Art and the Real-time Archive Relocation, Remix, Response

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An artist's book made by the author and referenced in the dissertation can be ordered from Amazon.com (US) under the title: 38 Messages from Space: The Wilbert Smith Archives Remixed.

On the computer screen, a time period becomes the "support-surface" of inscription. Literally, or better cinematically, time surfaces.

-Paul Virilio, The Lost Dimension

### **Abstract**

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If Internet artists have recently relocated their work to galleries and museums, there has meanwhile been an increasing engagement on the part of gallery artists with the media. While these migrations are often discussed in aesthetic if not economic terms, this essay asks what such phenomena can tell us about the changing nature of subjectivity in relation to media and technology.

Three main themes are introduced: the aura of information, inscription technologies, and the real-time archive. The themes extend across subsequent chapters addressing: the relocation of net art, the remix as an art method, and the capacity of the subject to respond to technology. The idea that technologies alter subjects (produce subject-effects) plays a central role in the arguments advanced.

Examples are drawn from both the author's own art practice as well the practice of others, including Phil Collins and Steve McQueen. Theorists including Lewis Mumford and Bernard Stiegler are used to interpret the questions raised by this practice. It is concluded that relocation and remixing can respectively aid in the apprehension of subject-effects and support subjective autonomy.

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# Introduction: Staging the Subject

In the aesthetic regime, artistic phenomena are identified by their adherence to a specific regime of the sensible, which is extricated from its ordinary connections and is inhabited by a heterogeneous power, the power of a form of thought that has become foreign to itself: a product identical with something not produced, knowledge transformed into non-knowledge, *logos* identical with pathos, the intention of the unintentional, etc. . . . The aesthetic state is a pure instance of suspension, a moment when form is experienced for itself. Moreover, it is the moment of the formation and education of a specific type of humanity. (Rancière 2004, 22-23)

The text that follows reflects an attempt to identify the language and discourses that I would choose for discussing my art practice. However, as it is the very nature artwork to deny anyone the right to hegemony when it comes to interpretation, there is nothing definite to be said. My approach to artistic research is rather one in which a dialectic between two mutually exclusive signifying practices provoke each other. That is to say, creative practice provokes critical reflection and vice-versa.

Thus, the event of artistic research does not occur in the artworks nor the present essay, but somewhere between the two. Just as aesthetic experience enlists subjectivity, the subject of this trans-discipline is also required to stand in a place of uncertainty between the two poles of artistic practice and critical reflection. Only by doing so, can they reencounter the challenge I have posed for myself and come up with their own responses; other languages, other discourses.

Short of this, my approach is intended to protect the autonomy of both the artwork and the arguments. Through this modular approach, artistic research is intended to serve as a trans-discipline capable of producing both its own artifacts as well as those specific to disciplines such as Fine Art, Art Criticism, and Cultural Theory. Here my cue is taken from art historian James Elkins who has outlined a typology of basic approaches to artistic research in which varying negotiations between theory and practice are reached. While my approach does not fit neatly within his typology, the sprit of my inquiry derives largely from the following provocation:

[T]he dissertation is considered as conceptually equal to the art. The research doesn't support or inform the art, but compliments it, with each one illuminating the other. (Elkins 2005, 14)

If the artworks discussed in the present essay range from those of well-established artists to my own, a common thread among many of them could be said to be the relations between humans and technology. Thus, what is on one level an essay about the rise and fall of an art movement known as "Internet art" or "net art," this story will come to be superceded by subplots lurking beneath the surface. One of these will be my own creative practice. Shifting focus from the content of the forthcoming arguments to their form, the reader will find that the voice in the text will oscillate from the third to the first person in order for me to discuss this practice subjectively.

Seeing as the stakes of the arguments advanced are rooted in questions of subjectivity insofar as the relations between humans and technology are concerned, it would appear to be a missed opportunity to ignore the obvious manifestation of such questions in the construction of the text itself. *I* sit and write on a word processor that delivers technical advantages that even seasoned machine typists would have found hard to imagine, much less scholars working by candlelight. Nonetheless, the affordances of

this technology will not prevent the flow of these arguments from moving back in time, to questions as simple as they are old: Who is the *I* that speaks? Who is the *I* that writes? Are they one and the same, or is articulation divorced from inscription?

This essay was begun with a host of preconceived ideas about humans and technology that have since been cast aside as the arguments have been refined. Chief among these ideas was the notion that a clear distinction could be made between the humans and technology, especially one in which something natural is contraposed against something artificial. Suffice it to say, in as much as we can assert that there would be no modern technology without humanity, we must also contend with the notion that we are as much a product of our tools as they are of us. Climbing back towards the surface, I will now outline a series of more subjective interpretations that will hopefully continue to resonate across the more objective arguments that follow.

First, net art is of interest to me in that it is a processoriented form of public art in the lineage of mediums such as cinema and movements such as fluxus and situationism. If the oppositions outlined in chapter 2 suggest a certain neutrality in regard to the institutional domestication of the medium, this is only to the degree that this turn of events has legitimated voices and practices and thus given them wider reach. Thus, when the performative interventions of the activists RTMark (The Yes Men) are introduced alongside the hermetic abstraction of artist John F. Simon, Jr., I do so to illustrate the breadth of the medium. Simon's career says a great deal about net art and in turn about its sociocultural milieu.

My own practice can be seen as a type of offline (or relocated) Internet art. While the finer grain of this contention will not come into view until it is elaborated in the forthcoming arguments, a question that has oriented this practice is: How do various practices in various contexts create or stage subjects? That is to say, what are the *subject-effects* of aesthetic encounters in

different spaces? Hans Ulrich Gumbrecht explicates subject-effects as follows:

[C]ouplings between human bodies, psychic systems, and new communications technologies (especially the printing press) produce specific subject-effects. With this perspective, they diverge from a historiographical tradition that describes technical innovations as motivated by collective needs and as "invented" by subjective genius. Instead of confirming the deeply rooted belief in an instrumental relation between the subject and different technologies, they encourage us to experiment with the inversion of this narrative pattern. (1994, 400-01)

Put another way, what creates an *I*? Beyond this, the forthcoming arguments will endeavor to say something about how this *I* relates to the technologies that it comes into contact with, or the subject-effects of these technologies.

In my artistic practice, I have explored the aesthetics of this encounter and in chapter 8 will aim for a degree of comprehension relative to a set of three themes common to two individual projects. These arguments will be situated within media theory, semiotics, and philosophy. More specifically, the media theory of the past twenty years will serve as a context within which to interpret both online and offline art practice. This theoretical frame of reference is concurrent with the revolution in electronic communication dating back to the early 1990s. If the questions posed by this revolution are not all together new, they are nonetheless significant relative to their historical specificity.

Being oriented more towards aesthetics than pure art criticism, the discussion will largely concern the changing nature of subjectivity in relation to media and technology. As such, the delineation of mediums based on their relative technicity will receive less emphasis than an exploration of the manner in which this technicity reshapes the subject in general.

In particular, the following questions will be raised: How is subjective autonomy modeled differently within museum space versus media space? What are the implications of the shift from "uploading to downloading" evidenced in relocated net art? Given the increasing subjectivity of technology, can it be said that it is capable of delivering testimony? How do such questions inform the larger discussion concerning the relations between humans and technology, or the question of post-humanism? A unifying question will be: What is the role of the aura of information produced by inscription technologies within a real-time archive?

Readers familiar with theorist Charlie Gere's *Art*, *Time and Technology* will find numerous affinities between this book and the essay that follows. If Gere's book "asks and tries to answer the question about what kind of role art might play in a world increasingly dominated by [real-time systems]" (Gere 2006, 1), this essay follows Gere's lead within the area of artistic research. Gere defines his area of inquiry as follows:

The term 'real-time systems' refers to the information, telecommunication and (multi)media technologies that have come to play an increasingly important part in our lives, at least in the so-called 'developed' countries. It is almost impossible to overstate the ubiquity and importance of the technologies in question. Real-time computing underpins the whole apparatus of communication and data processing by which our contemporary techno-culture operates. Without it we would have no email, word processing, Internet or World Wide Web, no computer-aided industrial production and none of the invisible 'smart' systems with which we are surrounded. 'Real-time' can also stand for the more general trend toward instantaneity in contemporary culture, involving increasing demand for instant feedback and response, one result of which is that technologies themselves are beginning to evolve ever faster. The increasing complexity and speed of contemporary technology is the cause of both euphoria and anxiety. (1)

Returning to the aforementioned themes, the first of these is that of *aura*, a concept that will be traced from its inception by philosopher Walter Benjamin through to its subsequent development by the theorists: Hans Abbing, Aleida and Jan Assmann, Dirk Baecker, Michael Betancourt, Carolin Duttlinger, Hans Ulrich Gumbrecht, and Michael Marrinan. The exploration of this theme will culminate with the thesis that the *aura of information*, to use Betancourt's terminology, is best understood as a phenomenon of time as opposed to space.

The second theme concerns what literary critic N. Katherine Hayles refers to as *inscription technologies*. In other words, mark making methods ranging from film emulsion to the cathode ray tubes that display characters on a computer monitor. In developing this theme, philosopher C. S. Peirce's figure of the *index* will come into play alongside philosopher Henri Bergson's concept of *duration* (time as states of consciousness). Together they will used to support the thesis advanced in the first theme.

The third theme is the net as a *real-time archive*. Technologies such as the Google search engine and the Twitter micro-blogging platform (Web log posts limited to 140 characters and commonly accessed via mobile devices) have reoriented archives away from the spatial and towards the temporal. Here, media theorist Friedrich Kittler's concept of *discourse networks* and philosopher Giorgio Agamben's writing upon testimony and archives will be considered. The ideas of cultural theorist Paul Virilio will traverse the three themes.

Following an exploration of these themes, their conclusions will be reviewed in service of establishing a framework for presenting and reflecting upon my own art practice. The first project to be presented will be a computer-based video installation entitled *These People from Elsewhere*. The second is an artist's book entitled *38 Messages from Space: The Wilbert Smith Archives Remixed*.

## Post-net Art and the Law of Relocation

The late 1990s saw the rise of net art as a new movement within contemporary art, one that can be defined as "work that was at least partly made on and for the World Wide Web and could only be viewed on-line" (Gere 2006, 173). Its concerns ranged from the expressly political work of RTMark (The Yes Men) to the formal abstraction of John F. Simon, Jr. The former published a Web site leading visitors to believe that it was produced by the World Trade Organization (WTO), the presence of articles such as "WTO Announces Formalized Slavery Market For Africa" notwithstanding.

Conversely, Simon's work was minimalist and programmatic. In the figure below (Fig. 1), one of his online works (*Every Icon*) is shown offline in a format the artist refers to as an "art appliance" (Simon). This work systematically draws every possible combination of black and white pixels that can appear within a 32 x 32 pixel grid. The descriptive text above the grid reads:

Given:

An icon described by a 32 x 32 grid.

Allowed:

Any element of the grid to be colored black or white.

Shown:

Every icon.

#### CHAPTER 2

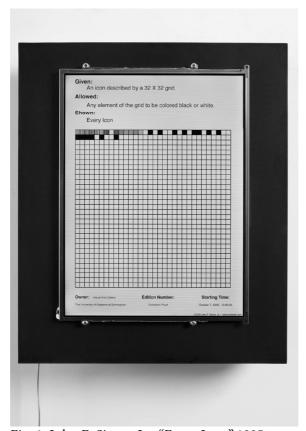


Fig. 1. John F. Simon Jr., "Every Icon" 1995.

Following in the steps of photography and video art before it, this new technologically oriented medium was ultimately assimilated within the general canon of art. However, following the dot com crash in the year 2000, institutional enthusiasm for net art began to wane.

Then in March 2004, the *New York Times* published an article entitled "Internet Art Survives, but the Boom Is Over" (Sisario 2004). The article featured quotes from a number prominent figures associated with digital art. The general consensus was that net art as a movement was dead. However, many of these pronouncements were tempered with caveats noting that there was

still vital work being done in this area, despite it being presented under a different name.

The fall of net art can be attributed to two factors. First, individuals and institutions that raced to invest in this new art form failed to see an adequate return on their investment. Second, the increasing digitization of society made contemporary art a safe haven from technology and the changes introduced by it. As galleries and museums returned to business as usual, paintings evoking the digital realm (such as those of artist Miltos Manetas) tended to replace net specific works.

From the year 2000 on, society has continued to be influenced by the net in unimaginable ways. Meanwhile, artists previously labeled "net artists" relocated themselves to safer ground as "media artists" working in installation-oriented practices that essentially traded the Web browser for the gallery space. If the first decade of net art was primarily about uploading, the second decade has been about downloading.

In more specific terms, a reversal occurred whereby the rush to import art-specific practices into the online world was followed by the rise of artistic practices that filtered content extracted from the now overwhelmingly rich online world such that it could be repurposed and repackaged in a manner more conducive to the culture of contemporary art. An example here would be *Learning to Love You More* by the artists Miranda July and Harrell Fletcher. They describe the work as follows:

Learning to Love You More is both a web site and series of non-web presentations comprised of work made by the general public in response to assignments . . . Participants accept an assignment, complete it by following the simple but specific instructions, send in the required report (photograph, text, video, etc), and see their work posted online. . . . Since Learning To Love You More is also an everchanging series of exhibitions, screenings and radio broadcasts presented all over the world, participant's

documentation is also their submission for possible inclusion in one of these presentations. (July)

This shift from uploading to a Web browser in the 1990s to downloading to an installation space after the year 2000 can also be seen as an example of what critic Nicolas Bourriaud names as the *Law of Relocation*. He traces the roots of this tendency back to the intersection of photography and impressionism, arguing that the former was relocated to the latter where it was explored as a form of thinking as opposed to a technique:

Degas and Monet thus produced a *photographic way of thinking* that went well beyond the shots of their contemporaries. . . . [W]e can say that art creates an awareness about production methods and human relationships produced by the technologies of its day, and that by shifting these, it makes them more visible, enabling us to see them right down to the consequences they have on day-to-day life. Technology is only of interest to artists in so far as it puts effects into perspective, rather than putting up with it as an ideological instrument.

This is what we might call the *Law of Relocation*. Art only exercises its critical duty with regard to technology from the moment when it shifts its challenges. So the main effects of the computer revolution are visible today among artists who do not use computers. (2002, 67)

However, technology routinely outpaces our capacity to relocate and interrogate it. If large art fairs and contemporary art exhibitions rely on an increasingly technologically rich infrastructure, these back-end operations are as invisible as overseas call centers. Put another way, photography and film have been assiduously interrogated in recent decades, but what of the Internet? Gestures have of course been made, but this moving socio-cultural target is as elusive as it is intimidating.

The Internet remains elusive in that it is increasingly difficult to establish what in media theorist Marshall McLuhan's terminology would be its *anti-environment* (McLuhan 1997). In other words, a vantage point from which to see something one is immersed in. The net is no less intimidating in that its increasing reach threatens to objectify us. In this regard, it is tempting to simply *not* see it and thereby avoid acknowledging something largely beyond our control if not comprehension. Given that relocation promotes the apprehension of subject-effects, the flow of the argument will now turn towards the practices of artists such as Santiago Sierra and Phil Collins who are engaged in relocations relative to the white cube of the gallery space or museum space, an offline territory (historically speaking) providing something of an anti-environment to the immediate subject-effects of the net.

Museum space as such will be defined as a three-dimensional physical environment dedicated to the exhibition of art as well as the history, symbolic language, and socio-cultural conventions associated with such space. Its corollary in this essay, media space, will be defined as an essentially one-dimensional electronic environment that is not art specific. While this does not preclude three-dimensional virtual environments from media space as so defined, such spaces are nonetheless simulations. To cast electronic media space as one-dimensional is to emphasize a binary logic wherein the presence or absence of signals is constitutive of the landscape created (whether by radio, television, or Internet). As will be argued below, this flatness is then thrown into relief as an epiphenomenon of the speed of transmission and reception.

If the arguments in this chapter are aimed at identifying the political valance of a series of offline practices, this is in service of highlighting the value of reconsidering the subject they address in light of this subject's relation to media space. In short, the latter is increasingly inseparable from the construction of individual and thus collective identity. Thus, so called "political art" becomes an ideal place to interrogate the subject-effects of the net. If the figure of a successful model of subjective autonomy will be a recurring

theme relative to the real-time archive, the stakes of this autonomy are as much political as they are personal.

Here, a bit of personal history would be prudent in clarifying the perspective from which this essay is being written. I am a media artist who has leveraged an industrial skillset to self-finance net art projects. Occasional grants notwithstanding, this approach has found me working largely without State sponsorship. If the arguments in this chapter connote a de facto relation between museum space and the State, this is not to imply that the latter does not fund work in media space, nor that self-financed artists do not occupy museum space. Nonetheless, institutional support tends to institutionalize art. That is to say, situate it in places where the rent is paid by the State. Given the challenges this poses for noncommercial practices, I hope to show that there is something to be gleaned from the net's particular model of subjectivity, problematic as it is.

#### Santiago Sierra

In a work shown at the Venice Biennale in 2001, Sierra paid approximately \$60 each to a group of "illegal street vendors, most of them immigrants from other parts of the world: Senegalese, Bangladeshi, Chinese, and also Southern Italian" (Sierra), to dye their dark hair blond. Despite the breadth of the parameters for contemporary art practice within galleries and museums, there remain reasons to be skeptical about the potential of such politically oriented practices in these spaces to serve as a model for the manifestation of subjective autonomy, at least in isolation. Implicit in this isolation is a relationship to the State that warrants being called into question. When such practices rely on State sponsored funding mechanisms, a general precondition becomes the recognition of the State (to criticize it is to recognize its authority) as a prime stakeholder of *cultural capital*, to invoke a tripartite concept originated by sociologist Pierre Bourdieu:

For Bourdieu, there are three basic forms of capital: cultural, social and economic. Cultural capital refers to the possession of symbolically valued cultural accourrements and attitudes. These may be material in nature – books, painting, clothes – or symbolically prestigious – for example, a 'good' accent, educational qualifications, refined manners. In this way, capital can be expressed materially, corporally or gesturally, but in each case it is symbolic because it attracts acknowledgement of value from those sharing positions within the given field. (Grenfell 2007, 30)

However, as evidenced by theorist Brian Holmes, there remain reasons for calling the inherent value of this cultural capital into question. In particular, it becomes suspect in the face of circumstances that jeopardize the subjective autonomy and thus, collective agency of "those sharing positions within the given field." This situation leads to all manner of responses from artists who bite the hand that feeds them in challenging ways. Holmes refers to this a *picture politics*, likening the situation to a poker game in his essay "Liar's Poker."

#### Thomas Hirschhorn

In commenting upon artist Thomas Hirschhorn's Wirtschaftsland-schaft Davos, Holmes writes:

Hirschhorn's style can be referenced to "dadaist collage", observes one critic; but his major source is "the practice of excluded people who know perfectly well how to get their messages across, by using whatever they find." In this case the excluded people are those who confront the barbed wire at the World Economic Forum. And since counterglobalization has been a hot subject, representing them is a perfect way to become popular in a museum. (Holmes)

There is thus cultural capital to be gained by representing a "hot" political subject, but if the function of this representation is simply to be a commodity, then it poses an ethical dilemma, i.e. profiteering from the "excluded."



Fig. 2. Thomas Hirschhorn, "Wirtschaftslandschaft Davos" 2001.

Thus, what Holmes dubs the "Representation of Politics/Politics of Representation" in the subtitle of his essay, is a double-edged sword. That is to say, political issues can be represented either on their own behalf or on the behalf of the presenter. The two probably cannot be made distinct from each other and perhaps this should not be expected, as the biographies of political activists show they are human beings with human egos. Here it becomes important to clarify just what is meant by the word "political" within the present context. In this regard, the work of philosopher Jacques Rancière will now take center stage.

In his translator's introduction to Rancière's *The Politics of Aesthetics: The Distribution of the Sensible* (Rancière 2004), philosopher Gabriel Rockhill names a basic question underlying Rancière's overarching philosophical project: "From what position do we speak and in the name of what or whom?" (2004, "Politics" 2). As such, the aforementioned question (p. 3) concerning the

relation between enunciation, inscription and identity is well suited to being explored relative to Rancière's philosophy.

As reflected in its title, the specific focus of Rancière's book is "...the distribution of the sensible, or the system of divisions and boundaries that define, among other things, what is visible and audible within a particular aesthetico-political regime" (1). Thus, what is political, aesthetically speaking, is not so much the explicit figure or content of a work so much as its implicit ground or form. If the former can be reduced to a statement, the latter is inherently non-reductive insofar as it constitutes something more akin to language. This brings to mind the manner in which George Orwell represented the totalitarian implications of the truncation of language in his novel Nineteen Eighty Four (Orwell 2004). If Orwell's fictional Newspeak operates at the level of words, the actual text message abbreviations (SOT = short of time, for example) of the real-time archive operate at the level of letters. While the former is portrayed as a totalitarian means of constricting content and the latter is generally perceived as a practical constraint only constricting form, their end result may not be dissimilar. In any case, the ethos underlying both would appear to stand in direct counterpoint to Rancière's call for disruptions to "the distribution of the sensible:"

...disagreement is neither a misunderstanding nor a general lack of comprehension. It is a conflict over what is meant by 'to speak' and over the very distribution of the sensible that delimits the horizons of the sayable and determines the relationship between seeing, hearing, doing, making, and thinking. (Rockhill 2004, "Politics" 4)

Below, Rockhill outlines what are for Rancière the various regimes of images (art):

[T]he *ethical regime* of images characteristic of Platonism is primarily concerned with the origin and telos of imagery in relationship to the ethos of the community. It establishes a

distribution of images – without, however, identifying 'art' in the singular - that rigorously distinguishes between artistic simulacra and the 'true arts' used to educate the citizenry concerning their role in the communal body. The representative regime is an artistic system of Aristotelian heritage that liberates imitation from the constraints of ethical utility and isolates a normatively autonomous domain with its own rules for fabrication and criteria of evaluation. The aesthetic regime of art puts this entire system of norms into question by abolishing the dichotomous structure of mimesis in the name of a contradictory identification between logos and pathos. It thereby provokes a transformation in the distribution of the sensible established by the representative regime, which leads from the primacy of fiction to the primacy of language, from the hierarchical organization of genres to the equality of represented subjects, from the principle of appropriate discourse to the indifference of style with regard to subject matter, and from the ideal of speech as act and performance to the model of writing. (4-5)

The parallel dichotomies of speech versus writing and immediacy versus theatricality (literarity) will both play a role in the arguments advanced in this essay, particularly in regard to how both inform questions having to do with the relations between humans and technology.

Returning to Hirschhorn, in the context of the present essay it is pertinent to note the relation between his work and the Internet. If the historic WTO protests in Seattle in 1999 could be said to be a product of the organizational infrastructure made available by the net, the representations of politics appearing in this information space carried real consequences for political action in physical space.

Conversely, the representations of politics presented by Hirschhorn in the Kunsthaus Zürich can be seen as means by which the State inoculates itself against massive critique and the political mobilization that might accompany it. As the signs in *Wirtschafts*-

landschaft Davos (Fig. 2) have been derived from the antiglobalization movement, there is thus a tendency for such representations of politics in museums to risk undermining the political agency of such signs by investing them with exchange value.

Furthermore, one is left to ask just who the audience is for such work and what psychosocial functions it serves for them. The real point however, is that this socio-political stagnation is not happenstance. It is the result of what is best ambivalence and at worst something all together different on the part of the State's majority stakeholders, namely wealthy elite:

The art of maintaining social balances through the management of cultural trends has long been developed by the European social democracies, and is being taken over by the privatized institutions. In other words, we must suppose that a fraction of those in power seek to manipulate the public, by instrumentalizing the cultural producers who play their tricks for them. (Holmes)

Thus, what artists such as Hirschhorn actually represent is the "agony" of their own alienation from the State and this is an alienation mirrored by the audience. In this way there is a social realism to Hirschhorn's aesthetic in that it mirrors the collapse of representative democracy:

How does picture politics work, when it is associated with a proper name and presented within the contemplative frame of the art institution? Invariably it produces statements like these: "I represent the people", or "I represent a social movement", or "I represent the excluded" – which are the classic lies of representative democracy, when it serves to conceal private interests. (Holmes)

This collapse can be likened to what cultural theorist Jean Baudrillard names as the *obscene* (not seen), in other words, the

collapse of stage upon which to see or interpret our reality because of its mediated proximity:

What characterizes him [the contemporary subject] is less the loss of the real, the light years of estrangement from the real, the pathos of distance and radical separation, as it is commonly said: but, very much to the contrary, the absolute proximity, the total instantaneity of things, the feeling of no defense, no retreat. It is the end of interiority and intimacy, the overexposure and transparence of the world which traverses him without obstacle. He can no longer produce the limits of his own being, can no longer stage himself, can no longer produce himself as mirror. He is now pure screen, a switching center for all the networks of influence. (Baudrillard 2002, "The Ecstasy" 153)

This concept will be explored in greater depth in subsequent chapters. For the time being, we can say that museum space in isolation may not be capable of staging the subject in a manner that enlists their subjectivity autonomy such that it can model any effective challenge to the State. Furthermore, it can be said that the expenditure of cultural capital in this arena sidesteps the key question of the subject's capacity to stage themselves insofar media ontological questions are not essential in the aesthetic field of relations. However, "social capital" is nonetheless exchanged within this space:

[S]ocial capital is at least partially acquired through the accumulation of cultural capital, which can be conceived as the ability to produce and display the very specific types of signs, images and gestures which are most valued within a given field at a particular period. Accumulating cultural capital means mastering complex fetishes of meaning which have been constructed and transformed over time. Thus it becomes apparent that a powerful function of belief is at work. You must believe that these fetishes are really valuable, or 'interesting'. Bourdieu came to call this belief *illusio*,

which he defines as "the fact of being invested, caught up in and by the game." "Being interested", he continues, "means ascribing a meaning to what happens in a given social game, accepting that its stakes are important and worthy of being pursued." In the game we are discussing, the fundamental interest (or illusion) is the attainment of autonomy: a historical ideal whose terms are open to endless struggle. (Holmes)

In Bourdieu's terms, it can thus be said that Hirschhorn's work lacks illusio. That is to say, an aesthetics in which subjective autonomy appears to be at stake. This does not imply a generalized value judgment wherein museum space is less fertile than media space, but rather calls into question the type of subjectivity modeled in much museum space-based practice. Below, Holmes questions the degree to which the work of artists such as Hirschhorn (and perhaps we could include Sierra) contains the seeds of possibly reorienting the field of relations that surround this museum space:

Can the illusio that accounts for the very coherency of the field be transformed, gravitationally shifted, so that its prestigious objects – the signs, gestures and images – are reevaluated? Such a result could only come about through a shake-up in the system of positions occupied by specific players. This is what we are now witnessing. In the artistic game of liar's poker, certain players are increasing the stakes, and steering the conventional bluff of picture politics to the point where the contract that holds together the artist, the curator, the public and the house – that is to say, the museum as a social institution – finally breaks. When you can bluff your way to a very dramatic break, then there is the possibility of changing the field itself, of beginning to play a different game. (Holmes)

In this light, it can be said that Hirschorn's work is edgy, but not revolutionary. That is to say, for all its drama, its capacity to change the "game" is dubious. However, can one imagine a practice more likely to "break the bank" than Sierra's? In other words, what sort of museum space-oriented practices would be necessary to enlist (or perhaps withdraw) socio-cultural capital from the institution such that its most fundamental principles were thrown into question?

Below, Holmes quotes artist and activist Florian Schneider, who was part of a group responsible for organizing a workshop at Documenta X entitled "[cross the border]."

On Sunday, we opened a passport exchange office, and we asked people to give us their passport to pass it on people who need it much more, which are undocumented or so called illegal people. A policeman appeared, and he asked 'Is this art or not? what are you going to do with the passports?' And we asked him for his passport. He refused to give us his passport, but he promised us to talk with his superiors about the action, and that was what we wanted to reach. So it seems that we could do everything we want. It's great and very funny, but in the same way, it makes me nervous a little bit, because there is even no reaction by the other side. That's the main problem in the art context. (Holmes)

Here is an example of changing the game being played insofar as representation as a commodity is sacrificed for representation as a staging ground for action. However, if Holmes applauds Schneider's capacity to transcend the representation of politics in favor of a concrete encounter with the politics of representation, Schneider himself notes that there was "no reaction by the other side." This suggests that the field of operations circumscribed by the museum space creates a zone of freedom for artists that short-circuits their political efficacy in the same movement. For Holmes this is indicative of a level of hypocrisy in both art and democracy:

[I]n the age of corporate patronage and the neoliberal state, art is becoming a field of extreme hypocrisy. And so it directly reflects the crisis of the representative democracies.

The temptation is then to cease playing the game (the anarchist solution), or to simply exploit the museum's resources for other ends ("radical media pragmatism"). Both positions are justified, from the activist point of view. But there are disadvantages to leaving entire sectors of society to rot, as each new swing to the neo-authoritarian right is there to prove. The most interesting question within the artistic field then becomes: How to play the exhibition game in such a way that something real can actually be won? (Holmes)

While I do not agree that "to cease playing the game" is the equivalent of anarchy (art is one of many forms of mass culture), I will contend that one route is to hybridize the space of the encounter such that the subject is staged both within and without the net simultaneously. This aesthetic strategy can be seen as a means of staging a response relative to a situation that Virilio names as follows:

Whether we like it or not, for each and every one of us there is now a split in the representation of the World and so in its *reality*. A split between activity and interactivity, presence and telepresence, existence and tele-existence. (1997, 44)

In the arguments that follow, I will characterize this response as relocated net art. The logic behind this strategy is intended to wrest as much subjective autonomy as possible from both museum and media space while trying to foreclose the trappings of each via the presence of the other. That is to say, the "swing to the neo-authoritarian right" is one that must be dealt with not only on the macro-level, via public protest, but also on the micro-level in terms of the signifying systems we are increasingly immersed in. In this light, to abandon media space whether tactically or conceptually is to likewise leave "entire sectors" of ourselves to the wolves. A hybrid approach also provides a more authentic aesthetic encounter given the increasing role of the net in our everyday lives:

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Right now, the greatest symbolic innovations are taking place in self-organization processes unfolding outside the artistic frame. And it is from the reference to such outside realms that the more concentrated, composed and self-reflective works in the museum take their meaning. The only way not to impoverish those works, or to reduce them to pure hypocrisy, is to let our highest admiration go out to the artists who call their own bluffs – and dissolve, at the crisis points, into the vortex of a social movement. (Holmes)

This does not mean that paintings need to be traded for interactive installations, but rather that the subject addressed by art is addressed in a more contemporary manner. While Holmes does not name the Internet per se, it would be hard to imagine where these "symbolic innovations" were evolving in greater number than online. This is not to suggest solely net-based interaction, but rather all of the permutations of these interactions that reach into the offline world. That is to say, hybrid spaces spanning both information space and physical space such as the aforementioned WTO protests (p. 16). Here, artistic activism such as the work of RTMark (The Yes Men) and Banksy serve as examples of practices that seamlessly shift between offline space (public space and museum space) on the one hand and online space (media space) on the other. This approach challenges assumptions about the subject's autonomy on both sides while realistically presenting the manner in which the online world increasingly impinges upon the offline world.

#### Banksy

While Banksy is routinely labeled a graffiti artist, there is a good deal more to his strategy than one usually associates with this genre. For example, in one of his interventions, he applied graffiti to the West Bank barrier in Israel. In an article that describes him as a "guerrilla artist," Banksy's spokeswoman states that: "The Israeli security forces did shoot in the air threateningly and there

were quite a few guns pointed at him." (BBC 2006). One of Banksy's exploits just prior to his "attack" on the West Bank barrier (he refers to himself as an "art terrorist") consisted of surreptitiously installing his work in four of New York's most prestigious museums in a single day. For example, the painting below (Fig. 3) was installed at the Metropolitan Museum of Art.



Fig. 3. Banksy, "Untitled" 2005.

Banksy's practice resonates with Baudrillard's suggestion that: "Reciprocity comes into being through the destruction of mediums per se" (Baudrillard 2003, 284). Later in this same essay ("Requiem for the Media"), Baudrillard names "transgression" as the method by which communication prevents itself from becoming reabsorbed into a defense of the system of codes within which it

speaks. While he specifically suggests a transgression of the distinction between producer and consumer, one might also apply museum space and media space as a viable set of oppositions. As if prefiguring Banksy, the example of this transgression that Baudrillard offers is graffiti:

Graffiti is transgressive, not because it substitutes another content, another discourse, but simply because it responds, there, on the spot, and breaches the fundamental role of nonresponse enunciated by all the media. Does it oppose one code to another? I don't think so: it simply smashes the code. It doesn't lend itself to deciphering as a text rivaling commercial discourse; it presents itself as a transgression. (287)

Here we can ask whether the above image (Fig. 3) represents a transgression within museum space, media space, or both. In any case, the strength of Banksy's art is not located entirely in his stencil art or in his hijacking of museums, but in his ability to use the media that he is immersed in as tool to project a rejection of fear. However, whether Holmes would place Banksy among examples of "artists who call their own bluffs – and dissolve, at the crisis points, into the vortex of a social movement" is an open question. This, in that the spectacular nature of Banksy's art attacks resist such dissolution due to their power as representations and potential commodities. If the strength of Bansky's work is its directness, this is also its weakness from a critical standpoint.

#### Mark Wallinger

In Banksy's place, stands artist Mark Wallinger (Turner Prize winner in 2007), whose *State Britain* (Fig. 4) suggests that there remains something to be won within the museum space. Wallinger's installation consisted of the re-creation of a diverse collection of signs donated to and displayed by anti-war activist Brian Haw. Wallinger recreated the signage after Haw's materials

were confiscated under the authority of the "Serious Organized Crime and Police Act 2005," which effectively banned protest materials within one kilometer of Parliament Square. The artist then installed the recreated signage within the Tate, such that it was half inside and half outside this "exclusion zone," as the Tate itself is situated within one kilometer of Parliament Square.



Fig. 4. Mark Wallinger, "State Britain" 2007.

Wallinger's work comments upon not only upon the relations between public space and museum space, but also the displacement of a politically empowered subject (regardless of context). Thus, the work of Banksy and Wallinger can be seen to question the efficacy of "the political stage of representative democracy:"

Here, the issue is thereby no longer only to do with the 'figurative' and the 'non-figurative', as in the twentieth century, but indeed concerns representation in real space of the artwork and the pure and simple presentation, in real time, of untimely and simultaneous events or accidents that certain artists sometimes call performances or installations...

Even while the acceleration of art history, at the beginning of the twentieth century, merely prefaced the imminent ousting of the figure, meaning of all figuration, the acceleration of reality contemporary with our twenty-first century once more undermines all 'representation', not only pictorial or architectural but especially theatrical, to the

detriment of the political stage of representative democracy. (Virilio 2007, 119-20)

In juxtaposing the relations of representation between the media, the museum, and the street, both Banksy and Wallinger address this obscenity on various levels. Thus, the obscenity confronting the individual subject on a micro level can be seen to mirror the obscenity of the political stage on a macro level. While the street is the prototypical site for the promotion of collective identity and formation of protest, its vibrancy has waned in the face of a network of privatized interests, which increasingly restrict free speech while increasing surveillance. By applying the tactics of a street protest in a museum, Banksy creates a spectacle that demonstrates the museum's representative synergy with the media. By reframing an actual street protest within the Tate, Wallinger recaptures a bit of its vitality by exoticizing it, but perhaps also shows the manner in which public space has become privately petrified like the halls of a museum.

However, if Wallinger's installation stages the disappearance of public space, its representation in the media stages the disappearance of museum space. When *State Britain* is reframed through its representation in the media, it enters a field of unpredictable dialectical relations in which it can serve ends directly counter to those with which it was intended. For example, as proof that the voice of protest traditionally heard on the street is still alive via aesthetic interventions such as Wallinger's and therefore tacitly implying that flooding the actual streets in protest is unnecessary. This is akin to what Baudrillard points to when he speaks of *image-events*, or images capturing events:

The role of images is highly ambiguous. For they capture the event (take it as hostage) at the same time as they glorify it. They can be infinitely multiplied, and at the same time act as a diversion and a neutralization (as happened for the events of May 68). . . . The image consumes the event, that is, it absorbs the latter and gives it back as consumer goods.

Certainly the image gives to the event an unprecedented impact, but as an image-event. (Baudrillard 2001)

For philosopher Bernard Stiegler, the "industrial manufacturing of the present" means that an event is only memorized "through its being forgotten:"

The preservation of memory, of the memorable (selection for inclusion in the memorizable, the retention of this memorable element, creates it as such), is always already also its elaboration: it is never a question of a simple story of "what happened," since what happened has only happened in not having completely happened; it is memorized only through its being forgotten, only through its being effaced; selection of what merits retention occurs in what should have been, and therefore also in anticipating, positively and negatively, what soon will have been able to happen (retention is always already protention).

What happens in industrial manufacturing of the present, that is, in time, would consequently have nothing exceptional in its general structure: deferral, indiscernibility of the event and its story line. It is never possible, in fact, "to decide if there is an event, story, story of an event, or event of a story" (Derrida). (2009, "Technics" 115-16)

Both Haw's original signage and Wallinger's recreation of it included a painting "by" Banksy, yet the latter would appear an unlikely candidate for the Turner prize himself. This may be attributable to the perception that there is something "dirty" about using the media the way that he does, and yet the reach of his voice is likely to extend beyond all of the previously mentioned artists with the possible exception of The Yes Men and artist Damien Hirst, both of whom also make sophisticated use of the media.

Conversely, it appears that Holmes wants to champion artistic practices capable of "conceiving and shaping the ways we live" without acknowledging that any gesture made in this

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direction is always relative to the ever-increasing mediation of our culture and society. In particular, Holmes assumes that subjects are constituted a priori beyond the tentacles of the mass media and the degenerative effect often associated with it in critical circles. However, what such critiques assume is the presence of a State that supports the privilege and even possibility of mounting such critiques by another means in the first place. For vast parts of the world's population, this safety net simply does not exist. In such an environment, whether we are talking about the voiceless in Eastern Europe or New Orleans, access to tools giving them a voice in the media is of enormous significance. Such access (having a voice) can be said to even create these subjects insofar as it provides a context for them to express an I in a cost-effective manner. By extension, I would argue that digital media art, or the digital aesthetics of subjective autonomy, should not be easily discounted. If citizen journalism or user-generated content runs the risk of obscenity, media art's reflexivity retains the potential to apprehend the subject-effects of the net. Bourriaud writes:

[T]hose who produce so-called "computer graphic" images, by manipulating synthetic fractals and images, usually fall into the trap of illustration. At best, their work is just symptom or gadget, or, worse still, the representation of a symbolic alienation from the computer medium, and the representation of their own alienation from methods dictated by production. So the function of representation is played out in behavioral patterns. These days, it is no longer a question of depicting from without the conditions of production, but of introducing the gestural, and deciphering the social relations brought on by them. When Alighiero Boetti gets 500 weavers in Peshwar, Pakistan, working for him, he represents the work process of multinational companies much more effectively than if he merely portrayed them and described how they work. The art/technology relationship is thus particularly suited to this operational realism which underpins many contemporary

practices, definable as the artwork wavering between its traditional function as an object of contemplation, and its more or less virtual inclusion in the socio-economic arena. . . . This is the challenge of modernity: "Taking the eternal from the transitory", yes, but also, and above all, inventing a coherent and fair *work conduct* in relation to the production methods of their time. (2002, 68)

Yet he potentially underestimates the value of media art projects (often independent and minimally financed) and assumes the presence of institutions (State or otherwise) capable of and willing to support the arts to begin with. Looked at in this light such "operational realism" risks replaying a dynamic of colonialist exploitation under the guise of an aesthetic gesture. Practices such as Sierra's exist because someone can afford to support them. Thus, for this operational realism to actually be realistic, it would be necessary to also represent the flow of capital and actual work conduct underlying the entire work process.

### Steve McQueen

In artist Steve McQueen's project *Queen and Country* (Fig. 5), the subject in staged through their direct interaction in "the socioeconomic arena" insofar as they purchase and use a postage stamp created by the artist that commemorates British casualties in Iraq. In this work, the hand of the State is not just transparently implicated but actively involved in the production of the representation. In other words, McQueen's postage literally makes the representation of these deaths part of an exchange system. If the work of Sierra, Hirschorn, Banksy, and Wallinger can be seen as fuses, McQueen's work is an open circuit.

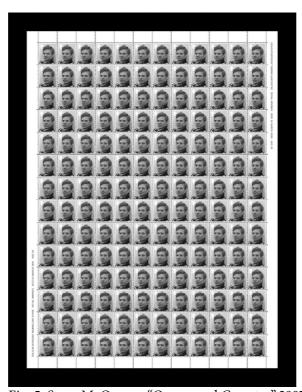


Fig. 5. Steve McQueen, "Queen and Country" 2007.

There is admittedly a perennial lack of self-awareness on the part of new media artists as to the politics of representation underlying their most basic tools. For example, the prevalence of the English language on the Internet skews this socio-cultural landscape in ways that are seldom considered by native English speakers. However, the Faustian bargain that Holmes and Bourriaud assume the freedom to decline is socio-culturally specific. That is to say, if submitting to the normalizing effect of digital representation (having a free e-mail account owned by a multi-national corporation, for example) is a precondition for subjectivity on the part of many citizens and artists alike, this has become more of a rule than an exception across the socio-cultural spectrum. In other words, it is increasingly only the destitute and oligarchs who are

not subject to the "liberation" of new information technology. If those in-between sometimes portray themselves as unwilling accomplices in their own technological subjectification, one is left to ask how much choice they really have to begin with.

## Phil Collins

A more nuanced meditation upon this question of the constitution of the subject can be seen in artist Phil Collins's *they shoot horses* (Fig 6). While Collins's practice shares affinities Sierra's practice, the former includes media space as part of its aesthetic equation.



Fig. 6. Phil Collins, "they shoot horses" 2004.

Critic Claire Bishop describes Collins's work as follows:

Invited to undertake a residency in Jerusalem, he decided to hold a disco-dancing marathon for teenagers in Ramallah, which he recorded to produce the two-channel video installation *they shoot horses*, 2004. Collins paid nine teenagers to dance continuously for eight hours, on two consecutive days, in front of a garish pink wall to an unrelentingly cheesy compilation of pop hits from the past

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four decades. The teenagers are mesmerizing and irresistible as they move from exuberant partying to boredom and finally exhaustion. The sound track's banal lyrics of ecstatic love and rejection acquire poignant connotations in light of the kids' double endurance of the marathon and of the interminable political crisis in which they are trapped. It goes without saying that they shoot horses is a perverse representation of the "site" that the artist was invited to respond to: The occupied territories are never shown explicitly but are ever-present as a frame. This use of the *hors* cadre has a political purpose: Collins's decision to present the participants as generic globalized teenagers becomes clear when we consider the puzzled questions regularly overheard when one watches the video in public: How come Palestinians know Beyoncé? How come they're wearing Nikes? By voiding the work of direct political narrative, Collins demonstrates how swiftly this space is filled by fantasies generated by the media's selective production and dissemination of images from the Middle East (since the typical Western viewer seems condemned to view young Arabs either as victims or as medieval fundamentalists). By using pop music as familiar to Palestinian as to Western teens, Collins also provides a commentary on globalization that is considerably more nuanced than most activistoriented political art. They shoot horses plays off the conventions of benevolent socially collaborative practice (it creates a new narrative for its participants and reinforces a social bond) but combines them with the visual and conceptual conventions of reality TV. The presentation of the work as a two-screen installation lasting a full eight-hour workday subverts both genres in its emphatic use of seduction on the one hand and grueling duration on the other. (Bishop 2006, 182)

Thus Collins's subjects are not only staged (for themselves and for us) relative to their imaginary relation to the media, but are simultaneously staged in relation to the imaginary construction of the Middle East in the minds of many Westerners. This selfstaging occurs within a media space, but is presented within a museum space.

Conversely, Sierra's work simply excludes the former outside the perimeter of his aesthetic field. Whereas Collins reveals the subtlety of the challenges presented to the subject in the face of the media, Sierra forecloses the event of subjectivity offered by mediation insofar as the participants of his project can be read as victims of neoliberalism. Collins's teenagers are not victims, and as such, they are capable of mirroring to the audience the hope that there is something to be won both in the museum space and the media. However, the artist achieves this through the introduction of an aporia between the two where the subject-effects of the media come to the fore. My underlying contention here is that from Sierra to Collins, all are looking for ways to stage the subject. Underlying this search is the specter of a subject rendered an object via the technology of media.

## Observing the Light of Speed

Since optics is the branch of physics that deals with the properties of light and so with visualization phenomena, the split in sight is now saddled with the split in light itself; not just the old split between *natural* light (sun) and *artificial* light (electricity), but the current split between *direct* light (sun and electricity) and *indirect* light (video-surveillance) that results from the interaction of real time, optical phenomena and electronics. Whence the term 'opto-electronics'.

All this leads us at this juncture to speak not solely of the extension and duration of the space of matter, as the philosophers of the classical age did, but also of the *optical density* of the time of light and of its 'optoelectronic' amplification. This means chucking out the geometric perspective of the Italian Renaissance and replacing it with an electronic perspective: that of real-time emission and instantaneous reception of audio-video signals. (Virilio 1997, 35-36)

Spanning the arguments advanced in this essay is a theoretical orientation towards a central concept in the philosophy of Virilio, that of the *light of speed*. While this figure is explicated in various ways across his body of work, it can generally be thought of as an epistemology in which electromagnetic radiation (light) is overtaken by rate of movement (speed) as the dominant metaphor in models of interpretation. Virilio typifies the difference between these two models as *small-scale optics* versus *large-scale optics*. The former are small in that they are linked to one's immediate surroundings and exist relative to the Earth's horizon. The latter are

large in that they transcend these parameters. The distinction is also made relative to the dichotomy between passive and active. In other words, there is a "dwindling importance of geometric optics, the *passive optics* of the space of matter (glass, water, air)" (Virilio 1997, 35), in favor of "the **active optics** of the time of the speed of light" (35). Of light in hermeneutics, philosopher Paul Ricoeur writes:

We can see the fantastic extrapolation involved here: 'With every metaphor, there is no doubt somewhere a sun; but each time that there is the sun, metaphor has begun'. Metaphor has begun, for with the sun come the metaphors of light, of looking or glancing, of the eye – pre-eminent figures of idealization, from the Platonic eidos to the Hegelian *Idea*. By virtue of this, "idealizing" metaphor . . . is constitutive of any element of philosophy in general'. More precisely, as the Cartesian philosophy of *lumen naturale* attests, light aims metaphorically at what is signified in philosophy: 'It is to that main item signified in onto-theology that the tenor of the dominant metaphor will always return: the circle of the heliotrope'. (2003, 341)

For his part, Virilio twists this linguistic and philosophical tradition by inverting the common figure of the "speed of light," into the "light of speed." But for what purpose? Virilio was trained as a physicist, thus a short detour into physics will be of use here.

From the standpoint of modern physics, we can say that observer and observed implicate one another. Whether the framework is relativistic or quantum mechanical, there is no observed without an observer. As a result, speed and position are variables just as important to the observer as to the observed. Using a parallel logic, Virilio sees the speed of observation enabled by technology as being responsible for a fundamental shift in our relation to dimension:

If the dimensions of the physical world resulted from its exploitation as a field of action, and if speed resulted in the negation of these dimensions, what then is a dimension?

In his book, B. Mandelbrot responds that it is a matter of the degree of resolution and that the numerical result (from zero to several dimensions) depends on the relationship between the object and the observer, that is, the distance between the observed and the observer, spatial dimensions being hardly more than fragmentary messages that geometry will never cease from interpreting, the true 'dimension of the world' would then be not only a matter of the degree of resolution of the image (geometric, geographic) but also that of its speed, the value of the dimensional mediation never ceases to metamorphose (according to Mandelbrot, to alternate) dromoscopically thanks to the progress of the speed of observation, the means of communication of dimension, vectors and vehicles (surveyors, lenses, microscopes, telescopes, automobiles, satellites...) being simultaneously the means of extermination of dimensions. The ultimate traffic accident where, at the speed of light, the apparent reality of the visible world comes to an end, implosion, dimensional collapsing [télescopage] that would see the disappearance of appearances in the dazzling light of speed. (Virilio 2006, 117-18)

Thus, the play of light in space yields to the play of speed in time as the arbitrar of semblance. In other words: [T]he 'real-time perspective' of ubiquity . . . gives the real-space perspective of the Quattrocento its stereoscopic 'relief' (Virilio 2007, 37). Echoing Virilio, Baudrillard also cites mathematician Benoît Mandelbrot in relation to the necessity of rethinking the dimensionality "of standards of truth or objectivity" relative to the light of speed:

[I]nformation is truer than true since it is true in real time – this is why it is fundamentally uncertain. Or again, to draw on Mandelbrot's recent theory, we can say that things in the information space or the historical space, like those in fractal

space, are no longer one-, two- or three-dimensional: they float in some intermediate dimension. We no longer have any standards of truth or objectivity, but a scale of probability.

You put out an item of information. So long as it has not been denied, it is plausible. And, barring some happy accident, it will never be denied in real time and so will always remain credible. Even if denied, it will no longer ever be absolutely false, since it has once been credible. Unlike truth, credibility has no limits; it cannot be refuted, because it is virtual. We are in a kind of *fractal truth*: just as a fractal object no longer has one, two or three dimensions (in whole numbers), but 1.2 or 2.3 dimensions, so an event is no longer necessarily true or false, but hovers between 1.2 or 2.3 octaves of truth. The space between the true and the false is no longer a relational space, but a space of random distribution. (2002, "Screened" 85-86)

## Along similar lines, Stiegler speaks of *light-time*:

Information's "truth" is *light-time* [*le temps-lumière*]. This term essentially designates the transmission of information at the speed of light, with no delay, creating analogic and numeric orthotheses – while the literal orthothesis implies an essential delay between what might be called the event or its entry as data on the one hand and its reception or reading on the other. But it is at the point of data entry, as in its processing, that the analogically or numerically in-formed event submits to the logic of light-time. (2009, "Technics" 114)

Gere suggests that Stiegler shares sympathies with both Virilio and Baudrillard:

[F]or Stiegler our human relationship with time is governed by the technical means by which we apprehend it. With the rise of real-time technologies, this relation is brought into question. He suggests that the conjunction between the question of technics and of time made evident by the speed of the technical evolution and by the ruptures in temporalization and 'event-ization' it provokes call for a new consideration of technicity, in which it is understood as constitutive of temporality as well as of spatiality. (2006, 22)

In light of Baudrillard's concept of the image-event, this *eventization* can be seen as means by which the inscription of memory is commodified, whether inside- or outside of the subject. In other words, in both the electrochemical inscription of neural networks and the magnetic inscription of binary data

[e]vent-ization means *selection*. All events are inscribed in a memory, and event-ization is memory's functioning. The issue, then, has to do with the criteria of selection (and beyond that, with the organization of a memory that has become an informational reserve [*stock*] – such as data, sperm, or organ banks, or genetic sequences). (Stiegler 2009, "Technics" 100)

When this event-ization occurs outside the subject, it is possible to speak of not only an "outsourcing" of personnel as is common parlance in business, but of an actual outsourcing of memory itself. This is not something new to the conditions of the real-time archive, but the latter can be seen to accelerate an intersection between citation (outsourcing authority) and belief, one outlined by philosopher Michel de Certeau in *The Practice of Everyday Life*:

Belief no longer rests on an invisible alterity hidden behind signs, but on what other groups, other fields, or other disciplines are supposed to be. The "real" is what, in a given place, reference to another place makes people believe in. (1984, 188)

In this book de Certeau laments a play of signification that draws strength from the unseen. While belief and faith may have previously been the province of that which was beyond one's comprehension, it has been transposed onto only that which is subject to one's perception. In Baudrillard's terms, this recursion of the real is the obscene.

Conversely, as the act of selection becomes more intentional and creative, or in Stiegler's terms "protentional," this act increasingly contains the seeds of effecting a redistribution of the sensible. In the face of obscenity, this act in the form of the remix affords a means of making a wager in hopes of winning a degree of subjectivity autonomy relative to media space. Just as the exponential increase in the amount of information at our disposal has placed a premium on the subject's time, it has likewise increased the protentional value of their agency in the face of the real-time archive. Whether it is an even match remains an open question. While the house (what we might think of as the burgeoning subjectivity of the net) exists because of its propensity to win, there are nonetheless spectacular exceptions. If a century ago, Duchamp redefined art in relation to the act of selection, we have all become the progenitors of this aesthetic revolution insofar as contemporary culture is predicated upon selection and remixing. What may in a certain light appear to be a whimsical aesthetic derived from pop culture, may constitute nothing short of a survival mechanism in our era of electronic communication. The genesis of remixing is recounted by musician and producer John von Seggern as follows:

[T]he idea of creating musical 'remixes' appears to originate . . . in the work of Jamaican dub producers working in the late 1960s and early 1970s. Pioneering producers such as Lee Perry, King Tubby, and Scientist made an art form out of taking prerecorded rhythm tracks and rearranging them into a piece of music, a new *version* as they called it. . . . Early hiphop DJs such as DJ Kool Herc, Grandmaster Flash, and Afrika Bambaataa furthered the line of experimentation of the early dub producers, constructing live musical perfor-

mances out of bits and pieces of recorded performances from the past.

This is a major conceptual leap: making music on a meta-structural level, drawing together and making sense of a much larger body of information by threading a continuous narrative through it. This is what begins to emerge very early in the hiphop tradition in works such as Grandmaster Flash's pioneering mix recording *Adventures on the Wheels of Steel*.

The importance of this cannot be overstated: in an era of information overload, the art of remixing and sampling as practiced by hiphop DJs and producers points to ways of working with information on higher levels of organization, pulling together the efforts of others into a multilayered multireferential whole which is much more than the sum of its parts.

One new composition is made from bits and pieces of many others, and the art and the message lies in their selection and the way they are reassembled and connected. (Seggern)

The reader will notice that the text of the present essay reflects this hope of using the tactic of the remix to establish a "multilayered multireferential whole." The prevalence of citations in the text can perhaps be further traced to the influence of scholars such as Benjamin and Virilio, whose approach to writing can be likened to a montage that favors showing over telling or image over argument (Manovich "Film/Telecommunication"). Beyond seeing my own style of writing in relation to remixing, I can also see it as being photographic in that the prevalence of citation reflects a certain obsession with the capture of text as image. Such an approach dovetails with the "post-hermeneutic" philosophy of Kittler to be introduced in chapter 6. In other words, "the literal materiality of the letter" (Kittler 1990, 370).

Returning to Virilio, he above (p. 37) introduces the term *dromoscopy*, one that perhaps be best thought of in relation to the more familiar image of a strobe light: "Opposite to the *stroboscopy* 

which allows us to observe objects animated by rapid movement, as if they were in slow motion, this *dromoscopy* displays inanimate objects as if they were animated by a violent movement" (Virilio 2006, 105). Virilio further explicates the term as "the optical illusion experienced by the motorist whereby what stays still appears to recede while the interior of the moving vehicle appears stationary – taints representation of the whole world, not just the roadside (2007, 20)." Artist Ken Lum's *My Son...* (Fig. 7) can be seen as an example of an art practice that reflects what Virilio refers to as this "trajective perception," in that the image draws from the visual lexicon of roadside signs.



Fig. 7. Ken Lum, "My Son..." 2003

While he repeatedly discusses this perception in relation to the automobile, it can nonetheless be thought of as transcending any particular technology and instead applicable to any circumstance in which the relations between observer and observed have been technologically reconfigured. In this light, the computer processors and Internet routers underlying the real-time archive are equally dromoscopic.

Bringing to mind images of the massively distributed fiber optic networks spanning the globe, Virilio notes that it is now the speed (not the optical resolution) of "luminous emission" that dictates what appears to us as dimensions of space, despite the fact that "this relief lacks a third dimension and owes everything to the fourth dimension and to the intermediary of the instantaneity of telecommunications" (46-47):

Since the visible is only the surface effect of the alacrity of the luminous emission and since, meanwhile, what happens more and more quickly is perceived less and less distinctly, it is indeed necessary that we recognize the obvious, that what we see in the visual field is such thanks to the mediation of the phenomena of acceleration and deceleration in all points identifiable with variable intensities of illumination. If speed is light, all the of the world, then what is visible derives both from what moves and the appearances of momentary transparencies and illusions. The dimensions of space, are themselves only fleeting apparitions, in the same way that things are visible in the instant of the trajectory of the gaze, this gaze that both is the eye [l'oeil] and that defines place [le lieu].

The various sources of speed (generator, motor) are, therefore, indeed sources of light and sources of images, images of the world when it is a question of its dimensions. Triggering the appearance and development of 'high speeds', the dromoscopic revolution contributed to the development also of a great number of shots [clichés] that treated different types of physical stature with the new representation; the transportation revolution also set off the industrialization of the traditional enterprise of images, a factory for speed and, therefore, also for light and images, this suddenly becomes a cinematic projection of reality, the fabrication of a world, of a world of artificial images, a montage of dromoscopic sequences where the optic of mobile illusion renews optical illusion. (Virilio 2006, 118)

Thus, the "dromoscopic revolution" of mechanized transportation (heavy industry) can be seen as a precursor to the "cinematic projection of reality" fostered by Hollywood (light industry) pioneers such as film director D. W. Griffith. The latter's groundbreaking use of camera movement in films such as *The Birth of a Nation*, serve as an example of this dromoscopic renewal of "optical illusion." Beyond this, films of this era can also be seen as inculcations into a cinematographical mode of apperception,

one to be explored in greater detail in chapter 5 relative to the philosophy of Bergson. Benjamin noted this shift of apperception as follows: "The audience's identification with the [film] actor is really an identification with the camera" (2006, 25-26).

Here it is worth noting that Manovich sees the evolution from film to electronic communications as part of a continuum relative to the process of modernization. If such a perspective contradicts the claim of an epistemological shift in which speed overtakes light, Manovich nonetheless considers telepresence to be "radically new" in that users "can affect change on material reality over physical distance in real time" ("Film/Telecommunication"). Not only can the essential nature of this telepresence be called into question (it is arguably obscene), but this analysis leaves unacknowledged the truly revolutionary product of electronic communication, namely the increasing subjectivity of technology.

Returning to Virilio's concept of intropathy, the seemingly kinetic apperception resulting from identification with the camera can actually be seen to deprive the subject of agency. This, in that not unlike the slowing and eventual stopping of time at the threshold of the speed of light, such apperception renders the subject inert: "What we can say of INTROPATHY, at this early stage of the twenty-first century, except that it makes visible the general spread of the megalomania involved in real time along with its inertia" (Virilio 2007, 22)? In a gesture that prefigures arguments in chapter 8 related to Cubism, Virilio ends his explication of dromoscopy with a reflection upon geometry:

The historical function of geometry seems, therefore, to have been the progressive and progressivist reorganization of 'movement-power' [pouvoir-mouvoir], the development of a sort of generalized logistics or chronologistics, applied, not only to the visible domain – since this domain is only the appearance of reality produced by speed – but also to the totality of physical realities. By the constant renewing of the relations of semblance to movement, geometry leads to the regulation of different forces of penetration; by the updating

of appearances, in revealing matter as perspective, that is, as dimension, as objective, the geometric enterprise accelerates its dissipation, to the very rhythm of the extermination of its dimensions, speed finally provides for a crossing over, without any problem, of the distance between the physical and the metaphysical. (2006, 118-19)

In naming "matter as perspective," Virilio lays the groundwork for a possible bridge between the ontology of the light of speed and the visual language of Cubism. In *Art as Far as the Eye Can See*, he further lays the groundwork for rethinking the relations between practices as diverse as photography and net art around the figure of light:

Photography has never actually been anything more than the first of these 'arts of light' that have little by little contaminated the perceptible through a 'photosensitivity' whose history is yet to be written.

Even though, from the very beginning of photography, the heliographic shot put TIME-LIGHT to work – that is, the limit speed of a luminous radiance – the graphic arts, for their part, enlisted TIME-MATTER of the sole persistence of a support (canvas, stone, bronze,...) and, thereby, the aesthetics of the progressive appearance of the figures of the visible.

With the photogram, this resistance of materials came to an end, leaving room only for the cognitive persistence – accordingly known as 'retinal' – that allows for perception of movement and its acceleration, from the cinematograph right up to the recent feats of real-time audiovisual videoscopy. Whence the term art-light for all that now enlists in the aesthetics of disappearance, whether filmic, analogical or digital. (2007, 117)

For Stiegler, the evolution of these "arts of light" leads to the mediation of memory and narrative (both internal and external) through an interface:

Access to network-vectors of industrial memory relies on the existence of means of input and output, also called interfaces or terminals. The first analogic, then numeric, machines did not have such instruments for entry from and output to a network: photographic and phonograph apparatuses are instruments for analogic input, not for transmission of data at a distance. However, advances in photographic techniques rapidly led to belinography [transferring images by telegraph or telephone], then to advances in cinematography, which in turn led to the direct and then to on-line transmission of images, while the combining of the principles of telegraphy and phonograph resulted in the telephone, then in direct radio-diffusion. If the light-time network could remove the delay between the entry of an event as data and its reception by infinitesimally reducing transmission time, the analogic or numeric instrument for data entry also removes all delay between the event and its entry as data.

Conjoining the effect of the real (of presence) in image capture, in which event and input of the event coincide in time, with the real-time or the live aspect of transmission, in which the captured event and reception of this input coincide equally and simultaneously, analogic and numeric technologies inaugurate a new collective as well as individual experience of time as a departure from historicity, if it is true that historicity relies on an idea of time that is essentially deferred; that is, on a constitutive opposition posited in principle (illusorily -- but this illusion has very real effects) between story line and what it reports. (2009, "Technics" 114-15)

Thus, in moving from an aesthetics of inscription characterized by the stamping of coins and the plastic arts to a neuroaesthetics of inscription characterized by "videoscopy" and the real-time archive, there is an ontological shift from space to time.

Returning to models of interpretation, the relation between the figure of light as explicated by Ricoeur, and the light of speed can be considered relative to our inherent limitations as human subjects. If the light that we see with our eye bears an etymological relation ranging from the "Platonic *eidos* to the Hegelian *Idea*," than the light of speed suggests an epistemological shift with implications that Virilio names as "profane":

[W]hat is profaned with this reversal of perspective is the concrete orientation of our 'view of the world'; of a world once panoramic, open to the infinitely big, which, thanks to acceleration of reality, suddenly becomes the hypercentre of interactivity, to the detriment of a universal exteriority delivered up to the lack of localization, to the loss of any true position (ethical, political...), where the thin habitable film of geophysical expanse is internalized, literally locked up at the centre of the 'world time' of immediacy and its panoptical ubiquity. (2007, 96-97)

For Gumbrecht, the possible consequences of this objectifying "reversal of perspective" are no less than "a future without theory:"

[O] ur desire for theory may lead toward a situation without a form of self-reference that is exclusively "human," without a construction of "time" through which we can follow its transformation as a narrative – and hence toward *a future without theory*. (1994, 392)

Leaving such speculations aside for the time being, suffice it to say that the objectifying effects of real-time signification, what Virilio refers to as "depth without density" (2007, 98), will comprise a significant theme in the arguments that follow. Beyond that, we will continue to theorize with the time available. The focus of the arguments that follow will narrow to explore the specific semiotic-material concepts at the heart of the subject-effects produced by the real-time archive. Perhaps it would be more apt to say that the rhythm of these arguments will become slower if not more deliberate.

# The Aura of Information: from Space to Time

In relation to technology, the use of the concept of aura within the humanities can be traced back to Benjamin's "The Work of Art in the Age of Mechanical Reproduction." Here he writes:

We define the aura . . . as the unique phenomenon of a distance, however close it may be. If, while resting on a summer afternoon, you follow with your eyes a mountain range on the horizon or a branch which casts its shadow over you, you experience the aura of those mountains, of that branch. . . . Every day the urge grows stronger to get hold of an object at very close range by way of its likeness, its reproduction. Unmistakably, reproduction as offered by picture magazines and newsreels differs from the image seen by the unarmed eye. Uniqueness and permanence are as closely linked in the latter as are transitoriness and reproducibility in the former. (2006, 22)

While Benjamin uses the qualifier "however" in uniting the distance and closeness that comprise aura, it is perhaps more useful to consider the latter as being a product of the oscillation between the two. In other words, aura emerges as a phenomena derived from the co-presence of distance and closeness. Baecker names this emergence as a delay, one "produced by oscillating between observing distance and observing closeness: time is not extended by pausing in either of these operations, but only – if this were truly possible – in the open-ended duration of the oscillation itself"

(2003, 18). As a concept, duration will come to play an increasing role in the arguments to be advanced.

Returning to Benjamin, he first traces an arc from the natural to the mechanical, suggesting that the latter rob the former of a degree of presence, his concept has been reinterpreted and reworked by a number of scholars. Before proceeding with Duttlinger's contribution, it is important to note that even the lengthy citation from Benjamin above (p. 49) fails to encapsulate the author's own multivalent interpretation of the concept. For example, Benjamin next names the manner in which this same aura can be found in the ritualistic function of artworks, a function that he is happy to see diminished via the introduction of mechanical reproduction.

The subtlety and complexity of Benjamin's arguments thwart reductive logic (for example, aura is good, its destruction bad). The number of scholars who continue to find the seeds of productive inquiry within Benjamin's work is a clear testament to this. For her part, Duttlinger draws her reading of aura not from Benjamin's aforementioned "Artwork" essay but rather from "A Short History of Photography." In analyzing a portrait photograph, Benjamin here suggests that one "search such a picture for the tiny spark of contingency, of the Here and Now, with which reality has so to speak seared the subject, to find the inconspicuous spot where the immediacy of that long-forgotten moment the future subsists..." (1997, 243). For Duttlinger, this passage

prefigures Benjamin's later conception of the auratic work of art; in this case, however, these auratic characteristics are attributed to the very medium which is later blamed for the aura's disappearance. While in the "Artwork" essay the aura of painting is said to stem from its origin in rituals "first magical, then religious", here the "magical value" of photography is said to be the result of the technological recording process, which preserves a sense of immediacy even across a temporal distance. Another, even more striking example which underlines Benjamin's later theoretical

U-turn is the suggestion, developed in the above passage, that photography is rooted in the "here and now" of reality; in the "Artwork" essay, by comparison, this exact phrase recurs in relation to painting, denoting its self-contained material existence, the aura of its singularity. . . . Within the "Photography" essay, this dynamic, and the associated image of the "spark of contingency" which sears the picture, marks one of its key insights. While emphasizing photography's representational realism, Benjamin simultaneously stresses its indexical nature – the fact that every photograph bears the physical trace of its referent. (2008, 85-86)

Thus, for Duttlinger the reproductive technology of photography becomes the arbitrar of aura rather than its thief. Next, Benjamin's immediacy preserved across a spatial distance is traded for an immediacy preserved across a temporal distance. Finally, in emphasizing the photograph's "physical trace of its referent" or *indexicality*, Duttlinger reframes the Benjamin's concept such that its relation to time (duration) can be seen to take precedence over its relation to space (distance). The concepts of indexicality and duration will be explored in chapter 5 in support of this argument. In the meantime, I will advance to Betancourt's line of inquiry into the role of aura in digital media.

Betancourt's approach is largely concerned with the political economy of digital objects. In these he sees "the underlying ideology of capitalism itself – that there is an infinite amount of wealth that can be extracted from a finite resource" (2006). Thus, the realm of the digital is cast as a mirror image of the illusions driving capitalism itself. He first makes a distinction between the *material* and the *symbolic* qualities of an object. These terms are no less apt for discussing a digital representation given that the latter's aura serves as a proxy for its materiality:

The separate valences of material and symbol can be understood as existing at different levels of interpretation: the physical provides the first level, with all the conclusions about the object's age, etc. forming a first order; the symbolic content, including its connection to traditions, similarity or difference with other objects, the interpreter's relationship to the particular object, etc. all form a second order of interpretation. While the second, symbolic order does require the first order (some type of physical presence) for its presentation, the interpreted content exists as an excess to the first order. It is information provided and created by the interpreter using previous experience with interpreting the form and character of the first order that produces the second order. (2006)

Next, Betancourt defines the aura of information as "the separation of the meaning present in a work from the physical representation of that work" (2006). He then reflects upon the nature of what he calls the *digital object*, suggesting that

it is composed from both the physical media that transmit, store, and present the digital work to an audience, and the digital work itself [which] is actually composed of both a machine-generated and a human-readable work created by the computer from a digital file (itself actually stored in some type of physical media). (2006)

Thus, the unifying principle of digital objects is their uniformity as binary files and their multiplicity as potential representations. While a text file and an image file look largely the same in their binary format, either one can be represented in an innumerable number of ways. Based on his reading of artist and economist Hans Abbing (Abbing 2004), Betancourt then suggests that Benjamin's original thesis has not been borne out: art objects such as compositions by Bach *have* retained their aura despite the machinations of mass culture. Betancourt claims that cult status has been traded for exchange value and in this manner reproduction actually extends the aura of such objects. Below, Assmann and

Assmann provide a humorous example supporting Betancourt's thesis:

'In a world where so much is imitation, people now value the original more and more. That's why people for so many years have enjoyed the wholesome goodness of Original NABISCO Shredded Wheat.' This quotation comes from the package of a product that uses 'The Original' as a prefix of its brand name. . . . Can these two simple sentences from the breakfast cereal of an American table neutralize fifty pages of Walter Benjamin's brilliant and sophisticated discourse? (2003)

If Benjamin suggested that aura derived from the physical nature of art objects, Betancourt contends that aura is rather a by-product of reproducibility:

"[A]ura" is both the physical traces of the particular history that an object has experienced, and the relationship of that object to the tradition that produced it. These are two distinct values: one resides in the physical object, the other lies in the spectator's knowledge (and past experience) of the object's relationship to other, similar objects. If the first value is a "historical testimony," the second value can be called a "symbolic relationship." . . . Separating these two values results in a new conception of "aura" independent of Benjamin's initial proposition that is specifically applicable to digital technology: the idea of "aura" results from the role the work plays for its audience sociologically (how they employ the work in their society.) (2006)

Betancourt next shows that a mechanical reproduction has more in common with the original it is based on than a digital clone or duplicate of the same artifact. If the set of the former both carry historical testimony or materiality, the latter does so only at the point that the uniform and infinitely reproducible binary file is instantiated into a specific representation. The underlying model

of complementarity is not unlike that of the wave-particle conundrum demonstrated by the two-slit experiment in quantum mechanics: light behaves as an unbroken wave until it is quantized by the perception of a witness (The University of Colorado). In this light, the subject can be considered as a witness to the *testimony of technology*. Betancourt writes:

Mechanically or manually (re)produced objects always have an implicit limit on their availability (thus their accessibility); digital objects do not have a limit of this type – in principle, an infinite number of any digital work could be produced without a change or loss, or even deviation between any of the works. (2006)

There are two problems with this supposition. First, it is based "in principle" rather than in actuality, where a material quantization does occur. To deny the historical testimony of the latter would be to suggest that a layperson could distinguish between a cloned sheep and their "real" counterpart. Both bear the traces of historical testimony despite one being conceived in a laboratory. The second objection to be raised in regard to Betancourt's claim that there is no deviation inherent to digital duplication has to do with compression.

While in theory this is true, practice suggests otherwise. Because the term "digital object" can refer to so many different things, it becomes necessary to refer to a more specific case in order to test the theory. This is exactly what media theorist Lev Manovich does in "The Paradoxes of Digital Photography" ("The Paradoxes"), where he points out that the limitations inherent to storage space and network bandwidth have led to a situation whereby lossy compression has become a mainstay of working with images in computational environments.

Thus, while an infinite number of duplications could hypothetically be made of a given image, the moment these images need to be stored or transferred, the equation changes. Furthermore, the digital artifacts (pixilation) produced by this

compression have become part of a documentary aesthetic that confers authenticity through its aura. When Betancourt suggests that:

Every digital reproduction is identical to every other; digital objects are stored as a form of information, rather than limited as physical objects inherently are; thus the digital state can be understood as a form of instrumental language – instructions for executing the "retrieval" that is a specific digital (art) work. (2006)

He fails to acknowledge both the specificity of the data stored, as well as the specificity of the data retrieved. That the former exists is attested to by the fact that some files become corrupted. That the latter exists is attested to by the fact that the same image can take on an innumerable number of tints when displayed on different monitors. Gumbrecht and Marrinan note a similar set of circumstances at work aurally when it comes to digitized music: "[A] huge number of errors . . . are immediately "masked" by even the most simple CD player; in fact, we never actually "hear" a compact disc in exactly the same way more than once" (2003, 132). They further note that Benjamin overlooked this same dynamic in relation to photography:

What he failed to see . . . is not that the question of an "authentic" print makes no sense because any number can be made, but that *all of them exist systematically as the original*. One can find hundreds of small, nearly invisible differences among prints made from a single negative, so that no print can claim "authenticity" over the others. (131)

In Betancourt's terms, I would argue that it is the symbolic aura of the digital object that increases when it is retrieved. Thus, the instrumental language that he speaks of – binary code – at once collapses the physical aura or historical testimony of an object while simultaneously increasing it symbolically. If this process is

mediated by microprocessors measuring time to a billionth of a second, the testimony of digital objects cannot be interrogated by the natural light of the sun or even under the artificial light of an incandescent lamp, but can only truly be "seen" by Virilio's light of speed.

Virilio's ideas are not unlike those of sociologist Manuel Castells, who suggests that "network society" is predicated upon a *space of flows* coexisting with the *space of places* that we otherwise inhabit. The former produces what Castells calls *timeless time*, a field emerging "when the characteristics of a given context, namely, the information paradigm and the network society, induce systemic perturbation in the sequential order of phenomena performed in that context" (2000, 464). From this field emerges what I will refer to as *simulated materiality*.

With these ideas in mind, it becomes necessary to use more specific terminology in order to name what is operational within this simulated materiality such that it has an aura. This points towards inscription technologies and the manner in which they generate this simulated materiality. They do so through the registration of indexicality within duration. If Betancourt's contention was that the aura of information entailed a separation between meaning and physical representation, the next chapter will argue otherwise.

# Inscription Technologies: Indexicality and Duration

[A] computer is a clock... (Stiegler 2009, "Technics" 241)

In Writing Machines, Hayles begins a chapter entitled "Material Metaphors" with the following provocation: "What would it mean to talk about materiality in an era in which simulations are everywhere around us" (2002, 21)? She begins this process of explication by laying bare something of the irony of speaking of a "material" metaphor in that the latter is almost by definition immaterial: "Traditionally, metaphor has been defined as a verbal figure. Derived from a root meaning bearing across, it denotes the transfer of a sense associated with one word to another" (22). In Hayles's material metaphor

the transfer takes place not between one word and another but rather between a symbol (more properly, a network of symbols) and material apparatus. This kind of traffic, as old as the human species, is becoming increasingly important as the symbol-processing machines we call computers are hooked into networks that in which they are seamlessly integrated with apparatuses that can actually do things in the world, from the sensors and actuators of mobile robots to the semiotic-material machinery that changes the numbers in bank accounts. To account for this traffic I propose *material metaphor*, a term that foregrounds the traffic between words and physical artifacts. (22)

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If the most immediate examples of this semiotic-material exchange are robotic and financial, its far reaching implications are post-human. For example, Castells suggests that the very logic of "the network society is characterized by the breaking down of rhythmicity, either biological or social, associated with the notion of a lifecycle" (2000, 446). Returning to Hayles, she next affirms "the literal materiality of the letter," or rather its presence as a material metaphor:

To change a material artifact is to transform the context and circumstances for interacting with the words, which inevitably changes the meanings of the words as well. This transformation of meaning is especially potent when the words reflexively interact with the inscription technologies that produce them. (2002, 23-24)

In drawing attention to the materiality of media, Hayles is no less provocative than McLuhan when he asserts that television is essentially tactile (McLuhan 2001). Reworking common misconceptions about the immateriality of media will prove invaluable in addressing the aura of simulated materiality.

However, this aura is not so much spatial as temporal. Accordingly, it should be read relative to both Benjamin's distance and Virilio's dromoscopy. The latter, a situation in which speed has replaces light as the dominant model of apperception. With this in mind, the inscription technologies that Hayles explicates below increasingly work in time as much as much as they work in space:

In print books words are obvious inscriptions because they take the form of ink marks impressed on paper. The computer also counts as an inscription technology, because it changes electric polarities and correlates these changes with binary code, higher-level languages such as C++ and Java, and the phosphor gleams of the cathode ray tube. To count as an inscription technology, a device must initiate material changes that can be read as marks. (2002, 24)

Thus, pixels dancing across a screen constitute "the making of marks" and in this regard the work of a Web designer is no different from that of a metallurgist stamping coins. Or is it? If artifacts can be bisected into their material and symbolic substrates, both Web pages and gold coins would appear to have complementary symbolic substrates. That Internet banking exists would seem to attest to this fact. The question of material substrates is more complex. Would anyone deny that a gold coin is "more material" than a digital image of the same object? What if this coin were scanned at the highest resolution possible, revealing qualities all but imperceptible to the unaided eye?

If this example would seem to support the notion that both physical artifact and digital are equally material, this should be qualified by a return to Virilio's dromoscopy. While the physical coin holds its shape and weight for what seem to be an unlimited duration to us, the scanned coin is more fleeting. Furthermore, if such a scan were to be analyzed on a cathode ray tube, it would only exist for as long as this tube was firing electrons at the viewer such that an image seemed to hold its shape. In a sense the duration of a physical artifact and a digital object are wildly different: if the power company shuts off the electricity, the object is gone. However, if the context of analysis is limited to the real-time in which a subject consorts with an object they are exactly the same. Aura can emerge by way of the index in either case.

Peirce tells us that the index or indices "show something about things, on account of their being physically connected with them" (1998, 5). An example would be smoke as an index of fire. If this figure is abstracted from real smoke and fire to virtual smoke and fire, we can examine the role of indexicality relative to simulated materiality. Here the virtual smoke serving as an index of virtual fire (as in a computer game) can be said to be pseudo-indexical. However, as with the physical indexicality that it simulates, this pseudo-indexicality emerges from duration. In other words, it appears as the sudden quantization of the otherwise

unbroken flow of experience. Peirce names this phenomenon as an indication: "A rap on the door is an indication. Anything which focuses the attention is an indication. Anything which startles us is an indication, in so far as it marks the junction between two portions of experience" (8).

Here it becomes necessary to say a bit more about duration as concept. Its origin can be traced back to the philosophy of Bergson. Philosopher Leszek Kolakowski's summarizes this philosophy in three words "time is real" (1985, 2). Kolakowski's summation is equally applicable as a means of explicating the more specific concept of duration. In *Time and Free Will*, Bergson arrives at an interpretation of time as duration by way of mathematical figures. He first suggests that "when you equate the number 3 to the sum of 1 + 1 + 1, nothing prevents you from regarding the units which compose it as indivisible: but the reason is that you do not choose to make use of the multiplicity which is enclosed in each of the units" (2002, 51). As such, Bergson considers numbers as "extended discontinuities." In other words, just as 3 can be divided into 1 + 1 + 1, each "1" can also be divided (extended) ad infinitum. He then introduces states of consciousness into the equation:

[T]here are two kinds of multiplicity: that of material objects, to which the conception of number is immediately applicable; and the multiplicity of states of consciousness, which cannot be regarded as numerical without the help of some symbolical representation, in which a necessary element is *space*. (54)

As duration and states of consciousness implicate one another, to spatialize the latter is to mistake space for duration. The implications of such a category mistake extend beyond the object of study and back towards the subject. Bergson writes: "If in order to count states of consciousness, we have to represent them symbolically in space, is it not likely that this symbolic representation will alter the normal conditions of inner perception" (55)? He then draws a parallel between a clock's pendulum and apper-

ception: "[W]e get into the habit of setting up the same distinction between the successive moments of our conscious life: the oscillations of the pendulum break it up, so to speak, into parts external to one another..." (63-64).

The various figures employed by Bergson all point towards one thesis: duration cannot be expressed in space. This echoes back to Zeno's paradoxes and the difference between seeing movement as a set of immobilties or as an unbroken whole. Bergson further suggests that duration and motion are alike in that neither possesses any homogeneity. A consequence of this is that whether the context of consideration is mathematical or spatial, equations for the measurement of motion are always a misrepresentation because, in Bergson's words "an algebraic equation always expresses something already done" (68), whereas "it is the very essence of duration and motion, as they appear to our consciousness, to be something that is unceasingly being done..." (68).

As was discussed regarding the extended discontinuity of numbers, the intervals measured by science may be made infinitely small, but duration and motion will nonetheless escape because the latter are not objects, but rather (in Bergson's terms) "mental syntheses" with "no analogy to number" (68). Despite this, mechanisms for exploring the minutia of intervals proliferate within science and society in general. Bergson typifies this situation with the axiom: "[I]t is through the quality of quantity that we form the idea of quantity without quality" (70). That said, he readily admits that society, as it is predicated upon language, relies on such instrumental uses of consciousness. This conundrum can often be seen playing itself out in the study of physics: try as they may, scientists are unlikely to isolate particles correlating to states of consciousness.

Returning to the index, this suggests that to "show something about things, on account of their being physically connected with them" is something that occurs within states of consciousness. As such, distinctions between indexicality as it has been discussed relative to physical objects and indexicality specific

to digital objects would appear irrelevant. This also brings to mind Betancourt's assertion that "with digital works this eliding of the specifics of location, presentation, context, etc. happens in the mind of the spectator" (2006). Yet, there is such a thing as historical testimony when a digital object is retrieved. That such an object can be reactivated means that it takes on substantive duration at its moment of retrieval. This implies the generation of what Gumbrecht and Marrinan refer to as *multiple originals*, a phenomenon that the art market has already come to terms with:

[A]rt in the age of its technical reproduction has produced at least one phenomenon in which reproduction-based multiplicity and authenticity converge. These are the multiple originals of numbered and signed etchings or prints that have become so popular on the contemporary art market. Or should we say that, rather than multiple originals, they are authentified copies? (2003, 126)

If in the scenario outlined above, a human signature plays a decisive role in attesting to the authenticity of an artifact, machines are just as commonly used for the same purpose. An example would be the receipts produced by ATM machines. Granted, this is a different type of historical testimony than was outlined by Benjamin, one distinguished by its spatial and temporal compression. Put another way, if aura has traditionally been understood in terms of a dialectic between subject and object, one in which the life of the object was measured in years and its contours measured in meters, the aura of information lasts for a matter of minutes within a space measured by microns. Virilio addresses this shift in terms of an opposition between what is *here* and what is *now*:

The aesthetics of the appearance of objects or people standing out against the *apparent horizon* of classical perspective's unity of time and place is then taken over by the aesthetics of the disappearance of far-off characters looming

up against the lack of horizon of a cathode screen where the unity of time wins out over the unity of the place of encounter. . . . The direct lighting of the day star that breaks up the activity of our years into distinct days is now supplemented by indirect lighting, the 'light' of a technology that promotes a sort of personality split in time between the real time of our *immediate activities* – in which we act both here and now – and the real time of a *media interactivity* that privileges the 'now' of the time slot of the televised broadcast to the detriment of the 'here', that is to say of, of the space of the meeting place. (1997, 37)

However, even in the "now" of the televisual, there is nonetheless a dialectic between subject and object that occurs within states of consciousness interpenetrated by the aura of the artifact in question. If in Peirce's terms, this is the "organic pair" of object and index, it constitutes a cybernetic pair when transposed into the digital realm. In differentiating between this indexical "focusing of attention" that connects an object with something that is shown about it and the relations characterizing the symbolic order, Peirce writes:

...the interpreting mind has nothing to do with this connection, except remarking it, after it is established. The symbol is connected with its object by virtue of the idea of the symbol-using mind, without which no such connection would exist. (1998, 9)

Here Betancourt's typology of the aura is relevant, whereby the symbolic qualities of a digital object lead an exchange value whereby its aura is extended by duplication. More specifically, the cloning or duplication of digital objects endows them with a unique type of aura that is essentially sociological. In this light, it can be said that the aura of the indexical constitutes a precondition to the symbolic relationship that emerges from it. In more elaborate terms it could be said that out of duration emerges

indexicality and that out of the latter flows authenticity, historical testimony, aura, and finally authority. In Benjamin's words:

The authenticity of a thing is the essence of all that is transmissible from its beginning, ranging from its substantive duration to its testimony to the history which it has experienced. Since the historical testimony rests on the authenticity, the former, too, is jeopardized by reproduction when substantive duration ceases to matter. And what is really jeopardized when the historical testimony is affected is the authority of the object. (2006, 21)

To refocus upon aura in particular, there appears to be something of a paradox at work when it is considered in light of this relationship between the indexical and symbolic. If it is the indexical that breathes life into the symbolic dimensions of a digital object thereby extending its aura, this would appear to come at the cost of the specificity of the index itself. In Peirce's words: "A symbol, as we have seen, cannot indicate any particular thing; it denotes a kind of thing. Not only that, but it is itself a kind and not a single thing" (1998, 9). Suffice it to say, between index and symbol lies a great deal.

# The Real-time Archive: Inscribing Consciousness

Not long ago my flesh as an earthling seemed, indeed, to be the unique centre of the living present Husserl [was] talking about, but since the acceleration of reality in the age of temporal compression, this carnal centre of presence extends to the TELEPRESENCE in the real-time world delivered by the instantaneity of a ubiquity that has now gone global. (Virilio 2007, 20)

If archives have traditionally be associated with spatially oriented collections of analog documents (libraries), their electronic transposition has shifted their emphasis towards the temporal. There is thus a parallel between the evolution of aura and archive. However, as was argued relative to the simulated materiality of the aura of information (its indexical emergence within duration), real-time archives are not unlike their offline predecessors, simply temporally compressed. Here, "real-time" is used as an adjective. In other words, "of or relating to computer systems that update information at the same rate they receive information" (real-time). While the speed of the real-time archive derives from digital calculation, "storage in terms of numerical data does not eliminate indexicality (which is why digital images can serves as passport photographs…" (Gunning 2004, 40).

In this chapter, the subject-effects of real-time archives such as Google will be considered against the backdrop of Kittler's discourse networks, Hayles's "inscription technology fused with consciousness," and editor Kevin Kelly's "megacomputer." The inversion suggested by Gumbrecht above (technology rewrites

subjectivity; p. 4) will be implicit in this chapter's arguments. In other words, just as media is not immaterial, subjectivity is not unmediated. At its root, this mediation can be traced to the event of speech, wherein Agamben situates the emergence of subjectivity:

The "I" that, as a unity transcending the multiple totality of lived experiences, guarantees the permanence of what we call consciousness is nothing other than the appearance in Being of an exclusively linguistic property. . . . It is thanks to this unprecedented self-presence as "I," as speaker in the event of discourse, that there can be in the living being something like a unitary center to which one can refer lived experiences and acts, a firm point outside of the oceans of sensations and psychic states. And Benveniste has shown how human temporality is generated through the selfpresence and presence to the world that the act of enunciation makes possible, how human beings in general have no way to experience the "now" other than by constituting it through the insertion of discourse into the world in saying "I" and "now." But precisely for this reason, precisely because it has no other reality than discourse, the "now" - as shown by every attempt to grasp the present instant - is marked by an irreducible negativity; precisely because consciousness has no other consistency than language, everything that philosophy and psychology believed themselves to discern in consciousness is simply a shadow of language, an "imagined substance." Subjectivity and consciousness, which our culture believed itself to have found its firmest foundation, rest on what is most precarious and fragile in the world: the event of speech. (1999, 121-22)

If enunciation creates "human temporality" through the "pure presence" of dialogue, the archive circumscribes this event of being with a metasemantics situated between *langue* and *corpus*:

As the set of rules that define the events of discourse, the archive is situated between *langue*, as the system of

construction of possible sentences – that is, the possibilities of speaking – and the *corpus* that unites the set of what has been said, the things actually uttered or written. The archive is thus the mass of the non-semantic inscribed in every meaningful discourse as a function of its enunciation; it is the dark margin encircling and limiting every concrete act of speech. (143-44)

In these terms, the dialectic between langue and corpus merely occurs faster within a real-time archive than it would if the systems mediating between the two were less technologically advanced. Google can thus be seen as the result of a historical progression aimed at closing this gap. The real-time archive was not invented by Google, but perhaps perfected. That said, there is mounting evidence that the micro-blogging service Twitter may be a contender for this role:

Twitter Search is meant to be a different kind of powerful search engine in its own right. A smaller, potentially curated, real-time search engine.

Twitter's biggest trump card here is the real-time factor. It's not entirely real-time right now, and there are often delays, but it's faster than Google... (Siegler 2009)

In any case, philosopher Jacques Derrida prefigured the implications of the real-time archive in *Archive Fever*:

[T]he archive, as printing, writing, prosthesis, or hypomnesic technique in general is not only the place for stocking and for conserving an archivable content of the past which would exist in any case, such as, without the archive, one still believes it was or will have been. No, the technical structure of the archiving archive also determines the structure of the archivable content even in its very coming into existence and in its relationship to the future. The archivization produces as much as it records the event. (1996, 16-17)

The production of meaning that occurs relative to this archivization points towards the intellectual project of Kittler, one that media theorists Geoffrey Winthrop-Young and Michael Wutz preface as follows:

Step 1: We recognize that we are spoken by language. Step 2: We understand that language is not some nebulous entity but appears in the shape of historically limited discursive practices. Step 3: We finally perceive that these practices depend on media. In short, structuralism begot discourse analysis, and discourse analysis begot media theory. (1999, xx)

Kittler's scholarship or "media discourse analysis" (xvi) is unique in many ways, but for the purposes of the present argument, it is his emphasis upon the materiality of discourse that will be emphasized. In short, Kittler assumes that (a) "media determine our situation" (xii) and (b) that the material nature of a medium is inextricable from the messages produced by it. As outlined in chapter 5, Hayles followed a similar logic within the context of literary theory resulting in her concept of material metaphors.

Kittler defines as "[t]he network of technologies and institutions that allow a given culture to select, store, and process relevant data" (1990, 369). The lineage of his discourse analysis can be traced back to Foucault, whereby the latter established a precedent for placing the subject outside of the signifying practices that constituted them. Below, Agamben notes the import of linguist Emile Benveniste's theory of enunciation in terms of the metasemantics underlying philosopher Michel Foucault's archeology, which

perfectly realizes Benveniste's program for a "metasemantics built on a semantics of enunciation." After having used a semantics of enunciation to distinguish the domain of statements from that of propositions, Foucault establishes a new point of view from which to investigate knowledges and disciplines, an *outside* that makes it possible to reconsider the field of disciplinary discourses through a "metasemantics": archeology. (1999, 139-40)

In pursuing this "outsideness" from the archive to inscription technologies, Kittler's approach can be seen as being post-hermeneutic in the sense that the hermeneutics "did not deal with the literal materiality of the letter" (1990, 370). His taxonomy of discourse networks is divided by century, thus there is the symbol-based network of 1800 derived from universal alphabetization, and the technology-based network of 1900 derived from data storage. While Kittler did not explicitly define the characteristics of a "discourse network 2000," there are gestures pointing in this direction to be considered. The two networks of 1800 and 1900 can be loosely defined as that of "nineteenth-century romanticism and that of twentieth-century modernism" (Johnston 1997, 4). Media theorist John Johnston continues:

[D]iscourse is embedded in and operates as part of a specific discourse network comprised of other discourses contemporaneous with it, pedagogy and philosophy in 1800, psychophysics and psychoanalysis in 1900. (4)

In the progression of Kittler's intellectual project from *Discourse Networks* 1800/1900 (Kittler 1990) to *Gramophone*, *Film*, *Typewriter* (Kittler 1999) he shifts his emphasis even more towards the technologies underlying such institutional discourses, a trajectory that culminates in "There is No Software" and "Protected Mode" (Kittler 1997). In the latter essay he considers how the microprocessor constitutes a sort of black box to which the user is largely denied access. What will become apparent in tracing the outlines of this trajectory is the degree to which an increasing use of mechanical and now digital inscription technologies had led to situation whereby one is forced to consider the post-human dimensions of signification:

Once the technological differentiation of optics, acoustics, and writing exploded Gutenberg's writing monopoly around 1880, the fabrication of so-called Man became possible. His essence escapes into apparatuses. . . . So-called Man is split up into physiology and information technology. (1997, 46)

#### In a similar vein, Hayles suggests:

[T]he appropriate model for subjectivity is a communication circuit rather than discrete individualism, for narration remediation rather than representation, and for reading and writing inscription technology fused with consciousness rather than a mind conveying its thoughts directly to the reader. (2002, 130)

Kittler begins *Gramophone*, *Film*, *Typewriter* by highlighting the confluence between the threat of nuclear war and the evolution of the optical fiber networks that constitute the Internet. Art critic Saul Ostrow neatly summarizes the lineage of such observations in relation to Virilio: "Following the work of Marshall McLuhan, Kittler informs his understanding of media and literature with a Paul Virilio-like interest in technologies's relations to the wars that produce them" (1997, ix). Kittler then suggests that questions related to the ontology of media overshadow aesthetic concepts such as Benjamin's aura:

Ears and eyes have become autonomous. And that changed the state of reality more than lithography and photography, which (according to Benjamin's thesis) in the first third of the nineteenth century merely propelled the work of art into the age of its technical reproducibility. Media "define what really is"; they are always already beyond aesthetics. (1999, 3)

Here one can hear echoes of both Baudrillard and Virilio who have already extrapolated the insights of Benjamin and McLuhan such that media is not the figure but rather the ground against which semiosis takes place. Ostrow further suggests that Kittler's estimate of the situation is one in which

we are now moving towards becoming the *object* of technological developments that were once secreted within the body. In this schema, technology, which Marshall McLuhan theorized was the extension of our bodies into the world, now becomes the object of technology literally modifying and transforming the body that had given rise to it. (1997, x)

Via Kittler, Johnston traces the roots of this post-human dimension to signification back to the first experiments in psychophysics, whereby researchers "measured the parameters of memory, sensory, and motor response by excluding meaning as an independent variable" (1997, 16). Kittler argues that such work established a basis for the work of linguist Ferdinand de Saussure and perhaps the same may be said of Peirce. The mechanical world picture leading up to this point can be traced back to Galileo who

treated the mind as if it could function without all the other members of the body, as if the eye saw by itself and the ear heard by itself, and as if the brain, equally isolated, was dedicated in its most perfect state to the specialized function of mathematical thinking. (Mumford 1970, 54)

The fragmentary nature of the signs now flickering across our screens is thus the consequence of probing our tolerances with little or no regard for the subject as a holistic entity with qualities lying beyond the range of the instrumentation at hand. In this regard, the terms used to discuss consciousness belie a set of false distinctions to begin with. Historian Lewis Mumford calls this Galileo's "crime:"

He had no notion that his radical distinction between the external world and the internal world, between the objective

and the subjective, between the quantitative and the qualitative, between the mathematically describable, and thus knowable, and the irreducible, inaccessible, unanalyzable, and unmeasurable, was a false distinction, once human experience in its symbolized fullness – itself a deposit of countless ages of organic life – is left out of account. (58)

If Mumford names the "crime" of Galileo, Hayles names it consequences:

Interpolated into the circuit, we metamorphose from individual interiorized subjectivities to actors exercising agency within the extended cognitive systems that include non-human actors. . . . [O]ur bodies are . . . remapped and reinterpreted by intelligent machines working within networks that bind together our flesh with their electronic materiality. (2002, 51)

When Gumbrecht and Marrinan write: "[A]uthenticity . . . has to do with double corporeal touch. Whatever is considered to be authentic has been in touch with the body of an author" (2003, 147), this begs the question of whether this touch could be between machines as subjects through human flesh as an object. Artist and media theorist Edmond Couchot surveys this theoretical landscape as follows:

According to Roy Ascott, for example, subjectivity is no longer localized in a sole point in the space but distributed through the networks; according to Siegfried Zelinski, subjectivity is the possibility of action at the frontier of the networks; according to Pierre Levy, subjectivity has become fractal; Derrick de Kerckhove speaks of "borrowed subjectivity," the possibility of "alienarization." (Couchot 2007, 183)

If scholars such as philosopher of science Ervin László and author Peter Russell have presented convincing arguments for what they call the *global brain* (László 2008; Russell 2008), as the result of humanity's increasing telecommunication and interconnection, they have not emphasized the degree to which this brain might rather resemble a kind of artificial intelligence that uses humanity as its resource. For Baudrillard:

Perhaps you are indeed merely the machine's space now – the human being having become the virtual reality of the machine, its mirror operator. This has to do with the very essence of the screen. There is no 'through' the screen the way there is a 'through' the looking-glass or mirror. The dimensions of time itself merge there in 'real time'. And, the characteristic of any virtual surface being first of all to be there, to be empty and thus capable of being filled with anything, it is left to you to enter in real time into interactivity with the void. It fact, it is the (virtual) machine which is speaking you, the machine which is thinking you. (2002, "Screened" 178-79)

However, dichotomies such as subject/object, human/machine, and nature/culture can themselves be challenged. Along these lines, Stiegler suggests that rather than inventing technology, humanity was invented by it. In other words, "the notion of 'originary technicity', which proposes that hominization and technicization develop in tandem" (Gere 2006, 15-16). The foundation of Stiegler's thesis rests on his reading of paleoanthropologist André Leroi-Gourhan and Jacques Derrida. From the former, Stiegler draws the notion that a "freeing of memory" occurs in the trajectory from genetic to technical inscription. That is to say, instinct is read as a program (grammè) subject to a process of "exteriorization." From the latter, he draws the concept of différance, or the deferral of meaning in difference. In more specific terms

Derrida bases his own thought of différance as a general history of life, that is, as a general history of the grammè... Since the grammè is older than the specifically human written forms, and because the letter is nothing without it, the conceptual unity that différance is contests the opposition animal/human and, in the same move, the opposition nature/culture. "Intentional consciousness" finds the origin of its possibility before the human . . . The history of the *grammè* is that of electronic files and reading machines as well - a history of technics - which is the invention of the human. As object as well as subject. The technical inventing the human, the human inventing the technical. Technics as inventive as well as invented. . . . Différance is the history of life in general, in which an articulation is produced, a stage of différance out of which emerges the possibility of making the grammè as such, that is, "consciousness," appear. (Stiegler 1998, 137-38)

In this light, to tie the real-time archive to a uniquely post-human set of conditions appears suspect. Put another way, if the technologization of différance is a means by which consciousness can "appear," if "speed is pure difference" (Gere 2006, 21), how could this be seen to compromise what it means to be human? Below, Gere's speculation upon the relation of différance and technics brings the irreducibility of Bergson's duration to mind:

But against the speed of contemporary technics it is possible to posit the aporia of time, of delay, the impossibility grasping time in the light of difference and deferral central to Derrida's politics of deconstruction. The incalculability of the passage of time exceeds both its logical disavowal and its technical organization. (24)

Stiegler suggests that nothing less that "the future" will be determined relative to how the "light of difference" is mediated:

When selection becomes industrial, it integrates a vast array of equipment controlled by economically determined calculations that thus from the very beginning attempt to dissolve the undetermined. But because this industrialization ends in the development of différant identities, such a dissolution is not possible. In other words, two indissoluble tendencies confront each other in this transformation. The future consists of their negotiation. (2009, "Technics" 100)

This "negotiation" can perhaps be traced by posing it within the realm of representation, or rather relative to its limits. In *Six Stories from the End of Representation* (Elkins 2008), Elkins transposes a Kantian dichotomy between comprehension/apprehension (*Zusammenfassung/Auffassung*) into his own of intuition/calculation. For example, one may apprehend or calculate the number 93,000,000 in trying to understand the distance of the sun from the Earth, this does not mean that one can comprehend or intuit that number. He does this in service of developing a framework in which to interpret scientific images that challenge art historical models of interpretation.

Just as intuition cedes to calculation at the scalar limits of representation, the quality of consciousness that we associate with humanism (as an extension of the Renaissance) is compromised through its cybernetic processing or quantification via the subject-effects of the real-time archive. This brings us back to Bergson's axiom: "[I]t is through the quality of quantity that we form the idea of quantity without quality" (2002, 70). Virilio details this epistemological shift towards calculation within science as follows:

A total of seven measures form the basis of an international system of weights and measures: the metre (length), the kilogramme (mass), the second (time), the ampere (electric current), the kelvin (thermodynamic temperature), the mole (quantity of matter) and the candela (quantity of light intensity). Now, only one of these measures, the kilogramme, is still calibrated using a physical object, the

famous cylinder held at Sèvres, the other six now being based on unchanging natural phenomena.

For example, the standard metre, of the same metal as our standard kilogramme was replaced, in a concern for efficiency, and redefined as the distance light travels in a vacuum during one 299,792,458th of a second. As for the second, it is based on the frequency of the natural vibrations of the caesium atom. Once again, an object is replaced by a trajectory and 'metrology' all of a sudden turns into a 'dromology'! (2007, 60-61)

However, a moments departure from theory to practice finds that social networking utilities such as Facebook and Twitter have not only extended the reach of the real-time archive, but are enormously popular. With 91 million US visitors, the former is growing at a rate of almost 200% annually. With 14 million US visitors, the latter is growing at a rate of over 1000% annually (Ostrow 2009). If such figures suggest closer connections between the users of these social networks, researcher Dr. Aric Sigman claims: "In less than two decades, the number of people saying there is no-one with whom they discuss important matters nearly tripled" (BBC 2009). Why then, is the growth of these real-time archives skyrocketing?

My contention is that our relationship to technology in general and the real-time archive in particular be understood as an addiction. In other words, a relation characterized by dependence and habit-formation. In this context, Virilio's figure of the light of speed evokes the word "speed's" informal denotation of the drug methamphetamine. That the Blackberry mobile device is also referred to as a "crackberry" (in reference to crack cocaine) provides anecdotal evidence of our addiction. Using drug abuse as a model, this cycle of addiction can be seen to escalate such that greater doses deliver diminishing returns. Nonetheless, addicts lack the agency to act outside of the limits prescribed by this downward spiral.

Does this mean that technology is not liberating? No, but for many people so is alcohol. In both cases, it is abuse as opposed to use that is destructive. Who would be in a position to differentiate the two? Here media theorist Wolfgang Ernst provides a useful model of interpretation: "[C]yberspace is not about content, but rather a transversive performance of communication" (Lovink 2003). In this light, use in service of the communication of content becomes abuse as the performance of communication. The latter is indicative of an addiction to the extent that the subjectseffects of the technology in question become more powerful that than those of the human actors involved in the drama. One could argue that it is hard to distinguish between the two amidst the so called "interactivity" of the real-time archive, however this is something all together different from face-to-face interaction. In Virilio's terms, we can distinguish between the *egocentricity* of the carnal subject and the exocentricity of their cybernetic doppelganger:

Here, the EGOCENTRICITY of the human being's body proper is transferred to the inertia of the earthling's world proper – in other words, to peripheral EXOCENTRICITY – for this man of the Last Day who is now no more than a fully fledged sedentary being, a lounge lizard, driven by his megalomania to revise more than to revisit his cramped domain, in an ambulatory dementia in which accelerated displacement doesn't even mean a journey any more, but a vibration analogous to that of the waves that convey his telescopic sensations... (Virilio 2007, 25)

Based on his reading of sociologist and philosopher Roger Caillois, psychoanalyst Jacques Lacan tried "to explain how the autonomous self is produced as an optical effect as a body attempts to conform to an encoded visual surface and to inhabit a landscape constituted as the field of the other's gaze..." (Meek 1998). Without face-to-face contact, that is to say, without this "field of the other," can we even speak of an independent subject or are we rather speaking of a

subject with a dependency, an addiction? The relation of this addiction to consciousness can perhaps be located in what software executive Linda Stone names as *continuous partial attention*. In other words, "we are so busy keeping tabs on everything that we never focus on anything" (Thompson 2005). Journalist Clive Thompson continues:

This can actually be a positive feeling, inasmuch as the constant pinging makes us feel needed and desired. The reason many interruptions seem impossible to ignore is that they are about relationships – someone, or something, is calling out to us. (2005)

However, who or rather what we are really interacting with on Facebook or Twitter? Here McLuhan's reading of the myth of Narcissus is relevant. Generally speaking, to invoke the myth of Narcissus is to imply a relationship whereby a subject has fallen victim to their own self-fascination. McLuhan's insight is to point out that Narcissus was not actually fascinated with himself or a reflection of himself but rather mistakenly perceived the reflection in the water to be another person entirely:

The youth Narcissus mistook his own reflection in the water for another person. This extension of himself by mirror numbed his perceptions until he became the servomechanism of his own extended or repeated image. The nymph Echo tried to win his love with fragments of his own speech, but in vain. He was numb. He had adapted to his extension of himself and had become a closed system. (McLuhan 2001, 41)

If the narcissistic subject has gone numb as the result of misidentifying his or herself as another person, the promise of social networking is that one is interacting with others rather than oneself. That is to say, engaging in an elaborate deferral of the selfrecognition that can only occur in the face-to-face field of the other. This relates to the event of speech as follows:

Language, for example, is a synchronic milieu (as Saussure taught us) in which there is diachrony. If I speak and you listen to me, it's because I am not in absolute synchrony with you; but if I can speak to you, it is because my diachrony tends to synchronize with you. Language is the articulation of the diachronic and the synchronic, that is, the composition of two tendencies that are also forces, a composition that produces a dynamic process. And a language dies when these tendencies decompose. (Stiegler 2009, "Acting" 52)

In these terms, social networking would appear to have more to do with the evolution of a single, cybernetic mass subject seeking to know itself in the field of the multitudes comprising its other. For Baudrillard:

You are the automatic questioner and, at the same time, the automatic answering device of the machine. Both coder and decoder - in fact your own terminal, your own correspondent. That is the ecstasy of communication. There is no 'Other' out there and no final destination. And so the system goes on, without end and without purpose. And its sole potential is for infinite reproduction and involution. Hence the comfortable vertige of this electronic, computer interaction - like the vertige induced by drugs. You can spend your whole lifer at this, without a break. Drugs themselves are only ever the example of a crazed, closedcircuit interactivity. . . . [T]he fact that identity is the identity of the network and never that of individuals, the fact that priority is given to the network rather than to the network's protagonists implies the possibility of hiding, of disappearing into the intangible space of the virtual, so that you are not detectable anywhere - even by yourself. This resolves all problems of identity, not to mention those of alterity. So, the attraction of all these virtual machines no doubt derives not so much from the thirst for information and knowledge as from the desire to disappear, and the possibility of dissolving oneself into a phantom conviviality. A kind of 'high', which takes the place of happiness, of obvious happiness, by the very fact that happiness no longer has any *raison d'être* here.

Virtuality comes close to happiness only because it surreptitiously removes all reference to things. It gives you everything, but at the same time it subtly deprives you of everything. The subject is realized to perfection, but when realized to perfection, the subject automatically becomes object, and panic sets in. (2002, "Screened" 179-80)

If this suggests that interactivity and individuation are mutually exclusive, there would appear to be a middle ground in what Virilio names as the *televisual horizon*, what for many is now exemplified by real-time video teleconferencing software such as Skype:

[W]hen two people communicate in real-time through interactive techniques, the direct, face-to-face contact is made possible by the absolute speed of electromagnetic waves, regardless of the intervals in time and space that actually separate them. Here the event does not take "place" or rather, it takes place twice. . . . The "televisual horizon" therefore exists only during the transmission and the reception in real-time of the televised conversation. It is a present moment, defined by the framing of the perspective of the two tele-viewers and above all by the duration of their face-to-face encounter. (Virilio)

Whether the subject-effects Virilio's televisual horizon enable the production of an "autonomous self" in the "field of the other's" televisual gaze is an open question. While it appears to be beneficial in terms of maintaining social bonds, it would appear unlikely that this gaze contains the type of contingency necessary to create these same bonds, at least insofar as they have been traditionally defined. Instead, the synchronization engendered by the real-time archive

can be seen to produce what Virilio describes as "mass individualism:"

[A]fter the camps, and, more recently, after the information revolution, this familiarity with the domestication of the public has become patently obvious – to the point where the phenomenology of perception DE VISU is reversed, thanks to the teleobjectivity of a view of the world that has taken us from the collectivism of bygone days to mass individualism.

In fact, and as we pointed out earlier, our contemporaries no longer want to see but only to be seen by all the tools of audiovisual televoyance.

This is it, the reversal of the scopic impulse of voyeurism, along with the boom in transfiguration, a lay version, now, but one that owes everything to the illumination of the real time of an instantaneity likely to inspire, tomorrow or the day after, the revelation of a myth of transappearance in which exhibitionism will achieve its goal, promoting not only the synchronization of sensations but, especially, the globalization of affects. (2007, 89-90).

Here one might speak of a human gaze versus its post-human equivalent. If in the former, the subject wants to see, in the latter they want to be seen and to have their emotions electronically synchronized. From Stiegler's perspective, the qualitative multiplicity of a Bergsonian model of consciousness cedes to a quantitative singularity in which "unique temporal objects" merge with a synchronized (and thus standardized) subject:

The chief consequence of the fact that ours is indeed an age of programming industries and of institutionalized memory is that industrial memory's product is a flux in which absolutely unique temporal objects appear, objects whose flux coincides with the flux of the consciousnesses it produces.

The programming industries, and more specifically the mediatic industry of radio-televisual information, mass-

produce temporal objects heard or seen simultaneously by millions, and sometimes by tens, hundreds, even thousands of millions of "consciousnesses": this massive temporal coincidence orders the event's new structure, to which new forms of consciousness and collective unconsciousness correspond. (2009, "Technics" 241)

In any case, there are those who see nothing but useful liberation in the subject-effects of the real-time archive. For example, in "We Are the Web" Kelly reflects upon the "freeing of memory" that Google enables:

We already find it easier to Google something a second or third time rather than remember it ourselves. The more we teach this megacomputer, the more it will assume responsibility for our knowing. It will become our memory. Then it will become our identity. In 2015 many people, when divorced from the Machine, won't feel like themselves – as if they'd had a lobotomy. (2005)

In counterpoint to the unbridled post-humanistic optimism of Kelly and futurists such as Ray Kurzweil, stands AI researcher Hugo de Garis. The title of the author's 2005 book speaks volumes: The Artilect War: Cosmists Vs. Terrans: A Bitter Controversy Concerning Whether Humanity Should Build Godlike Massively Intelligent Machines (2005). If Garis's godlike machines suggest a technological subject beyond comprehension, media theorist Geert Lovink's succinct definition of archives as "cybernetic entities" (Lovink) provides an equally challenging, if more intuitive figure to consider in approaching such questions. On a more utopian note, Gere notes that for writer Ernst Jünger, technology contains the seeds of nothing less than a spiritual awakening:

For Jünger, when technology goes through the time wall, when it progresses faster than history, an analogous culture shock is produced. But, according to him, breaking through

the time wall does not signal certain disaster but offers, rather, the means of entering a new age of human history, or even the end of history as we understand it. Jünger pursues this theme through *An Der Zeitmauer*, starting with a curious defence of astrology as offering guidance for man in understanding his cosmic being, and follows with a Hegelian analysis of the progress and final phase of history, in which harnessing the forces inherent in the earth becomes the focus of man's energies. In a passage that echoes the work of both the Jesuit paleontologist and mystic Pierre Teilhard de Chardin and media theorist Marshall McLuhan Jünger declares that technology is the 'form and beginning of a new spiritualization of the earth in the closing stages of historical time' and that it is changing the face of the earth by copying the functions of the central nervous system. (2006, 90-91)

With the three themes of "The aura of information: from space to time," "Inscription technologies: indexicality and duration," and "Real-time archives: inscribing consciousness" having been respectively developed, it now possible to address a unifying question: What is the role of the aura of information produced by inscription technologies within a real-time archive? The conclusion reached in exploring the first theme was that time has replaced space as the arbitrar of aura. In contradistinction to Betancourt's concept, it was further contended that the aura of information is one in which meaning and physical representation are nonetheless conjoined. The exploration of the second theme concluded by noting that the aura of digital objects is produced by an oscillation between their indexical and symbolic qualities. The conclusion reached in exploring the third theme was that the subject-effects of real-time archives are essentially post-human. Put simply, this suggests that with increasing speed, the oscillation between the indexical and the symbolic qualities of digital objects is going to change us in ways that will redefine what it means to be human. Having tightened the focus of the arguments in the last three chapters in order to explore the realm of the semiotic-material, the

#### CHAPTER 6

next chapter will widen in scope in service of exploring the implications of the conclusions thus far reached in relation to both my own art practice and the practice of others.

## Relocating Internet Art

Just as Collins "hacked" both the material and metaphoric dimensions of the postal system, artist Cory Arcangel has hacked into the subject-effects produced by platforms such as the Nintendo gaming system:

Mr. Arcangel said that part of his motivation behind the Nintendo hack was not just completing it, but creating a Web site that showed how he did it. The project itself, his "Super Mario Clouds v2k3" from 2003, at the biennial, erases everything from the game display but the puffy white clouds floating in a pixellated blue sky, may have been physical, but it was designed partly for an online audience. "While it's not really Net art like Net art used to be defined," he said, "it is Net art because half the reason I made it was so I could put it on the Internet and have it participate in Internet culture." (Sisario 2004)

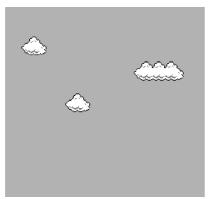


Fig. 8. Cory Arcangel, "Super Mario Clouds" 2002.

The citation above comes from journalist Ben Sisario's aforementioned essay "Internet Art Survives, but the Boom Is Over" (p. 8). The reader will recall that for most of those interviewed, net art's post mortem was tempered with the acknowledgement that the creative activity surrounding the net was still very much alive. In describing his installation, Arcangel names a dialectic underpinning the situation: the culture may be online, but the capital has moved offline. This turns of events circumscribes a return to the conditions under which net art was born.

The birth of net art as a movement can be attributed to a handful of European and Russian artists including: Heath Bunting, Vuk Cosic, Jodi.org, Olia Lialina, and Alexei Shulgin (Greene 2004). For many of these artists, socio-political activism was as much as of a driving force as the white cube. The work of such artists throws into relief both Baudrillard's figure of the obscene and Bourriaud's critique of the "computer medium" on the one hand, and the potential for digital media art to apprehend the subject-effects of the real-time archive on the other. For his part, Virilio writes with skepticism about the political agency modeled by such "unlocated" practices:

This is it, the profanation of 'the art of the possible' of the politics of nations; this is definitely it, this OUTLAND ART that denies representative democracy its inscription in the real space of some soil, and thus its territorial localization; real-time exchange flows further accentuating the difficulty of framing, legally or otherwise, a transnational activity now corrupted into a sort of (virtual) interactivity that dissolves, one after the other, the spaces of the law as surely as nuclear radiation dissolves those of the body. (2007, 109)

However, a parallel can be drawn between the earlier critique of Hirschhorn's practice in relation to the State and the manner in which net art's socio-political aspirations became commodified as part of the value chain of museum space. It could also be argued that such practices were already compromised socio-politically as the result of their situation within the privatized commons of the net. In any case, net art's institutional rise came on the coattails of a socio-cultural shift that was bullish about the online world in terms of its commercial applications. Just as Web design and development companies with virtually no infrastructure were suddenly being competitively traded alongside companies with hard assets, net artists found themselves hacking into the brick and mortar art world with great ease. If it was online, it was of value:

As the millennium came to a close, many levels of change were afoot. For a start, there was evidence of growing institutional interest in net art. In 1999 the ZKM mounted its substantial 'net condition' show, and Tate Britain and Tate Modern began commissioning net art. New York's Whitney Museum of American Art hired digital culture magazine Intelligent Agent founder Christiane Paul as an adjunct new media art curator, and announced that net art would be in the 2000 Biennial. '010101: Art in Technological Times' was scheduled by the San Francisco Museum of Modern Art to open in 2001. The Guggenheim Museum also commissioned online art and began its valuable 'variable media initiative', in which curator Jon Ippolito considered how to preserve and conserve ephemeral and contingent new media and conceptual artworks. Vuk Cosic, practically a folk hero in Slovenia, was selected as the country's representative at the Venice Biennale. (Greene 2004, 129)

However, a tipping point in the Spring of 2000 when the stock market began to falter under the weight of digital speculation:

[N]et art suffered palpable losses in prestige and funding alike. The collapse of the American stock market in spring 2000, after years of prosperity driven by information technology (since 1995, more than a third of American economic growth had resulted from information technology

enterprises), brought with it a sense of cynicism about the internet. (168-70)

Not long after, a bearish wave swept through culture such that the value of what was online was suddenly suspect. This trend extended into the art world, and while the Whitney's 2002 Biennial had a section dedicated to net art, its 2004 Biennial exhibited only installation-based digital art such as that of Arcangel.

This shift, coming from the Museum that pioneered the recognition of digital art with shows such as "BitStreams" and "Data Dynamics" in 2001, signaled the end of online net art and the beginning of its process of relocation, institutionally speaking at least. This is not to suggest that arts organizations such as Rhizome or Turbulence that continue to commission net-based art are not culturally vital. However, the market has its own logic and its impact is tremendous.

Market forces aside, there are a host of equally intriguing questions that arise from the relocation of net art. Here it should perhaps be noted that what is being considered is not so much the re-location of net art as its location. In other words, its being spatially situated someplace. In Castells's terms, this would be the distinction between the space of flows and the space of places. If the former is where net art was previously unlocated, the latter is where it has relocated.

One of the most obvious repercussions of this relocation is a shift away from the aura of information (away from a temporally-based aura) and towards the more familiar aura of an art object that maintains its presence through a pronounced oscillation between distance and closeness. In other words, a spatially-based aura. Thus, one of the characteristics of relocated net art is that it ventures into auratic waters that its online predecessor left behind.

While for many net artists, particularly those without a stake in its institutionalization, this shift can be easily read as yet another capitulation in a regressive trend that has sapped the medium of its lifeblood since the late 1990s. Conversely, this does not mean that the aesthetic questions posed by relocated net art are illegitimate. In fact, given that the movement had roughly ten years (1995-2005) of expansive growth in its "pure" online form, perhaps this shift is timely.

Before moving on the question of inscription, it becomes necessary to clarify the terms online and relocated. Online refers to works that make use of a real-time connection to the Internet. Relocated refers to works that have one foot online and the other offline. They are thus not so much relocated as in a constant state of relocation. Jodi's http://wwwwwwww.jodi.org (Fig. 9) is online net art. Arcangel's Super Mario Clouds (Fig. 8) has been relocated. The former consists of a morass of bright green ASCII (American Standard Code for Information Interchange) text that blinks on and off against a black background. While the characters inscribed within the Web browser appear all but unintelligible, the page's source code reveals diagrammatic ASCII illustrations of what appears to be a bomb. There is thus a net-specific quality to the representational strategy or counter-strategy at work in that the semiotic abstraction of the source code is repurposed towards pictorialism, while the window of the browser is filled with garbled code.

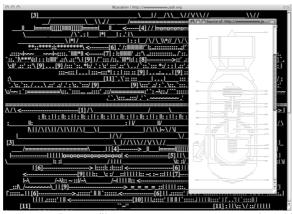


Fig. 9. Jodi.org, "http://wwwwwww.jodi.org" 1995.

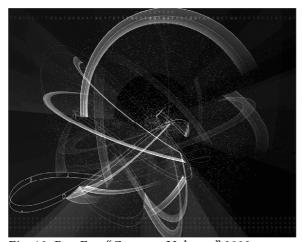


Fig. 10. Ben Fry, "Genome Valence" 2002.

However, relocated net art can do things with inscription that online net cannot. For example, it can be printed in books as in the case of July and Fletcher's *Learning to Love You More* or appear in Hollywood films (*The Incredible Hulk*) as in the case of information designer Ben Fry's work (Fig. 10). Thus, relocated net art has more of a chance of appearing under the light of the sun or that of movie projector than online net art, which is essentially dromoscopic (speed is its meta-narrative).

This leaves the question of the relation between relocated net art and real-time archives. If the subject-effects of the real-time archive are a part of the experience of online net art, then relocated net art implies an interruption to those effects. To the consternation of readers who may lament the days when net art was seen as synonymous with political activism, it is equally possible that whatever its politics, the form itself may have an innately post-human orientation.

It is of course debatable whether this is positive or negative. If the implication above is the latter, there are of course figures such as Kelly and Kurzweil who would claim the former. While an indepth consideration of this question is beyond the scope of this essay, it is admittedly biased towards the conclusion that our technical knowledge has eclipsed our innate wisdom and that we risk losing control of the situation. That said, in chapter 10 it will be argued that we have perhaps never been in control of this situation to begin with. In any case, this loss of control can again be likened to a cycle of addiction. If the verse: "First a man takes a drink, then a drink takes a drink, then a drink takes a man!" (Sill 2008, 318) is used to describe alcoholism, substituting the word "tool" for "drink" might equally describe our addictive relationship to technology. The abstraction of this contention has been concretized by both studies within neurological science (Yoffe 2009) as well as tragedies in which computer gamers have binged themselves to death. If the risk generally discussed here is particularly physical, this downplays the importance of making an effort to apprehend the more elusive subject-effects registered by the real-time archive upon consciousness in general. More specifically, we might ask whether we are the recipients of a beneficial augmentation, whether our awareness is being compromised, or if what is happening is a more nuanced mix of both of these tendencies.

To an extent, our present situation has been prefigured by the work of scholars such as Mumford and Virilio. If the vitality of their respective intellectual projects is inspiring, their conclusions can hardly be considered optimistic. In more concrete terms, a cursory look at some of the ecological challenges that humanity faces as the result of its misuse of technology makes it hard to conclude that a post-human future would be livable.

One could conversely argue that we need to be augmented in order to find solutions. However, the ends do not justify the means and a shift towards a cybernetic subject would simultaneously need to be measured against its footprint on the environment. In this regard, landfills erected from mountains of discarded electronics, themselves the product of planned obsolescence, do not bode well for the prospect of a post-human future that is eco-friendly. While the relocation of net art may seem far removed from such challenges, its hybrid subject is consistent with the need to consider the embodied consequences of cyberspace.

## Remixing "The Wilbert Smith Archives"

I will now present two artworks that will provide an opportunity for a more subjective and in-depth analysis of the themes thus far explored. These two artworks share two overarching traits: both were produced using material from the same archive, and both are examples of relocated net art. The archive is a CD-ROM that I purchased online for approximately five Canadian dollars. Its author is man named Grant Cameron. Ostensibly, Cameron spent roughly twenty years studying a renowned Canadian scientist and engineer named Wilbert Smith.

The veracity of Cameron's project is qualified (ostensibly) such that moving forward, it is clear to the reader that we are leaving the realm of "facts" as they would commonly be supported within an academic text. That said, I have no reason to doubt Cameron's claims (nor the story that unfolds within his archive), beyond the fact that it cannot be extensively corroborated via conventional academic methods. In this light, Cameron's work is an alternative history.

The question of authenticity is of course related to aura and it was the aura of the material on the CD-ROM that prompted my creative involvement with it. This is especially significant considering how fantastic the content is. That is to say, otherworldly and unbelievable. If Google can deliver data fitting this description in a matter of milliseconds, the fascination of such data is mitigated by its aura. In this regard, *The Wilbert Smith Archives* are as fantastic as they are auratic.

Cameron's stated intention in compiling the archive was to write a monograph about Smith. The archive is thus structured as a collection of reference material that would enable him to do so. Why Cameron chose to release his material prior to writing the book is unclear. I was in contact with him via e-mail for a short time, but this was not discussed. In any case, his "open-sourcing" of the archive material puts him in perfect-step with a cultural logic of increasing importance.

Wilbert Smith directed Project Magnet, the Canadian government's official investigation into UFOs. The project ran from 1950-1954. In 2003, Cameron released *The Wilbert Smith Archives* on CD-ROM. The archives include audio recordings made by Smith and nearly 1000 pages of scanned documents from sources including the Canadian government and the University of Ottawa. The two artworks presented in this chapter are palimpsests or remixes of this archival material.

As the speculative format of this essay affords the chance of adding a productive tension to the reader's encounter with these artworks, I will briefly note a few pieces of information in hopes of framing the UFO enigma. Both concern US astronauts who became-have become increasingly vocal about the subject in their latter years. The first is Gordon Cooper, one of the original Mercury astronauts. Before a UN panel in 1985, he testified:

I believe that these extraterrestrial vehicles and their crews are visiting this planet from other planets, which obviously are a little more technically advanced than we are here on Earth. [...] For many years I have lived with a secret, in a secrecy imposed on all specialists and astronauts. (CNN 2004)

The second is Edgar Mitchell, the sixth man to walk on the Moon. In 2004, he made a public statement regarding the legendary events of Roswell: "A few insiders know the truth...and are studying the bodies that have been discovered." (Moore 2004) In 2008, Mitchell stated:

It's been well covered up by all our governments for the last 60 years or so, but slowly it's leaked out and some of us have been privileged to have been briefed on some of it.

I've been in military and intelligence circles, who know that beneath the surface of what has been public knowledge, yes – we have been visited. (Farmer 2008)

## These People from Elsewhere

This project is a computer-based video installation completed in 2007. In 2008 it was shown in several exhibitions and festivals including Art+Communication (SPECTROPIA) and Transmediale.08 (CONSPIRE). Below, I will outline characteristics of the work in relation to Cubism, the aura of information, inscription technologies, real-time archives, and relocated net art. An online version of *These People from Elsewhere* can be viewed here: <a href="http://www.stopmotionstudies.net/dr3">http://www.stopmotionstudies.net/dr3</a>>

### CHAPTER 8

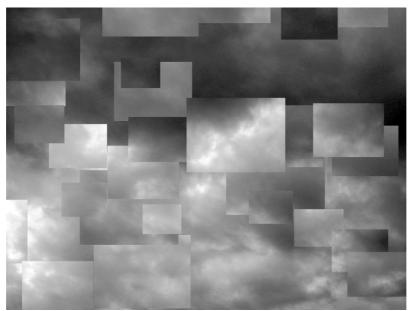


Fig. 11. David Crawford, "These People from Elsewhere" 2007.

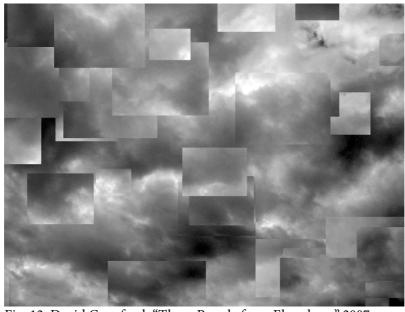


Fig. 12. David Crawford, "These People from Elsewhere" 2007.

In the simplest terms, the video can be described as a type of animated cubism whereby shards of photographic imagery depicting clouds are interlaced such that successive moments in time are simultaneously juxtaposed. The paintings of Cézanne and Picasso can be said to have exerted a considerable formal influence upon the work. Below, I will present a brief outline of the invention of Cubism in order to throw its influence upon *These People from Elsewhere* into relief.

The roots of Cubism can be traced to Cézanne, who turned away from what he saw as the decorative nature of Impression and instead investigated perspective in a manner that made his formal argument relevant to those developed during the Renaissance. In particular, Cézanne contested a linear conception of space and instead installed a vision of his own, one that was to be extended by Picasso and artist Georges Braque into what we now recognize as the canon of Cubism.



Fig. 13. Paul Cézanne, "La Montagne Sainte-Victoire vue de Bellevue" 1888.

Central to Cézanne's vision was the use of more than one plane of perspective, such that the space defined in his canvases was neither linear on the one hand, nor entirely flat and decorative on the other. The oscillation between the two generates much of the tension that gives his paintings their reserved power. As a method, Cézanne used patches of color instead of lines to render his subjects. He referred to this atomized approach to inscription as his "touch." (Machotka 1996)

In turn, Picasso and Braque saw in Cézanne's work something that prompted them to begin the development of Cubism. That thing was an open challenge to linear perspective in favor of a more tactile and linguistically oriented conception of space. Within the language of Cubism, one thus encounters linguistic figures such as metaphor and metonym (synecdoche). The painting below will serve as an example.



Fig. 14. Pablo Picasso, "David-Henry Kahnweiler" 1910.

If the abstract relationships that define the space in *David-Henry Kahnweiler* (Fig. 14) are seen as analogous relations (analogies), then the latticework grid and the relations it embodies can be said to be metaphoric. Likewise, there are two distinct elements in this portrait that can be considered synecdochic (a part signifying the whole). The first is the wave of the subject's hair in the upper left. The second, the set of clasped hands perched in the lower-center area of the frame.

Speaking about the evolution of this picture, Picasso talked about adding these specific attributes as a means "to bring one back to visual reality, recognizable to anyone" (Karmel 2003, 17) In this sense, it can be said that the formal operations of the written word make themselves evident as very real (and productive) tensions within the formal argument put forward here by Picasso. Put another way, the aesthetic tension in this work derives largely from the relation of what might be called its metaphoric (grid) and synecdochic (hair and clasped hands) elements.

Returning to the law of relocation, we can ask whether photography was not just reactive to these painterly inventions, but rather central to the formulation of Cubism to begin with. It is worth noting that photography had already gained a place within the cultural vernacular as Cubism was still being developed. Moving forward in time, our computer desktops with their shards of overlapping windows serve as a reminder that Cubism continues to inflect the discourses of many disciplines.

Moving from image to sound, a monologue recorded by Wilbert Smith in 1958 provides the narration in *These People from Elsewhere*, which is presented with the following introductory text:

Wilbert Smith directed Project Magnet, the Canadian government's official investigation into flying saucers. The project ran from 1950-1954 and included the establishment of a flying saucer observatory near Ottawa that housed equipment for detecting magnetic fluctuations in the atmosphere. There on 8 August 1954, Smith's instruments

displayed signals that led him to believe that he had detected a flying saucer.

"The deflection in the line [drawn by an electronically operated pen] was greater and more pronounced than we have seen even when a large aircraft has passed overhead. I ran outside to see what might be in the sky. The overcast was down to a thousand feet, so that whatever it was that caused the sharp variation was concealed behind the clouds. We must now ask ourselves what it could have been."

—Wilbert B. Smith

Thus, the artwork is loosely framed as Smith's reflection upon his experience that day, if not a reconstruction of it. The audio finds Smith recounting his experiences as a UFO researcher followed by his conclusions about the phenomenon. The auratic quality of the recording, in Baecker's sense of the term (its oscillation between distance and closeness), is just as significant as the story that unfolds within it.

Meanwhile, the shifting grid of incisions between the photographs in the animated cubist photo collage emanates what is more akin to an aura of information, in the sense that I have repurposed Betancourt's figure (simulated materiality and its temporal essence). There is thus a contrast between two types of aura, a typology loosely based in a distinction between the spatial and the temporal.

While the aura of the audio could easily be read as temporal, I would suggest that its immediacy across a distance nonetheless qualifies it as more spatial than objects that emanate the aura of information. The temporality of the latter is not a temporality of distance. In other words, a quality derived from the immediacy of something ancient. The aura of information is rather the product of a simulated materiality emerging from the light of speed, from the split-second oscillation between presence and absence underlying electronic representation. If photography's aura emerged relative to mechanical intervals as narrow as a thousandth

of a second, the aura of information underlying the real-time archive emerges from electronic calculations measured to a billionth of a second.

This abstraction can perhaps be made more concrete by way of an analogy to the electron beam that creates the image on a television screen or computer monitor. This beam scans the photoluminescent surface within the display in a successive manner such that slowing it dramatically would reveal that the image is never really "there." This effect is occasionally seen when photographing televisions or monitors whereby only certain portions of the image are rendered.

In *These People from Elsewhere*, this effect is replicated to some degree with the scan lines being traded for cubes. The aura produced by both arresting the smooth flow motion that we generally associate with film and video and by lacerating the frame into a constellation of sub-windows draws attention to what in the terms of media theorists Jay David Bolter and Richard Grusin (1999) would be the *hypermediacy* of the representation, its opacity as an image comprised of juxtapositions.

While the aura of information is equally present on the screen of a monitor displaying a Web page, its presence is more subtle in that one can feel the micro-oscillations giving rise to the electronic image more than one can see them. Returning to Kant, one can apprehend them without comprehending them. This same process occurs when one experiences discomfort under the fluorescent light or sees a dog react to an imperceptible noise: it is a question of frequency.

In this artwork, the frequency commonly associated with the reality effects of video is arrested. Discarding with the immediacy of a single pane running at 30 frames-per-second (FPS), the video is comprised of up to 36 sub-windows each running at around 5 FPS. One effect of the staccato motion and fragmented space is to emphasizes what Manovich calls the "photo-GRAPHIC, the photo providing only an initial layer for the overall graphical mix" ("Image Future").

Within the event of this mix, inscription occurs. That is to say, "material changes that can be read as marks (Hayles 2002, 24). These marks are the graphic borders between the sub-windows and the temporal borders between the still frames within them. The sub-windows are generated in real-time via a Flash ActionScript. The script generates 36 sub-windows of random sizes and places them randomly across the screen. Each sub-window cycles through an image carousel.

Each carousel consists of between 6 and 15 still photographs depending upon which of 11 sequences is being displayed. Thus, over the course of the 12 minute video, a reshuffling of the subwindows occurs 11 times. At the initiation of each sequence, a starting frame is randomly selected at which point the carousel begins to loop. The effect is that the same carousel of images is juxtaposed over itself 36 times at various points in its progression.

These tactics of breaking the framework of the moving image can be said to create an "opening [of] a space for consciousness of the still frame within the moving image" (Mulvey 2006, 186), and are typified by film theorist Laura Mulvey as aesthetics of delay: "The aesthetics of delay revolve around the process of stilling the film but also repetition, the return to certain moments or sequences, as well as slowing down the illusion of natural movement" (192).

In this light, the moving image became a new (or has returned to an older) type of critical object. Implicit in the shift of cinema from a recording medium to a "sub-genre of painting" (Manovich 2000, 175), is its ability to shift from the register of illusionistic depth (motion) to the register of graphic surface (immobility). An "aesthetics of delay" is thus concerned with illusionistic motion and indexical stillness as co-present potentialities.

If filmmakers such as Dziga Vertov and Chris Marker have already explored this tension, digital representation marks a shift whereby the technology used to view motion pictures has changed the ontology of the moving image. Along these lines, artist and writer Yve Lomax has extended the aesthetics of delay into the realm of the social, wherein the consequences of spatializing time, and of moving from fascination to fetish are considered:

Is it almost impossible for us to side step the obsession with controlling time and calculating security? Perhaps I should put the question another way: How can we maintain an uncontrolled time? Yes, this is a question I want to shout out: How can we nourish a time that brings to us the surprise of the unexpected without which life suffocates from banality? Indeed, how can we enable chance and the unforeseen be given a chance? (2006, 56)

## Paraphrasing philosopher Alain Badiou, she then writes:

For Badiou there must be a retardation process that, in its slowing down, produces an 'interruption' within the circuits and ever increasing acceleration of the 'calculus of life determined by security'. Indeed, in the face of the injunction to speed there must be a 'revolt' that produces an interruption in which thinking can construct a time that is its own. It is in this time that thinking obtains the chance to 'throw the dice' against the obsession with calculating security. (57)

When the fetish of "controlling time and calculating security" is transposed from a DVD player (Mulvey's predominant figure) to the real-time archive, the aesthetics of delay begin to enter a dialogue with relocated net art. In other words, what better way to "produce an interruption in which thinking can construct a time that is its own," then by denying continuous partial attention? Put simply, going offline.

While below I will argue that *These People from Elsewhere* represents an instance of relocated net art, its situation within a certain aesthetics of delay and the real-time archive will be preceded by a return to Bergson. In particular, his concept of the

cinematographical mechanism of thought provides a model upon which to build a critique of the ontology of the real-time archive. Both artworks to be presented will come to be situated relative to this critique.

In *Creative Evolution*, Bergson's concept of the cinematographical mechanism of thought serves as a model allowing him to deconstruct an epistemology originating in ancient Greece. Within this epistemology, the "becoming" that Bergson writes of is seen primarily as the degradation of a form rather than that which breathes life into forms. Below, he questions the specificity of the insight that such a knowledge can attain:

In order to advance with the moving reality, you must replace yourself within it. Install yourself within change, and you will grasp at once both change itself and the successive states in which *it might* be immobilized. (2001, 297)

Bergson further explicates this "moving reality" in relation to two of Zeno's paradoxes of motion: the *arrow paradox* and *Achilles and the tortoise*. In the former, the arrow's movement is not a movement from point A to point B, but rather movement AB. In the latter, Achilles will overtake the tortoise because each of his steps represent an indivisible act. The arrow arrives and Achilles wins because measurement is embedded within (as opposed to being constitutive of) becoming.

Thus, within Bergson's epistemology: "[T]here is *more* in the transition than the series of states, that is to say, the possible cuts, *more* in the movement than the series of positions, that is to say, the possible stops" (302-303). In a word, that more is *durée*, or duration. This returns us to the figure underlying the indexicality of inscription technologies and their entendant aura. In *These People form Elsewhere*, the mediation of duration is intended to be evident rather than hidden.

Implicit in the construction of the artwork is the notion that any critique of the cinematographical mechanism of thought must be addressed from the inside-out. While it goes without saying that Bergson's figure is only a metaphor, it will be assumed that a "material" (the mechanism is conceptual when transposed into the digital realm) manipulation of this mechanism can be seen to reflect back upon the metaphor and from there upon consciousness.

In *These People from Elsewhere*, the cinematographic means of representation is laid bare through a series of oppositions: movement and stillness, depth and surface, and illusion and indexicality. This gestalt is one of highlighting the fragmentary qualities of cinematographic representation, while at the same time retaining an illusion of movement. The artwork can thus be seen as an invitation to invest in the illusion of movement without forgetting that it is rooted in abstraction.

This enables the artwork to reflect back upon cinematographic representation in general, and in doing so, upon the cinematographic mechanism of thought in particular. That which can be seen to emerge from these rifts in continuity is the idea of duration. Hence, the formal logic of *These People from Elsewhere* exaggerates the impossibility of spatializing duration, while simultaneously showing that the spectator remains willing to invest in illusionistic spaces that are fragmented.

In evidencing the abstract fragmentation of the inscription technologies used (a camera and a computer), the artwork also points towards the ontology of the real-time archive. While the techniques used are concretely situated within the formal logics of film/video and digital art, these logics are likewise implicated by the presence of the real-time archive. This, as Bergson's figure points to its successor: from a mechanism of thought to an inscription of consciousness.

In support of this supposition, it is important to note that *These People from Elsewhere* was conceived and designed to be instantiated both online and offline. That is to say, its preferred

presentation format is as a computer-based video installation, yet it is also shown in an online format as net art. While viewers may not be aware of the "sibling" that they are not seeing, the work refuses to a medium specific restriction and this hybridity infuses the artwork's texture.

For example, as a video installation, the fracturing of frames that occurs makes direct reference to the windowed environments of the Web. As net art, the absence of interactivity shifts the positioning of the work towards the medium of video art. Thus, the work as a thing, a noun, or video installation/net art can be seen as an example of relocated net art. Along the same lines, the work as an action, a verb, or an experience can be seen as *relocating* net art.

Just as we are increasing both here and elsewhere when sitting in meetings and checking text messages, re- or bi-locating net art is neither fully on- or offline. From an art historical standpoint that is at all Greenbergian in its orientation, this is of course provocative. In particular, it can be equated with a theatricality in art that critic Michael Fried dismissed in asserting: "Presentness is grace" (Fried 1998, 168). However, such a position is based on a modernist model of subjectivity in which "totally manifest" presentness is still possible:

Fried was concerned to criticize Minimalist, or what he described as 'literalist' art, for its theatricality, which he saw as manifested in its setting up a particular relation between the beholder as *subject* and the work as *object*, which necessarily takes place in time and which therefore has duration. . . . Fried contrasted Minimalist theatricality with the more general trend in artistic modernism precisely to *defeat* theatre and to suspend both objecthood and temporality. He contrasts this with modernist works, such as paintings by Noland or Olitski or sculptures by Anthony Caro or David Smith, in which 'at every moment the work itself is totally manifest'. . . . And it is by virtue of their 'presentness' and 'instantaneousness' that 'modernist painting and sculpture defeat theatre'. (Gere 2006, 165)

Against this model, one could contrast Baudrillard's figure of the obscene. In Fried's model, the presentness of an artwork enlists subjectivity via immediacy. However, this can be said to rely on subject's capacity to "stage" the aesthetic encounter to begin with. Far from implying a relocation of the very theatricality that Fried contests, this staging rather refers to the subject's capacity to differentiate themselves from the encounter in question. In other words, the defeat of theater is akin to kicking in an open door when the subject lacks the capacity to stage themselves in the first place. This does not preclude the aesthetic power of immediacy, but requires an approach to Fried's call for presentness in a manner that simultaneously takes into account the changing nature of a subject increasingly turned object.

For Baudrillard, this capacity for staging and by extension subjectivity, has been jeopardized in a state that he names as obscenity:

It is no longer then the traditional obscenity of what is hidden, repressed, forbidden or obscure; on the contrary, it is the obscenity of the visible, of the all-too-visible, of the more-visible-than-the-visible. It is the obscenity of what no longer has any secret, of what dissolves completely in information and communication. (Baudrillard 2002, "The Ecstasy" 151)

By way of a more detailed explication of the word "obscene," it is perhaps first necessary to detach some of its common associations. While it may generally be taken as a reference to that which is hidden due to its sexualized or violent dimension, Baudrillard uses the word to invoke cooler associations related to visibility itself. More specifically, his inflection of the word is one that splits it into "ob" (meaning "to hinder") and "scene" (meaning "stage") (Taylor 2007). Baudrillard's concept can be concretized in relation to media and physiology. That is to say, in relation to the quantity of information that we are capable of processing. Here Castells notes:

Indeed, some experiments in psychology found that even if TV presents 3,600 images per minute per channel, the brain responds consciously to only one sensory stimulus among each million stimuli being sent (2000, 335)

While it could be argued that the conscious mind perceives only a fraction of the sensory data that it receives at any given moment, in media we are confronted with a cultural construct that equates explicit visibility with knowledge. In other words, truth as reality effect. Below, literary critic and film theorist Joel Black explicates the latter as "truth as visible spectacle" and does so within the context of what in Baudrillard's terms could be described as the obscenity of Hollywood films:

today's sophisticated effects are increasingly used to produce heightened illusion of reality itself (crashes, disasters, wars, space travel, etc.) – of truth as visible spectacle, of reality as anything that is filmable . . . what I call the reality effect. . . . Documenting actual objects, characters, and events (referential realism), or even making objects, characters, and events seem real (perceptible realism), is altogether different from making them explicit. (2002, "The Ecstasy" 8)

Thus, making something visible or explicit does not mean to make it real. In addition, the logic of representations designed for their reality effects is by its very nature a spectacular and thus a logic of excess. If, in a general physiological sense it is taken for granted that the subject's capacity will self-regulate the amount of information deemed vital at any given moment, the logic of reality effects is the logic of perpetual sensory excess.

An example of such self-regulation would be the way in which subjects report a slowing down of time in moments of extreme concentration. This is a common feature of accounts given by athletes when speaking of being in the "zone:" a state in which increased performance coincides with decreased self-

consciousness. For its part, television routinely exceeds the subject's capacity through the perpetual imposition of a synthetic "zone."

If relocated net art trades the singularity of presentness for the plurality of the theatrical, this drama plays itself out within (and not upon) the stage of the subject. In light of the obscene, the agency of Fried's subject appears suspect. Meanwhile, the oscillation of relocation can, in cultural theorist Allen Meek's terms, locate the "field of the other" within the real-time archive, within what Lovink names as a "cybernetic entity." Such are the post-human dimensions of the real-time archive.

## 38 Messages from Space: The Wilbert Smith Archives Remixed

This project is an artist's book published in 2008. A small number of copies have been sold for \$11.00 each following a print-on-demand distribution model. Below, I will outline the characteristics of the work in relation to other relevant artworks, the aura of information, inscription technologies, real-time archives, and relocated net art. The first twenty-five pages can be downloaded here: <a href="http://www.stopmotionstudies.net/38">http://www.stopmotionstudies.net/38</a>>.

If *These People from Elsewhere* was formally contextualized relative to Cubism in general, 38 Messages from Space will presented relative to two artworks in particular. The first is artist Ed Ruscha's Twentysix Gasoline Stations. Originally published in 1963, Ruscha's artist's book sold for \$3.50. As the title suggests, it features or rather consists solely of photographs and captions of 26 gasoline stations. Ruscha's book influenced my own in terms of its seriality, title, and price point.

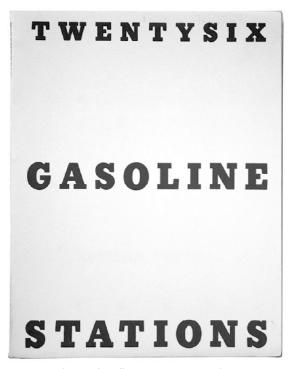


Fig. 15. Ed Ruscha, "Twentysix Gasoline Stations" 1963.

Next is artist Chris Wilder's *Project Blue Book*. Published in 1995, this artist's book is a reprint of a document published by the US Air Force in 1955 entitled "Special Report No. 14: Analysis of Reports of Unidentified Aerial Objects." Like the Duchampian spirit underlying Ruscha's approach – for example, intentionally omitting photographs that were too interesting – *Project Blue Book* is thus something of a readymade. Wilder's book influenced my own both in terms of content, by mixing art and Ufology, and in terms of form, by exploring the artist's book as a readymade.

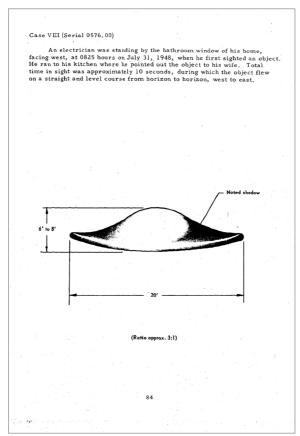


Fig. 16. Chris Wilder, "Project Blue Book" 1995.

Returning to my own work, I introduce 38 Messages from Space with the following text:

Wilbert Smith directed Project Magnet, the Canadian government's official investigation into UFOs. In a declassified memo dated 21 November 1950, Smith writes:

I made discreet enquires through the Canadian Embassy staff in Washington who were able to obtain for me the following information:

- a. The matter is the most highly classified subject in the United States Government, rating higher even than the H-bomb.
- b. Flying saucers exist.
- c. Their modus operandi is unknown but concentrated effort is being made by a small group headed by Doctor Vannevar Bush.
- d. The entire matter is considered by the United States authorities to be of tremendous signify-cance.

I was further informed that the United States authorities are investigating along quite a number of lines which might possibly be related to the saucers such as mental phenomena...

Researcher Grant Cameron studied Smith for two decades. In 2003, Cameron released *The Wilbert Smith Archives* on CD-ROM. The archives include nearly 1000 pages of scanned documents from sources including the Canadian government and the University of Ottawa. A copy can be obtained here: <a href="http://presidentialUFO.com">http://presidentialUFO.com</a>>.

38 Messages from Space is a remix of selected documents from Cameron's archives. While they have been retyped to improve legibility, every effort has been made to maintain both the accuracy and aesthetics of the originals. Most of these appear to have been typeset by Rear Admiral H.B. Knowles in 1954. In this remix, the documents are supplemented with my own illustrations.

The crop circle on page 109 appears courtesy of Zef Damen, being originally documented by photographer Steve Alexander in southern England in July 2004. Damen analyzes the geometric relationships within crop circles and then uses basic shapes to reconstruct them step-by-step. Over a

hundred such reconstructions can be viewed here: <a href="http://zefdamen.nl">http://zefdamen.nl</a>.

The presence of Web site addresses or Uniform Resource Locators (URLs) in this introduction can be seen to have at least three effects. First, the URLs credit the sources that provided the material enabling the book to be produced. Second, they contrast the book's spatial aura (its oscillation between distance and closeness), with the temporal aura of information (the split-second oscillation between presence and absence) that these Web addresses evoke. As with *These People from Elsewhere*, there is thus a contrast between two types of aura, between the spatial and the temporal. While the aura of the reconstructed text could be read as primarily temporal, its immediacy across a distance is essentially spatial in relation to the more temporal aura of information evoked by the Web addresses.

Third, the URLs challenge the traditional concept of books as artifacts that exist separately from the Internet. Put another way, they relocate the book such that its offline representation is inextricable from its relation to the Internet. Extending this line of thinking, the book can also be seen as a form of offline or relocated net art. This, in that the source material, production mechanisms, and distribution channels are all net oriented if not net specific.

Here Manovich might challenge that "there can be a distinct medium of net art based on the technology of the Net, but it is a mistake to automatically identify all art which uses the Net as 'net art' " ("Post-media"), yet I would contend that 38 Messages from Space qualifies as relocated net art in that its relation to the Internet is reflexive. That is to say, in its formal construction the book questions what books are in relation to the Internet. Just as the method of animation used in These People from Elsewhere arrests movement, the offline publication of 38 Messages from Space arrests what would otherwise be the seamless flow of data originating online.

If the inclusion of URLs in the front matter can be seen to stage a contrast between types of aura (spatial and temporal), a second contrast related to inscription technologies can be found in the dichotomy between two styles of mark making that appear throughout the book. The first is the self-evident reference made between the Courier typeface and the typewriter as an inscription technology. To use Courier is to reference this machine and its socio-cultural associations.

Beyond being a stylistic anachronism, or having a "retro look," the use of Courier in a fully digital chain of production is calls into question the enormous changes that have occurred within the realm of inscription technologies since the era in which typewriters were a dominant technology. Put another way, the spatial aura (the oscillation of proximity and distance) once produced by the embossing of an ink-covered character, is now rendered as the surface effect of a laser printer.

Returning to Betancourt's typology, this poses the challenge of viewing the book as both a material object and a symbolic representation. Insofar as it is a material object, the aura of Courier as an index of the typewriter can be seen to be lost. While this is fairly self-evident, it might be added that the uniformity of the marks made by the laser printer belies what could be called the piercing of the veil of duration that occurs more visibly via a typewriter.

In "The Ontology of the Photographic Image" film theorist André Bazin writes: "For the first time, between the originating object and its reproduction there intervenes only the instrumentality of a nonliving agent" (1960, 5). While the inscriptions of a typewriter are allographic (the inscription of glyphs as variables to produce similar graphemes, for example both a serif and sans-serif representation can be used for each letter of the alphabet) and not photographic, their aura is also largely the product of "the instrumentality of a nonliving agent." We are then led to ask why the testimony of nonliving agents holds such fascination for us?

I would contend that is the piercing of the veil of duration that marshals this faith. If "[a]n indexical relation falls entirely into the rational realm" (Gunning 2004, 46), an indexical inscription impregnated by duration nonetheless manages to touch upon an infinitude beyond this rational realm. With this faith largely sacrificed in the object's transposition from the analog to the digital, what of the reality effects of the inscription symbolically speaking?

Before addressing this, it should be noted that while the figures of indexicality and duration apply equally to any consideration of the aura of both analog and digital objects, there are obvious symbolic differences in how we would read for example, a typewritten document, a photocopy of this document, and a digital scan of this same document. Thus, if a unified model of interpretation can be applied on material level, pluralism persists on a symbolic level.

This can be attested to by the fact that a computer impersonating a typewriter does not eliminate the reality effects produced. That is to say, we can "know" that the inscription is not what it appears to be and yet still be subject its symbolic language. This is perhaps no different than the suspension of disbelief that allows us to enjoy the special effects of Hollywood films despite knowing (or perhaps feeling on some level) that they are synthetic.

If the pseudo-physicality evoked through the use of the Courier typeface constitutes the first style of mark making present in the dichotomy introduced above, the second style is what I will refer to as *selected text*. That is to say, a block of text in which the figure-ground relations have been altered or inverted in a manner that references the interface of word processing software such as Microsoft Word. The implication of this visual cue is that the text has either been directly chosen via a mouse click or indirectly chosen via the response of a search query.

If the use of Courier on a computer evokes a mechanical language within the context of software, the use of selected text within a printed book evokes the language of software within a mechanical context. This is not to say that the aura of the former is unlike that of the latter materially speaking, as both styles of mark making are based in the same inscription technology of a laser printer. However, the two styles are symbolically pluralistic: Courier evokes a chain of associations wholly different from selected text.

The two mark making styles are used as a consistent design program throughout 38 Messages from Space, with Courier being used throughout the book and selected text being used to introduce each new section. Below is an example of an original document from The Wilbert Smith Archives (Fig. 17) followed by a page from 38 Messages from Space (Fig. 18) in which the two mark making styles outlined above can be seen.

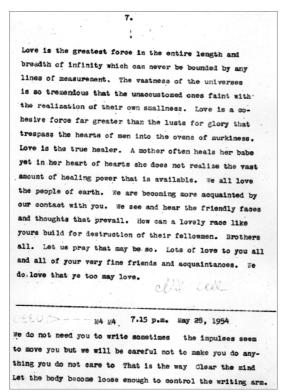


Fig. 17. Grant Cameron, "The Wilbert Smith Archives" 2003.

1954.05.27

## 01. Rear Admiral H.B. Knowles Writes Rear Admiral C.F. Espe, Chief of Naval Intelligence

27 May 1954

Rear Admiral C.F. Espe, U.S.N., Chief of Naval Intelligence, Navy Department, Washington, D.C.

Dear Admiral:

I am rear Admiral H.B. Knowles, U.S.N. (Ret.) and am communicating with you directly and personally rather than through official channels because I do not believe what I have to say, and to enclose, is a matter for many others to see at present.

I am writing this at the request of a Mrs. Guy A. (Frances H.) Swan for reasons which will become evident as you read the enclosures.

Mrs. Swan is probably about 40 years of age, of average education and perhaps better than average intelligence. She is deeply religious, greatly interested in schools, Girl Scouts, Red Cross and community and church affairs in general. She has a daughter, Dawnalyn, going to High School here, and her husband works in the Navy Yard at Kittery.

9

Fig. 18. David Crawford, "38 Messages from Space" 2008.

Having presented a figure from the book, it might now be considered how many *bounces*, to use artist Richard Prince's term (Prince), the information has been through before appearing upon the page you are now reading. While Prince uses the term "bounce" in relation to re-photography, I will be using it in relation to the re-printing and re-storage of data.

In any case, the reader will recall an earlier disclaimer in which it noted that the information about and within *The Wilbert Smith Archives* will be largely taken at face value. While this is not to say that I have forfeited my own skepticism, assessing the veracity of the story is beyond the scope of this essay. That said, if I was of the opinion that Cameron's research was fictitious I would be clear about this.

With that in mind, messages such as the one appearing in Figure 17, were ostensibly first handwritten by alleged contactee Mrs. Frances Swan based on her telepathic interaction with extraterrestrials. While a careful reading of the archive will reveal that in Smith's opinion, this process was more technological than esoteric, for all intensive purposes the conceptual model of telepathy will suffice. Swan's documents were then typewritten by Rear Admiral H.B. Knowles.

Figure 17 represents one of Knowles's typewritten documents after being scanned and finally reprinted upon the page you are now reading. This entails no fewer than three bounces if we restrict ourselves to counting instances in which the analog artifact of a print was produced (Swan's document, Knowles's document, and this document). Outside of that, the data can be seen to have been digitally re-stored again and again. For example, from the hard drive upon which the first scan was stored, to Cameron's hard drive, to the CD-ROM that I purchased from Cameron, and finally to my hard drive.

If this same model of bouncing is extended to examine the production and distribution of 38 Messages from Space, a parallel can be seen in the dialectic between the two styles of mark making (Courier and selected text), and the book's relation to the real-time

archive. Viewed from a wider perspective, the latter is a relation that the book now shares with millions that have been relocated to Google Books, so to speak.

This relation can be named as one wherein the book as a physical or mechanically produced object is digitally cloned such that its contents can be scanned and keyword searched online as if it were essentially a Web page. The book retains its formatting and design on a layer "beneath" the Web-based interface used to access it. Figure 19 represents Google Books being used to search 38 Messages from Space for the keywords "Rear Admiral H. B. Knowles."

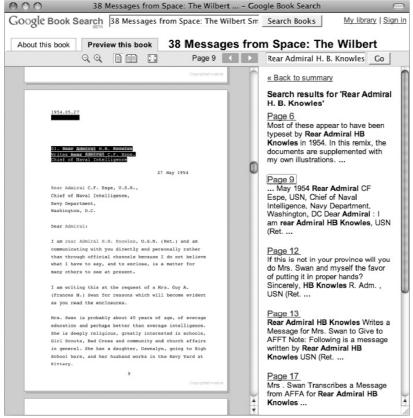


Fig. 19. David Crawford, "38 Messages from Space" 2008.

A list of pages in the book that contain these keywords appear on the right side of the interface as blue hyperlinks. Among these is the same page 9 that appears in Figure 19. However, in the Google Books interface, a yellow highlight can be seen around each instance of a keyword. While this suggests that the text is selectable, it is actually an overlay to the underlying image of the book's text. In other words, the text is pseudo-selectable.

If the Google Books version of 38 Messages from Space is not relocated net art (this is a distinction I would reserve for the offline book), it nonetheless extends the reach of the aesthetic questions posed in the book in a manner suggesting that it should be seen as a component of the overall artwork. Just as the two styles of mark making outlined above (p. 115) can be seen as meeting each other halfway while traveling in opposite directions (from analog-mechanical to digital-virtual and vice-versa), the offline and online versions of the book intersect in a manner that evokes the semiotic-material collapse found in Hayles's concept of material metaphors, "a term that foregrounds the traffic between words and physical artifacts" (2002, 22).

As an instance of relocated net art, the book can be seen as material metaphor for its doppelganger on Google Books. Likewise, the Google Books version of 38 Messages from Space can be seen as a material metaphor for the physical artifact of the book. In the former, the intangibility of words (their purely semiotic character) is materialized or shown in the process of materialization via the dialectic between the two styles of mark making. In the latter, the physical artifact is dematerialized or shown in the process of dematerialization via the intangibility of the words that flow through the hypertext interface. Not to confuse earlier arguments, all of this is postulated upon a symbolic or metaphoric level. At their most fundamental level, both versions are nonetheless equally material.

A second formal manner in which 38 Messages from Space references real-time archives can be seen in the book's use of latitudinal and longitudinal coordinates as a method of generating

illustrations. While this coordinate system is by no means specific to real-time archives, there has been a recent explosion of coordinate-oriented technologies on the Web that make use of things such as satellite data and the Global Positioning System (GPS). For example, by simply typing one's coordinates into Google Maps, one is able to bring up both topological and photographic data at varying scales. Within the context of analyzing the political dimensions of Foucault's thought, political scientist Thomas L. Dumm describes the history and implications of GPS technology as follows:

During the Persian Gulf War of 1990-91 the world witnessed for the first time the deployment of a technology known as the Navstar Global Positioning System (GPS). Developed by the American Department of Defense to keep troops informed of their location, the GPS is composed of a series of satellites in a fixed orbit, each of which transmits a signal to earth receivers. Anyone who has access to the system is able to learn his or her position on the face of the planet (and potentially the position of others) with extraordinary precision. As a result of this new technology, maps themselves now can become as indefinitely precise as the one represented in the allegory of the Chinese Emperor's map. Troops in the desert, motorists in Tokyo traffic, geologists in the Yukon, pedestrians in New York City, commuters in Southern California - all might avail themselves of the signals transmitted from these satellites (or might not, depending upon access to the signal, which due to security fears is sometimes scrambled in regions of the world, such as central Canada, that are sensitive to the pathways of nuclear warhead delivery systems). The GPS seems to be the definitive solution to what one enthusiast characterizes as perhaps the oldest problem facing mankind, establishing with precision "where he was and where he was going." . . . Within this surveyed immensity, position on a site is realized as an abstract location, a point on a matrix, neutral in the sense of lacking any content. Within the strategies of GPS positioning, the more precise the location, the more absolutely devoid of space the site itself becomes, until the point substitutes for the site itself. But the closer one comes to this ideal termination point, the closer one comes as well to realizing that there is a series of paradoxes entailed in the realization of complete location.

The primary paradox unveiled by the GPS is this: To be precisely located on a map is a new way of being lost. Once it is plotted with precision on a grid, location at a site is displaced by representation in cyberspace. (1996, 29-30)

This abstract condition of "displacement" as concretely reflected in GPS coordinates can be seen as endemic of the aesthetics of the real-time archive insofar as space cedes to time as the dominant model of interpretation. In other words, when Dumm speaks of "being lost," he is noting the shift the subject experiences as the result of realizing that they are only partially "where" they are, the remainder of their situatedness being immersed within the electronic temporal flux of real-time technologies.

When I first started considering working with the component of *The Wilbert Smith Archives* that Cameron refers to as the "Swan Transcripts," it became readily apparent that latitudinal and longitudinal coordinates figured predominantly within these documents. In particular, most of the messages received by Swan start with code such as the following: "O E E U > - - M4 M4 ////// - 35° west longitude 48° north latitude." Among other things, this code identifies both the space ship from which the transmission is being sent to Swan (M4) and the location of the M4 in latitudinal and longitudinal coordinates (48°, -35°).

With these coordinates I was then able to generate an illustration such as the one shown in Figure 21. This was done by first entering these coordinates into researcher Pierre Gorissen's "Google Maps Latitude, Longitude Popup." Gorissen's site uses the Google Maps API to chart the location of any coordinates entered. In Figure 20, the coordinates 48° latitude, -35° longitude have been

plotted against the standard Mercator projection used by Google Maps.

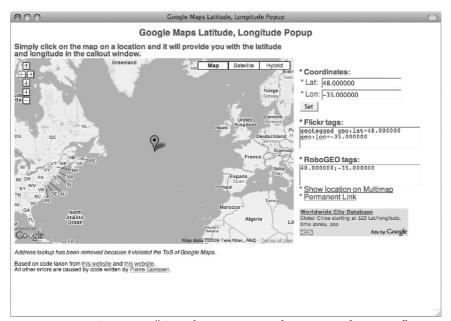


Fig. 20. Pierre Gorissen, "Google Maps Latitude, Longitude Popup" 2009.

Next, such an image was imported into a graphics editing program in which it was overlaid with a generic black and white projection that could be used to generate the illustration. While not entirely scientific, this process can be said to have enabled me to map the various coordinates given with a reasonable degree of accuracy. If the project of making these illustrations could have been undertaken in an offline production environment, it would have been far slower process.

An example of a finished illustration appears in Figure 21. This illustration is one of 21 similar illustrations that accompany each set of coordinates within the text.

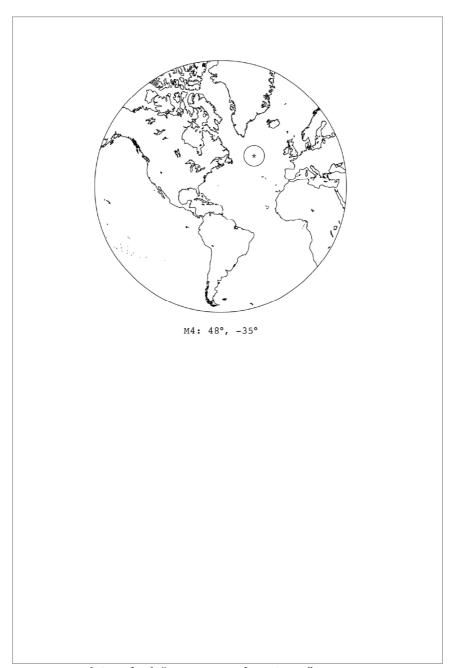


Fig. 21. David Crawford, "38 Messages from Space" 2008.

Finally, 38 Messages from Space can be seen as an instance of relocated net art a number of different ways. To begin with, as in These People from Elsewhere, the data used to construct the artwork was obtained online. To be clear, it was not downloaded so much as identified as being of interest and then purchased directly from Cameron. While places such as libraries and flea markets have provided artists with source material since long before the age of the Internet, the net has drastically reconfigured the role of information and archives in relation to art.

While provocative to say the least, Manovich has gone so far as to ask whether art after Web 2.0 is even possible:

[Does] the fact that we now have such platforms where anybody can publish their videos mean that artists have a new distribution channel for their works? Or [does] the world of social media – hundreds of millions of people daily uploading and downloading video, audio, and photographs; media objects produced by unknown authors getting millions of downloads; media objects easily and rapidly moving between users, devices, contexts, and networks – [make] professional art simply irrelevant? ("Software")

Manovich later answers this question by emphasizing the resilience of art as a commodity, despite (or perhaps in relation to) the "democratization of media production and access" ("Software") brought about by Web 2.0. However, if viewed from outside of the narrow context of the market and from the standpoint of media art in particular, the question of art's relation to Web 2.0 becomes more subtle. In terms of labeling art as "net art," the question becomes even more problematic, as this suggests such a thing as non-networked art, despite the net's ubiquity as a cultural architecture.

It is perhaps not without significance that net art's post mortem was declared at approximately the same time that Web 2.0 was born, so to speak. If the latter can be considered "an attitude not a technology" (MacManus 2005), the practice of social

networking can be seen as an expression of this attitude and more specifically of its ethos of sharing. Against this ethos, can be seen an economy of scarcity that mediates art in general and disowned net art in particular. However, if culture can be seen to take chances and face challenges outside of the territory circumscribed by the logic of the market at any given time, then the equation can be seen to change.

Thus, from the standpoint of a media artist who is not particularly beholden to the logic of the art market, I will now respond to Manovich's provocation with my own: in our real-time culture, the logic of the net tends to exceed our critical capacity. As such, there are few curatorial endeavors that can compete with the speed and scope of the real-time archive. Walk into any art fair or high-end gallery with a laptop, and assuming that you can connect to a Wi-Fi network, it is not unlikely that a relatively well-informed art viewer could find something of greater particular interest online.

There is of course the question of whether the online representation of this hypothetical "something" can actually be compared with a real world exhibition. Immersive social networking platforms such as Second Life notwithstanding, so called "real world" exhibitions are unlikely to cede ground to the online world given their social function and the reliance of this function upon embodiment. However, assuming that the real world will invariably trump the online world with its immediate presence, the quality of this presence nonetheless assumes a diminished status in the face the quantity of representations available online. Coupled with the preceding arguments (p. 87) concerning the influence of the market upon net art, this state of affairs has put museums and galleries into a similar quandary as that of Hollywood: provide a spectacle of enormous caliber or lose your audience. In both cases, the competition is played out in relations of scale, or the micro and the macro. As the real-time archive gets smaller in presentation format and faster in delivery, those who would garner the attention of its users compete with

productions of epic proportions. However, the logic of erecting a spectacular cultural firewall against the aesthetics and subject-effects of the real-time archive would appear to be more financial than critical.

While the preceding provocation risks being dismissed as theatrical (contra Fried) and anti-relational (contra Bourriaud), if not anti-art in general, it is nonetheless a valid challenge for offline media art exhibitions. Here the logic of relocation comes into play in the practices of artists such as July/Harrell and Arcangel. If the situation of their net-related work within the white cube has thus far been cast as a relocation solely predicated upon the shifting logic of the market, this misses the manner in which such work simultaneously addresses the challenge of making art after Web 2.0. In other words, managing to balance the "polar opposites" of distraction and concentration:

Distraction and concentration form polar opposites which may be stated as follows: A man who concentrates before a work of art is absorbed by it. He enters into this work of art the way legend tells of the Chinese painter when he viewed his finished painting. In contrast, the distracted mass absorbs the work of art. (Benjamin 2006, 32)

Put another way, the work of these artists is present while managing to stand up to the Internet, suggesting that intimacy is not antithetical to partial attention. This echoes further points in Benjamin's "Artwork" essay. First, his contention that "reception in a state of distraction" can nonetheless foster criticality:

The distracted person, too, can form habits. More, the ability to master certain tasks in a state of distraction proves that their solution has become a matter of habit. Distraction as provided by art presents a covert control of the extent to which new tasks have become soluble by apperception. Since, moreover, individuals are tempted to avoid such tasks, art will tackle the most difficult and most important ones

where it is able to mobilize the masses. Today it does so in the film. Reception in a state of distraction, which is increasing noticeably in all fields of art and is symptomatic of profound changes in apperception, finds in the film its true means of exercise. The film with its shock effect meets this mode of reception halfway. The film makes the cult value recede into the background not only by putting the public in the position of the critic, but also by the fact that at the movies this position requires no attention. The public is an examiner, but an absent-minded one. (33)

Thus, were Benjamin able to comment upon the real-time archive, he might not see continuous partial attention as antithetical to the promotion of collective agency. However, were Baudrillard able to comment, he would likely point out that the capacity of media "to mobilize the masses" has reached a point of obscenity that threatens subjective autonomy. Obscenity and the figurative question of staging leads back to the second of Benjamin's relevant themes: the literal difference between theater and film:

This situation might also be characterized as follows: for the first time – and this is the effect of the film – man has to operate with his whole living person, yet forgoing its aura. For aura is tied to his presence; there can be no replica of it. The aura which, on the stage, emanates from Macbeth, cannot be separated for the spectators from that of the actor. However, the singularity of the shot in the studio is that the camera is substituted for the public. Consequently, the aura that envelops the actor vanishes, and with it the aura of the figure he portrays. . . . Any thorough study proves that there is indeed no greater contrast than that of the stage play to a work of art that is completely subject to or, like the film, founded in, mechanical reproduction. (26)

Thus, the schism between these two modes of representation can be seen as a microcosm of tensions produced between human subjects and industrial "temporal objects" within the real-time archive. As

such, relocated net art can be seen as a means by which of situating these tensions so as to promote their apprehension. Just as the dislocations of the Internet can be said to promote the fragmentation of states of consciousness (from the qualitative to the quantitative), in film

there are elementary necessities of equipment that split the actor's work into a series of mountable episodes. In particular, lighting and its installation require the presentation of an event that, on the screen, unfolds as a rapid and unified scene, in a sequence of separate shootings which may take hours at the studio; not to mention more obvious montage. (26)

If the real-time extension of these "mountable episodes" found in cinema is the user-generated content that drives Web-based services such as Facebook and Twitter, the very theatricality criticized by Fried appears to be an attractive means of challenging such hyper-immediacy. In fact, the entire dichotomy between "absorption and theatricality" outlined by Fried in his book of the same title (Fried 1980) can be equally situated within the viewer once the means of representation of technological enframing has turned the latter from subject to object. While this does not preclude the possibility that the unmitigated presence of works in the white cube might be equally effective at modeling subjective autonomy in the face of the subject-effects and obscenity of the real-time archive, there remains the question of how such an approach chooses to situate itself media-ontologically. In short, the question of how to locate the subject.

38 Messages from Space can thus be seen as an instance of relocated net art in that it attempts to maintain the aura or presentness of an art object while simultaneously opening its field of relations to include the real-time archive. With antecedents in movements such as Dada and Conceptualism, the act of selection becomes an aesthetic act. However, in a contemporary context,

this act becomes more analogous to the cybernetic event of a search query than to an offline program of action.

In this regard, the dialectic between styles of inscription, one mirrored in the dialectic between the offline and online versions of the book, evokes an aura of information (a temporal aura rooted in the rapid oscillation of presence and absence) that confers a material or semiotic-material quality upon the seemingly disembodied act of search. Put another way, 38 Messages from Space suggests that searching the Web is a physical act and by extension that our bodies are now implicated within this real-time archive, just as it is implicated within us.

In conjoining the temporal aura of selected text with the spatial aura (an oscillation between distance and closeness) of the Courier typeface, the purely semiotic quality of the characters is effectively shown in a process of materialization. By freezing the text and simultaneously representing it in a liquid state, this contrast of styles of inscription sets the two types of aura into an oscillation with each other, one that could be characterized as a dialectic between the semiotic and the material. This then becomes a model or analog for the oscillation that our bodies are engaged within the network itself. The subtlety of this oscillation becomes manifest in relatively concrete terms if we consider the question of whether text selected from a hand-coded Web page retains an aura relative its initial inscription or whether this trace of subjectivity is stripped away in the process of its real-time re-inscription.

Such abstract minutia may contain clues as to the actual character of Kelly's megacomputer or László and Russell's global brain. For example, the possible of emergence of a democratic (majority rule versus egalitarianism) mass subject in which quantitative re-inscription is far more influential that qualitative inscription. The rhetoric associated with real-time technologies such as Twitter notwithstanding, there are reasons to doubt the platform's contribution to subjective autonomy based simply on the terms used to facilitate its core features: one has a "following" and "followers." The former term has connotations to the cult of

celebrity suggesting that narcissism and subordination may be two sides of the same coin. Stiegler suggests that this scenario was prefigured by Nietzsche:

This system engenders herd behavior and not, contrary to legend, individual behavior. To say we live in an individualistic society is a patent lie, an extraordinarily false delusion, and, moreover, extraordinary because no one seems conscious of it, as if the efficacy of the lie was proportional to its enormity, and as if the lie was nobody's responsibility. We live in a herd-society, as comprehended and anticipated by Nietzsche. (Stiegler 2009, "Acting" 48)

In any case, the reader will recall that both of my own artworks have been framed as remixes of Cameron's *The Wilbert Smith Archives*. In this light, they can be seen as instances of subjective interventions within the context of the real-time archive. If Cameron's CD-ROM is not technically online, its low-cost distribution via the Internet makes it a product of the real-time archive. As the directory structure on the disc is accessed through HTML, it can be further argued that the CD-ROM is essentially an offline Web site.

In remixing this material in *These People from Elsewhere* and 38 Messages from Space, and then relocating it as both on- and offline net art, what could be called the event of subjectivity is contrasted with the subjectifying effects of the real-time archive. If the former has been more specifically identified as an epiphenomenon of the event of speech, the act of writing, rewriting, or remixing is nonetheless related to this event of subjectivity.

While there is ample room to here make further distinctions between speech and writing in regard to Derrida, suffice it to say that whether we are speaking about the emergence of an unitary "I" or a trace of subjectivity, the subject is implicated within both speech and writing. From here I would contend that the act of the remix is uniquely subjective act that assumes the burden of the

archive having circumscribed this event of being within its metasemantics. In other words, between langue and corpus. If the former is the system of possible constructions and the latter the set of expressions thus far registered, then remixing engages with the corpus in a manner that is perhaps even farther from speech than writing. Put another way, if writing as a form of inscribed speech has been slowed such that its différance, or deferral of meaning in difference can be more immediately apprehended, the remix can be seen as an even more concretely corporeal gesture in which the materiality of media is embraced in a signifying act that is as much sculptural as it is abstractly semiotic. In this regard, my own artworks can be seen to favor an event of subjectivity that is indecomposable from the corpus of the archive in general and from the subject-effects of the light of speed of the real-time archive in particular.

In *These People from Elsewhere*, this is done through the introduction of the aesthetics of delay. That is to say, through the introduction of an interruption conducive to the production of human temporality. This interruption manifests itself in a Cubist representation of space that is tactile and linguistic. This representation can be seen to evoke Bergson's cinematographical mechanism of thought insofar as it is self-reflexively references photomechanical technologies and ways of thinking, while pointing towards Hayles's inscription of consciousness insofar as it self-reflexively references the mediation of duration (as states of consciousness) by the computer processor.

In 38 Messages from Space, the subject-effects of the light of speed of the real-time archive are evoked through a contrast between styles of inscription. In other words, a contrast between the spatial aura evoked by the Courier typeface and the temporal aura of selected text. Their confluence on a single printed or electronic page can be seen to embody Hayles's semiotic-material exchange and the book can thus be seen as a material metaphor. The latter can in turn be seen as an analogy for manner in which

human subjectivity is increasingly implicated within the corpus of the real-time archive.

In closing, it is important to reiterate the aim of this exercise. Returning to Elkins's provocation (p. 2), the reader will recall that it is to suspend these works in a relation of conceptual equality to the dissertation itself. As such, the preceding arguments correlate the theoretical constructions of myself and others with instances of my art practice in hopes that "each one illuminat[es] the other." Following Elkins, the distinction I intend to make is between such synergy, or complimentary relations, and mere support. That is to say, these correlations have not been drawn in service of establishing a relation dependency between theory and practice.

This is all the more important given that the reader's interpretation of these constituent elements will likely differ from my own to begin with. The complexity of this equation points towards the freedom of interpretation implicit to this new discipline if not the subjective responsibility that it entails. Nonetheless, it is hoped that my own correlations contain the seeds of reframing (versus explaining) my particular theory and practice in ways that engage the reader and hint at the promise of artistic research in general.

## Responding to the Testimony of Technology

Moving from a consideration of the remix in regard to questions of subjectivity, to a consideration of the materiality of the objects being remixed, we return to a theme taken up earlier in this essay, namely historical testimony. The reader will recall that the trace of duration can be said to emerge from indexicality and that from the latter flows authenticity, historical testimony, aura, and finally authority. In Benjamin's words:

The authenticity of a thing is the essence of all that is transmissible from its beginning, ranging from its substantive duration to its testimony to the history which it has experienced. Since the historical testimony rests on the authenticity, the former, too, is jeopardized by reproduction when substantive duration ceases to matter. And what is really jeopardized when the historical testimony is affected is the authority of the object. (2006, 21)

If we thus consider historical testimony to be the confluence of an object's content or message together with a record of the traces left by this object's passage through time, we can say that a component of what is being remixed in my two artworks is historical testimony. For example, in *These People from Elsewhere*, the recording of Smith's voice can be said to carry historical testimony to the degree that the content of the monologue is formally implicated with pops and crackles attesting to the age of the recording. In 38 Messages from Space, the content of the period specific figures of speech used by the characters is implicated by the

Courier typeface in a pseudo-indexical form of inscription. That is to say, not the indexical embossing of a typewritten character but rather a simulation of it.

In both cases, this remixing of historical testimony can also be referred to as a remixing of the testimony of technology. Evoking the post-human, this figure suggests the capacity for subjectivity on the part of the technological apparatus. The figure can also be read relative to the manner in which uniform and infinitely reproducible binary files are instantiated into specific representations and thus quantized or attested to, not unlike the quantization of light by the perception of a witness in the two-slit experiment of quantum mechanics. If the aura of information is the product of a simulated materiality emerging from the light of speed, from the split-second oscillation between presence and absence underlying electronic representation, then the testimony of technology can be seen as the product of this aura.

Implicit in this figure of speech is the notion of some type of truth claim. In other words, the suggestion that the trace of duration emerging from indexicality is in someway connected to truth. Here film theorist Tom Gunning's "What's the Point of an Index? or, Faking Photographs" will come into play. If Gunning's figure of analysis is limited to the photograph, this will still prove instructive relative the larger category of digital objects. Implicit here, is the assertion that the former constitutes a subcategory of the latter. That this hierarchy can be inverted in writing that is more art historical in its orientation is a given. Gunning writes:

[T]he apparatus, in itself, can neither lie, nor tell the truth. Bereft of language, a photograph relies on people to say things about it or for it... Both historically and institutionally, in order to tell the truth, the photograph must be subjected to a series of discourses, become, in effect, the supporting evidence for a statement. Anyone who knows either the complex history by which photographs were granted evidentiary status in legal trial, or indeed the scrutiny and discussion to which they must be subjected before they

are granted such status in contemporary trials must realize that in order to speak the truth the photograph must be integrated into a statement, subjected to complex rules of discourse – legal, rhetorical and even scientific (discussing all the aspect of the photograph, its exposure, developing and printing). (2004, 42)

Thus, truth is not something that belongs to either photography or indexicality, but rather to dialogue. That the mimetic strength of the photograph and the "focusing of attention" of indexicality can serve as prime motivators for this dialogue is without question. Nonetheless, it is in the unpredictable nature of dialogue that something as self-evident as truth actually emerges. If "[t]he truth implies the possibility of lying, and vice versa" (42), then it exists as a dialectical phenomenon outside the mimetic spell of visual representation.

From this standpoint, to speak of the testimony of technology is to risk using a non sequitur. However, perhaps parity can be found between the event of subjectivity in speech and the testimony of technology. For example, if the index emerging out of duration creates the aura underlying the testimony of technology, this trace is mirrored in this coming into being of the speaking subject:

It is in this non-place of articulation that deconstruction inscribes its "trace" and its *différence*, which voice and letter, meaning and presence are infinitely differed. . . . If there is no articulation between the living being and language, if the "I" stands suspended in this disjunction, then there can be no testimony. The intimacy that betrays our non-coincidence with ourselves is the place of testimony. *Testimony takes place in the non-place of articulation*. (Agamben 1999, 129-30)

Thus, perhaps the aura surrounding the automated testimony of nonliving agents is partially derived from their absent subject, as if this technological non-place somehow coincides with the "nonplace of articulation" that is the origin of subjective human testimony. This dovetails with the work of Benveniste and Foucault "once the principle referent of study becomes statements, [and] the subject is stripped of all substance, becoming a pure function or pure position" (141). While it is beyond the scope of this essay to pursue this conjunction of truth and the absent subject much farther, we can nonetheless conclude that whether we are speaking of the historical testimony of an object, or the testimony of an increasingly subjective technology, there is a correlation between truth claim and the "outsideness" of an absent subject. The reader will recall that this "outsideness" was first introduced in relation to Benveniste's theory of enunciation and in turn, Foucault's influence upon Kittler's post-hermeneutic emphasis upon the materiality of media. To remix the testimony of technology can thus be seen as an attempt to manifest the event of subjectivity within the "outsideness" of the metasemantics of the real-time archive.

In Stiegler's terms, another way of approaching this would be to speak about using the method of the remix to provide a new *primary retention* for *tertiary temporal objects*. In Stiegler's schema, the primary retention is the event between subject and artifact (looking at a photograph), and the *secondary retention* is the subject's memory of this event:

[T]ertiarized temporal objects – that is, objects either recorded or converted into a controllable and trans-missible signal (such as phonograms, but also films, and radio and television broadcasts) – are materialized time, which overdetermines the relations between primary and secondary retentions in general, thus, in a certain sense, permitting their control. (Stiegler 2009, "Acting" 54)

The implications of this overdetermination suggest that:

[I]f it is true that secondary retentions form the selection criteria in primary retentions, then the fact that the same people watch the same programs every day necessarily leads each "consciousness" into sharing more and more identical secondary retentions, and thus to selecting the same primary retentions. They end up being so well synchronized that they have lost their diachrony, that is, their singularity, which is to say their liberty, which always means their liberty to think. (55)

This process in which the position of the freethinking subject is compromised, threatens this subject's capacity to bear witness to their own subjectivity. Put another way, this subjectivity could be said to be challenged by the synchronizing effects of the real-time archive.

Take, for example, a traffic accident: somebody gets hurt, there are three additional witnesses, and finally there is the driver. The three witnesses give three different versions of events. Spontaneously, one might tend to think that the reason each has understood the causality of the event differently is because each one saw things from a different location. And this is no doubt partially true, but I think above all this difference of viewpoints leads rather to the conclusion that the witnesses each have their own past, and therefore do not witness in the same way – in the first place because a past grounds expectations, forms horizons of expectation that are proper to the past and that receive events and render them sensible to those to whom they happen. One sees on the basis of a competence, formed by memories and correlative expectations, retentions and pro-tentions, a "competence" that enables a "performance" (to speak like certain linguists), for example, a given event that I have witnessed and that will be verbalized in the form of a police statement.

But if, little by little and asymptomatically, everything that comes to consciousness is identical to what strikes my "neighbor's" consciousness, then there is simply *no longer* any witness. The *I* is confounded with the we: they disappear in the they where there is no longer any witness. Thus the television news can "virtualize" a Gulf War, such that there is no longer anyone to denounce the horror, which is nonetheless broadcast live. (61-62)

This raises the question of whether an investment of subjectivity in relation (whether online or offline) to the real-time archive as a form of media constitutes what Baudrillard named as a *response*. More specifically, in "Requiem for the Media" he throws the agency of the subject into question by challenging a position taken by poet and author Hans Magnus Enzensberger in "Constituents of a Theory of the Media" (Enzensberger 2003). Here Enzensberger advocates a greater investment in the media on the part of consumers in the name of increasing their political agency. In other words, he advocates that they become producers. Against this, Baudrillard asks whether a response to the media is really possible given what he names as a "scientific injunction" at the level of the sign. That is to say, the impossibility of a response to the extent that a symbolic exchange beyond an abstract code (itself based on the arbitrary isolation of signs) is structurally precluded.

While the advance of technology and the rhetoric surrounding it may appear to have made this argument mute due to the overwhelming "response" of the masses via what was characterized earlier as the addiction of social networking, the territory first staked out between Enzensberger and Baudrillard in the early 1970s is no less contestable today. To delve deeper requires a more thorough explication of what is meant by a "response:"

To understand the term *response* properly, we must take it in an emphatic sense, by referring to an equivalent in "primitive" societies: power belongs to the one who can give and *cannot be repaid*. To give, and to do it in such a way that one is unable to repay, is to disrupt the exchange to your

profit and to institute a monopoly. The social process is thus thrown out of equilibrium, whereas repaying disrupts this power relationship and institutes (or reinstitutes), on the basis of an antagonistic reciprocity, the circuit of symbolic exchange. The same goes for the media: they speak, or something is spoken there, but in such a way as to *exclude any response anywhere*. This is why the only revolution in this domain – indeed, the revolution everywhere: the revolution *tout court* – lies in restoring this possibility of response. (Baudrillard 2003, 281)

Baudrillard then extends this model from the macroscopic level of society to the microscopic level of the sign:

The schema of separation and closure already operates, as we have noted, at the level of the sign, in linguistic theory. Each sign is divided into a signifier, and a signified, which are mutually appointed, but held in "respective" position: and from the depths of its arbitrary isolation, each sign "communicates" with all the others through a code called a language. Even here, a scientific injunction is invoked against the immanent possibility of the terms exchanging amongst each other symbolically, beyond the signifier-signified distinction – in poetic language, for example. In the latter, as in symbolic exchange, the terms *respond* to each other beyond the code. It is this response [that is] ultimately deconstructive of all codes, of all control and power, which always base themselves on the separation of terms and their abstract articulation. (285)

Thus, response can only occur at the level of the code, not at the level of the sign. Here we left to ask whether social networking is only a play of signs or whether it entails a reconfiguration of codes and whether by definition, any response to the real-time archive must be made via such a reconfiguration. If the first question lies beyond the scope of this essay, the second can be approached by way of Baudrillard's explication of the role of discursive

transgressions such as jokes and graffiti. The reader will recall that he maintains that such transgressions remain the only means of generating a response allowing us to manifest our own temporality and thus subjectivity:

So, for example, the witticism, which is a transgressive reversal of discourse, does not act on the basis of another code as such; it works through the instantaneous deconstruction of the dominant discursive code. It volatilizes the category of the code, and that of the message. (287)

While not all jokes or graffiti are meaningful, both forms remain a fertile means of staging transgressive reversals. The question then turns towards whether the remixing of the testimony of technology can be seen as a transgressive play of codes akin to either jokes or graffiti. Before asking this question in relation to my own practice, I will review examples of other works that fit this description. The first is The Yes Men, who were cited at the outset of this article in relation to online net art they produced under the moniker of RTMark. Along with Simon, whose "Every Icon" (Fig. 1) is depicted in its offline instantiation as an art appliance, The Yes Men went from online net art to what could be described offline net art as their career progressed.

More specifically, when the RTMark (The Yes Men) published a Web site <a href="http://www.gatt.org">http://www.gatt.org</a> purporting to be the official site of the WTO, this instance of online net art managed to garner an invitation from a hapless visitor who wished to have the WTO speak at their conference in Finland. The Yes Men accepted on behalf of the WTO and staged a legendary performance in which one of its members donned a reflective gold body suit, custom designed to assist managers in exploiting their employees (Fig. 22). This offline performance then appeared online in the form of the group's PowerPoint presentation along with images derived from a video shoot that was gathering material for the group's 2003 self-titled feature film.



Fig. 22. The Yes Men, "Tampere, Finland Performance" 2001.

A press release from the group's Web site describes the event as follows:

August 30, 2001 FOR IMMEDIATE RELEASE WTO INTRODUCES NEW MEMBER Gold and one meter long, phallus is brand-new technology to control distant workers

Anti-WTO impostors have struck again, delivering a lecture about the rights of slavery, the stupidity of Gandhi, and the supremacy of free trade to an enthusiastic crowd of scientists, engineers, and marketing professionals – all of whom thought they were watching an official WTO representative.

The 150 experts at the "Textiles of the Future" conference in Tampere, Finland heard one Hank Hardy Unruh explain that Gandhi's "self-sufficiency" movement was entirely misguided, because it centered around protectionism, and that Lincoln, by outlawing slavery, had criminally interfered with the trade freedom of the South, as well as with slavery's own freedom to develop naturally. Had slavery never been abolished, Unruh said, today's much

cheaper system of sweatshops would have eventually replaced it anyhow; following this free-market logic to the end, Unruh declared the Civil War just a big waste of money.

Finally, to applause from the highly educated audience, Unruh's business suit was ripped off to reveal a golden leotard with a three-foot-long phallus. The purpose of the "Management Leisure Suit", he explained, was to allow managers, no matter where they were, to monitor their distant, impoverished workforces and to administer shocks to encourage productivity – assuring that no "Gandhi-type situation" develop again. (RTMark)

If both the group's live performance and subsequent theatrical film featuring this performance are offline practices, both were nonetheless predicated upon their online practice. That is to say, without their site as a virtual imposter, their real-world impersonations would not have been possible. In this light, this work can be cast as a type of relocated net art wherein the testimony of technology has been remixed in a play of codes that is transgressive due to its humor.

The original <a href="http://www.gatt.org">http://www.gatt.org</a> hack turned Finland performance is an example of relocated or *relocating* net art in that the two sites of performance, the online and the offline, continuously implicate one another. To the degree that the original WTO site (Fig. 23) can be seen to carry historical testimony that was repurposed in The Yes Men's site (Fig. 24), it can be said that the testimony of technology was remixed. Finally, this remix can be seen as a transgressive play of codes that enlists temporality and subjectivity with witticisms such as "WTO Announces Formalized Slavery Market For Africa."

## RESPONDING TO THE TESTIMONY OF TECHNOLOGY



Fig. 23. The World Trade Organization, "WTO | Welcome to the WTO website" 2009-05-06.



Fig. 24. The Yes Men, "WTO | World Trade Organization: WTO / GATT" 2009-05-06.

The second example of a remixing of the testimony of technology that can be seen as a transgressive play of codes akin to either jokes or graffiti is a piece of online net art by Miltos Manetas entitled *Jackson Pollack* (Fig. 25). Manetas's project consists of a browser window that serves as the user's virtual canvas, with each tiny gesture of the cursor being mapped to an event of inscription that could be called pseudo-indexical to the extent that the drips show us something about virtual paint through a virtual connection to this referent.

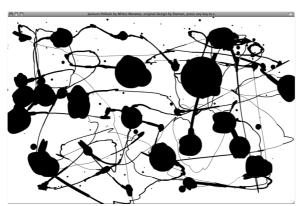


Fig. 25. Miltos Manetas, "Jackson Pollack" 2009-05-07.

If the browser window is traditionally the place of ASCII text, illustrations, photographs, and video, *Jackson Pollack* "responds, there, on the spot" with an "instantaneous deconstruction of the dominant discursive code" (Baudrillard 2003, 287). *Jackson Pollack*, or rather Manetas thus responds to the real-time archive by giving users themselves a tool through which to remix various representations within the browser window. With each click of the cursor, a new color is added to the mix; with each press of the space bar, a new canvas is loaded. The testimony of technology, as a real-time form of virtual inscription is thus remixed in a form of virtual graffiti that can likewise be seen as a transgressive play of codes that enlists temporality and subjectivity on the part of the user.

In addition to enacting a play of codes, the above examples can also be seen to embody what Rancière posits is the "double effect" of a "suitable political work of art:"

The dream of a suitable political work of art is in fact the dream of disrupting the relationship between the visible, the sayable, and the thinkable without having to use the terms of a message as a vehicle. It is the dream of an art that would transmit meanings in the form of a rupture with the very logic of meaningful situations. As a matter of fact, political art cannot work in the simple form of a meaningful spectacle

that would lead to an 'awareness' of the state of the world. Suitable political art would ensure, at one and the same time, the production of a double effect: the readability of a political signification and a sensible or perceptual shock caused, conversely, by the uncanny, by that which resists signification. In fact, the ideal effect is always the object of a negotiation between opposites, between the readability of the message that threatens to destroy the sensible form of art and the radical uncanniness that threatens to destroy all political meaning. (Rockhill 2004, "The Janus-Face" 63)

If the artwork of RTMark (The Yes Men) and Miltos Manetas attests to the possibility of a staging a response to the real-time archive that reconfigures "the distribution of the sensible," I will now return to the question of the degree to which my own practice can be seen in this light.

In These People from Elsewhere, the inscriptions marking the borders between the sub-windows can be seen as an automated form of graffiti if the latter is interpreted as an informal inscription. While programmatic, the roots of these inscriptions can be traced all the way back to Cézanne's handmade "touch" and are furthermore randomized and irregular in a manner that can be said to smash the discursive code of the picture plane as it is commonly employed in relation to photography and the moving image. In this manner, the aesthetics of delay outlined earlier can be seen as being manifested through this graffiti. In other words, through an automated remix of informal inscription. In cultural theorist Martin Lister's terms, this automated remix can be seen as an instance of the "informatic" opposition of pattern and randomness co-existing with the more familiar photographic opposition between presence and absence. (Lister 2007) This event of both informatic and photographic re-inscription creates a place relative to the "placelessness" characteristic of the stream of the real-time archive.

If Jackson Pollack can be seen to enlist an event of subjectivity closer to that of the event of speech by nature of the

fact that the inscription occurs in response to the user's real-time interaction, in *These People from Elsewhere* this inscription can be said to occur closer to the corpus of the real-time archive and its cybernetic automation. If an even greater degree of subjectivity can be seen relative to the intentionality underlying the remix that occurs between the Smith soundtrack and the images themselves, it is not particularly transgressive in the manner prescribed by Baudrillard.

Thus, if the virtual graffiti of the irregular inscriptions in *These People from Elsewhere* evokes a certain subjectivity via the aesthetics of delay, it does so through an automated or objective interruption rooted in code. That is to say, through a reflexive use of the language of the real time archive, itself rooted in the split-second operations of microprocessors. In this regard, the response is to some degree simply one of freezing these oscillations and exporting them to the surface of the picture plane in the form of a temporal and spatial rupture.

In 38 Messages from Space, the remixing of the testimony of technology can be seen as a transgressive play of codes akin to a joke in that the exacting detail used to represent the locations of the space ships in the 21 illustrations discussed above (p. 122) implies a facticity to these representations that conflicts with the fantastic nature of the story that unfolds. Put another way, there is a dry humor to the lack of humor implied by the instrumentality of the visual language used to map the coordinates of the ships.

Rather than simply dismissing the story that unfolds as nonsense derived from the margins of the real-time archive, the book presents this material to the reader using a documentary aesthetic that is funny to the degree that it is unflinching in its treatment of material that might otherwise be deemed too bizarre to take seriously. There are furthermore flourishes within the content itself that are charming if not funny in themselves. For example, on page 34 there is a conversation between an extraterrestrial named PONNAR and Mrs. Swan (her answers are in parentheses) that goes as follows:

How many children do most families have on average? (Answer: Dawnalyn says one and three-quarter children per family in our country.) I could say you are slipping in producing families. Couldn't you get the other one-quarter? (Answer: I like your sense of humor.) We could get to like each other, couldn't we? (Crawford 2008, 34)

This is one of several exchanges between PONNAR and Mrs. Swan in which there is an element of humor in their dialogue. Granted, it is one steeped in period-specific (1950s) cultural norms and turns of phrase that may not read as humorous to contemporary readers. That said, there are nonetheless a series of idiosyncratic expressions such as "bell" for flying saucer, and "fold" for sleep that are charming while at the same time adding to the text's suspension of disbelief. These figures of speech are conflated with the pseudo-indexicality of the Courier typeface in a historical testimony, or testimony of technology that is remixed with the instrumental illustrations mapping the coordinates of the space ships upon which character's such as PONNAR speak from. The net result is a subtle form of dry humor that can be seen as a response to the real-time archive.

As with *These People from Elsewhere*, there is also an event of re-inscription taking place in *38 Messages from Space*. Here, as in the present essay, the act of citation creates a "where" relative to the "when" or perpetual "now" of the real-time archive. Just as the duplication of digital artifacts extends their symbolic aura, such reinscription in the form of citation tends to ballast truth-claims through emplacement, insofar as "[t]he 'real' is what, in a given place, reference to another place makes people believe in" (Certeau 1984, 188). The value of such relocation must be qualified due to the plethora of uses and abuses demonstrated by it within the network of blogs (Web logs) referred to as the "blogosphere."

## We Have Always Been Post-human

If the schema of ideas thus far developed has strongly implied an opposition between what it is we call "human" and the real-time archive, it is now time to return to Derrida, Leroi-Gourhan, and Stiegler in an effort to take up this question once more. The reader will recall that the latter suggests that rather than inventing technology, humanity was invented by it. In "Technical Machines and Evolution," media theorist Belinda Barnet helps to unpack Steigler's assertion. This effort will in turn shed light upon a more nuanced set of relations between humanity and the real-time archive. Barnet asks:

[W]hat is the relationship between human thought and technics? If there is technical 'remembering', then there must also be a mode of transfer and storage, and a place where this occurs. . . . Is this place inside or outside? If it is inside human memory, then how does it exceed our biological death as human beings? If it is outside, then where is it located precisely? The relationship between human memory and technics constitutes a tension, a tension that marks the break from genetic evolution. (2004)

Thus, the more specific question of the relation between humanity and the real-time archive can be addressed in terms of the more general question of the relation between human memory and technics. Barnet then notes the relative positions of both Derrida and Stiegler in regard to this question. For Derrida, "human memory is a prosthesis of the inside" (2004). That is to say, différance (the deferral of meaning in difference). For Stiegler, this

internal prosthesis is best seen in its external technical manifestations.

Barnet notes that Stiegler's approach to the relation of human memory and technics is one of overturning a fundamental philosophical opposition between *tekhne* and *episteme*, or between art (craft, tools) and thought. This opposition is rooted in a Platonic schema in which tekhne must be differentiated from episteme in that the former is not auto-generative, tools do not develop themselves the way that thoughts can.

However, the separation between tekhne and episteme poses a problem in that to entirely separate technics and creative human knowledge suggests that any objects or technologies produced by humans are without knowledge in and of themselves. Barnet locates the problem with this assertion in philosopher Socrates's related problematic of the acquisition of virtue. In short, one cannot look for either what one knows or what one does not know. In other words, if there were not virtue to be found in external experience, or knowledge to be found in technics, one would not look for it there. Socrates locates the solution to this apparent paradox in the myth of reminiscence, the notion that we have forgotten all that we once knew as eternal souls. Thus, "[k]nowledge is an unveiling" and "[h]uman memory is transcendent" (Barnet 2004).

Conversely, Derrida and Stiegler argue as follows:

Derrida argues that memory is always already contaminated by technics. The prosthetic already-there: this is what the myth of reminiscence 'forgets'. Stiegler argues that the prosthetic already-there constitutes a break with genetic evolution; and not only this, it is a break which constitutes the human. Both philosophers put the idea of pure human memory into crisis, and consequently the idea of any access to a realm of thought uncontaminated by technics. (2004)

Just as Kittler and Hayles compel us to acknowledge that media is material, Derrida and Stiegler compel us to acknowledge that the myth of reminiscence has unduly dispensed with technics. As a result, one is returned to the earlier paradox or aporia wherein tekhne and episteme remain divorced, prior to the injunction of the myth of reminiscence. Barnet then approaches the question from the opposite angle and begins to question whether the thought giving rise to technical invention is actually human thought to begin with.

Barnet next introduces Stiegler's concepts of *epigenetic* and *epiphylogenetic* memory. The former can be thought of as a layer that surrounds us, one inscribing the memories of successive generations and transcending that of the individual's genetics. Language and archives would thus constitute epigenetic structures that both precede us, situate us, and exist following our death: "In entering into language, it creates a past for us, and we acquire this past, which we continue as our own" (2004).

Epiphylogenetic memory is rather the material structure that stores epigenetic memory. It can thus be thought of as being both technology in particular and culture in general: "It is technics, as the support of the inscription of memory, which is constitutive of transcendence" (2004). It is from this vantage point that what we call human can be seen to have been invented by technology. That is to say, the *what* of technics and the *who* of human subjectivity implicate one another to such a degree that neither can be said to precede the other:

Technology has, in this sense, created the human as a species; humanity is nothing but a process of 'exteriorisation', a process in which our access to time and culture is accomplished through external supports which transfer our memories. (2004)

Returning to the question of whether the thought giving rise to technical invention is really human, Barnet refers to *technical tendencies* that guide the development of technics in a manner that evokes a technical subject. The arc of this thought can be traced

back to Leroi-Gourhan and the notion that there is a "freeing of memory" leading to an exteriorization of technical forms that is both organized by humans but also self-organizing. For Stiegler, these forms are a type of epiphylogenesis, or epigenetic memory given material support. This epiphylogenesis occurs along certain lines. In other words, "as in the evolution of biological animals, there are only a given number of possibilities" (2004). Following Leroi-Gourhan, these technical tendencies are then expressed or exteriorized by inventors who give shape to them as archetypes. Stiegler's ideas go even farther in this direction. In Barnet's words:

[I] fit is explicitly as technical consciousness that man invents himself, and it is within this consciousness that anticipation of the technical object occurs, then the technical object is anticipated by none other than itself. (2004)

Thus, to speak of a technological subject and a human object one need not look to the future at all. It rather appears that our human subjectivity has been implicated by these technical tendencies from the very beginning. Gere suggests that for Stiegler such tendencies reflect an order of evolution, or *third kingdom* which has actually left humanity behind:

Through his reading of Leroi-Gourhan, Stiegler recognizes in technics another order of beings, a third kingdom, as Stiegler puts it, between those unorganized inorganic beings which are the concern of physics, and those organic beings which are the concern of biology. As such this third order, which Stiegler describes as being composed of 'organized inorganic beings', is subject to the morphogenetic laws of the evolutionary process, as much as the order of living beings. Relative to the rhythm of technical evolution, the human had more or less stabilized biologically about 20,000 to 30,000 years ago. This is why the post-Neanderthal human was already, in biological terms, modern. Our genetic structure seems to have been stabilized at about this moment. But

technical evolution has continued and accelerated since that point. In the transductive relation between our ancestors and technology that produced the human it is only technics that has continued to evolve. (2006, 21)

In the US the grip of this kingdom upon the population is so pronounced that the landscape appears to be designed for the needs of automobiles rather than people. For artist Peter Halley, cars, televisions, and computers can all be understood as variations of

[t]he cell. Its ubiquity reflects the atrophy of the social and the rise of the interconnective. At the same time that the advent of piped-in "conveniences" has made [it] unnecessary to leave the cell, it has also made it impossible to leave it. One finds oneself stuck at home waiting for a phone call; instead of entering the social, one must stay within the cell to communicate with someone else. Or one stays at home to watch something on TV; in order to be entertained or informed by human beings on television one forgoes the presence and company of actual human beings. One enters another cell, the automobile, to travel from the cell – and the automobile too is increasingly being outfitted with communications equipment to make it a desirable place in which to remain (1988, 154-55).

In any case, the dramatic implications of Stiegler's third kingdom throw into relief the vagueness of Winthrop-Young and Wutz's assertion that our subjectivity can be seen to "depend on media" (1999, xx). In other words, it is hard to deny importance of giving media theory a central role in contemporary philosophy.

Beyond synthesizing the ideas of a number of key theorists, the present essay has suggested that the model of addiction be used as a means of interrogating the subject-effects of the real-time archive. In particular, it has been argued that a tendency to consider a so called post-human condition from a physical standpoint (biological material in relation to hardware), the

relation between consciousness and cybernetics deserves greater consideration. While the latter opposition may at first sound more esoteric than the former, it is nonetheless obvious that our individual and collective consciousness has changed drastically in the last fifteen years as the result of the net. Thus, we might ask: Have our qualitative states of consciousness been enhanced by this quantitative explosion of information? Another way of posing this same question might be simply to ask whether wisdom can be derived directly from information, without the embodied role of experience leading to knowledge as an intermediary step.

However, just as it would be a mistake to subscribe to any kind of techno-utopianism, it would likewise be unwise to cursorily dismiss the enormous benefits of information technology. Echoing Castells's concept of timeless time, the real-time archive can be seen to produce a mutation in our awareness or consciousness that could perhaps best be described as fractal in nature. For Castells this produces a culture that is both eternal and ephemeral:

It is eternal because it reaches back and forth to the whole sequence of cultural expressions. It is ephemeral because each arrangement, each specific sequencing, depends on the context and purpose under which any given cultural construct is solicited. We are not in a culture of circularity, but in a universe of undifferentiated temporality of cultural expressions. (Castells 2000, 462)

If large stretches of our waking hours are now more qualitatively homogenous as the result of our continuous partial attention, there are nonetheless spikes of awareness provoked by our immersion within the real-time archive. The specific nature of these is of course dependent upon the subject in question: some users may leverage their addiction in service of profound growth. However, here the material opposition between the biology and hardware returns. No matter how powerful the augmentations available to the subject, their physical bodies remain the instrument through which such upgrades in consciousness occur. In simpler terms, there

remains the risk that the sedentary nature of the real-time addict will carry an unforeseen biological tax if left unchecked. Thus, something as mundane as obesity may be the most accurate reflection of what it means to be a cyborg.

The course of the discussion will now turn towards reiterating some of the general conclusions drawn from the various topics under consideration and pointing towards the consequences of implied by these conclusions.

## Conclusion: Being Beside Ourselves

Who controls the past controls the future: who controls the present controls the past... (Orwell 2004, 309)

In closing, the following questions will be explored: What conclusions were drawn concerning the modeling of subjective autonomy within the museum space versus the media space? What are the implications of the shift from uploading to downloading in regard to relocated net art? What conclusions were drawn concerning the testimony of technology and the potential of staging a response? What conclusions were drawn concerning the relations between humans and technology, or the question of post-humanism? What are the consequences of these conclusions?

In regard to the first question, it was concluded that the subjective autonomy modeled within the museum space in isolation, lacks the capacity to address the subject-effects of media technology. That said, in keeping with Bourriaud's law of relocation, the museum space is not only capable of doing so, but provides an ideal site to interrogate these subject-effects beyond their application as techniques within technologically-oriented art. However, to do so requires an approach to museum space that includes an awareness to media ontological questions manifested in the aesthetics of this approach, if not in its techniques.

Here, the work of Collins has been introduced as an example of museum-based practice that manages to walk this line successfully. That is to say, benefit form having a stake in both spaces. More specifically, this benefit can be named as the successful modeling of a subjective autonomy that acknowledges the breadth of subject-effects (both positive and negative)

engendered by media technology. In contravention, the work of Sierra, Hirschhorn, Banksy, and Wallinger was criticized to varying degrees as stopping short of such a nuanced approach.

The consequences of these critical conclusions are that the hybrid practices (those in which public space, museum space, and media space are intertwined) of artists such as McQueen and Collins are likely to be increasingly necessary in order to stage subjective autonomy in the face of what Baudrillard refers to as the "implosion of the social:"

Thus the media are producers not of socialization, but of exactly the opposite, of the implosion of the social in the masses. And this is only the macroscopic extension of the *implosion of meaning* at the microscopic level of the sign. This implosion should be analyzed according to McLuhan's formula, the medium is the message, the consequences of which have yet to be exhausted.... Beyond meaning, there is the fascination that results from the neutralization and the implosion of meaning. Beyond the horizon of the social, there are the masses, which result from the neutralization and the implosion of the social. (1994, 80-81)

If media space has foreclosed subjective autonomy on the level of the sign and collective identity on the level of the social (a community versus a mass), to assume that its subject-effects are neutralized upon entering museum space is naïve.

Conversely, to adhere to the aesthetic constraints prescribed within media space denies the law of relocation, whereby the subject-effects of a particular media technology come to light more clearly outside of its unique form.

In regard to the second question, the shift from uploading to downloading seen in relocated net art was qualified relative to two factors. The first of these was the socio-cultural shift following the dot com crash of 2000. The second was the more subtle distinction whereby the subject-effects of the real-time archive were brought into view through the denial of its direct techniques. In a word,

being offline. Here the work of artists such as July/Fletcher and Arcangel were identified as examples of practices that suspended the direct subject-effects of the real-time archive (what Baudrillard would refer to as its obscenity, for example), while simultaneously keeping these subject-effects within the purview of their aesthetic frame of reference. Again we find an aesthetic hybridity at work in these practices. If McQueen and Collins blur the more general distinctions between various ontological spaces, July/Fletcher and Arcangel play more specifically with the implications of being both on- and offline simultaneously.

The consequences of these conclusions dovetail with those emerging from the first of this chapter's questions. In other words, relocated net art is indicative of an oscillation between spaces (whether museum-media or online-offline) that is becoming a hallmark of the manifestation of contemporary subjectivity. As such, the aesthetic terrain lying between these two sets of artists (McQueen and Collins on the one hand, July/Fletcher and Arcangel on the other) would appear to be a promising area for subsequent work. That is to say, somewhere between the more public and media space savvy practice of the former and the more network savvy practice of the latter. This, as what is currently addressed as media space by McQueen and Collins has little to do with the technology of the Internet, despite its predominance as a form of media and producer of subject-effects. Likewise, July/Fletcher and Arcangel run the risk of staying too close to the network and thus not relocating in the name of both gaining aesthetic latitude and avoiding an aesthetic based on techniques:

Art-Light in the process of turning into the music of the televised image, or else art-matter of the visual arts – we have to choose. We have to choose between dynamics and its panic, the putting into a trance of the enthralled multitudes, or statics, material resistance and its tectonics of sense as well as shared sensations. (Virilio 2007, 123)

If Virilio suggests that museum space (art-matter) must be defended from incursions by media space (art-light), I would argue that this is a false dichotomy. In other words, the former cannot be defended from the latter. It is moreover a question of interrogating the subject-effects of media space and the real-time archive by throwing them into relief. If the light of speed is the quantity that renders dimensionality after we have left the light of the sun behind, then its presence (direct or implied) can be seen as precondition to substantive representation in this era. As such, both bulwarks against it as well as media art practices that uncritically capitulate to its subject-effects are likely to fall short of modeling subjective autonomy with the same degree of success as the hybrid practices surveyed in chapter 2.

That said, Virilio suggests that "the fate of political philosophy is today being played out" (123) within the very tension that exists between these two spaces. In other words, the tension between the global and the local:

Even while the 'nationalism' of days gone by was centripetal, exerting a gravitational pull towards the centre, into the capital, on power and rural populations, the transnationalism of globalization is, for its part, centrifugal, ejecting outwards towards the outside all that was still precisely located, here or there.

And so, the globalization under way acts in the manner of a CENTRIFUGE that outsources any and every (geophysical) implantation and any and every (geopolitical) representation. EXTRA OMNES (everyone out) could well be the slogan of this DROMOSPHERE of the acceleration of reality, where the centre is nowhere and the circumference everywhere at once! (124)

Stiegler notes that prior to the closing this circuit between localized subject and globalized network, there is a transposition of "ethnic difference" into "technical difference."

Time can only be deferred. However, there is what is called "real time": this is perhaps the fundamental trait of contemporary technology – it is perhaps also the technological grounding in which idiomatic difference, as ethnic difference, is absorbed into technical difference, and along with it a certain epoch. (2009, "Technics" 63)

This transposition mirrors the freedom allowed to goods but denied to people in that governments foment ethnic tensions to meet their geopolitical objectives while trivializing them to meet their financial objectives. Similarly, Dumm notes the tie between "decontextualization" and "strong claims to national and ethnic identity:"

Lost and found, previously opposing if complementary experiences, collapse into each other in the context of a decontextualization that emerges as the most common situation – the common denominator – of life in this era. Such a blurring of the conditions of being lost and found is evidenced by the fact that traditional geographical considerations are beginning to fade in political importance, displaced in the realm of modern conflict by the informational needs of the strategic itself, affectively (that is, reactively) expressed in that realm through the representational imperatives of strong claims to national and ethnic identity. (1996, 31)

Thus, relocation and remixing as a model for staging an aesthetic response to the subject-effects of the real-time archive can equally be seen as a model for the successful agency of subjects who are once locally situated while being part of a network that establishes their identity relative to a global value chain. Stiegler further describes how the subject's position relative to the real-time archive's "industrial fabrication of time" leads to a "complete loss of context:"

When memory is produced at a speed near that of light it is no longer possible, either in law or in fact, to distinguish an "event" from its "input" or its "input" from its "reception" or reading: these three moments coincide in a single spatiotemporal reality such that all delay, all distance, between them, is eliminated – but so is all locality, since locality is constructed from differentiation, like calendarity and spatiality, and differentiation is therefore, from the outset, what happens there. But if what happens there seems to tend to be the same everywhere, "locality" tends to become universally identical, that is, to disappear: no longer would decontextualization be solely that of the initial story, however distant globally, but that of its "reception," which would thus be a tendency toward, purely and simply, the complete loss of context. (116-17)

Conversely, Gere argues that online net art provides an adequate means of staging a response to the real-time archive:

For some of its exponents the short life of net.art as a viable artistic practice is already over. It has supposedly failed in its aims to remain independent and to narrow the widening gap between art and life. But this pessimistic attitude misses one of the most important aspects of net.art, which is its relationship to those institutions whose concern is to collect, curate, archive and display works of art, and which are therefore confronted by the challenges of an ephemeral, immaterial, network-based, non-commodifiable form of artmaking. It is here, in the 'crisis of the archive' which such work provokes, that the real interest of net.art lies. Net.art is intrinsically resistant to recuperation by the art gallery as an institution, at least as it is presently constituted. Its existence threatens to destabilize the whole archival enterprise that the gallery represents. Net.art is thus not simply another genre or practice that presents challenges to the gallery or museum, but which eventually succumbs to recuperation and institutionalization. It is, rather, a means of investigation of the very conditions of representation and archivization in the age of real-time systems, and thus – by extension – memory and mourning. (2006, 173-74)

However, just as Virilio risks missing the mark in calling for a resuscitation and defense of the museum space, Gere does not acknowledge the problem of staging inherent to online works. While online net art may begin to engage with the "crisis of the archive" its overwhelming immediacy tends towards an obscenity that jeopardizes its capacity to provide successful models of subjective autonomy. This tension can be seen as an extension of a double-edge originating in mechanical reproduction that Benjamin named as far back as 1936, namely the "renewal of mankind" versus "the liquidation of the traditional value of the cultural heritage:"

One might generalize by saying: the technique of reproduction detaches the reproduced object from the domain of tradition. By making many reproductions it substitutes a plurality of copies for a unique existence. And in permitting the reproduction to meet the beholder or listener in his own particular situation, it reactivates the object reproduced. These two processes lead to a tremendous shattering of tradition which is the obverse of the contemporary crisis and renewal of mankind. Both processes are intimately connected with the contemporary mass movements. Their most powerful agent is the film. Its social significance, particularly in its most positive form, is inconceivable without its destructive, cathartic aspect, that is, the liquidation of the traditional value of the cultural heritage. This phenomenon is most palpable in the great historical films. (2006, 21)

Relative to the real-time archive, this renewal would appear contingent to what can be called strategies of *re-inscription* (such as posting data to a blog) in which the quantitative replication of data "reactivates the object reproduced" within the mind of a subject

whose qualitative attention span remains a limited commodity. In this light, investment in the subject-effects of the real-time archive constitutes a gamble in which one wagers subjectivity in the hopes of winning agency.

If the impact of any online revolution is ultimately measured relative to its offline consequences, online net art – no matter how vital and urgent – finds itself in the same position. For Gere, net art is the "archive of the future:"

Thus despite its continued repressions, failures and supercessions, the avant-garde continues to return, but, as Foster puts it, 'it returns from the future'. It opens out the future to the contingent and the incalculable and thus the promise of the to-come. The avant-garde, of which net.art is perhaps the most plausible modern instantiation, is the archive of the future. (176)

For his part, Stiegler appears to reference Sex Pistols vocalist John Lydon's (Johnny Rotten) refrain of "no future" in "God Save the Queen," when suggesting that our cybernetic non-future is not without events, or rather event-ization:

Through their reception's simultaneity and universality, temporal industrial objects tend to suspend all contextuality. Memory's industrialization achieves a generalized decontextualization. Decontextualization of the written has allowed for interpretations' intensification to the extent that orthographic writing has been re-contextualized within a unique already-there, which has re-constituted its singularity within the admixture of local rhythms. The temporal industrial object is, on the contrary, the reification of a quasi-integrally de-localized rhythmics emerging, through telecommunications networks, from an anonymous elsewhere, a satellite with neither here nor now: the occultation of différance is the in-différance of a non-place ("no future" does not mean "nothing *happens* anymore"). (2009, "Technics" 241)

In any case, if one traces the arc of technology in general it becomes clear that the real-time archive is increasingly being imbedded within both the body and the physical environment. As such, it will not be comprehended on a monitor so much as apprehended in and around the subject. In this light, the relocation of net art can also be seen as a means of prefiguring a response to a situation in which we are the archive and it surrounds us. Just as the next productive frontier in the study of Web 2.0 is more likely to be concerned with cultural anthropology in general than technology in particular, the productive frontiers in the study of the real-time archive may prove to be neurological and architectural. In this regard, the aesthetics of architecture, what Benjamin describes as "tactile appropriation," may find their place alongside concepts such as continuous partial attention in discussions concerning the aesthetics of the real-time archive:

Architecture has never been idle. Its history is more ancient than that of any other art, and its claim to being a living force has significance in every attempt to comprehend the relationship of the masses to art. Buildings are appropriated in a twofold manner: by use and by perception - or rather, by touch and sight. Such appropriation cannot be understood in terms of the attentive concentration of a tourist before a famous building. On the tactile side there is no counterpart to contemplation on the optical side. Tactile appropriation is accomplished not so much by attention as by habit. As regards architecture, habit determines to a large extent even optical reception. The latter, too, occurs much less through rapt attention than by noticing the object in incidental fashion. This mode of appropriation, developed with reference to architecture, in certain circumstances acquires canonical value. For the tasks which face the human apparatus of perception at the turning points of history cannot be solved by optical means, that is, by contemplation, alone. They are mastered gradually by habit, under the guidance of tactile appropriation. (2006, 33)

For Dumm, "any serious contemporary discussion of the meaning of freedom" requires an equally specific discussion of space. In other words, whether the word makes reference to what we presently distinguish as architecture on the one hand and cyberspace on the other, space comes to the fore as the place in which freedom is made manifest.

[T]he relationship of freedom to space is brought to common attention through the emergence of televisual and computer technologies that have culminated in the creation of cyberspace, which is itself another popular formation, a product of the technological realm's focus on delineations of realms of space. In short, it is now difficult to doubt that questions of space – questions concerning its constitution and its role in the understandings of freedom developed by those who inhabit it – now must inevitably inform any serious contemporary discussion of the meaning of freedom. (1996, 31)

If overarching argument in this essay has been one of noting a generalized hermeneutic shift from space to time it should be noted that speed as rate of movement can only be measured relative to space. Thus events in space become the mirror through which to apprehend the light of speed. Historically speaking, one of the functions of space has been to catalog these events. Similarly, the many ideas orbiting an analysis of the circumstances surrounding the shift from uploading to downloading in relocated net art can be seen to gravitate around the theme of memory. Here one is reminded of the manner in which the latter was spatialized (located) in ancient civilizations such as Egypt and Greece in temples dedicated to recounting historical narratives. In addition, the prevalence of archeological excavations within the Vienna of his day exerted an influence on Freud's conceptual model of the economy of the mind and the function of memory within this economy. Stiegler synthesizes questions pertaining the (dis)location of memory as follows:

With temple stones, and initially with tombs, if the place of inscription remains immobile, it has nonetheless been built: the support - the medium - is already the product of displacement. But the message's receiver must go to the message. In a mobile support, from the engraved tablet to papyrus, to parchment, and finally to paper, the message's trajectory is inverted: the memory message can be "sent" from its transmitter to its receiver. But only with networks does this first inversion reach its limit: creation of Louis XI's postal service was a memory moment as essential as the widespread concurrent appearance of printing shops. Yet clearly even the "iterate" postal network is not a true limit, since a delay between sending and receipt of a message is inherent in it: in 1756 France, it took fifteen days for news leaving Paris by mail coach to reach Marseille. The true limit is only attained when information, circulating without delay, merges with "apparently instantaneous" time.

Memory has become the primary economic engine for current archival media, whose preservation and organization are enormous business risks: memory archives, very promising areas of investment, must be profitable. The more media are industrialized, the more they produce, and the greater the expansion of funding dedicated to their preservation. Since memory is constituted only in its memory lapses, it must erase information not only through economic reality but in order to be able to remember – even if delegation of "reading" to machines working at the speed of light allows for the sheer mass of memorizable material to be significantly increased. Too much memory would be equivalent to a memory hole. Then the question remains who regulates selection: if it is true that the criterion of elimination has a tendency to become the preserved database's strictly commercial profitability, is it conceivable that "new archives" might be exclusively subject to profitability? Could the future – memory to come – be seen purely as the result of its depreciation? (2009, "Technics" 127-28)

Such a perspective suggests that the act of selection – something at the heart of both art practice that is specifically Duchampian in its orientation (the readymade) as well as the cultural practice of the remix in general – is the arbitrar of epigenetic memory in relation to the plus-value or cost associated with particular recollections. This brings to mind Bourdieu's tripartite schema of capital (p. 12) and perhaps explains why certain subjects (UFOs for example) remain subcultural in the face of sufficient justification for their being given legitimate cultural status. In short, such subjects are ghettoized:

For Bourdieu, the way that capital works is through the processes of acknowledgement and recognition. Capital can only have value, especially in its most symbolic form, if it is recognized as such. The likelihood of this occurring is ensured by the social reproduction of the symbolic manifestations of the logic of particular fields . . . A characteristic of capital is that it is, by definition, a scarce commodity; if it were available to all, like air, it would lose one of its main functions - to act as an arbitrar of social differentiation. Possessing capital is only useful because some possess more than others. Therefore, although everyone implicitly recognizes the value of capital, not everyone possesses it. Yet Bourdieu is not arguing that fields and capital operate through an open and explicit struggle for what is of value and available in the field. Rather, he argues that much of this process goes on in a misrecognized form: although this competitive struggle is indeed what is occurring, most of those involved are not consciously aware of the fact - indeed many would deny it as such. For Bourdieu, such a denial, a kind of sociological bad faith, is an essential constituent of the mechanisms of legitimation which lead to the preservation of the field and its operations. (Grenfell 2007, 30-31)

Read in light of the citation by Rancière below, this suggests that one of the functions of the aesthetic regime and its potential for disrupting "the distribution of the sensible" is a leveling of the social stratification endemic to relations mediated by such capital:

The essence of *politics* consists in interrupting the distribution of the sensible by supplementing it with those who have no part in the perceptual coordinates of the community, thereby modifying the very aesthetico-political field of possibility. . . . Those who have no name, who remain invisible and inaudible, can only penetrate the police order via a mode of *subjectivization* that transforms the aesthetic coordinates of the community by implementing the universal presupposition of politics: we are all equal. (Rockhill 2004, "Politics" 3)

If one approaches the truth claims of the astronauts cited above (p. 94) as if they could be true, the act of establishing perceptual coordinates for such topics is political insofar as the latter is defined by Rancière. This raises the question of whether the "mode of subjectivization" available to Cooper and Mitchell is aesthetically powerful enough to remap the perceptual coordinates surrounding a subject as disputed as that of UFOs. While mere mention of the acronym conjures up a host of associations (few of them political), it is difficult to deny the "national security" implications of such testimony even if it is discredited. Conversely, the banal sexual "improprieties" of political figures routinely take on enormous political significance.

Thus, the controversial nature of the statements made by Cooper and Mitchell are no less remarkable then the relative obscurity of such statements within the perceptual coordinates of public debate. Despite the strength of their respective credentials, the statements made by these astronauts cannot be equated with the "universal presupposition" spoken of by Rancière above in that such statements are nonetheless statements within the media. They are thus subject to the practical, political, and media ontological conditions which can easily neuter the strength of such messages within the context of their transmission and are subject to the

challenges of obscenity in regard to their reception. As such, art practices that take up such difficult subjects may prove to be of equal or greater cultural value in remapping their perceptual coordinates.

In regard to the third question, the transgressions of both The Yes Men and Manetas were seen as examples of Baudrillard's thesis that jokes and graffiti can enable a response to the media. More specifically, it was suggested that this response could be seen to occur relative to the historical testimony of the real-time archive, or the testimony of technology. In this manner, these transgressions served as examples of art practices capable of stalling the objectifying subject-effects of this testimony such that the subject could embody their own temporal dimensions and subjective autonomy. The consequences of these conclusions are that the staging of a response to the real-time archive necessitates an intervention at the level of the code as opposed to the level of the sign. That is to say, the breach, aporia, or gap opened through both the joke and the informal inscription work towards the manifestation of subjective autonomy insofar as they momentarily rupture the otherwise seamless code or codes that make up our discursive and semiotic sense of the real.

In this sense, through an intervention into the technological imaginary, The Yes Men and Manetas manage to reconfigure this real, at least momentarily. This dovetails with Bourriaud's maxim concerning the relation between art and technology, namely that the "influence of technology on the art that is its contemporary is wielded within the limits circumscribed by this latter between the real and the imaginary" (2002, 71).

In regard to the fourth question, two significant conclusions were reached. The first was that our technology increasingly objectifies us. The second was that it is all but impossible to delineate between the human and his or her technology. Thus, we must assume responsibility for objectifying ourselves. Mumford can teach us at least things here. First, that the objectifying subject-effects of our technology actually evolved out of the instrumen-

talization of people insofar as they were the component parts of the first megamachines: "[I]t is doubtful indeed whether non-human machines would have been pushed to their present perfection if the elementary lessons in machine-building had not first been made with malleable human units." (1967, 208) Second, and bringing this full circle, Mumford also suggests that it is ourselves we must overcome in overcoming our technology lest it (we) overcome ourselves with its destructive capacity:

our capacity to go beyond the machine rests upon our power to assimilate the machine. Until we have absorbed the lessons of objectivity, impersonality, neutrality, the lessons of the mechanical realm, we cannot go further in our development toward the more richly organic, the more profoundly human. (1963, 363)

The consequence of our being post-human even in our nascent state is that we remain continually beside ourselves in vigilance in order to both create new technologies such as the real-time archive while we are created by them, without losing sight of the roads we are building for ourselves. Our short-sighted tendency to focus on only what is visible on the immediate horizon in conjunction with our best intentions may not be sufficient to successfully complete the project of becoming more human.

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