What is the relationship between contemporary digital media and contemporary society? Is it possible to affirm that digital media are without sin and exist purely in a complex socio-political and economic context within which the users bring with them their ethical and cultural complexities? This issue, through a range of scholarly writings, analyzes the problems of ethics and sin within contemporary digital media frameworks.
Without Sin: Freedom and Taboo in Digital Media

LEONARDO ELECTRONIC ALMANAC, VOLUME 19 ISSUE 4

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One Click at a Time

They must have felt like gods at the NSA when they discovered that they were able to spy on anyone. What feels ridiculous to someone that works one else knows or can know about ‘you.’ If only they discovered that they were able to spy on any-they would discover a range of services themselves, they would discover a range of services that have started to commercialize collective data: bought and sold through a range of semi-public businesses and almost privatized governmental agencies. Public records of infractions and crimes are available for ‘you’ to know what ‘your’ neighbor has been up to. These deals, if not outright illegal, are character-ized by unsolved ethical issues since they are ‘sell-ing’ of state documents that were never supposed to be so easily accessible to a global audience.

Concurrently as I write this introduction, I read that the maddened Angela Merkel is profoundly shocked that her mobile phone has been tapped into – this is naive at best but also deeply concerning: since to her world – has increasingly become the characteristic of contemporary political discourse, which, detached from the reality of the ‘majority’ of people, feeds into the godlike complex. Foolishness and lunacy reinforce this perspective, creating a rationale that drives the madness is also in the discourse about data, de-stined to be so faithful to the rules of reason, that we find all those signs which will most manifestly declare the very absence of reason? Discourses, and in particular political discourses, no longer mask the reality of madness and with it the feeling of having become omnipotent talks of human madness in its attempt to acquire the impossible: that of being not just godlike, but God. As omnipotent and omniscient gods the NSA should allow the state to ‘see.’ The reality is that the ‘hands’ of the state are no longer functional and have been substituted with prostheses wirelessly controlled by the sociopaths of globalized corporations. The amputation of the hands happened while the state itself was mer-stituted with prostheses wirelessly controlled by the sociopaths of globalized corporations. The amputation of the hands happened while the state itself was mer-rily looking somewhere else, too blissfully busy counting the money that was flowing through neo-capitalistic financial dreams of renewed prosperity and Napoleonic grandeur. The madness is also in the discourse about data, de-prived of ethical concerns and rooted withinperceptions of both post-democracy and post-state. So much so that we could speak of a post-data society, within which the current post-societal existence is the conse-quence of profound changes and alterations to an ideal way of living that technology – as its greatest sin – still presents as participatory and horizontal but not as plutocratic and hierarchical.
the role that ethics plays or no longer plays within contemporary mediated societies.

Concepts of technological neutrality as well as economic neutrality have become enforced taboos when the experiential understanding is that tools that possess a degree of danger should be handled with a modicum of self-control and restraint.

The merging of economic and technological neutrality has generated corporate giants that have acquired a global stronghold on people’s digital data. In the construction of arguments in favor or against a modicum of control for these economic and technological giants, the state and its political representatives have thus far considered it convenient not to side with the libertarian argument, since the control was being exercised on the citizens: a category to which politicians and corporate tycoons and other plutocrats and higher managers believe they do not belong to or want to be reduced to.

The problem is then not so much that the German citizens, or the rest of the world, were spied on. The taboo that has been infringed is that Angela Merkel, a head of state, was spied on. This implies an unwillingly democratic reduction from the NSA of all heads of state to ‘normal citizens.’ The disruption and the violated taboo is that all people are data in a horizontal structure that does not admit hierarchical distinctions and discriminations. In this sense perhaps digital data are violating the last taboo: anyone can be spied upon, creating a truly democratic society of surveillance.

The construction of digital data is such that there is not a normal, a superior, a better or a worse, but everything and everyone is reduced to data. That includes Angela Merkel and any other head of state. Suddenly the process of spying represents a welcome reduction to a basic common denominator: there is no difference between a German head of state or a blue collar worker; the NSA can spy on both and digital data are collected on both.

If anything was achieved by the NSA it was an egalitarian treatment of all of those who can be spied upon: a horizontal democratic system of spying that does not fear class, political status or money. This is perhaps the best enactment of American egalitarianism: we spy upon all equally and fully with no discrimination based on race, religion, social status, political affiliation or sexual orientation.

But the term spying does not quite manifest the profound level of Panopticon within which we happen to have chosen to live, by giving up and squandering inherited democratic liberties one right at a time, through one agreement at a time, with one click at a time.

These are some of the contemporary issues that this new LEA volume addresses, presenting a series of writings and perspectives from a variety of scholarly fields.

This LEA volume is the result of a collaboration with Dr. Donna Leishman and presents a varied number of perspectives on the infringement of taboos within contemporary digital media.

This issue features a new logo on its cover, that of New York University, Steinhardt School of Culture, Education, and Human Development.

My thanks to Prof. Robert Rowe, Professor of Music and Music Education; Associate Dean of Research and Doctoral Studies at NYU, for his work in establishing this collaboration with LEA.

My gratitude to Dr. Donna Leishman whose time and effort has made this LEA volume possible.

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Özden Şahin has, as always, continued to provide valuable editorial support.

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3. Ibid., 101.
Without Sin: Freedom and Taboo in Digital Media

INTRODUCTION

"Without Sin: Freedom and Taboo in Digital Media" is both the title of this special edition and the title of a panel that was held at ISEA 2011. The goal of the panel was to explore the disinhibited mind's ability to exercise freedom, act on desires and explore the taboo whilst also surveying the broader question of the moral economy of human activity and how this is translates (or not) within digital media. The original panelists (some of whom have contributed to this edition) helped to further delineate additional issues surrounding identity, ethics, human socialization and the need to better capture/understand/perceive how we are being affected by our technologies (for good or bad).

In the call for participation, I offered the view that contemporary social technologies are continuously changing our practical reality, a reality where human experience and technical artifacts have become beyond intertwined, but for many interwoven, inseparable – if this were to be true then type of cognizance (legal and personal) do we need to develop? Implied in this call is the need for both a better awareness and jurisprudence. This was achieved by mentally placing the boarder question of morality and taboos allowed me to formulate a sense of what might become future pertinent themes, and what now follows below are the notes from this process.

What Social Contract?

Hereby it is manifest that during the time men live without a common power to keep them all in awe, they are in that condition which is called war, and such a war as is of every man against every man. (Thomas Hobbes in chapter XII of the Leviathan)

Deborah Swack’s “FEELTRACE and the Emotions (after Charles Darwin)”, Johnny Golding’s “Ana-Materialism & The Fineal Eye: Becoming Mouth-Breast” and Kris Ravetto’s “Anonymous Social As Political” argue that our perception of political authority is somewhere between shaky towards becoming erased altogether. Whilst the original 17th century rational for sublimating to a political authority – i.e. we’d default back to a war like state in the absence of a binding social contract – seems like a overwrought fear, the capacity for repugnant anti-social behavior as a consequence of no longer being in awe of any common power is real and increasingly impactful. Problematically the notion of a government that has been created by individuals to protect themselves from one another sadly seems hopelessly incongruent in today’s increasingly skeptical context. Co-joined to the dissipation of perceptible political entities – the power dynamics of being ‘good’ rather than ‘bad’ and or ‘sinful’ appears to be one of most flimsy of our prior social borders. The new reality that allows us to transcend and explore our tastes and predictions from a remote and often depersonalized position feels safer (i.e. with less personal accountability) a scenario that is a further exacerbated space vacated by the historic role of the church as a civic authority. Mikhail Pushkin in his paper “Do we need morality anymore?” explores the online moral value system and how this ties into the deleterious effect of the sensationalism in traditional mass media. He suggests that the absence of restrictive online social structure means the very consciousness of sin and guilt has now changed and potentially so has our capability of experiencing the emotions tied to guilt.

Sherry Turkle’s current hypothesis is that technology has introduced mechanisms that bypass traditional concepts of both community and identity indeed that we are facing (and some of us are struggling with) an array of reconceptualizations.

Identity

Identity is not (and could not be) a unified survey of human activity and otherness; the final edition contains 17 multidisciplinary papers spanning Law, Curation, Pedagogy, Choreography, Art History, Political Science, Creative Practice and Critical Theory – the volume attempts to illustrate the complexity of the situation and if possible the kinship between pertinent disciplines.

Our post-social context where increased communication, travel and migration bought about by technology appears to be one of most flimsy of our prior social borders. The new reality that allows us to transcend and explore our tastes and predictions from a remote and often depersonalized position feels safer (i.e. with less personal accountability) a scenario that is a further exacerbated space vacated by the historic role of the church as a civic authority. Mikhail Pushkin in his paper “The Premediation of Identity Management in Art & Design – New Model Cyborgs – Organic & Digital” concur stating that “the line dividing taboos from desires is often blurred, and a taboo can quickly flip into a desire, if the conditions under which that interaction take place change.”

The Free?

The issue of freedom seems to be where much of the debate continues – between what constitutes false liberty and real freedoms. Unique in their own approach Golding’s and Pushkin’s papers challenge the premise that is implied in this edition’s title – that ‘Freedom and Taboo’ even have a place at all in our contemporary existence as our established codes of morality (and ethics) have been radically reconfigured. This stance made me recall Hobbes’s first treatise where he argued that “commodious living” (i.e. morality, politics, society), are purely conventional and that moral terms are not objective states of affairs but are reflections of tastes and preferences – indeed within another of his key concepts (i.e. the “State of Nature”), ‘anything goes’ as nothing is immoral or just. It would “appear” that we are freer from traditional institutional controls whilst at the same time one could argue that the borders of contiguous social forms (i.e. authority within contemporary culture nor is there an easy mutual acceptance of what is ‘right and proper’ after all we could be engaging in different iterations of “backward presence” or “forward presence” whilst interacting with human and non-human alike (see Simone O’Callaghan’s contribution: “Seductive Technologies and Inadvertent Voyeurs” for a further exploration of presence and intimacy).

Editing such a broad set of responses required an editorial approach that both allowed full expansion of each paper’s discourse whilst looking for interconnections (and oppositions) in attempt to distil some commonalities. This was achieved by mentally placing citation, speculation and proposition between one another.

Spilling the ‘meaning’ of the individual contributions into proximate conceptual spaces inhabited by other papers and looking for issues that overlapped or resonated allowed me to formulate a sense of what follows below are the notes from this process.
procedures, networks, our relationship to objects and things) seem to have dissipated alongside our capacity to perceive them. The problematic lack of an established conventional concomitance living such as Bau-
man’s idea that something is ‘right and proper’ is under challenge by the individualized complexity thrown up from our disenchanted minds, which can result in benign or toxic or ‘other’ behaviors depending on our person-
ality’s variables. Ravetto describes how Anonymous
consciously inhabits such an ‘other’ space:

Anonymous demonstrates how the common
cannot take on an ethical or coherent political
message. It can only produce a heterogeneity of
spontaneous actions, contradictory messages, and
embrace its contradictions, its act of vigilante jus-
tice as much as its dark, racist, sexist, homophobic and predatory qualities.

Perception
Traditionally good cognition of identity/society/rela-
tionships (networks and procedures) was achieved
through a mix of social conditioning and astute mind-
fulness. On the other hand at present the dissipation of contiguous social forms has problematized the
whole process creating multiple social situations (new
and prior) and rather than a semi-stable situation
(to reflect upon) we are faced with a digital deluge
of unverifiable information. Perception and memory
comes up in David R. Burns’s paper “Media, Memory,
and Representation in the Digital Age: Rebirth” where
he looks at the problematic role of digital mediation
in his personal experience of the 9/11. He recalls the
discommodulating feeling of being: “part of the digi-
tal media being internationally broadcast across the
world.” Burns seeks to highlight the media’s influence
over an individual’s constructed memories. From a
different perspective Charlie Gere reminds us of the
over an individual’s constructed memories. From a

Michel Foucault’s notion of the “Panopticon” (where
surveillance is diffused as a principle of social organi-
zation) and Guy DeDard’s “The Society of the Spectacle
i.e. “All that once was directly lived has become mere
representation”) and Richard Rorty’s Philosophy
and the Mirror of Nature (published in 1979): The
latter gave form to an enduringly relevant question:
are we overly reliant on a representational theory of
perception? And how does this intersect with the
risks associated with solipsistic introjection within non-
face-to-face online interactions? The ethics of ‘look-
ing’ and data collection is also a feature of Deborah
Burns’s paper “Differential Surveillance of Students:
Surveillance/Sousveillance as Opportunities for
Reform” in which Burns asks questions of the higher
education system and its complicity in the further
erosion of student privacy. Burns’s interest in account-
ability bridges us back to Foucault’s idea of panoptic
diffusion:

He who is subjected to a field of visibility, and who
knows it, assumes responsibility for the constraints
of power; he makes them play spontaneously upon
himself; he inscribes in himself the power relation
in which he simultaneously plays both roles; he
becomes the principle of his own subjection.

In panoptic diffusion the knowingness of the subject
is key – as we move towards naturalization of surveil-
ance and data capture through mass digitization such
power relationships change. This is a concern mir-
rored by Eric Schmidt Google’s Executive Chairman
when considering the reach of our digital footprints:
“I don’t believe society understands what happens
when everything is available, knowable and recorded
by everyone all the time.” Smita Kheria’s “Copyright
and Digital Art practice: The ‘Schizophrenic’ Position
of the Digital Artist” and Alana Kushnir’s “When Curat-
ing Meets Piracy: Rehashing the History of Unauthor-
ised Exhibition-Making” explore accountability and
power relationships in different loci whilst looking at
the mitigation of creative appropriation and reuse. It is
clear that in this area serious reconfigurations have oc-
curred and that new paradigms of acceptability (often
counter to the legal reality) are at play.

Bauman’s belief that “One thinks of identity whenever
one is not sure if where one belongs” maybe a clue into why social media have become such an integral
part of modern society. It is after all an activity that
privileges ‘looking’ and objectifying without the recipi-
ent’s direct engagement – a new power relationship
quite displaced from traditional (identity affirming)
social interactions. In this context of social media over
dependency it may be timely to reconsider Guy-Ernest
Debord’s ‘thesis 30’:

The externality of the spectacle in relation to the
active man appears in the fact that his own ges-
tures are no longer his but those of another who
represents them to him. This is why the spectator
feels at home nowhere, because the spectacle is
everywhere.

Underneath these issues of perception / presence /
identity / is a change or at least a blurring in our politi-
cal (and personal) agency. Don Ritte’s paper “Content
Osmosis and the Political Economy of Social Media”
functions as a reminder of the historical precedents
and continued subterfuges that occur in mediated
feelings of empowerment. Whilst Brigit Bachler in
her paper “Like Reality” presents to the reader that
“besides reality television formats, social networking
sites such as Facebook have successfully delivered a
new form of watching each other, in a seemingly safe
setting, on a screen at home” and that “the appeal of
the real becomes the promise of access to the reality
of manipulation.” The notion of better access to the
‘untruth’ of things also appears in Ravetto’s paper
“Anonymous: Social as Political” where she argues
that “secrecy and openness are in fact aporias.” What
is unclear is that, as society maintains its voyeuristic
bent and the spectacle is being conflated into the ba-
nality of social media, are we becoming occluded from
meaningful developmental human interactions? If so,
we are to re-create a sense of agency in a process
challenged (or already transformed) by clever implicit
back-end data gathering and an unknown/unde-
clared use our data’s mined ‘self’. Then, and only then,
dissociative anonymity may become one strategy
that allows us to be more independent; to be willed
even enough to see the world from our own distinctive
needs whilst devising our own extensions to the long
genealogy of moral concepts.

Somewhere / Someplace
Perpetual evolution and sustained emergence is one
of the other interconnecting threads found within the
dition. Many of the authors recognize a requirement
for fluidity as a reaction to the pace of change. Geog-
rapher David Harvey uses the term “space-time com-
pression” to refer to “processes that . . . revolutionize
the objective qualities of space and time.” Indeed
there seems to be consensus in the edition that we
are “in an accelerated existence and a concomitant
dissolution of traditional spatial co-ordinates – Swack
 cites Joanna Zylinska’s ‘human being’ to a perpetual
“human becoming” whilst Golding in her paper
reminds us that Hobbes also asserted that “[f]or see-
ing life is but a motion of Lims” and that motion,
comes from motion and is inextricably linked to the
development and right of the individual. But Golding
expands this changing of state further and argues
where replication (and loop) exist so does a different
experience:
The usual culprits of time and space (or time as distinct from space and vice versa), along with identity, meaning. Existenz, Being, reconfigure via a relational morphogenesis of velocity, mass, and intensity. This is an immanent surface cohesion, the compelling into a ‘this’ or a ‘here’ or a ‘now,’ a space-time terrain, a collapse and rearticulation of the tick-tick-ticking of distance, movement, speed, born through the repetitive but relative enfolding of otherness, symmetry and diversion.

Golding is a bewilderling proposition requiring a frame of mind traditionally fostered by theoretical physicists but one that may aptly summarize the nature of the quandary. The authors contributing to this edition all exist in their own ways in a post-digital environment, anthropologist Lucy Suchman describes this environment as being “the view from nowhere, detached intimacy, and located accountability.”

Wilson and Gomez further offer a possible coping strategy by exploring the usefulness of Jay Bolter and Richard Grusin’s “pre-mediation” as a means to strategy by exploring the usefulness of Jay Bolter and Richard Grusin’s “pre-mediation” as a means to embody and what it means now to be ‘human’ as we veer away from biological truth and associated moral values towards something else. Sue Hawksley’s “Dancing on the Head of a Sin: touch, dance and taboo” reminds us of our sensorial basis in which:

Touch is generally the least shared, or acknowledged, and the most taboo of the senses. Haptic and touch-screen technologies are becoming ubiquitous, but although this makes touch more commonly experienced or shared, it is often reframed through the virtual, while inter-personal touch still tends to remain sexualized, militarized or medicalized (in most Western cultures at least).

Within her paper Hawksley provides an argument (and example) on how the mediation of one taboo – dance – through another – touch – could mitigate the perceived moral dangers and usual frames of social responsibility. Swack raises bioethical questions and Swack mull over the implications of the digital on moral values towards something else. Sue Hawksley’s “Dancing on the Head of a Sin: touch, dance and taboo” reminds us of our sensorial basis in which:

CONCLUSION

In the interstices of this edition there are some questions/observations that remain somewhat unanswered and others that are nascent in their formation. They are listed below as a last comment and as a gateway to further considerations.

Does freedom from traditional hierarchy equate to empowerment when structures and social boundaries are also massively variable and dispersed and are pervasive to the point of incomprehension/invalidation? Or is there some salve to be found in Foucault’s line that “Power is everywhere” and ‘comes from everywhere’ so in this sense is neither an agency nor a structure.

Thus nothing is actually being ‘lost’ in our current context? And is it possible that power has always resided within the individual and we only need to readjust to this autonomy?

Conventional political power (and their panoptic strategies) seem to be stalling, as efforts to resist and subvert deep-seated and long-held governmental secrecy over military/intelligence activities have gained increased momentum while their once privileged data joins in the leaky soft membrane that is the ethics of sharing digitally stored information.

Through dissociative strategies like online anonymity comes power re-balance, potentially giving the individual better recourse to contest unjust actions/laws but what happens when we have no meaningful social contract to direct our civility? Its seems pertinent to explore if we may be in need of a new social contract that reconnects or reconfigures the idea of accountability – indeed it was interesting to see the contrast between Suchman’s observed ‘lack of accountability’ and the Anonymous collective agenda of holding (often political or corporate) hypocrites ‘accountable’ through punitive measures such as Denial-of-Service attacks.

Regarding de-contextualization of the image / identity – there seems to be something worth bracing oneself against in the free-fall of taxonomies, how we see, how we relate, how we perceive, how we understand that even the surface of things has changed and could still be changing. There is no longer a floating signifier but potentially an abandoned sign in a cloud of dissipating (or endlessly shifting) signification. Where once:

The judges of normality are present everywhere. We are in the society of the teacher-judge, the doctor-judge, the educator-judge, the ‘social-worker’-judge; it is on them that the universal reign of the normative is based; and each individual, wherever he may find himself, subjects to it his body, his gestures, his behaviour, his aptitudes, his achievements.

There now is no culturally specific norm in the diffuse digital-physical continuum, which makes the materiality and durability of truth very tenuous indeed: a scenario that judges-teaches-social workers are having some difficulty in addressing and responding to in a timely manner, an activity that the theoretically speculative and methodologically informed research as contained within this edition can hopefully help them with.

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Embodiment

In theory our deterritorialized and changed relationship with our materiality provides a new context in which a disinhibited mind could better act on desires and explore the taboo. Ken Hollings’s paper “THERE MUST BE SOMETHING WRONG WITH THIS, SALLY... Faults, lapses and imperfections in the sex life of machines” – presents a compelling survey of the early origin of when humans began to objectify and try live through our machines starting with disembodiment of voice as self that arose from the recording of sound via the Edison phonograph in 1876. Golding and Swack mull over the implications of the digital on embodiment and what it means now to be ‘human’ as we veer away from biological truth and associated moral values towards something else. Sue Hawksley’s “Dancing on the Head of a Sin: touch, dance and taboo” reminds us of our sensorial basis in which:

Touch is generally the least shared, or acknowledged, and the most taboo of the senses. Haptic and touch-screen technologies are becoming ubiquitous, but although this makes touch more commonly experienced or shared, it is often reframed through the virtual, while inter-personal touch still tends to remain sexualized, militarized or medicalized (in most Western cultures at least).

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REFERENCES AND NOTES


4. Thomas Hobbes, Leviathan (Charleston, South Carolina: Forgotten Books, 1976), Ch. XIII.


6. As perhaps Friedrich Nietzsche would argue... He has previously described "orgies of feelings" that are directly linked to our capacity to feel sin and guilt. "To wrench the human soul from its moorings, to immerse it in terrors, ice, flames, and raptures to such an extent that it is liberated from all petty displeasure, gloom, and depression as by a flash of lightning" Friedrich Nietzsche, The Genealogy of Morals, trans. Horace Samuel (New York: Russell and Russell, 1964), 139.


8. Consequential subsets within a disinhibited mind are dissociative anonymity (you don’t know me) and dissociative imagination (It’s just a game), which can lead to benign actions such as random acts of kindness or being more affectionate or potentially toxic (exploring more violent assertive sides of ones nature) and ‘other’ behaviors.


14. Bauman, ‘From Pilgrim to Tourist, or a Short History of Identity,’ 19.

15. The alienation of the spectator to the profit of the contemplated object (which is the result of his own unconscious activity) is expressed in the following way: the more he contemplates the less he lives; the more he accepts recognizing himself in the dominant images of need, the less he understands his own existence and his own desires. The externality of the spectacle in relation to the active man appears in the fact that his own gestures are no longer his but those of another who represents them to him. This is why the spectator feels at home nowhere, because the spectacle is everywhere.” Debord, The Society of the Spectacle, Thesis 30.


17. Mirko Schäfer highlights the role of implicit participation in the success of the Web 2.0, a situation where user activities are implemental unknowingly in interfaces and back-end design.


ARTICLE

INTRODUCTION

The more than twelve years that have passed since the September 11, 2001 (9/11) terrorist attacks on the United States have provided a meaningful space to reflect on those events and examine the media’s influence in forming memories of the events. While corporate media outlets have commemorated 9/11 in a journalistic context, both my article and my lossless digital media artwork, Rebirth, offer a personal remembrance of, and reflection on, the tragic events that took place on 9/11 in New York City. In my article, I explore the influence of the media industry’s representation of important events on our personal and collective memory formation of these events. I examine Rebirth as an example of a digitally mediated memory that acts as a site of resistance against the hegemonic media industry’s repeatedly broadcast lossless imagery.

HEADINGS: MEDIA AND MEMORY

9/11 was a perfect example of a paradigm shift in the way real-time memories are processed using digital technology. It illustrated the expansive reach of digital media technology and its importance on memory formation. On 9/11, United States civilians experienced an attack on U.S. soil via digital broadcast in real time as the events were unfolding outside their homes. This catastrophe was an example of a larger shift at the intersection of technology and memory. Digital media technology allows viewers to experience events as never before possible because the archived digital recordings of memorialized events do not de-materialize each time they are recalled. Instead, the digital, lossless memorialized events remain intact and preserved, irrespective of the number of times the digital memories are replayed. Before exploring the dramatic effect of digital media technology on memory, it is helpful to examine some of the differences between using analogue and digital media technology to mediate memories.

Analogue, Lossy Media and Memory

The nature of analogue and digital media technology affects its quality and accessibility and, therefore, its mediation of memories. Analogue, lossy media is used to record and playback audio-visual content, but because the storage medium is analogue, it is degradable and will deteriorate over time with each playback. For example, analogue film and video cameras record images to physical film stock and magnetic tape respectively and these images are projected or played
back on a physical screen. Each time an analogue film or video is played, the film or video’s images decay losing clarity and definition. Each important event is captured on analogue film or video and recalled many times, the quality of the imagery and the media itself degrades and, because analogue data is based upon and encoded in “physical quantities” with measurements such as length physically representing numbers, the film and video itself degrades over time.

Over time, the analogue images dematerialize and fade, even without playback, because of the physicality of the medium. Ultimately, after multitudinous viewings of the film or video over time, the film or video becomes illegible to the viewer rendering the imagery of the event illegible and less useful for the viewer’s memory creation and recall.

Analogue, lossy media is a less accessible media than digital, lossless media for inscribing and recalling memory. Individuals have been largely left out of the inscription process because large media institutions have predominantly controlled the costly and specialized tools that are needed to record and decode analogue media. The hegemonic institutional control over media content can be traced to the late Middle Ages when institutional actors beginning with the Church and later the media industry constructed a “monopoly of knowledge.” These institutions control and influence analogue media technology and limit people’s access and contributions to memorialized information. This institutional control and influence over analogue media technology has traditionally made it challenging for individuals to record and recall important events to add to the institutional and collective memory archive.

Digital, Lossless Media and Memory
In contrast to analogue, lossy media, digital media is a lossless form of communications technology that is used in the mediation of memories. As Sturken and Cartwright point out:

> Whereas analog (sic) images, such as photographs and most video images, are defined by properties that express value along a continuous scale, such as gradations of tone (or changes in intensity through increasing or decreasing voltage in video), digital images are encoded as information.

Since digital media is coded as discrete, digital information, the audio-visual information that is recorded and played back on digital media does not degrade over time. In fact, “the idea of the difference between a copy and an original is nonexistent” in lossless, digital images. Because digital media does not degrade over time regardless of the amount of times the media is played back, the content is lossless and retains all of its original qualities as if played back for the very first time. For example, when a digital video camera records an event, the digital video can be replayed an infinite amount of times without losing picture or audio quality. Whereas our organic memories, those that we archive in our minds, and our analogue film and video recordings, the recordings of our past, degrade over time and are lossy, digital recording of raw material remains both intact and preserved in its entirety irrespective of the number of times the memory is recalled and played back and is therefore lossless.

Digital, lossless media is also distinct from analogue media because it is far more easily accessible than analogue media. Indeed, the “value of a digital image is derived in part by its role as information, and its capacity to be easily accessed, manipulated, stored in a computer or on a web site, downloaded, etc.” Digital content can be inscribed using a wide array of inexpensive and easily accessible authoring tools including free or low-priced software. For example, Autodesk, a global software company, provides students and educators free licenses for its content-authoring software. Unlike the expensive and largely inaccessible analogue hardware of the past, such as unwieldy analogue film projectors and cumbersome Beta magnetic tape audio-visual cameras and players, the hardware necessary to author digital content is compact, widely available, and already in use by people worldwide. For example, in societies ranging from the most privileged to those in the Global South, mobile phones are popular devices to record content using the mobile phone’s camera and microphone as well as distribute content by accessing the Internet. Consumer digital audio and video recorders, digital cameras, and digital mobile devices have become inexpensive and widely available in North America, Europe, and many parts of Eastern and Western Asia. This broad access to digital media technology has allowed viewers to personally and collectively experience events as never before possible because the archived digital recordings of memories do not dematerialize each time they are recalled. Instead, the digital, lossless memories remain intact and preserved, irrespective of the number of times the digital memories are replayed.

**PARADIGM SHIFT AND MEDIATED MEMORIES**

The shift from analogue to digital media has therefore created a paradigm shift in personal and collective memory formation. The increased quality and broader accessibility of digital media has shifted the paradigm in personal and collective memory formation because digital media enables people to more economically inscribe, access, distribute, and preserve lossless memories across a wider range of platforms and geographies than ever before in recorded history. The progression from using analogue media to using digital media to receive and inscribe memory has resulted in an increase in individual and public accessibility to and distribution of inscribed memories.

Indeed, the move away from the analogue, lossy media to digital, lossless media is significant because of digital media’s quality and wide accessibility. Since digital media is lossless and the content inscribed on and recalled from digital media retains its original quality without degrading over time, people recalling memories from digital media will receive and experience inscribed memories in their most unadulterated form. This stands in stark contrast to people recalling memories from analogue media that dematerialize each time they are recalled. While all memories do not need to be part of the personal and collective memory, when important events like 9/11 or the Staalldashmarthattaacts of transfer.” In fact, this intergenerational transmittance is a distinguishing trait that differentiates humans from all other members of the animal kingdom. Memorialized information stored on digital media is especially suited to intergenerational transmittance because it can be accessed globally and across a wider range of platforms than analogue media. In contrast to static, analogue media that is difficult to access, digital media is dynamic and easily accessed over the Internet by a myriad of personal
digital devices including laptops, tablets, and mobile phones.

The shift to easily accessible lossless, digital media to inscribe and recall memorial information resulted in the burgeoning of personal memory sites being created and added to form collective memories. van Dijck explores how individuals mediate digital media for memory inscription and recall, and add to and reflect on collective memory. She examines the importance of using media as a tool for “reflection and self-reflection.” An example of a digital platform that provides individuals with easily accessible means to add to collective memories is the Internet. Individuals who inscribe their memories onto digital media can share and reflect upon their mediated memories globally using the Internet and easily accessible portals such as laptops, mobile phones, and tablets.

9/11 AND THE MEDIA INDUSTRY

With its repetitive television broadcast of lossless digital images, the media industry’s representation of the tragic events on 9/11 influenced individual and collective memory formation of these events. The digital TV broadcast was so pristine and repeatedly disseminated that it took on a hyperreal appearance; it took the place of the actual 9/11 event in the personal and collective memory. The differences between the broadcast of the event and the real event collapsed and the representations, the digital TV broadcasts, were the simulacra that preceded, defined, and became reality. The hegemonic media industry’s broadcast of lossless digital images of the terrorist attack on the World Trade Center were literal, hyperrealistic images that inundated people’s televisions appeared more real than the event itself. Viewing these pristine, vivid digital images repeatedly created a hyperreal audio-visual representation of the tragic events. The media’s constant barrage of pristine, lossless digital images of two hijacked planes slamming into the World Trade Center in New York City and the resulting fall of buildings in the World Trade Center complex in addition to the repetitious coverage of the event by news anchors around the clock, added to hyperreal colonization of the collective memory. Dan Rather in the CBS studio and Byron Pitts reporting in New York City gave a play-by-play televised recall of the terrorist attack on U.S. soil via digital broadcast while the events were taking place. After the events took place and for several days thereafter, the media industry continued to deluge audiences with the same audio-visual information for memorialization. In fact, the Internet Archive recorded over “3,000 hours of international TV News from 20 channels” covering 9/11 during the week of 9/11. This is a striking amount of digital media collected during one week centered on one event. The volume of mediated media containing memorialized information that the media industry broadcast had a profound effect on memory formation. Audiences were not given time to reflect on the events that took place on the morning of 9/11 before being inundated with the repeated broadcast of similar and nearly identical digital, lossless images across a wide band of the globally networked media industry.

There is no mystery as to why similar and nearly identical digital footage was used globally; consolidated hegemonic media empires controlled and broadcast 9/11 digital, lossless imagery. Since the first U.S. national live television broadcast took place in 1951, the global hegemonic dominance of the television media industry has strengthened as Western media companies have consolidated and captured the lion’s share of international markets. For example, Rupert Murdoch’s News Corp. broadcasts to people in over thirty Asian countries, “from the Western Pacific to the Persian Gulf.” The U.S. television media industry’s overseas impact has been enhanced in recent years through the use of “direct broadcasting satellite (DBS) networks in Europe, Asia, and Latin America.” This consolidation has limited the amount of alternative inscriptions of memorialized information available to individuals and the public. Audiences’ memories of 9/11 were influenced and mediated by the hegemonic media empires through the monopoly of digital images that were chosen for global distribution to memorialize 9/11 on a global scale. This limited people from freely forming their individual and collective memories of the event.

PARADIGM SHIFT AND 9/11

The tragic events on 9/11 exemplify the paradigm shift in personal and collective memory formation. The shift from analogue, lossy media to digital, lossless media changed the way people experience and mediate memories. The digital media technologies used to record and recall the events on 9/11 are lossless and stand in stark contrast to older, lossy analogue media technology used to record other important events such as the 1986 space shuttle Challenger disaster. The representations of the events of 9/11 are also more instantly accessible to influence collective memories than they were in 2001. Digital media technologies that were unavailable a decade ago connect millions of people with each other’s memories of important events in real time increasing access to individual and collective memories. The global accessibility of high-speed Internet connections and mobile media networks has enabled individuals separated by great geographic distances to access individual’s representations of events and memories in real time. This instantaneous access to individual memory is shaping a collective global memory that is constantly updating and expanding.

The media coverage of Osama Bin Laden’s death in 2011 is an example of the way digital media technologies that were unavailable a decade ago are now used to augment a collective global memory that is constantly updating and expanding. Osama Bin Laden’s death saturated media beyond traditional forms of print, television, and radio broadcast communications. News of Bin Laden’s death immediately inundated social media and mobile media platforms including Twitter and Facebook as well as broadly accessible websites formatted for mobile phones. In fact, the White House announced Osama Bin Laden’s death with a tweet and a Facebook post immediately after President Obama’s first formal announcement of the event in his television address.
The immediate access to real-time information is a further move in terms of the paradigm shift in the way real-time memories are processed using digital media technology. Digital media technology and social and mobile media platforms enable participants to experience events that inform their memories in real time on a scale never before possible.

**IMPACT OF LOSSLESS DIGITAL MEDIA ON DIGITAL MEDIA ARTWORK**

Because lossless digital media does not degrade over time, it is a good choice of medium for artists who create memory work designed for audience’s ease of access, repeated screenings and permanence. When artists use lossless digital media to create projects that mediate memories online, the public has the opportunity to gain access to the artists’ lossless imagery; this imagery does not degrade over time regardless of the amount of times the public accesses and screens the memory artwork. Furthermore, digital media is an economical choice of media for artists who inscribe and disseminate memory work because it is easy to format for and globally disseminate over the Internet. By using both digital media and the Internet together, artists provide the public with the opportunity to gain wide-ranging accessibility to artists’ lossless memory works for personal and collective memory formation.

Providing easily accessible sites for digital media memory work, for example making memory projects available online for screening, enables the members of the public to use their computers, smartphones, and tablets as extensions of themselves to connect with artists’ memory work. Marshal McLuhan believed that media technology should be easily accessible to people and that media technology was a natural extension of one’s self. As an extension of one’s self, McLuhan asserted that media technology opened doors to providing greater access to information. The organic connections between individuals and media technology are important components of mediating digital media memory works that are easily accessible to people.

Digital media artists can use these liminal, online artistic spaces as sites of resistance to challenge the hegemonic media industry’s control over the memorialized depiction and metanarrative of historical events. These online artistic spaces are liminal because they are situated at the border and outside the mainstream of the media industry’s representation of information; the artistic spaces offer an alternative reading of important historical events to counter the hegemonic media industry’s collections of memorialized information and encourage the public to resist the repetitious broadcasting of media industry controlled information. By using the same online, lossless digital media delivery mechanisms as the hegemonic mass media industry and providing an alternative perspective to those of the hegemonic mass media, these artworks occupy liminal sites of resistance to both the hegemonic mass media industry’s dominant use of lossless media and its hegemonic media presence. 

**HEADING: SITE OF RESISTANCE: REBIRTH**

**Artistic Reflection and Digital Media Artwork: Rebirth**

Applying the thesis that media technology can be viewed as an extension of man, I use the Internet to combine audio-visual with textual memory work as easily accessible sites of resistance against the hegemonic corporate media industry’s constructed memories of 9/11. They comprise an alternative mediated memory archive that is not under the influence of or funded by the corporate media industry. The Rebirth online artistic space does not use media industry’s produced and overexposed audio-visual work from 9/11. This is an important form of resistance to the hegemonic media archives and influence over individual and collective memory construction. My digital animation, Rebirth, associated images, personal textual narrative, and website offer liminal spaces with alternative, lossless digital imagery from a non-corporate owned and manufactured perspective. The online Rebirth artistic space provides the public with an alternative, abstract representation of the events of 9/11 that challenges the corporate, media industry’s perspective and control over the media and memories of the tragic event.

Rebirth is a liminal site of resistance because it encourages the public to resist the dominant media industry’s metanarrative and representation of the tragic events of 9/11 to inform their personal and collective memories. Rebirth offers the public an alternative perspective of the tragic events of 9/11 countering the hegemonic media industry’s collections of memorialized information. The online platform provides a site of resistance supplying the public with an alternative perspective to the media industry’s monolithic voice, calling, and adding my personal memories of the tragic events of 9/11 to the collective memory. For example, I used digital media art technology to create Rebirth, an abstract 3D computer animation examining my memory of the fall of the World Trade Center in New York City on 9/11. Rebirth’s lossless digital imagery and accompanying narrative are freely accessible to the global public on my website.

My digital animation, Rebirth, associated images, website, and narrative work are sites of resistance against the hegemonic corporate media industry’s constructed memories of 9/11. They comprise an alternative mediated memory archive that is not under the influence of or funded by the corporate media industry. The animation is representative of my experiences on 9/11 as I watched the tragic events unfold outside my apartment in lower Manhattan while simultaneously watching the events digitally broadcast to my television in real time. Viewing the abstract representation of this event in Rebirth opens up a dialogue between individual and collective memories of 9/11 and my memory and representation of the fall of the World Trade Center in New York City on 9/11.
Figure 2. Sequence of stills from Rebirth, 2006, by David R. Burns. © David R. Burns, 2006. Still image from 3D computer animation. Used with permission.
ARTISTIC REFLECTION AND PERSONAL NARRATIVE: REBIRTH

In addition to the abstract 3D computer animation, my Rebirth memory work includes the below personal textual narrative of my experience on 9/11. The personal narrative that follows was used to inform my abstract animation and digital media artwork within the context of my experience of living in New York City on 9/11. Providing my textual narrative in this article and including the link to my abstract 3D computer animation, Rebirth, offers audiences a holistic approach to mediating my memory of 9/11. This holistic approach uses textual and visual representations of my memory of 9/11 and provides the public with broader access to my memories across a variety of media. For example, the lossy analogue media of the printed text version of my memory work, the digital, lossless media version of my animation, and the written narrative viewed online are publicly accessible for the creation of personal and collective memories. The textual personal narrative of my memory work includes the below personal narrative of my memory of the events of 9/11 follows:

Personal Narrative 9/11: Rebirth

Early on the morning of September 11th 2001, this author was still asleep in his apartment in downtown Manhattan until being awoken by a phone call. I can still remember the phone conversation that jarred me out of bed. “Hello? What do you mean the World Trade Center was attacked? Stop joking around. I am going back to bed! Turn on the television? This is not funny.” To verify that this was just a bad joke my friend was playing on me, I turned on the television to watch the news. There it was, playing back over and over again: a plane crashing into 1 World Trade Center. In disbelief or shock maybe, I opened my window to see downtown and stuck in front of the television set that had by now begun to billow rapidly. This event was real! I was simultaneously watching 1 World Trade Center burning both on television and out of my living room window.

The feeling of watching in real time as the digitally represented World Trade Center and the organic World Trade Center burned on both the television set and outside my living room window seemed to put my immediate world on public display, as if I was now a part of the digital media being internationally broadcast across the world. I hadn’t realized yet just how powerful this connection between myself and society was in the context of what I call, a “memory footprint.” Instinctively, I grabbed my digital video camera and headed for the roof. I wasn’t sure why I was doing this; I just knew that something tremendous was underway that would be deciphered later.

Once on the rooftop, I used my natural, organic eyes to view the natural images of 1 and 2 World Trade Centers billowing smoke. These images were burned in real time into my organic neuronal memory systems. Not fully comprehending what was unfolding before my natural input devices, I switched over to taping the event using a digital video recorder. Looking through the viewfinder, it became difficult for me to discern what was real and what was my memory of the earlier television broadcast. The early morning 9/11 TV broadcast images that I viewed in my living room appeared more loosely edited and composed than the images that were broadcast later that day. The early, shaky broadcast images seemed to mirror what I observed through my handheld video camera in real time, but, as the day wore on, the lossless digital images broadcast to my TV appeared increasingly constructed, cinematic, and hyperreal. The well-composed shots broadcast to my TV blurred together with my shaky, more loosely composed handheld video camera imagery of the fall of the WTC in my mind’s eye. The act of alternating between looking through my camera’s digital viewfinder to compose my shots of the event and viewing the professionally-edited shots broadcast to my TV blurred the boundaries of the representation of the real event on TV and my experience of the event in real time at the location of the event. The feeling was very disorienting. I had not yet processed the earlier televised images of the plane slamming into 1 World Trade Center. Now as I looked through my digital video recorder’s viewfinder, I found myself looking at a composition built of digital bits similar to the memory I had of the images that were represented as color pixels on television. After staring through the digital viewfinder for a few minutes, my earlier memories that were recorded onto my natural storage device, my brain, began to be processed by my consciousness. The realization that the memory of the event I had experienced was, in fact, still taking shape and form in real time was so intense and confusing that I had to pause the digital recording and look away from the camera. I was caught somehow in a real-time memory of great destruction, but that memory was not able to pass. The memory of watching the destruction of 1 World Trade Center on television now merged into the real-time representation and memory of the destruction of both towers, 1 World Trade Center and 2 World Trade Center, that were in the process of being written to my analogue neuronal memory systems.

I was processing with my natural eyes and brain and simultaneously recording discretely on digital videotape. What was a natural observation? What part of my understanding came from the digital representation I had just seen? Confused, I looked through the digital viewfinder again. I needed to confirm that I was in fact physically and mentally cognizant, that I was indeed on the roof of my apartment building experiencing and memorializing a real-time event. I needed to make sure that I was not trapped in the confines of my living room and stuck in front of the television set unable to differentiate what was real, what was recorded, and what was being digitally broadcast to society. I can only describe the feelings I had and the environment around me as chaos. It was as if I was trapped in a horrible film and everything that I watched through the camera’s viewfinder made me a spectator of this horrible film. As I peered through my camera composing my shots, I found that my rooftop vantage point gave me a longshot cinematic perspective. The tragic events unfolding before my eyes were beyond belief; at times, I felt lost in the rectilinear composition of the viewfinder and I would pull away from the camera, not sure if I could trust what my eyes revealed. Through my handheld digital video camera, I watched the World Trade Center buildings burn with people inside their doors and people falling outside their windows. I lost myself watching the darkness, dust, and destruction juxtaposed on the canvas of clear, blue skies and brilliant sunlight filtering through the city.

Snap! I became aware of the real-time events unfolding again. Other people on the roof were shouting as something fell in the distance and more smoke billowed up into the sky. I turned and left the rooftop. Not sure what I was experiencing, I needed to sit down and process the events that had just unfolded before me. Later, I returned to the rooftop. There were many more people there now and we were all witnessing the same event. However, something had changed. The skyline looked emptier. There was more smoke now and it was coming from the smaller buildings that surrounded 1 and 2 World Trade Centers. Again, on the digital video recorder... An almost identical sequence of images to what I had seen earlier when I World Trade Center and 2 World Trade Centers were burning was now being repeated multiple times as the rest of the World Trade Center network of buildings, World Trade Centers 3 through to 7 began to plume smoke.

I wonder now, looking back at the time of that event and the several days following it, if the memories that I recall are all my own. An unanswered question remains: How much have my experiences of the event and memories of that morning recorded by my organic, analogue memory banks been influenced by my
memories of the digital, lossless images broadcast by the media industry on television repeatedly hour after hour for days and weeks on end.

CONCLUSION AND FURTHER THOUGHTS: REBIRTH

The more than twelve years that have passed since 9/11 offer a unique opportunity to reflect on what can happen when a highly personal and collective event is recorded to the neuronal and digital memory systems. It has been over a decade since I put my 9/11 digital videotape back in its case, but my organic memories have not yet faded enough for me to feel comfortable watching the digital, and therefore lossless, representation of that day’s events. Rather than screen the animation, I hope viewers will form personal and collective memories watching the digital, lossless images broadcast by CNN, “America Remembers,” (Toronto: Hartland Adams Innis, 1972), 139.

3. Ibid., 139.

4. Ibid., 139.


6. Ibid., 273.


8. Ibid., 139.

9. Ibid., 139.


12. Ibid., 139.

13. Ibid., 139.

14. Ibid., 139.


20. Ibid., 664.


24. Ibid., 273.


26. Ibid., 28-30.


31. Ibid., 64.


37. Ibid., 64.

38. Ibid., 64.

39. Ibid., 64.

40. Ibid., 64.

41. Ibid., 64.

42. Ibid., 64.


47. Ibid., 64.

48. Ibid., 64.

49. Ibid., 64.
MoCC Pavilion

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