among others-two possibilities that deepen and radicalize what film used to do in the past.

Digital realism is a field in need of much more inquiry. What I want to make clear is that the satisfaction of the basic "claim for the real" that cinema expresses is never fulfilled by a single element—even if it is the apparently fundamental indexicality of the signifier or the "transparency" of the representation. This issue is taken up in a recent book by Dudley Andrew, *What Cinema Is!*—a sort of manifesto praising film as an essentially realistic art.²⁵ I would add that realism is produced by a negotiation between contradictory elements—a negotiation capable of providing a "suturing point." It is the presence of these "sutures"—always provisional, always fragile—that connects the digital to the realm of reality rather than to the realm of animation.

Translated from the Italian by Daniel Leisawitz

^{24.} Gunning, "Moving."

^{25.} Dudley Andrew, What Cinema Is! (Oxford: Wiley-Blackwell, 2010).

Starry Skies and Frozen Lakes: Alexander Kluge's Digital Constellations*

PHILIPP EKARDT

Film, Literature, and TV

Since its beginnings in cinema and literature, the work of Alexander Kluge has manifested itself in increasingly diverse formats and media environments, including television and, more recently, the digital realm. Kluge's cinematic debut was the 1960 Brutality in Stone (Brutalität in Stein), co-directed with Peter Schamoni, the first in an extended sequence of short films, most of them executed according to a montage principle in which documentary segments are juxtaposed with static visual material (including illustrations and printed pages) in combination with often asynchronous sound samples and commenting voice-overs. Subsequently, Kluge also began to experiment with longer durations in his cinematic work, starting with Yesterday Girl (Abschied von Gestern) of 1965, in which he introduced acted sequences that can be read as nuclei for potential filmic plots, though these often unfold only in a fragmented manner. These elements are interspersed with fields of onscreen lettering. Reminiscent of silent film's intertitles, these written-word screen projections provide commentary and punctuation, and have become a visual trademark of his work.

Like his films, Kluge's literary texts emerge from an aesthetic commitment to brevity. His 1962 short-story collection *Lebensläufe* (*Case Histories*) was the first in what has become a sequence of volumes constructed out of brief core components and presented in sequential, non-narrative order. Kluge's subsequent literary works include the 2007 *Geschichten vom Kino* (*Cinema Stories*), his chronicle of both the history of cinema and his own history as a filmmaker; and the slender volume *Dezember* (2010), a collaboration with the artist Gerhard Richter, whose photographs of the snowed-in woods surrounding the Swiss Alpine resort town of Sils Maria are juxtaposed with Klugean tales

* I would like to express my gratitude to Alexander Kluge for patiently and generously responding to my inquiries on several occasions. I thank David Joselit for encouraging and supporting my interest in Kluge's work, as well as for his editorial suggestions and advice on this piece. Thanks to Jan Kedves for helping me improve an initial version of the interview script, and to Jess Atwood Gibson for polishing the linguistic form of this essay.



1. Dezember 1941: Eissturm an der Front vor Moskau. Es müßten zwei Armeen in Reserve stehen, sagt Generalfeldmarschall Fedor von Bock, der gegen 17 Uhr mit dem Oberkommando des Heeres telefoniert. An sich brauchen wir, fährt er fort, keine Waffen zur Bekämpfung der Russen, sondern eine Waffe zur Bekämpfung des Wetters. Nichts von diesem Geschehen im Osten ist in den Häusern Deutschlands unmittelbar wahrzunehmen.

Dr.-Ing. Fred Sauer, chemals Siemens, für die Versuchsabteilung des Heereswaffenamtes tätig, untersucht die Anatomie von Mammuten. Ließ sich aus den kurzen Rümpfen und gedrungenen Körpern dieser erfahrenen Riesen der Kaltsteppe (die es mit ihren staubigen, immerwährenden, extrem kalten Ostwinden im Jahr 1941 nicht mehr gibt) eine winterfeste Panzerwaffe entwickeln? In den gewaltigen Säulenbeinen, so Fred Sauer, wärmte das sauerstoffhaltige Blut, das aus dem Körper dieser Tiere strömte, das verbrauchte kalte Blut, das zum Körper hinaufstieg. Das war ein Hinweis auf die Möglichkeit, durch doppelte Kreisläufe in den Motoren (einer zur Erwärmung des Gerätes und einer für den Antrieb) eine Aushilfe gegen die Tükke des russischen Winters zu finden. Das Projekt kommt für die Entscheidung in diesem Jahr zu spät.

Der Monat Dezember 1941 war durch Zeitarmut charakterisiert.

Alexander Kluge and Gerhard Richter. Dezember. 2010.

on the themes of winter, stasis, and coldness.1

Whereas the rate of Kluge's literary production has steadily increased over the years, in his visual work he has gradually shifted away from classical film production.² Coinciding with a reform in the funding of German films in the late 1970s that rendered non-corporate independent cinematic work increasingly difficult to finance, Kluge migrated to electronic equipment (cameras, mixers, etc.) and two new formats: his so-called "minute-films"—short clips often combining historic footage with animated elements and visual manipulations, such as masks, coloring, etc.—and his television features. When *October* dedicated a special issue to his work nearly twenty-five years ago, Kluge had just embarked on this phase of his production.³ While these

^{1.} Alexander Kluge, *Lebensläufe* (Stuttgart: Goverts, 1962). Translated as *Case Histories* (New York: Holmes & Meier, 1988). *Geschichten vom Kino* (Frankfurt am Main: Suhrkamp, 2007). Partial translation: *Cinema Stories* (New York: New Directions, 2007). *Alexander Kluge, Gerhard Richter: Dezember* (Frankfurt am Main: Suhrkamp, 2010).

^{2.} In addition to his literary works, his writings also comprise a number of volumes accompanying his films, as well as theoretical treatises coauthored with the Marxist philosopher Oskar Negt.

^{3. &}quot;Alexander Kluge: Theoretical Writings, Stories, and an Interview," ed. Stuart Liebman, special issue, *October* 46 (Fall 1988).

features, which are broadcast twice weekly late at night on German commercial networks, occasionally contain documentary montages, textual elements, and music, for the most part they consist of conversations between Kluge—who, while never visible on camera, achieves a heightened aural presence through his insistent questioning from out-of-field—and "experts" of all sorts, from politicians and thinkers to actors and artists. The onscreen image is sometimes altered through a text-field on its lower edge—where titles, comments, and pieces of additional information run from left to right in the style of a news chyron—while the background behind the interviewee, if filmed in a blue box, is often subjected to varying visual alterations and manipulations. The conversational segments are interrupted by fields of lettering and by additional pictorial elements, such as re-filmed book illustrations. Kluge's programs are marked by a style so divergent from their televisual environment, and so obstinately sustained, that they have achieved instant recognition value, even when encountered in the most fleeting moments of channel surfing.

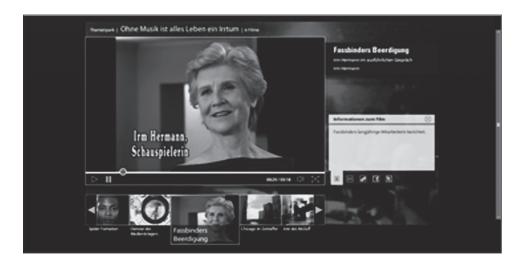
Digital Works

Over the course of the past several years, Kluge has also integrated digital media—DVDs and a Web site—into his work. His television production company maintains an Internet presence, www.dctp.tv, where Kluge recombines selected television features with elements from his analog films, as well as new documentary and animated clips and independent short interviews. These elements are grouped in so-called "thematic loops," which are partially organized under larger "theme complexes." If clicked on, a loop appears in the form of a navigable bar that can be scrolled laterally. Above it opens a window where a clip from the selection begins to play. On the navigation bar, the individual elements of a loop are each represented through both a still image and a title. While organized in a bidirectional linear fashion (scrolling is possible left to right), all elements are independently accessible and can be watched in variable order.

Kluge's use of the DVD started as documentation of his analog and early electronic filmic œuvre, which he made accessible in 2007 as a single boxed set, followed by another compilation containing a selection of television features.⁴ A crucial development occurred in 2008, when Kluge published his first proper production for DVD, *Nachrichten aus der ideologischen Antike* (News from ideological antiquity) (three discs, approximately nine hours), which takes its basic impulse from an investigation into Sergei Eisenstein's unrealized film about Marx's *Das Kapital.*⁵ The term "published," with its associations of magazines, newsprint, and book editing, is chosen deliberately: The *Nachrichten* and Kluge's major subsequent works for DVD have

^{4.} Alexander Kluge, *Sämtliche Kinofilme* (Frankfurt am Main: Zweitausendeins, 2007). Alexander Kluge, *Seen sind für Fische Inseln. Fernseharbeiten 1987–2008* (Frankfurt am Main: Zweitausendeins, 2009).

^{5.} Alexander Kluge, *Nachrichten aus der ideologischen Antike. Marx—Eisenstein—Das Kapital.* (Frankfurt am Main: Filmedition Suhrkamp, 2008). Eisenstein's *Notes for a Film of "Capital,*" translated by Maciej Sliwowski, Jay Leyda, and Annette Michelson, appeared in *October* 2 (Summer 1976), pp. 3–26. See ibid., pp. 27–38, for Michelson's pioneering essay on Eisenstein's project, "Reading Eisenstein Reading *Capital.*"



Kluge. Without Music Life Is a Mistake: Fassbinder's Funeral. *c. 2008.*

so far all been distributed through the Suhrkamp publishing house, which is also home to Kluge the literary author and theorist. Through the medium of the DVD, Kluge has thus devised a strategy for commercially mediating his time-based visual work that allows him to bypass the film and television industries—a potential that, as Kluge explains in the interview to follow, may also be offered by online-platforms such as YouTube.

The Nachrichten, as well as its successors—*Früchte des Vertrauens* (Fruits of trust, which was occasioned by the financial crisis that broke out in 2008) and *Wer sich traut, reißt die Kälte vom Pferd* (Who dares pulls the cold off its horse), a sister project to Kluge and Richter's book *Dezember*—are clearly recognizable developments of Kluge's earlier analog, televisual, and authorial productions.⁶ To varying degrees, the works consist of clips, interviews, segments from Kluge's analog films, and sequences of onscreen lettering extended to unprecedented durations. They most closely resemble Kluge's late works for the cinema (e.g., *The Patriot [Die Patriotin]*, 1979, and *The Power of Feelings [Die Macht der Gefühle*], 1984). These are characterized by picture-book-style montages, which often give the viewer the feeling that she or he is leafing through the pages of a printed and illustrated volume, along with acted scenes and plot fragments. Kluge's DVDs now offer a similar viewing experience, featuring a new type of filmed segment whose design is governed by a commitment to "*ars povera*," an aesthetic doctrine that renounces artistic splendor, embellishment, and high production

6. Alexander Kluge, *Früchte des Vertrauens* (Frankfurt am Main: Filmedition Suhrkamp, 2009). Also, Kluge, *Wer sich traut, reiβt die Kälte vom Pferd. Landschaften mit Eis und Schnee. Stroh im Eis* (Frankfurt am Main: Suhrkamp, 2010).

values. These clips often consist of a single static take—one could call them visual sketches—in which the camera catches the simplest of motifs. In the *Wer sich traut* project, for example, one sees a formation of snow; flakes drifting close to the lens with the blurred surface of a frozen lake in the background; and the view of wintry trees from the balcony of Kluge's apartment. Kluge here

captures variations on the theme of ice and snow with a matter-of-fact approach that never seeks to derive an aesthetic surplus value from the potentially romantic motif of the beautiful cold. In their unassuming, stripped-down style, these images provide further evidence of Kluge's declared independence from plenitude, constituting instead of sober, visual exemplifications of the concept.

In comparison with Kluge's long films and his television features, the elements of his DVDs are less rigidly coordinated. The films and features follow a linear structure and arrange their individual components in a lineup in which later segments partially refer back to earlier ones. On his DVDs, Kluge seems to have eroded this mode of sequential development in favor of more general groupings, all of which relate to a common topic but none of which depends on being deciphered in a particular order, before or after another chapter. The elements of Kluge's DVDs have thus entered a stage of loose coupling, as it were, an organizational



Kluge. Wer sich traut, reißt die Kälte vom Pferd (Who dares pulls the cold off its horse). 2010.

flexibility enhanced by the collections of literary stories that come with each DVD project. These are included as text-files, as well as in accompanying booklets in which the usual information (the list of disc chapters, producers' credits, etc.) is banished to the back. These booklets form an integral part of the DVD works; in the case of the *Wer sich traut* project, the booklet has even been given a proper title—*Stroh im Eis* (Straw in ice)—while the actual disc carries the title

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Landschaften mit Eis und Schnee (Landscapes with ice and snow). Together, they constitute a digital/print diptych that figures under the overarching title Wer sich traut, reißt die Kälte vom Pferd.

Picturing the Constellation

One of the ways in which Kluge addresses the digital is by figuring it as a constellation, and indeed, the sky with its constellations of stars is a recurrent visual motif in his films and features. Through the concept of the constellation, Kluge pictures the multiplicity of Internet users, the attention that they invest in their online activities, and the unstable interrelation that connects them, and turns them into a dynamic context of individually attending and producing sub-





Top: Kluge. Wer sich traut, reißt die Kälte vom Pferd. *2010. Bottom: Kluge.* The Blind Director. *2010.*

jects. Kluge also rotates the image, as it were, from a synchronic to a diachronic dimension, declaring that the constellation may also serve to model the historical relation between digital media and the analog and electronic media that preceded them. The constellation thus becomes a structural figure for a relation in time, a media-historiographical model shaped by the epistemological stance that new media do not cancel or supersede old media.

Moreover, beyond this general historiographical perspective, the figure of the constellation can be understood as specifically depicting the temporal signature of Kluge's own work. As such, it relates to one of the fundamental principles according to which Kluge builds a certain subcategory of his images. Ever since the analog celluloid beginnings of his visual oeuvre, his work has encompassed layered, or constellated, image-entities in which re-filmed historic footage is supplemented by and viewed through masking devices and hazes of color. It is a method that constellates old and new elements so as to produce multilayered structures. Another example of such a constellational procedure can be found in the television features, in which Kluge sometimes "places" an interlocutor, originally filmed in a blue box, "in front of" footage shot elsewhere (for example, a hotel in Venice, already filmed by Visconti, or the rotating moon, as filmed in a several-hour take at night). Here, the electronically generated image configures segments of different temporal origins and durations into a spatial arrangement by assigning them the positions of front and back within a picture. Kluge's viewer sees, for example, German director and artist Christoph Schlingensief conversing about the tragedy of *Hamlet*, while "behind" him runs an accelerated, hazy camera recording of Schlingensief's 2001 Zurich

staging of Shakespeare's play where an ensemble of shadow-silhouettes the actors—circulate through a foggy zone illuminated by irregularly pulsing stage lights. Through such procedures, the figure/ground distinction that structures the image as spatial representation assumes the function of an intra-chronic hiatus.

This constellational layering of onscreen images is further developed by digital media in Kluge's DVD projects. Whereas Kluge's earlier films construct multi-strata entities through analog means (for example, by re-filming historic footage through color foils stuck to the camera), the computer now enables Kluge to select cutouts from an electronically recorded Caspar David Friedrich paintingthe iconic Sea of Ice (circa 1823–24) and impose them onto a series of photographs of Western cities, various sites around the world, and of icebergs adrift in the Arctic Sea. The result of this conjunction is a visual fiction of the Earth thrown into the stasis of a new ice age, an operation through which human history itself is bracketed as an episode of geo-history, a glimpse of a reverse diluvian





Both images: Kluge. Paraphrase zu einem Bild Caspar David Friedrichs (Paraphrase on a painting by Caspar David Friedrich). 2010.

horizon where the human age does not emerge from the floods but reaches its frozen end.

There is, finally, a way of understanding the constellation as picturing the recombinatory potential that digital media introduce to the history of Kluge's production *in its entirety*. Through its binary base, the DVD, just like the computer, can function as storage for the texts as well as the (originally) analog, electronic, or digital time-based visual works that constitute Kluge's output. By virtue of this quality, digital media offer the possibility of shoring up current and older fragments from different phases of Kluge's work-biography. In this manner, literary stories about the theme of ice and snow can now be juxtaposed with short visual takes on these motifs; or, as Kluge describes below, segments from his 1963 short documentary *Lehrer im Wandel* (Teachers in a time of change) can now be linked to more recent interviews for a program-loop on dctp.tv. Kluge has employed such a method of combinatory re-editing as a principle in constructing his literary works from the beginning of his activity as an author. The digital now allows him to extend its reach into the pictorial dimension.

Paraphrasing the Constellation

In its diachronic aspect, as the model for a conjunction between the present and a remote past, Kluge's term points to one of its possible origins, namely the concept of the dialectical image as found in the work of Walter Benjamin. For Benjamin, the dialectical image described a constellation between a "now" and a previously obfuscated and forgotten historical moment of the past that are separated by a temporal gap, which is to say that the two points in time are not connected through a linear development.⁷ Benjamin found several exemplifications for such a relation: for instance, in the way in which contemporary fashions appropriate and actualize outmoded aesthetics as discontinuous, a movement which he called fashion's tiger's leap into the past; the Surrealists' trophy hunting in the stylistic cosmos of the late nineteenth century, a world of outdated tastes; or the way in which the French Revolutionaries "cited" ancient Rome.⁸ Thus, the dialectical image structurally describes a constellation in time in which the disconnected past reenters a present while still articulating the temporal caesura that marked it as a relation across time. And for Benjamin, it proved a structural figuration of the image as such, amounting to a definition of the image as constellation. Kluge appropriates this figure in the following conversation as the specific

^{7.} For an attempt at a more detailed analysis of the dialectical image's constellational character, see the present author's "Die Bestimmung der Aufnahme. Licht und Graphie bei Walter Benjamin," in *Benjamin-Studien* 2 (Munich: Fink, 2011), pp. 52–56.

^{8.} See Walter Benjamin, "On the Concept of History," in *Selected Writings* vol. IV., eds. Howard Eiland, Michael W. Jennings. (Cambridge, Mass.: Belknap Press, 2000) 2003, pp. 389–400; "Surrealism: The Last Snapshot of the European Intelligentsia," in *Selected Writings* vol. II. part 1., eds. Michael W. Jennings, Howard Eiland, Gary Smith (Cambridge, Mass.: Belknap Press), pp. 207–21. Here p. 210.

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image of stars in a night sky, as an account of the digital, and in so doing he submits it both to a contraction—condensing the term's history into a picture—and a variation. The variation consists of the term's application to the field of media technologies, where it now accounts for both the relation between the digital and its technological antecedents and to the relations between various historical strata of visual production as manifest within a single image (historic footage re-recorded and altered). Kluge occasionally refers to this general method of appropriation of preexistent motifs and concepts, which in his work always includes a condensation and at least a slight modification, as a procedure of paraphrase. (For example, in the conversation, he describes his treatment of Eisenstein's notes as "paraphrases," and the previously mentioned series of transpositions of ice floes from The Sea of Ice carries the title Paraphrase zu einem Bild Caspar David Friedrichs (Paraphrase on a painting by Caspar David Friedrich). It should be noted that a paraphrase is also the Klugean image for the constellation that rehearses the older concept of the dialectical image, to which it adds the difference of mediahistory, as it opens from the standpoint of our digital present.

The Digital as Reconfiguration

Kluge's concept of the constellation relates to his conception of the digital as a reconfiguration of its preceding techniques, strategies, types of production, and so forth. The digital enables Kluge to recalibrate, as it were, the activity of montage, which is no longer necessarily tied to the linear temporal unfolding of a film or a literary text. It allows him to re-actualize the relationship of his work to the "primitive diversity" of archaic cinema, as he explains in the conversation. And it gives him the opportunity to readjust the economies of short and long durations in his works. These transformations are not without precedent in his work-biography. In fact, a comparable revision occurred when Kluge integrated the means of the television feature—short programming, brief intertitles, graphic elements, etc.—to further develop the specific relation of short elements and long duration that had characterized his literary works (in which anecdotes/stories make up texts/books) and films (in which short montage-episodes constitute the entire, often quite extended, film and create its "picture-book" style).⁹

Thus, for Kluge, the transition into the digital is not a mere reordering of the elements and formal features that constitute his earlier work. It is also the return to a preceding reconfiguration that took place when he expanded from the systems of literature and film to the system of television. In Kluge's work, digitalization thus amounts to reconfiguring the very process of reconfiguration, a sort of second-order reordering, by which the activity of assigning a new arrangement to an extant combination turns upon itself. The terminological correlate to this

^{9.} See Miriam Hansen, "Reinventing the Nickelodeon: Notes on Kluge and Early Cinema," *October* 46 (Fall 1988), pp. 179–98.

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movement lies in the re-constellation of the notion of "constellation." Under digital terms the concept of the constellation articulates the historical difference between separate states of media-technology. But it also enters into a relation—a constellation—with the previous meanings of the term constellation itself, which had carried different implications under analogical terms. These earlier meanings are neither erased nor "corrected" by their digital counterpart, but are rather subjected to a paraphrasing variation.

The Potencies of Storing

This reconfiguring activity is to no small extent enabled by the augmented powers and altered possibilities of storing that digitalization puts into effect. Kluge's work makes use of these transformations in the recording of visual and textual information on the basis of a binary code. This allows Kluge to assemble the various formats he works in within the context of a single medium, such as the DVD. In this sense, the DVD allows for a miniature representation of all the various media in which Kluge is active: film, television, and literature—to which is added the digital format that functions both as storage for the aforementioned forms of artistic articulation and as a new medium used by Kluge in its own right.¹⁰

The second quality of digital storage that Kluge takes advantage of derives from what could be considered, at least from the recipient's perspective, a kind of latency. None of the individual elements contained on a disc are present to the eye of the recipient in the manner that printed pages in a book, or still frames on a printed strip of celluloid, are visible. In the latter cases, units of visual information may be "jumped," by browsing a volume or by fast-forwarding a film in the projector, but these acts of accelerated movement through a medium are categorically different from skipping a track on a DVD or going through a set of icons that represent text files on a screen. On a DVD, the act of reception involves a retrieval of elements from a state of latency. This selective actualization constitutes another type of constellating activity, a mode of deciphering an artwork that is shaped by the type of storing specific to the digital. In the case of Kluge's DVDs and Web site, the elements of this correlating retrieval can belong to his current output, but they may just as well consist of older—now digitally re-stored—work-segments. Each of these acts of correlation thus potentially amounts to a constellating of elements from the present and the past. Instead of defining digitalization historically and temporally as a radical break or a categorical rupture with a preexistent analog and non-digital electronic order, Kluge's work thus makes use of the digital as the realm for such temporal conjunctions.

10. In organizational terms, one major threshold divides the general combination possibilities on Kluge's discs. The choice between the selection menu for texts and the one for time-based visual works forms the DVD's highest structuring partition. Put in more concrete terms: portions of writing may occur within a trajectory of clips as onscreen lettering or as filmed or photographed printed pages, but there is no direct access from this essentially pictorial segment of the DVD to those sections where Kluge's literary stories are saved as text files in PDF format. The temporal vector of Kluge's work, however, is oriented not just towards reconfiguring a relation to the past but also towards the future. As Kluge explains in the subsequent interview, the digital offers unprecedented storage capacities, which he exploits with the full knowledge that the recorded work will never be exhaustively retrieved in any single act of viewing or reading. The constellational character of reception, enabled by digital information's latent exuberance, thus responds to a type of work whose definite formal articulation becomes less and less a matter of the artist/author's or the public's present. Instead, the work is as much addressed to an uncertain future—whose indefinite futurity enters the body of the work itself, which never fully constitutes itself for a single viewer or reader. Kluge's image for this partial future-directedness in the conversation is that of a raft—a maritime vessel of comparative simplicity that the artist sets in motion in the hope that future audiences will encounter it one day and unload its aesthetic freight. These qualities are tied to a transformation in the character of the artwork itself, which, at least in Kluge's interpretation, takes on the structure of storage.

Three Negative Definitions of a Klugean Approach to the Digital

The way in which Kluge does *not* address the digital is, finally, just as instructive as the way in which he does. Three examples may demonstrate this.

Remarkably absent from Kluge's analysis is an emphasis on simultaneity, a Virilioan dromological perspective of acceleration and synchronization.¹¹ (Indeed, Kluge already thematized and rejected this possibility in his 1985 film *Der Angriff der Gegenwart auf die übrige Zeit* (The assault of the present on the rest of time—distributed internationally under the title *The Blind Director*), which in part deals with the disappearance of cinema and the emergence of such electronic media as television and computerization.) While Kluge certainly underlines the all-encompassing character of the Internet, in his perspective this quality leads to a deregulation, not a synchronization, of temporal orders. The result is a mode of reception that is characterized by a new level of differentiation and accuracy with which people "appropriate" time. In turn, it becomes mandatory for artworks and texts to readjust their temporal economies if they are to persist in the digital realm.

Secondly, Kluge proves immune to the connectivity myth, which holds that the transformative potential, and often also the political hopes, of the rising network society will emerge from within the communicative activity of exchange alone. Kluge, by contrast, does not conceive of the digital commons as a public sphere constituted through mere interaction in networks. Rather, his notion of the public sphere

^{11.} See, for example, the chapter "The Perspective of Real Time" in Paul Virilio's book *Open Sky*, where he lays out his "dromological" position that the "regimes of temporality" put in place by information technologies lead to an exclusion of "temporal exteriority" in favor of a creation of the "instant of instantaneous telecommunications," an event that Virilio otherwise refers to as "the accident of the present." Paul Virilio, *Open Sky* (London: Verso, 2008), pp. 22–34. The first two citations are on p. 22 and p. 25; the third on p. 14.

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remains tied to the idea of a large-scale projection, an abundant visibility of the image, which lies beyond or before the network, and around which the community of viewers/onlookers gather and exchange their thoughts and feelings.

Finally, Kluge does not deduce the primacy of smooth compositing from the possibilities of the digital, as others have done, i.e., he does not equate the emergence of an informational infrastructure for artworks with the end of the disjunctive aesthetics of montage.¹² On the contrary, Kluge dialectically recognizes a renewed urgency for montage techniques in digital environments, insisting that montage does not merely amount to the articulation of an aesthetics of disruption; rather, this discontinuity, through the immobilization of the flux of sensory impressions, serves to generate suspended moments of reflection, as if a viewer had briefly paused on a walk through the woods to let her gaze wander across a thicket of bare stems and branches. In Kluge's terms: instead of facilitating the flow of images, montage creates frozen lakes that need to be looked at in a quiet state of mind. In this sense, the landscapes with ice and snow that we see in Kluge's most recent DVD the visual recordings of flakes drifting, of footprints in wintry fields, of a pair of boots set against frozen grass, of a sunset on the polar circle—are also meta-images depicting, in the brief duration their maker has allowed them, a reflective stillness, islands of quiet observation with which Kluge seeks to freeze over the pressures of a merely reactive attentiveness exerted on audiences present and future.

How to Access the Works of Alexander Kluge

The vast majority of Alexander Kluge's literary and theoretical works have appeared in German with the Suhrkamp publishing house. A few older titles are still in print (*Part-time Work of a Domestic Slave* [*Gelegenheitsarbeit einer Sklavin*]), others have been republished in new editions (*Der Luftangriff auf Halberstadt am 8. April 1945* [The air raid on Halberstadt, April 8, 1945]; *Lebensläufe*). The monumental two-volume *Chronik der Gefühle* (Chronicle of feelings), originally published in 2000, consists of a near complete reissuing of every literary text that Kluge had written up to that point. In line with his general artistic program, the individual items in the *Chronik* have been partially subjected to slight variations as compared to the original versions. English translations of a number of Kluge's canonical literary texts exist (*Case Histories, Battle, Learning Processes with a Deadly Outcome*), although the English editions sometimes only render selections from the original collections (e.g., *Cinema Stories*).

Kluge's analog and electronic works for the cinema are all included in the

^{12.} See, for example, Lev Manovich: *The Language of New Media* (Cambridge, Mass.: MIT Press, 2001), pp. 136–45. Tom Conley describes a similar figure in Jacques Rancière's interpretation of Godard's video and television works, in which Rancière recognizes a farewell to an artistic program of dissensus and antagonism, and the emergence of a neo-symbolist aesthetics of mystery and fusion. Tom Conley, "Cinema and its Discontents: Jacques Rancière and Film Theory," in *SubStance*, vol. 34, no. 3 (2005), pp. 96–106.

DVD boxed set Sämtliche Kinofilme (Complete works for the cinema), available through the German media publisher Zweitausendeins, which also issued the boxed set Seen sind für Fische Inseln. Fernseharbeiten 1987–2008 (To fish, lakes are islands: works for television 1987–2008), which contains a fourteen-disc selection of Kluge's features for television. Both sets include subtitling options in English, French, Spanish, Chinese, and Russian. Kluge's three DVD films to date (Nachrichten aus der ideologischen Antike; Früchte des Vertrauens; Wer sich traut, reißt die Kälte vom Pferd) have all appeared with Suhrkamp's new film edition and are not subtitled. The theme loops in which Kluge organizes his online work are at www.dctp.tv/#/themen/themenschleifen.

In collaboration with Kluge, the German department at Princeton University has established the Alexander Kluge Research Collection, comprising digitized versions of his writings, films, and videos, as well as scholarly literature on his work. Access is available on the Princeton campus, and detailed information can be found at www.princeton.edu/german/kluge.



Alexander Kluge. Wer sich traut, reißt die Kälte vom Pferd (Who dares pulls the cold off its horse). 2010.

Returns of the Archaic, Reserves for the Future: A Conversation with Alexander Kluge

PHILIPP EKARDT

- *Philipp Ekardt*: Your book *Cinema Stories* (*Geschichten vom Kino*), which appeared in 2007, begins with the following sentences: "For about 120 years cinema projectors have been rattling unstoppably. The cinematic principle is older than the movie theaters. It is as old as the sun and the images in our heads. This is why cinema is not finished when the silent projectors are coming." You are alluding to the intervention of the digital here. What are the preconditions of this transformation? What are its consequences?
- *Alexander Kluge*: There were early signs of the digital revolution in the 1980s, but it only truly came into its own in the 1990s and at the beginning of the twenty-first century. Yet it has already opened new paths for film. A new possibility for cinema emerges online, for example on YouTube. There is a new development of those forms of film that I know and love from the archaic history of the medium, such as the minute-film, which was the principal element of the cinema of attractions on the fairgrounds. Charles Darwin wrote that evolution always emerges on the part of small creatures, and our ancestors were tiny. The same holds true in this case. On the other hand, there is also the ten-hour film, the epos on the Internet.
- Ekardt: As an agglomeration of many online minute-films?
- *Kluge*: Yes. These long films emerge in a process that resembles the formation of coral reefs, where a multitude of life-forms coexist. Digitalization is particularly effective in that it opens new filmic production possibilities laterally, sideways from established institutions, such as commercial cinemas, which can now be bypassed.
- *Ekardt*: Do these new possibilities relate exclusively to the production of film, or to its storing and archiving as well?
- *Kluge*: In terms of new productions, the digital tends toward the short archaic form. But if you are talking about representing the wealth of film history, the digital world forms rafts. One such raft is the DVD.
- Ekardt: What would be the characteristics of such a raft-like construction?
- *Kluge*: A raft consists of logs, which are products of nature. They have grown by themselves. These are then tied to one another. A raft is constructed by set-

ting one element next to another. On a raft you can navigate the Missouri or the Mississippi all the way down to the sea. You can even cross the ocean with it. It occupies an intermediate position between a "natural resource" and a "vessel." Such rafts are robust basic forms. They are distinguished, for example, from steamships, which are always specialized final products.

- *Ekardt*: You have been using the DVD as a proper artistic medium since 2008, when your three-disc, nine-hour-long *Nachrichten aus der ideologischen Antike* (News from ideological antiquity) was released. The medium's essentially paratactical nature figures here as a juxtaposition of filmed sequences, interviews, and animations, as well as montages of documentary and historic material. And there is another noticeable formal feature to it. In contrast to classical film, linear organization has become less dictatorial because the independent chapters are all accessible via the disc menu.
- *Kluge*: Exactly. I find this "vertical" structure very liberating. Instead of forcing elements into a set sequence, it allows you to work spatially. All of my DVDs contain text files of written stories, which accompany the visual and filmic work. I would also count these among the "vertical" options.

Ekardt: According to what principles do you structure your DVDs?

Kluge: On an elementary level, one needs to consider people's desire for variety, which means that you have to be brief. The result is the minute-form, which can take ten minutes, five minutes, three minutes, or just a single minute.

Ekardt: So essentially a clip?

- *Kluge*: Yes, it is basically a form of contraction, which in fact has a long history in the arts. In rhetoric it would correspond to the laconic style, which has a tradition from Tacitus up to the German playwright Heiner Müller. Instead of constructing long periods that you need to memorize, you articulate very short flashes. The minute-form is also essential when you are working online. Of course you may upload your ninety-minute film, but your audience has to understand what your film is about after the first three minutes. A filmic opening sequence in an online context is completely different from an opening sequence in the cinema, where you present an introduction, the names of the cast, etcetera. You can't make promises online, and exposition is practically forbidden because it is perceived as a moment of retardation.
- *Ekardt*: Is this the result of the way the digital affects the extant economy of time and attention?
- *Kluge*: Yes. The effect is a new way in which people appropriate time. They are either truly interested, in which case length and duration don't matter at all, or they are testing whether something could be of interest to them. In this case, anything exceeding a few minutes is too long. A corresponding phenomenon is the dissolution of regulated time, which occurs simply because the Internet spans all time zones. The ways in which people articulate their time and attention have become much more exacting than they used to be. But the minute-form also has its opposite pole, which I call thoroughness. If

you are, for example, investigating how a century is derailed, how European civilization as a whole slides into a catastrophic accident, as was the case in the First World War, you have to rely on extended durations.

Ekardt: And DVDs are an appropriate medium here?

- *Kluge*: Yes, because as a storage medium the DVD allows you to put something on reserve at a minimum economic risk. And by the term "economy" I am referring not to finances but to the currency of attention. It would be impolite to request ten hours of attention from a cinema audience. However, I also have an interest in depicting contexts for which I would never find an appropriate ninety-minute form. The DVD enables me to put ten hours onto a raft. I like to call it a polite offer. The medium is more passive than others and does not constantly solicit your attention. It functions like a refrigerator at night. I don't regularly eat at 4 A.M., but I know the provisions are there.
- *Ekardt*: So storage capacities have become an integral element of form, and it is not even necessary that the full duration of the accumulated information actually be watched or read to have a valid experience of the work. Does this storage function extend beyond temporal aspects into the visual?
- Kluge: Indeed. For example, in my work for television, we have experimented with mounting traditional film optics, systems of lenses, some of them between 600 and 800 years old, onto electronic cameras. As a result, you receive a visual quality and information density that are by no means inferior to the images of classical cinema. This shows in terms of light-quality and the refractions you are able to capture, for example. On television, though, the medium for which these images were initially produced, these effects would never get noticed. There are two reasons for this. First, you have a screen that breaks down into 625 lines, which will never live up to cinematic capacities. Second, it wouldn't even matter if you broadcast this material in high definition because the television viewer's attention would never focus on these qualities. So we are practically manufacturing a luxury product here, which we are putting on reserve. But once you load these images onto a digital raft, such as the DVD, there is at least the option of paying attention. And there is at least the possibility that these visual qualities will be recognized when we show them in a projection in the public sphere. As long as there still exists one old cinema with a high-quality projection apparatus and a large-scale screen, we will continue making films for it. That is Godard's doctrine.
- *Ekardt*: So the artwork you are producing encompasses latent durations and latent degrees of visual quality, which may or may not be actualized at a given point. This means your works are made for an unpredictable future.
- *Kluge*: Yes, but this unpredictable future does exist. To give you an example from the field of politics: during the student movement in Frankfurt in 1974, we were completely surprised by the fact that in Guinea-Bissau, a colonial army would putsch towards the left. There was no prediction of this in Marx. Or take the Portuguese revolution, which in the end was liquidated very quickly.

But the mere fact that this revolution came into being astonished all of us. For a moment it seemed like the blueprint of a bourgeois revolution—no guillotine, no mistakes, no collapse into the mere interests of the middle class. It could have become a very beautiful event. With the same certainty with which you can say that these political possibilities existed, you can assume that the audience will claim the achievements and possibilities of film history. The idea that there are "masses" whom you would need to "cater to" is wrong.

- *Ekardt*: If the digital form constitutes rafts, or perhaps even "arks" of visual plenitude destined for an uncertain future, there is the challenge for the producers of such images that it becomes nearly impossible to anticipate in what format the image will eventually appear. It might be the large screen of classical cinema, the screen of a computer, or, as of recently, even the much smaller display of a mobile phone.
- *Kluge*: Yes. This uncertainty results in the emergence of opposite poles. The one pole would be exemplified by the peeping hole in a municipal swimming pool in my hometown Halberstadt, through which you could risk a peek and see a naked woman. That is interesting, but it is not large-screen.
- *Ekardt*: So basically a replication of the peephole of historic cinema-automata? Another archaic form resurges
- *Kluge*: Exactly. But there is also the second pole: the public sphere. The public sphere is the locale where personal experience is transformed into self-consciousness, because it is shared with others. And for this purpose, I need occasions like a film festival, for example, which gives me the opportunity to realize a large-scale projection—if possible as large as a building. Otherwise, you wouldn't understand that what you read in these tiny, postage-stamp-format images exists for the many. We have to respect the moving image and demand that it be recognized through grand appearances. I am working on these two opposite poles if I present the same topic as a large-scale projection at the film festival in Venice, where I have to be brief, and if I am presenting it as a long version online, covered like a hidden treasure, where not everybody will find it. This is why I produced a nine-hour DVD version of my Eisenstein film *Nachrichten*, as well as an eightyminute edit, which has been screened, for example, at the Brecht Forum in New York and could potentially be projected in theaters, or at the opera.
- *Ekardt*: To stay with the pole of smallness and brevity: In your earlier analog work there already seems to be a visual correlate to the temporal figure of the short laconic flash, namely the glimpse. Whereas the flash restrains the duration of visibility to a short moment, the glimpse offers only a partial, in fact incomplete, impression of the depicted object. The way in which you film the human face, for instance in your 1984 feature film *The Power of Feelings* (*Die Macht der Gefühle*), could serve as an example here. You employ the close-up, but often these shots are so close that they do not allow for a full

visual grasp of the face, which by consequence never attains the function of an "expressive" surface.

- Kluge: For me, expression consists of various components: on the one hand, the words; on the other, the expression of the body, the face or even of a detail. Whenever you find a close-up in my work, you will get a long shot at another point, although the long shot does not necessarily relate to the same moment as the close-up. I am using them to set a person into a relation. To give you a concrete example: the female intercourse thief in my film In Danger and Dire Distress the Middle of the Road Leads to Death (In Gefahr und *gröβter Not bringt der Mittelweg den Tod*) runs with her suitcase through a street fight of police forces and demonstrators. She could have easily been hit by a stone. I am showing her running in a long shot; I wouldn't use a close-up in this context. But at another point, shortly before that scene, there is a closeup of her face which, however, is recognizably shot in a different spatial and temporal context. So in my films, or in my concept of expression, I have a certain view or a certain idea of the person I want to portray. But this portrait will, firstly, not be confined to a single moment in the film. If this were the case, I would be isolating that person. Instead, the portrayal will occur throughout the course of the film in the most different of places. Secondly, I always make sure to edit the individual elements in such a way that they aren't subsumed under a single narrative, or under the description of specific scenes. All moments taken together will form an equivalent of that person, but each element functions autonomously as well.
- *Ekardt*: Your activities in the field of digital composition also include your Web site dctp.tv. How do you proceed here?
- *Kluge*: By building gaps that are as large as possible. Dctp.tv works in the immediate vicinity with the Web site of the German weekly newsmagazine Der Spiegel, where the whole reality of the week gushes through. We have a permanent link on their main Web page—a window where we display the title of one of our features, and a still image from the corresponding video. Via this link, you can navigate over into our realm, where you enter into a different world. Here you will find, for example, a program loop titled Man kann nicht lernen, nicht zu lernen (You cannot learn not to learn), which consists of sixteen videos, between just under a minute to approximately twenty minutes' duration. The topic here is "education," and we have documentary episodes and interview features, which at first sight still correspond more or less to the expectations of a viewer or reader navigating over from a news Web site. But the loop also contains three excerpts from my 1963 short film Lehrer im Wandel (Teachers in a time of change). All of these you can click on and view in any possible order and selection. One important element is a conversation between a historian and myself about the role of expert knowledge in the age of Alcuin, who was an adviser to Charlemagne. This would be an example of one of the gaps I mentioned, because the Latin Middle Ages

have no immediate relation to the current news of our present. When I confront and juxtapose these unrelated elements as if they were cousins, I generate new capacities for the imagination. This is, by the way, not a result of my artistic strategy; rather, it is a fact generated by the real circumstances. The wider you tear open these gaps, with the consent of the audience, the more space will there be for something which is not depicted, but that emerges in between images.

- *Ekardt*: What you just laid out is reminiscent of your earlier accounts of the potential and functioning of montage: for example, your repeatedly stated comment on Godard, that film is not "24 times truth per second." Rather, you once wrote, cinema relies on the alternation between "an exposure of 1/48 seconds" and "a dark phase of 1/48 seconds, the so-called transportphase. In average, it is dark half of the time. For 1/48 seconds the eye looks outward and for 1/48 seconds it looks inward." This pertains first to the technological conditions of film as a medium and second to a certain manner in which the epistemological potential of montage can be used, namely in destructive, not merely representational, ways. Is the electronic and digital registration of film changing this model? The material base for this montage concept has practically evaporated . . .
- Kluge. It disappears, unless you produce it artificially. In this respect, the cinema has already been lost. The question is whether we can reconstruct this quality without a ground supplied by the technical medium. Or would that produce something superfluous? The main reason I employ montage is to destroy images. Through the mutual destruction of two images in montage, there emerges a third term: an epiphany. And this epiphany has now been separated from technical necessity. Can we produce this epiphany again? Certainly, but more coarsely. For example, if we return to the example of the program loop Man kann nicht lernen, nicht zu lernen and compare it to Lehrer im Wandel: in my short film, I portrayed three singular pedagogue fates, embedded in a historical tracing of pedagogical institutions in Germany since the early nineteenth century. Throughout, quotes from Plato's *Apology* were juxtaposed with historical visual material and with documentary takes that we filmed on the occasion of the inauguration of a new school building. By way of montage, I was thus able to construct a very detailed contextualization for the three teachers' lives, which I also represented through montage, as sequences of still images with a voice-over. These biographical capsule films now reappear as glimpses in the online program loop, but the entire detailed contextualization is missing. Instead, they stand in conjunction with all the various interviews and documentary segments under the general rubric of "education." You will note how coarsely knit the online loop is in comparison with the 1963 short film.
- *Ekardt*: Since you are claiming "coarseness" as a description for your own work, does the term carry negative implications?

- *Kluge*: For me the word "coarse" has a positive connotation. I am not using it in the sense of rude, impolite, or even brutal. Rather, it expresses a level of simple organization, which proves robust in relation to the robust environment of the Internet. In film history there is the early phase of so-called primitive diversity which I alluded to earlier. Its forms are coarse, in the sense of being robust.
- *Ekardt*: And this coarseness is also the necessary condition for working successfully on the Internet?
- *Kluge*: Yes. Otherwise you wouldn't get noticed. But while we generate coarseness on this pole, we must also refine and differentiate on the other pole. Everything I was just telling you is dialectical. We must be coarse, because otherwise we would not be able to enter the differentiations in the first place. If we immediately confronted the differentiated elements with the robust environment of the Internet, they would not persist. But ultimately we are not raw within the raw.
- *Ekardt*: So raw on the outside, where you are interfering with the milieu of the Web, but internally, the forms allow for differentiated articulation and reception?
- *Kluge*: Yes. Further, I would say that the objective of image destruction, for which montage is the cardinal technique if you trace the term back to Godard, gains a renewed urgency with regard to the Internet. People certainly feel that the plenitude of images which they encounter online, from commercials to film and all different sorts of uploaded content, is too much. In this sense, we need montage interventions to interrupt the omnipresence of electronic imagery. Our chances lie not in augmenting, but in reducing images.
- *Ekardt*: Could one extend this concept of image reduction to the question of style? On your recent DVD *Wer sich traut, reißt die Kälte vom Pferd* (Who dares pulls the cold off its horse) there is a marked tendency toward the single, almost still image. You are showing static shots of snow and ice, landscape imagery that gives a distinct nod to Caspar David Friedrich paintings.
- Kluge: Yes. The plenitude of electronic images stirs my hunger for simple images that can be easily captured by the camera. On dctp.tv, there is a related program loop titled *Alles fließt* (Everything flows) that consists of videos of rivers and puddles—simple, elementary images. It is important that we concentrate on images again. I also wouldn't separate this level, which you called "stylistic," from the function of montage. If used in the right way, montage does not aim at creating a ninety-minute flow of images—which would be the case for commercial cinema. Instead, it creates frozen lakes. The result is a still image that you don't necessarily need to contemplate for an extended period of time, but you need to look at it in a calm state of mind. This technique of focusing is essentially *ars povera*, which as such has existed for 3,000 years. Actually, it isn't even poor; it simply dispenses with unnecessary splendor.
- *Ekardt*: Could one also understand German director Tom Tykwer's contribution to the *Nachrichten* as an exercise in image reduction? In his twelve-minute film "Der Mensch im Ding" (The man in the thing), he first shows a woman hurrying along a boardwalk. Then he halts the moving image; the movement

freezes before our eyes. This arrest is followed by a rather astonishing effect. Tykwer treats the image digitally and literally turns it into a space. The viewpoint—one is tempted to call this a camera-perspective, but it isn't, it is computer-generated—can be shifted, and visual explorations are possible within a space that we saw only seconds before as a static two-dimensional image.

- *Kluge*: Indeed. I find rather bold what Tykwer did. There is no camera movement in the world that can generate this type of three-dimensionality. He first made a 35mm film, from which he took photos—like you were saying, he created a kind of stasis from cinematic movement. He then generated a three-dimensional digital rendering of this image in a studio in Prague. The result is a virtual space in which he can visually move around. He can shift the point of view between a cigarette butt and the sky, between the doorbell and the entire house. No camera in the whole world can do this.
- *Ekardt*: Because what we are seeing is no longer an image of space but rather an image turned into a visual space, which becomes the object for a close investigation.
- *Kluge*. Yes, and even if you had every possible crane, you would never master this task. These types of virtual movements aren't zooms either. They are really new.
- *Ekardt*: When we approach one of the objects in this suspended image-space visually—the woman's handbag, for example—we hear Tykwer reading short texts describing the history and conditions of production of this object.
- *Kluge*: The title of the second DVD within *Nachrichten* is "Alle Dinge sind verzauberte Menschen" (All things are enchanted humans), and Tykwer filmed just that by giving us a cinematic representation of the workforce and human lifetime invested in the objects which we see in this image-space.
- *Ekardt*: So Tykwer filmically performs the task of disenchanting the object-world, or rather of lifting the spell that lies upon this labor turned into things?
- *Kluge*. In other words, he managed to film the commodity fetish, a central concept of Marxist economic theory. He is now able to express dead labor—using cinematic means that I was entirely unaware of—by giving you a spatial configuration in which unseen and heretofore unexperienced types of visual movement are possible, and where through the combination of visual approximation, filmic recording, and voice-over narration each thing can be connected to its history of production. But there is also another important aspect to Tykwer's piece. He added an entire dimension to the image by turning it into a space. This type of quality emerges in the zone of friction, at the suture, if you will, between the means of classical cinema and electronic cinema, because half of Tykwer's clip is still film. Through the addition of the electronic element emerges something new. It is practically alchemy.
- *Ekardt*: Your description of this alchemic encounter implies a supplementary relationship between old and new media. The digital revolution is figured as a

form of grafting, a process whereby the new technology enters into a relation with the older technology and engenders a transformative process.

- *Kluge*: My image for this supplementary relation would be a constellation. There is Grandville's famous illustration of the planet-bridges, which Benjamin cherished. Grandville depicts the bridges that connect the celestial bodies as massive iron constructions, as solid as the Trans-Siberian Railroad. If these were real circumstances, the bridges would permanently break apart, because of the planets' dynamic movement in space. That is the meaning behind the strange word "dialectics": everything is in permanent movement. This type of interaction between movement and gravity also exists in society, where each heart and each mind—the subjects' emotions and consciousness—contribute to it. This would be the subjective side, which in turn interacts with a second type of gravity formed by objective constraints. You certainly can say that the Internet, in terms of its potential and its actualization, functions like a constellation of autonomous celestial bodies that can't be connected by fixed relations. This would be an image for the cumulative process of supplementation in societal terms. The image of the constellation further serves to symbolize the accumulation and supplementation among the qualities of classical film, which for me still have the same validity as in 1902, and the possibilities of the Internet, which I also respect.
- *Ekardt*: Does this image of constellational accumulation also describe the interaction between analog and electronic hardware in your work, like the mounting of traditional lenses onto digital cameras that you mentioned earlier? Or is this procedure—one could almost speak of a techno-historical palimpsest—more on the side of alchemy?
- *Kluge*: The result is certainly an alchemic process, comparable to the one from which emerges Tykwer's film. There are other examples in my work of this combination of old and new technologies. For instance, we built the old filters and masks of the historic Debrie camera, which was invented in 1908, onto electronic vision mixers, a combination that sometimes achieves a Meliès-like quality. The Debrie is practically the camera with which the brothers Lumière and Abel Gance, but also Eisenstein, were filming. It is more or less the predominant camera in 1922. The masks allow for an admirable structuring of the image. They add a striated component.

Ekardt: Lozenge shapes, diamonds, peek holes . . .

- *Kluge*. They are not just schematic. They also allow you to alter the relations between the focus zones in the picture. And the mixer is an apparatus that allows you to blend different images in the process of analog-digital production.
- *Ekardt*: Let me finally raise a seemingly marginal element—which is, however, central to your visual work: the way in which writing and letters appear in your clips, your TV features, on the DVDs, and in your films. Digitalization seems to have effected a strong stylistic transformation here. From your first to your last analog film, from the early 1960s to the mid-1980s, you operated

mainly with a sans serif, modernist typeface which appeared first on black, later also on blue, panels that are interspersed with the image sections of your long and short movies.

Kluge: Yes, for me that is the most beautiful typeface—Akzidenz Grotesk. It was developed by Otl Aicher, one of the founders of the Ulm Hochschule für Gestaltung, an institution that was meant to reintroduce the principles of progressive design to West Germany. These principles had initially been developed at the Bauhaus in the 1920s, but were subsequently eradicated by the National Socialists. I taught film on the academy's faculty in the 1960s.



Left: Otl Aicher. Cover of Kluge's Case Histories. 1962. Right: Lettering from Kluge's The Power of Feelings. 1984.

Otl Aicher designed the layout for my first book of literary stories, *Case Histories (Lebensläufe)*, for which he utilized Akzidenz Grotesk.

- *Ekardt*: Today the text panels on your DVD projects, sometimes also in your television features, usually display very colorful, sometimes even graphic lettering, as, for instance, when you are showing, or rather spelling, short literary anecdotes about the character of light in letters that seem to be illuminated, sometimes taking on the character of flames, sometimes surrounded by graphic representations of emanating light rays, and the like. Sometimes you even employ different typefaces within one panel, occasionally you tilt the words into the diagonal or the vertical, and so on.
- *Kluge*: This is a direct result of working with a computer that is connected to an enormous typeface database. You will notice that in the television features we actually stick to a single standard pattern for the informative parts, namely Quanta-Font. In these cases we don't want to thematize the character of the letters. As for the other panels, we decided to return to a visual equivalent of the Babylonic variety of languages. The first reason is that we want to avoid individual preferences—so neither I nor my coworkers at dctp will dominate the choice with our taste. We also don't want to become stranded

in the design world, where almost everything has already been invented and has at least once been in fashion. So we opt for a topsy-turvy approach instead. Sometimes we are also able to generate very effective contrasts, for example when on my DVD *Früchte des Vertrauens* (Fruits of trust) we are writing out the story of a German soldier in the Second World War who suffers a brain-damaging injury and is afterwards executed as "unworthy life" by his compatriots. The employment of a colorful and cheery typeface here functions as sensory seduction, it creates an attitude of collusion, against which I can narrate this horrible story. Through a more "appropriate" typeface the story would lend itself to being consumed more easily, it would almost be



Lettering from Kluge's Nachrichten aus der ideologischen Antike. 2008.

redeemed. But in the face of such monstrosities you have no right to appeal to art. Art loses its privilege here, and taste even more so.

- *Ekardt*: At the beginning of the *Nachrichten* DVD there is a similarly interesting employment of the written word.
- *Kluge*: Yes. *Nachrichten* begins with a few transcriptions from Eisenstein's notebooks for the film that he intended to make out of Marx's *Capital*. He embarked on this project right after finishing *October*, but never realized it. I transpose these notes into onscreen lettering, and I pay particular attention to a passage on cooking . . .
- *Ekardt*: . . . which is of central importance because Eisenstein wanted a scene where a worker's wife stands by the stove, cooking, while her husband is returning from work, to encapsulate his intended film, an idea which he took from Joyce's *Ulysses*. Departing from this image, he considered following lateral transformations, or associations, chains of production. For example, the petroleum for the cooker would lead to the image of oil production and refinery.
- Kluge: Yes. My DVD then shows a brief montage, practically filmic shorthand, of images of a gas flame, a pot, its lid, a spoon that stirs the soup, and so on.

These are paraphrases of passages from Eisenstein's notes. Through this method I tell the audience right away: we are dealing with something written here, for which I am providing a supplementary image. So if the topic is cooking, you will see a pot. If you are setting an image next to the letters that you see onscreen, you are saying, "This is how it is, truly." In a certain sense reiteration, which Eisenstein liked to use, is the most important means, and it is rhetorically appropriate.

- *Ekardt*: Since *Nachrichten* intends to reconstruct an unrealized filmic project of the silent era, one is also reminded of the way in which lettering and image interacted in that earlier period's vastly different media ecology.
- *Kluge*: And that period is tremendously important to me. When I began making films in 1958 I first apprenticed with Fritz Lang. But I immediately felt that his works of the twenties were far more interesting than anything that the major German film production company UFA was doing, or what was being done in film in general at the time. In the 1920s, silent film allowed a much larger space for the autonomous activity of the spectator. And one reason for this is the specific combination of image and texts. Take *Metropolis*—the film leads through the texts—and *M* as well. This liberates the formation of the image that is not tied to linguistic narration by the tone of the theater.
- *Ekardt*: Because the image does not fully stand in the service of the plot, and the narration does not depend entirely on a visual anchoring? In this sense, the spectator's autonomy that you just mentioned would rely on the autonomy of the filmic elements.
- *Kluge*. Yes. This would be one example of what immediately fascinated me about 1920s cinema, and which has since vanished in filmic reception.
- *Ekardt*: So the image/lettering articulation that you are using on your DVD is no mere affirmation; it must have a different function. As you just explained, the combination of writing and image in Lang and in the silent film of the 1920s relies on the non-affirmative relation between these two elements. Of course, if you want to be historically accurate, Lang and Eisenstein follow very different programs. But it is perhaps the tenor you're interested in?
- *Kluge*: The tenor—that is what Eisenstein and Lang have in common—is an idea of writing's potential in film. The letters undergo a metamorphosis; they are no longer letters from a book. And what the image shows is like a reinforcement, a deepening, or a well. It differs from the horizontal structure.
- *Ekardt*: And with your recent work you are trying to actualize this quality of the image under digital conditions?

Kluge: I would hope so.

LUCY RAVEN

The Second Eye (Two one-eyed 3D film directors/ 2D > 3D conversion/ 144 fps)

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Raoul Walsh, the prolific studio director of Westerns and crime films such as *High Sierra* and *White Heat*,¹ also directed a lesser-known 3D movie called *Gun Fury*.²

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1. Born in New York City, in 1887, Raoul Walsh got his theatrical start riding horses on treadmills in vaudeville Westerns. His first film job was for D.W. Griffith, playing John Wilkes Booth in The Birth of a Nation; he was also the film's assistant director.



Walsh, who had only one eye, would never see the film he shot as it was intended to be seen.³

André de Toth, the other Hollywood a Nation; he director who lost an eye and went on to make a 3D movie, once said that it was too bad that none of his one-eyed contemporaries (John Ford, Nicholas Ray, Fritz Lang, and Walsh) had made 3D films. Actually, *Gun Fury* had come out in the same

2. The film features guns and arrows shot straight at the audience, but its most striking illusion involves the Arizona horizon, which seems to recede far behind the screen. This effect (positive parallax) causes the eyes to focus on a point behind the plane of the film screen itself.

year (1953) as de Toth's own *House of Wax*. Strangely, de Toth didn't mention it, and most film critics would follow suit.

> Perhaps the film was seen as too much of a stock Western—it's no *High Sierra*, though it does star Rock Hudson



and Donna Reed. Or, it just got lost in the filmography (it was one of four movies Walsh directed that year). In addition to 3D, Walsh experimented with early versions of sound and

3. Walsh doesn't mention Gun Fury in his 1974 autobiography, but he calls the chapter that describes his loss of an eye "Cyclops." And, in fact, Walsh's career in Hollywood-from cowboy to stuntman to actor, assistant director, and, finally, film director-is something of a latter-day Odyssey. "I saw its birth, its golden era, and its declining years," Walsh told an interviewer in 1974. "We were never the lotus-eaters of legend. We performed an endless job of hard work under hot lights and blazing sun, in snow and rain, or wherever the job took us."

color, as well as with new projection formats (such as Cinemascope). But the two-camera setup he used on *Gun Fury* came the closest, in ways that none of those other processes could, to capturing on film what it was like to be on location (though some, such as 70mm Grandeur,⁴ came close). From Walsh's own, one-eyed, POV, his actual, three-dimensional surroundings would have looked like a flat production still. But a second camera could simulate binocular parallax, giving Walsh's audience a sense of

what the director himself could no longer see.

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"Here was the revolution," Walsh said after seeing Al Jolson in *The Jazz Singer*, "yet the picture annoyed me. The triteness of the sets and the obvious nervousness of the 4. Lo female lead made me want to jump up

female lead made me want to jump up and start shouting. Then a thought struck me. If the tedious dialogue could be supplemented and broken up by more action, the result might be thrilling instead of soporific. I got up to leave, but turned back at the top of the aisle, when a burst of sound from the newsreel [run after the feature] caught my attention. There before my eyes, a Fox Movietone News truck was filming a dock strike."

That newsreel inspired In Old Arizona—the first feature with sound recorded outdoors, which Walsh made on location, on a mountaintop in Caliente, Mexico, in 1928. The shoot was arduous;

toward the end of filming, the Movietone News truck Walsh had commissioned broke down. That night, the director, who also had a starring role in the film (he was playing the Cisco Kid), rode down the mountain in an equipment truck driven by a man who'd been drinking all day. According to Walsh, the driver took

switchbacks on two wheels, dodged rodents and cattle, and finally hit a jackrabbit straight on. The animal smashed through the truck's windshield, and into Walsh's right eye.⁵



4. Lowering wagons on the set of The Big Trail, 1930. "Due to the more natural shape of the Grandeur frame, there is a certain pseudostereoscopic effect produced: but this effect is lost unless there is a very considerable depth of focus in the image. The 70mm picture is very nearly the same proportion as the natural field of our vision, which, I suppose, is responsible for this pseudostereoscopy. It marks a definite advance in motion picture technique, and from it will undoubtedly be evolved the truly stereoscopic picture of the future, toward which so many people have long been striving."-Arthur Edeson, A.S.C., "Wide Film Cinematography: Some Comments on 70mm Camerawork From a Practical Cinematographer," American

Cinematographer, September, 1930.



5. After the accident, Warner Baxter replaced Walsh as the Cisco Kid, winning the Oscar for his performance, and Irving Cummings took over as director. Walsh had tanned for weeks on set to pull off his starring role as the Mexican character; the Indians were also played by white men: "What the eye does not see, the mind does not worry about," Walsh said about the film's casting.



What even one eye sees, the mind worries about.⁶ André de Toth's 3D horror movie, *House of Wax*, was celebrated for demonstrating the great potential of

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6. André de Toth, 1912–2002.



7. The young Charles Bronson's head cast in wax, House of Wax, 1953.

3D film when it was released in 1953. It also marked the screen debut of Charles Buchinsky (later Bronson)⁷ and kicked Vincent Price's career as the star of any number of horror movies (and, years later, Michael Jackson's "Thriller") into high gear.

De Toth, who lost the use of his left eye in a childhood accident, first made mention of his

interest in 3D films in 1946, in an article for the *Hollywood Reporter*. Seven years later, two industry old-timers—screenwriter Crane Wilbur, who'd starred with Pearl White in the serial *The Perils of Pauline* (1914), and producer Bryan Foy, who'd gotten his start in vaudeville and joined Warner Bros. in the 1920s, when he directed the Vitaphone talkie *Lights of New York* (1928)—helped the director persuade Jack Warner to let him shoot one.

"The properly used power of a third-dimensional film can make the audience believe they are not viewers but are part of the scene," de Toth told Warner. "There is a big difference in concept between a '3D movie' and a 'third-dimensional film." The studio head acquiesced, on the condition that de Toth hide his eyepatch in his back pocket throughout the shoot.

The extra dimension de Toth was after in *House of Wax* seems not so much spatial as psychological, and his special effects were all in the service of the film's plot, which hinges on illusions of one sort or another: the confusion of wax and human figures; the inanimate and the living; the seen and the believed. Early on, an ex-business partner sets fire to Price's wax museum, melting the statues and nearly killing the sculptor. As Price watches his creations liquefy, de Toth forces our eyes to converge on the glass eyeballs that fall from their heads and onto the floor. *House of Wax* was shot with the Natural Vision (dual-camera) system,⁸ and it introduced Warner Stereophonic sound, which used multiple audio recordings to simulate for the ear the sensation of

depth the stereo camera created for the eye. Stereo sound was immediately incorporated into the industry, but the 3D craze was short-lived.

Later that year, de Toth made another 3D film, a Western called *The Stranger Wore a Gun*, that went on to bomb at the box office. "I knew I was better than the rest of the ordinary geniuses and I

thought that, single-handedly, I'd be able to stop the exodus from 3D, revive third-dimensional pictures, and gain some more experience in 3D by doing a

Western," de Toth said. "But my conceit and hope didn't resurrect 3D. It was dead and buried by the junk thrown at the public way before we started. Too bad."9



8. The Natural Vision camera is twice the width of an ordinary motion-picture camera and consists of two regular cameras enclosed in a long metal box. Gears are synchronized so that both cameras work in perfect unison. The manufacturer's note to Warner Bros. explained: "Distance between the shutter openings of each camera should represent the normal distance between the two eyes of a person. Because of the camera's construction, the shutter openings could not be brought close enough together. So the cameras face each other in the metal box and an ordinary silvered mirror is attached in front of each lens. Each camera photographs the scene as reflected in its mirror. The two mirrors are adjusted to the 'correct interocular distance,' representing the distance between the eyes."



9. "J.L. [Warner] and Brynie [Bryan Foy] understood what I was trying to avoid," de Toth commented. "Those overstated effects killed 3D. How many times can a lion crap in the poor suckers' laps before they rebel?" De Toth was talking about Bwana Devil (1952) by Arch Oboler, which also used Natural Vision (and featured a lion jumping out of the screen), and just beat the release of House of Wax as the first American 3D feature.

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Raoul Walsh died in 1980, and missed that decade's flirtation with 3D cinema. André de Toth died in 2002, two years before *Avatar* went into development, and just as the industry and technology were changing radically.

As of this writing, roughly half of the new 3D films we see are shot with a 2D camera and converted in postproduction. (Those filmed with two-camera rigs also incorporate conversion into their

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postproduction process; in some cases, 3D scenes come out badly; in others, the sets are too tight to shoot with bulky stereo rigs.) And as Hollywood itself relies more on outsourced postproduction, the industry's 3D component is moving further than ever from a reliance on natural vision towards the digital mass-manufacture of a collective prosthetic vision—which is to say, towards mathematically constructed illusions of spatial depth.

These illusions are forensic re-creations of the stereo two-camera setup (which is itself a translation or approximation of our own binocular vision). To create them, technicians work backwards from a flat image, constructing stereoscopic viewpoints from artificially determined vanishing points. The incredibly painstaking, frame-byframe and pixel-by-pixel conversion process involves thousands of VFX animators, who work under the—usually remote, video-conferenced—supervision of a "stereographer," all of them doing their best to interpret the roundness of objects and create illusions of space between them.

Scores of postproduction houses, located all around the world, work sections of this "global pipeline" (often on different chunks of the same film, simultaneously). VFX artists in India and Asia work on the initial, most labor-intensive steps of conversion: rotoscoping (tracing the contours of each shape in every frame), depth creation (wrapping the flat cutout around a digitally created 3D polygon), duplication (adding a second eye: repeating the image for this second viewpoint by adding another camera within the now-digital 3D space of the image), and misregistration (readjusting the point of view from the second "camera eye" to the subject in the frame by the interocular distance, usually about 2.5 inches). Compositingputting all the cut-out parts from both left eye and right eye together in the frame-happens back in Los Angeles. The spatialized images are then re-uploaded overseas for dustbusting (filling in any "holes" or fixing any "artifact" that came about as a by-product of the process) and "lighting."

On the display end, 1950s-era dual-projector systems have been replaced by high-powered projectors that are able to offset "right"- and "left"-eye images with a single shutter and beam. These extra-bright projectors flash each eye's view in rapid-enough succession for the brain to register them as if they'd come, simultaneously, from two projectors: three right- and three left-eye flashes every 1/24 of a second, or 144 flashes per second. The speedy alternation of images works according to the same principle—the persistence of vision—as any motion picture. But in this case, parallax is a synthetic extrapolation of the original image—a product of sameness, rather than difference. The second eye has become just another digital effect.