



LEONARDO ELECTRONIC ALMANAC

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EDITORIAL MANAGERS SHEENA CALVERT & ÖZDEN ŞAHİN

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.



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#### LEA PUBLISHING & SUBSCRIPTION INFORMATION

##### Editor in Chief

Lanfranco Aceti lanfranco.aceti@leoalmanac.org

##### Co-Editor

Özden Şahin ozden.sahin@leoalmanac.org

##### Managing Editor

John Francescutti john.francescutti@leoalmanac.org

##### Art Director

Deniz Cem Önduygu deniz.onduygu@leoalmanac.org

##### Editorial Board

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##### Cover

Deniz Cem Önduygu

##### Editorial Address

Leonardo Electronic Almanac

Sabancı University, Orhanlı – Tuzla, 34956

Istanbul, Turkey

##### Email

info@leoalmanac.org

##### Web

- » [www.leoalmanac.org](http://www.leoalmanac.org)
- » [www.twitter.com/LEA\\_twitts](http://www.twitter.com/LEA_twitts)
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# LEONARDO ELECTRONIC ALMANAC, VOLUME 19 ISSUE 4

# Without Sin: Freedom and Taboo in Digital Media

VOLUME EDITORS

**LANFRANCO ACETI & DONNA LEISHMAN**

EDITORIAL MANAGERS

**SHEENA CALVERT & ÖZDEN ŞAHİN**

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NSA: No Speaking Aloud, Anonymous, 2013.

# Post-Society: Data Capture and Erasure One Click at a Time

*"Oh, in the name of God! Now I know what it feels like to be God!"*

*Frankenstein (1931)*

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 with digital media is the level of ignorance that people continue to have about how much everyone else knows or can know about 'you.' If only people were willing to pay someone, or to spend a bit of time searching through digital data 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 characterized by unsolved ethical issues since they are a 'selling' 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 not understand what has happened politically and technologically in the 21st century one must have been living on the moon. Perhaps it is an act or a pantomime staged for the benefit of those 'common' people that need to continue living with the strong

belief or faith that their lives are in good hands, that of the state.

Nevertheless it speaks of a 'madness' of the politician as a category. A madness characterized by an alienation from the rest of society that takes the form of isolation. This isolation is, in Foucauldian terms, none other than the enforcement of a voluntary seclusion in the prison and the mad house.

The prisons within which the military, corporate, financial and political worlds have shut themselves in speak increasingly of paranoia and fear. As such the voluntary prison within which they have sought refuge speaks more and more the confused language that one may have imagined to hear from the *Stultifera Navis*.

Paranoia, narcissism and omnipotence, all belong to the delirium of the sociopaths, who push towards the horizon, following the trajectory set by the 'deranged minds.'

*It is for the other world that the madman sets sail in his fools' boat; it is from the other world that he comes when he disembarks.*

This otherworldliness – this being an alien from another 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

*Stultifera Navis* towards its destiny inexorably, bringing all others with them.

Having segregated themselves in a prison of their own doing, the politicians look at all others as being part of a large mad house. It is from the upper deck of a gilded prison that politicians stir the masses in the lower decks into a frenzy of fear and obedience.

*Why should it be in this discourse, whose forms we have seen 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 merrily 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, deprived of ethical concerns and rooted within perceptions 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 consequence 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.

In order to discuss the present post-societal condition, one would need first to analyze the cultural disregard that people have, or perhaps have acquired, for their personal data and the increasing lack of participation in the alteration of the frameworks set for post-data.

This disregard for personal data is part of cultural forms of concession and contracting that are determined and shaped not by rights but through the mass loss of a few rights in exchange for a) participation in a product as early adopters (Google), b) for design status and appearance (Apple), c) social conventions and entertainment (Facebook) and (Twitter).

Big data offers an insight into the problem of big losses if a catastrophe, accidental or intentional, should ever strike big databases. The right of ownership of the 'real object' that existed in the data-cloud will become the new arena of post-data conflict. In this context of loss, if the crisis of the big banks has demonstrated anything, citizens will bear the brunt of the losses that will be spread iniquitously through 'everyone else.'

The problem is therefore characterized by multiple levels of complexity that can overall be referred to as a general problem of ethics of data, interpreted as the ethical collection and usage of massive amounts of data. Also the ethical issues of post-data and their technologies has to be linked to a psychological understanding of the role that individuals play within society, both singularly and collectively through the use of media that engender new behavioral social systems through the access and usage of big data as sources of information.

Both Prof. Johnny Golding and Prof. Richard Gere present in this collection of essays two perspectives that, by looking at taboos and the sinful nature of technology, demand from the reader a reflection on

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 citizen; 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.

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#### Lanfranco Aceti

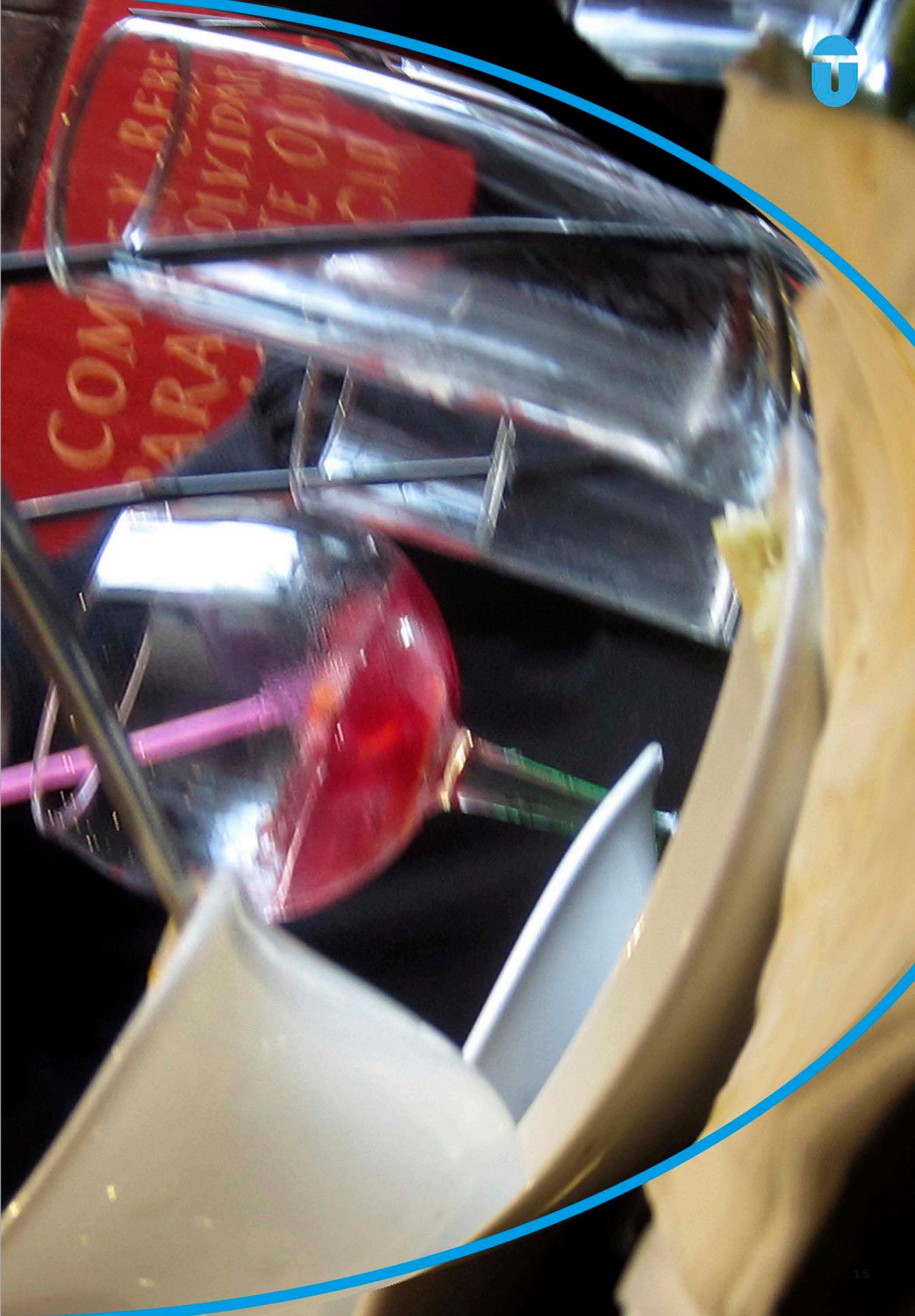
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1. Clive R. Boddy, "The Corporate Psychopaths Theory of the Global Financial Crisis," *Journal of Business Ethics* 102, no. 2 (2011): 255.
  2. Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason*, trans. Richard Howard (London: Routledge, 2001), 11.
  3. *Ibid.*, 101.



NSA: No Speaking Aloud, Anonymous, 2013.



# 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 boarder question of the moral economy of human activity and how this translates (or not) within digital media. The original panelists (some of whom have contributed to the 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 jurisdiction of these emergent issues. Whilst this edition is not (and could not be) a unified survey of human activity and digital media; 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.

*Human relationships are rich and they're messy and they're demanding. And we clean them up with technology. Texting, email, posting, all of these things let us present the self, as we want to be. We get to edit, and that means we get to delete, and that means we get to retouch, the face, the voice, the flesh, the body – not too little, not too much, just right.* <sup>1</sup>

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. Zygmunt Bauman in his essay “From Pilgrim to Tourist – or a Short History of Identity” suggests that:

*One thinks of identity whenever one is not sure if where one belongs; that is, one is not sure how to place oneself among the evident variety if behavioral styles and patterns, and how to make sure that people would accept this placement as right and proper, so that both sides would know how to go on in each other's presence. 'Identity' is the name given to the escape sought from that uncertainty.* <sup>2</sup>

Our ‘post-social’ context where increased communication, travel and migration bought about by technological advances has only multiplied Bauman's conditions of uncertainty. Whilst there may be aesthetic tropes within social media, there is no universally accepted

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” <sup>3</sup> 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 commonalties. 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 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 XIII of the *Leviathan*) <sup>4</sup>

Deborah Swack's “FEELTRACE and the Emotions (after Charles Darwin),” Johnny Golding's “Ana-Materialism & The Pineal Eye: Becoming Mouth-Breast” and Kriss 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. <sup>5</sup> 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 transgress 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. <sup>6</sup> Sandra Wilson and Lila Gomez in their 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 treaty 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 and or unjust. <sup>7</sup> 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.

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 commodious living such as Bauman's idea that something is 'right and proper' is under challenge by the individualized complexity thrown up from our disinhibited minds, which can result in benign or toxic or 'other' behaviors depending on our personality's variables.<sup>7</sup> 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 justice as much as its dark, racist, sexist, homophobic and predatory qualities.*

### Perception

Traditionally good cognition of identity/society/relationships (networks and procedures) was achieved through a mix of social conditioning and astute mindfulness. 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 discombobulating feeling of being: "part of the digital 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 prominence (and shortcomings) of our ocular-centric perspective in his discussion of "Alterity, Pornography,

and the Divine" and cites Martin Jay's essay "Scopic Regimes of Modernity"<sup>8</sup> which in turn explores a variety of significant core concepts of modernity where vision and knowledge meet and influence one another. Gere/Jay's line of references resurrect for the reader Michel Foucault's notion of the "Panopticon" (where surveillance is diffused as a principle of social organization),<sup>9</sup> Guy DeDord's *The Society of the Spectacle* i.e. "All that once was directly lived has become mere representation"<sup>10</sup> and Richard Rorty's *Philosophy and the Mirror of Nature* (published in 1979).<sup>11</sup> 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 'looking' and data collection is also a feature of Deborah Burns's paper "Differential Surveillance of Students: Surveillance/Sousveillance Art as Opportunities for Reform" in which Burns asks questions of the higher education system and its complicity in the further erosion of student privacy. Burn's interest in accountability 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<sup>12</sup>*

In panoptic diffusion the knowingness of the subject is key – as we move towards naturalization of surveillance and data capture through mass digitization such power relationships change. This is a concern mirrored 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."<sup>13</sup> Smita Kheria's "Copyright and Digital Art practice: The 'Schizophrenic' Position of the Digital Artist" and Alana Kushnir's "When Curating Meets Piracy: Rehashing the History of Unauthorised 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 occurred 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"<sup>14</sup> 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 recipient'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 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.<sup>15</sup>*

Underneath these issues of perception / presence / identity / is a change or at least a blurring in our political (and personal) agency. Don Ritter'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."<sup>16</sup> 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 banality 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<sup>17</sup> and an unknown/undeclared 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 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 edition. Many of the authors recognize a requirement for fluidity as a reaction to the pace of change. Geographer David Harvey uses the term "space-time compression" to refer to "processes that . . . revolutionize the objective qualities of space and time."<sup>18</sup> 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"<sup>19</sup> whilst Golding in her paper reminds us that Hobbes also asserted that "[f]or seeing life is but a motion of Limbs"<sup>20</sup> 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 repetition (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's is a bewildering 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."<sup>21</sup> 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 externalize a host of fears and reduce negative emotions in the face of uncertainty. The imperative to create some strategies to make sense of some of these pressing issues is something that I explore in my own contribution in which I offer the new term *Precarious Design* – as a category of contemporary practice that is emerging from the design community. Precarious Design encompasses a set of practices that by expressing current and near future scenarios are well positioned to probe deeper and tease out important underlying societal assumptions to attain understanding or control in our context of sustained cultural and technological change.

### 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).*

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 about the future nature of life for humans and "the embodiment and containment of the self and its symbiotic integration and enhancement with technology and machines." Whilst Wilson and Gomez's go on to discuss *Biopresence* by Shiho Fukuhara and Georg Tremmel – a project that provocatively "creates Human DNA trees by transcoding the essence of a human being within the DNA of a tree in order to create 'Living Memorials' or 'Transgenic Tombstones'"<sup>22</sup> – as an example of a manifest situation that still yields a (rare) feeling of transgression into the taboo.

### 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,"<sup>23</sup> 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? It 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.*<sup>24</sup>

There now is no culturally specific normal 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.

### Donna Leishman

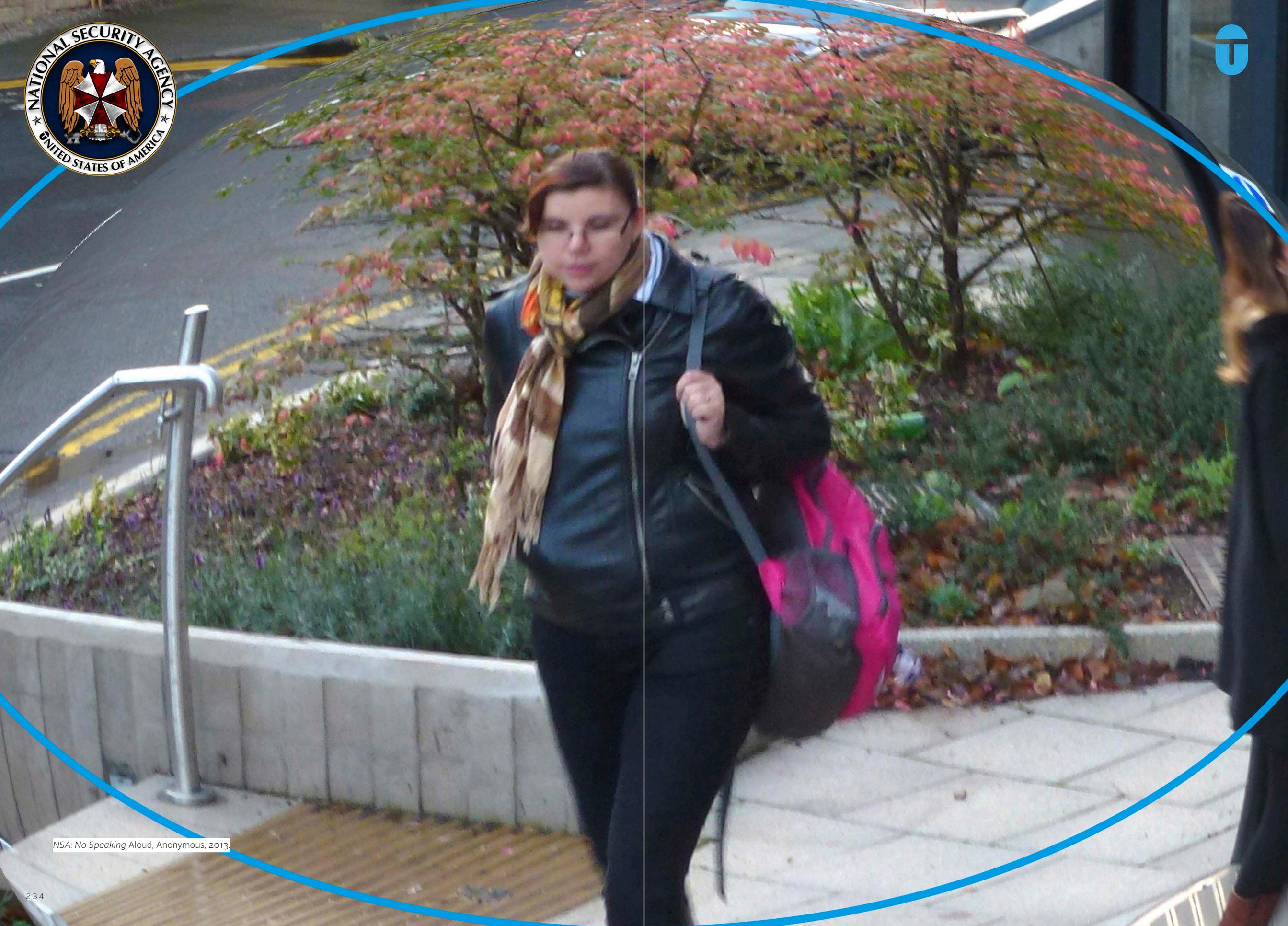
*Duncan of Jordanstone College of Art & Design  
University of Dundee, UK  
d.leishman@dundee.ac.uk  
<http://www.gamhoover.com>*

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NSA: No Speaking Aloud, Anonymous, 2013.



NSA: No Speaking Aloud, Anonymous, 2013.

# THE PREMEDIATION OF IDENTITY MANAGEMENT IN ART & DESIGN

*New Model Cyborgs – Organic & Digital*

by

**Sandra Wilson &  
Lilia Gomez Flores**

SANDRA WILSON

Senior Lecturer Design & Craft (Jewellery & Metal Design)

Duncan of Jordanstone College of Art & Design  
University of Dundee

s.z.wilson@dundee.ac.uk

<http://www.imprintsfutures.org>

LILIA GOMEZ FLORES

Research Assistant, Imprints Project

Duncan of Jordanstone College of Art & Design  
University of Dundee

l.gomezflores@dundee.ac.uk

## INTRODUCTION

We are now entering a phase of “persistent identity”<sup>4</sup> where our identity is always ‘on.’ When we withdraw money from a machine outside the bank, as CCTV monitors our movements on the street as we move about our daily business, or as we log on to a computer to conduct our banking or buy goods and services, our identity is now central to giving us access to a range of benefits. Hence, increasingly we need to ‘manage’ our identity.

Identity management (IM) is an expression that has only been found in the academic literature since approximately 2004 and yet it is a concept that has slowly been infiltrating our lives and our daily lived-experience since 2001; post 9/11, governments and large corporations place a stronger emphasis on security. This, together with the fact that the majority of our interactions are now conducted remotely online via a computer or smart device means that various forms of identity management have developed, from passwords and pin codes, to tokens such as driving licenses and wearable tokens, to more recent innovations in biometrics, such as finger printing, retina scans and face recognition.

## ABSTRACT

*Post 9/11, governments and large corporations are placing a stronger emphasis on security. This, together with the fact that the majority of our interactions are now conducted remotely online via a computer or smart device, means that various forms of identity management have developed; passwords, wearable tokens and more recent innovations in biometrics such as face recognition. These forms of identity management are also shaping our concept of self.*

*Through Richard Grusin’s lens of “premediation,”<sup>1</sup> in which multiple futures are alive in the present, we are able to identify the taboos of identity management and discuss how art and design practices are part of this wider media phenomenon. Within scenarios of identity management 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.*

*We discuss the tensions between technology and the body and how many art projects are raising awareness of the loss of anonymity and privacy through the use of masks and other organic materials. We conclude that we are all becoming “new model cyborgs”<sup>2</sup> – a mixture of the organic and the digital in a continual process of engagement, separation and re-engagement between our bodies and technology. Finally, supporting this paper we created an interactive presentation where people can give their opinion, answering and posing questions, about current technologies and how they work with identity management.<sup>3</sup>*

As part of the *Imprints* research project<sup>5</sup> (funded by the UK Engineering & Physical Sciences Research Council) that aims to identify the public’s responses to future IM practices and technologies, we have conducted a review of IM scenarios in art & design to identify the taboos and desires associated with them. For example a taboo is the extension of some of these IM databases into other areas of life, such as face recognition technology being used to determine sexuality.<sup>6</sup>

In the aftermath of 9/11, Grusin observed a new media logic emerging in the US. He called it “premediation” and explained that it:

*works to prevent citizens of the global media sphere from experiencing again the kind of systematic or traumatic shock produced by the events of 9/11 by perpetuating an almost constant, low level of fear or anxiety about another terrorist attack.<sup>7</sup>*

Premediation will be used as a valuable lens to explore different scenarios and taboos in IM. According to Grusin, premediation can refer to:

1. Future media forms and technologies (we will explore a range of possible future scenarios that may or may not emerge in order to be prepared and take action before the future becomes the present).
2. Future events and affective states (we will analyse how these scenarios become either a taboo or desire experience).<sup>8</sup>

Our key question is: in what ways are future IM practices and technologies premediated within art and design? By using the concept of premediation, we will also be able to analyze and discuss the taboos associated with IM.

Exploring and expressing concepts of identity has always been central to the work of artists and designers through, for example, portrait painting, photography, film and personal items such as jewellery and fashion. However, this is the first systematic study of the ways in which art and design is in fact premediating future identity management technologies and practices. It is important to establish that premediating is not the same as predicting, as premediating explores and represents many future possibilities that may or may not happen and predicting is used to foretell usually specifying only one future direction.

## IDENTITY MANAGEMENT

It is useful first, however, to consider some definitions in the field of IM. Authentication is the process of positively verifying the identity of a user, device, or other entity in a computer system, often as a prerequisite to allowing access to resources in the system.<sup>9</sup> Authen-

tication used to be a straightforward process based on direct contact and recognizing someone by visual appearance. As interactions have become increasingly remote, so identifying a person has become more complicated; it now involves the use of systems, devices and technologies to communicate who a person is, and to validate their identity (for example, through bank verification card readers).



**Figure 1.** A system to verify identity involving the use of cards and fingerprints. Photo by: Rachmaninoff. Used with permission via the Creative Commons Attribution-Share Alike 3.0 Unported license.

Identity Management (IM) is defined as the enrolment and subsequent verification (i.e. the decision made as a result of authentication) that gives individuals a trusted means to prove who they are to others.<sup>10</sup>

### Forms of IM

There are three main forms of IM, based on knowledge/memory, tokens, and body-related systems. Knowledge/memory forms include passwords and pin codes – single words, phrases or numbers that people have to remember and keep as a secret.<sup>11</sup> In 2011, the Daily Telegraph reported that the average person in the UK “needs to remember 10 individual

PINs or passwords a day.”<sup>12</sup> This is rapidly becoming a problem for most people, who are starting to use the same ID and password for all their services, making themselves easy targets for identity theft. Some IT professionals now refer to “password overload”<sup>13</sup> to label the anxiety and distress caused by this modern phenomena. In the future this knowledge/memory based form of IM may fade away, being replaced by others means.

A token is a physical, portable artifact that performs or aids authentication,<sup>14</sup> such as a passport, driving license, etc. This is an area that seems to be blending with other existing craft and technology and is expected to expand within the next few years as clothing and jewellery become augmented with embedded electronic and digital technology.

Body-based forms, or Biometrics, depend upon features measured from the human body that are distinguishing enough to be used for user authentication. Biometrics includes: fingerprints, eye, face, hand, voice, and signature, as well as other more obscure or futuristic metrics such as gait and smell.<sup>15</sup> It is also likely that in the future some of these forms will be used in conjunction with each other.

## METHOD

In order to look at how the field might be responding to this new area of IM, our first step was to search for art and design exhibitions and projects on or relevant to the topic since 2004. However, the temporary nature of exhibitions in museums and galleries led the team to look for records left on the Internet. This data gathering is gaining validity with traditional institutions such as the British Library, which is ‘harvesting’ billions of web pages, blogs and e-books in a bid to preserve the nation’s ‘digital memory.’ This suggests that Inter-

net searching is becoming a valid, recognized research tool.<sup>16</sup>

A major issue when searching the Internet for art and design projects related to identity is the strong association that identity has with branding and logotypes. IM is not a very common term and more often than not, the results coming back from different browsers were related to Corporate Identity Design. To overcome this problem, the search was conducted using less rigid, and apparently unrelated terms, such as technology and the body, biometrics, face recognition and wearable technologies.

Browsers such as pinterest.com and stumbleupon.com were used to explore art, design and technology categories. The fact that these browsers are visually-led, rather than based on a textual search platform, proved to be extremely useful, along with the categories and subcategories of their site maps. Websites dedicated to films and videos like vimeo.com and youtube.com were also used, to find art exhibitions that were filmed and to locate examples of designed products projected for the future. Social media was also used, and the team started to ‘follow,’ using Facebook and Twitter, those artists and designers whose work proved to be relevant for the research (for example, digital media artist Cornelia Sollfrank).

News channels with an online presence – such as BBC, ABC, FOX and NBC – proved to be very useful when reporting the latest developments in art, design and technology, and were full of visual and detailed information. And we discovered that there was a ‘snowball effect’ while looking for information on the Internet; once a project, an artist or a design studio was discovered, links or images within the original websites were used as ‘bridges’ to discover other artists/designers/organizations who were doing similar work exploring IM practices. The same happened in visual browsers,

social media and video search engines. Most of them are fed by people who organize and categorize their own data into folders and themes that made it easier for the team to follow in a 'connect the dots' way.

Films such as *Minority Report*,<sup>17</sup> *Surrogates*,<sup>18</sup> *Monsters Inc.*,<sup>19</sup> *Despicable Me*,<sup>20</sup> *The Incredibles*,<sup>21</sup> and TV shows such as *Identity*,<sup>22</sup> *Continuum*,<sup>23</sup> and *Catfish*,<sup>24</sup> to mention only a few of them, were analyzed from the perspective of how art and design objects are used to premediate the future, familiarizing audiences with artifacts and technological devices that will possibly be used for IM in the next few years. For example, the main character from the TV show *Continuum* is a law enforcer wearing a suit that allows her to be identified by her colleagues, but also to authenticate those around her, displaying personal information on the fabric of her suit and giving her the option to project it for more detailed viewing.

**Figure 2.** The use of an ID suit by the main character in the TV Show *Continuum* (2012-) allows her to ID herself and people around her. Photo by TVDB.com. Used with permission via the Creative Commons Attribution-Share Alike 3.0 Unported license.



### Remediation and Premediation

Richard Grusin and Jay Bolter defined "remediation" as "the double logic according to which media (particularly but not exclusively digital media) refashion prior media forms."<sup>25</sup> It is a way to recognize and even pay homage to a previous technology; Video Games, for example, 'borrowed' and refashioned cinematic formats to create personalized interactive movies, just as films previously 'borrowed' photography frame sets, which were themselves taken from the language of painting.

IM has also evolved the same way; forms of identification have been examples of remediation using the latest technologies available, from hand written and stamped documents, to photo ID to biometric authentication such as finger printing.

Grusin presents premediation as a consequence of what is happening in mass media after 9/11. Books,



**Figure 3.** One of the most popular forms of biometric identification is finger printing technology. Photo by: CPOA. Used with permission via the Creative Commons Attribution- Attribution-NoDerivs 2.0 Generic license.

films, Virtual Reality, Video Games, etc. are constantly premediating the future for the public; they present hypothetical scenarios of what may or may not happen, from different perspectives, to prepare people and tell them what to expect. They show them:

*a world in which the immediacy of the catastrophe, the immediacy of disaster, could not happen again-because it would always already have been premediated.. to see the future not as it emerges immediately into the present but before it ever happens.*<sup>26</sup>

### FUTURE MEDIA FORMS AND TECHNOLOGIES

#### Being 'Smart'

Among many possible futures being premediated, a dominant theme is that of being 'smart.' The smartphone has been with us now for a few years. It not only keeps the user connected at all times, but it also keeps track of his/her movements, location, activities and social and economic interactions. It is also a valuable token for identity management; smart phones can use different forms of identification from pin codes and passwords to face recognition software to give access to the user. This has become necessary due to the high demand for mobile services such as electronic banking, which require users to disclose sensitive and personal information. A survey of US adult smartphone owners found that 63% of female

respondents and 73% of male respondents don't go an hour without checking their mobiles.<sup>27</sup>

The mobile connectivity that mainly smartphones (but also tablets) offer brings to the table some concerns and taboos – for example, sharing too much information through 'life-logging,' which is largely done by posting a collection of tagged photos and videos to document and share a person's life. Mobile devices offer an excellent medium for life-logging, giving the opportunity to upload the posts into blogs and social media in real time. *TakeThisLollipop*<sup>28</sup> is an Internet application developed by Jason Zada that presents a taboo scenario of what may happen with all the personal information posted in a social network like Facebook. As a result of this concern, new apps are being developed to minimise the risks of sharing too much. Recently, *Snapchat*,<sup>29</sup> by Snapchat Inc. was launched, offering users the possibility to share messages and pictures for a pre-set time before it self-destructs, even notifying the user if the receiver took a screen shot of the message before its destruction.

A number of new smart materials that are emerging are also being applied to IM. We have already become familiar with smart cars fitted with satellite navigation and GPS tracking systems, but there are now cars that will authenticate the driver through the use of a smart seat that recognizes the driver's unique buttock print!<sup>30</sup> Other examples come from the home. In their video, *A Day Made of Glass*,<sup>31</sup> 'Gorilla Glass' by Corning presents a very sterile home inhabited by a happy nuclear professional family who are hyperconnected. In the Corning house lighting, temperature and entertainment will be all programmed to obey the owner's lifestyle and habits, and smart mirrors in the bathroom give a daily update on the user's health. All of this is happening as the smart objects automatically recognize and identify each of the members of a household or office.

Another example of this is the British TV show *Black Mirror*; <sup>32</sup> the episode '15 Million Merits' shows a future where the places we live, work and spend leisure time is surrounded by glass displays.

Other new smart materials being considered for use within IM include: *Graphene*, <sup>33</sup> a flexible material that enables your alarm clock to transform into your watch, transform into a tablet and transform into a touch screen; Nokia has patented tattoos made with electromagnetic ink <sup>34</sup> that will be linked to mobile phones; and electronic tattoos for medical purposes are already being tested in the University of Illinois. <sup>35</sup>

A very recent development in being 'smart' is the extension of this concept to clothing and jewellery. In late 2012 we witnessed the launch of the first ever *twitter dress* <sup>36</sup> modelled by Nicole Scherzinger at the launch of 4G in the UK. The gown was created by leading interactive fashion design agency Cute Circuit, whose clients include celebrities such as U2 and Katy Perry. Cute Circuit describe themselves as "future fashion now" <sup>37</sup> and pioneers in the field of wearable technologies through the use of smart textiles and microelectronics.

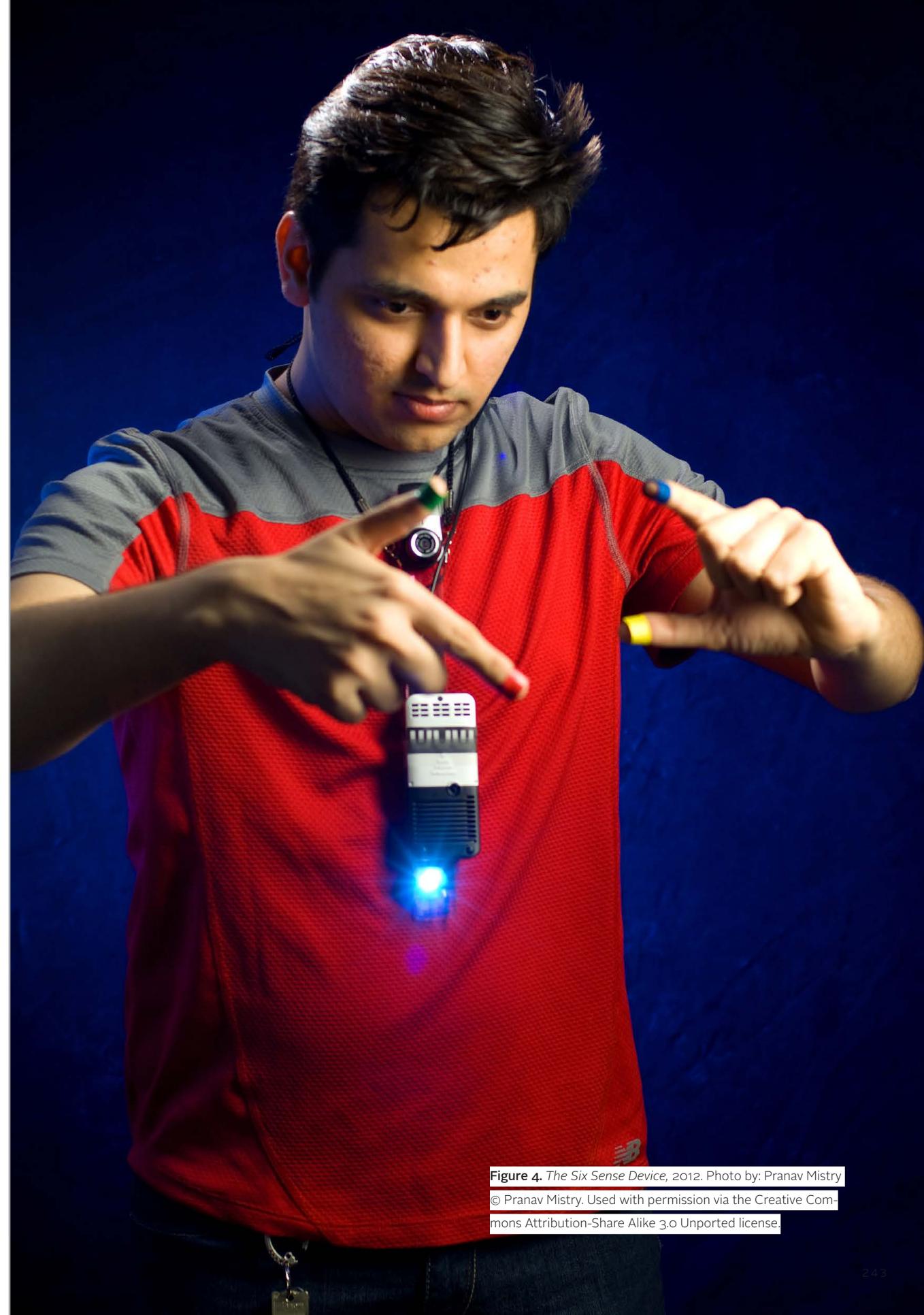
A further example is *Ping: A Social Networking Garment*, developed by Electric Foxy. The garment connects wirelessly to your Facebook profile and is operated by natural gestures associated with the garment, such as lifting the hood up, tying a bow or simply moving. The project informs us that:

*rather than simply attaching technology to clothing, the project investigates garments that have electronics built directly into them resulting in a new aesthetic of form and behavior that becomes a core part of our expression, our identity, and our individuality.* <sup>38</sup>

In the last few years, many websites have begun to incorporate a plug-in that allows users to register using their Facebook account; essentially the intent is to make their Facebook identity work as a passport to the web. One username, one password, web-wide access, this matches Facebook's co-founder Mark Zuckerberg's vision to build "toward a Web where the default is social, every application and product will be designed from the ground up to use one real identity." <sup>39</sup> This vision seems to become a reality that is expanding beyond the virtual world into the physical world through wearable technologies incorporating social networks. *The Printing Dress* developed and defined by Microsoft Research is:

*an artistic piece that explores the notion of wearable text and its potential impact on the future of fashion, as well as our social identity. Built almost entirely of paper, the dress enables the wearer to enter 'thoughts' on to its fabric and wear them as public art.* <sup>40</sup>

Another wearable technology is the *SixthSense* device <sup>41</sup> developed at the MIT Media Lab's new Fluid Interfaces Group, led by Pattie Maes and spearheaded by Pranav Mistry. The wearable device, made up of a camera, a mirror and a projector, is worn around the neck. The device is an example of the ways in which the digital is becoming physical as it enables walls, tables, and so on to display and interact with digital data. For example, photographs that can be projected onto a wall can then be manipulated on the wall by the use of colored finger caps that recognize the gestures of the operator (hence the reference to "Imagine Minority Report and then some" <sup>42</sup>). Details of how to create your own sixth sense device have been made available through open source online. The MIT team is currently exploring a variety of ways that the device can be used, including the potential to project online data held on someone's identity onto that individuals'



**Figure 4.** *The Six Sense Device*, 2012. Photo by: Pranav Mistry © Pranav Mistry. Used with permission via the Creative Commons Attribution-Share Alike 3.0 Unported license.

body. Pattie Maes herself has suggested that this is perhaps a more controversial use of the technology, due to the intimate level of interaction the device allows to users displaying personal information found in blogs, social networks or databases such as those from banks, institutions or universities.

Wearable technologies are closely related to wearable computers and to ubiquitous computing. The aim is to seamlessly interweave technology into people's everyday lifestyle and into their bodies and personal space. So far wearable technologies for IM have gone the full spectrum between taboo and desirable user experience. Most of it depends on the context, the demographics of users and the social implications associated with objects. A good example of a fun, desirable, apparently seamless experience is *Rumbatime* watches,<sup>43</sup> a fashionable collection of watches designed using an RFID (Radio Frequency Identification) tag specifically designed for people with a very active lifestyle such as surfers, runners, clubbers, etc. The integrated tag can be loaded with credit/debit card information to be used with contactless payment technology. The user will create an online ID and will validate it using credit/debit card details, in turn not having to worry about carrying a bag, purse or wallet, and then enjoying the freedom of pursuing their favorite sporting activity.

In this example, personal hobbies and interests are prioritized over simply being a consumer. Elsewhere the Google ring is borne of convenience: one piece of jewellery to hold all your passwords.<sup>44</sup> The UK designer Dougie Kinnear has created jewellery with health in mind: his *Emergency Medical Alert*<sup>45</sup> rings and necklaces hold RFID chips with emergency health information that can be scanned by paramedics.

Against the backdrop of such developments, examples of critical design have become increasingly common.

According to the design studio Dunne & Raby:

*As biotech moves out of the laboratory into the marketplace, there is a need now, more than ever, for a form of design, let's call it critical design, that questions the cultural, social and ethical implications of emerging technologies. A form of design that can help us to define the most desirable futures, and avoid the least desirable.*<sup>46</sup>

Dunne & Raby explore ideas of self, identity, genetic identity and consumer eugenics and they suggest their design scenarios are like "props for non-existent films." They provide an example of a critical design project titled *Biopresence*,<sup>47</sup> by Shiho Fukuhara and Georg Tremmel that explores what would happen if genetic culture fully integrated our imaginations and we began to think of our bodies less as stuff, matter, flesh and more as information, data, DNA. In particular this considers the impact this would have on burial rituals and ideas for a business that would embed human DNA in a living tree without affecting the existing organism. Public debate has centered on "if one of their living memorials bore fruit would eating it be a form of cannibalism?"<sup>48</sup>

Similarly, in a dedicated 'far-future' research initiative, Philips design probes track trends and developments that may ultimately evolve into mainstream issues. Their probe *SKIN:tattoo* enables the human body to be explored as a platform for electronics and interactive skin technology. Stimulated by touch, an Electronic Tattoo traverses across the landscape of body, navigated by two lovers and their desire for each other. Interestingly, Philips uses the language of Pre-mediation in its description of the prototype;

*SKIN:tattoo is a Probe, a far-future design concept. It is not intended as a production prototype nor will it be sold as a Philips product. Like past Probe*

*design concepts that have stimulated discussion around a range of issues, this concept is testing a possible future – not prescribing one.*<sup>49</sup>

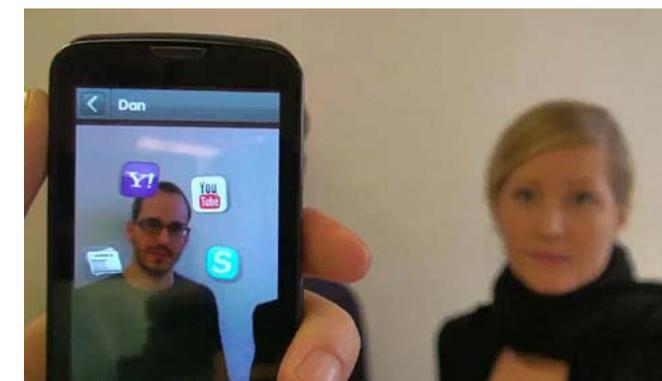
These critical design projects enable a wider public to engage with a range of possible futures and provide opportunities for the public and media alike to premeditate the future.

#### FUTURE EVENTS AND AFFECTIVE STATES

The closer devices and technologies get to the human body, the stronger and more polemical are the reactions they appear to generate. An example of this is the use of RFID microchips implanted within the body, storing all the personal information of the wearer for IM. It applies the same logic as animal microchipping: the chips, the size of a rice grain, are injected in a fleshy part of the body and can be read by RFID readers to disclose the saved information.<sup>50</sup> Mainstream TV shows such as *Black Mirror* are starting to portray a future where the use of this technology is not just vastly used and accepted, but where it is more sophisticated and its rejection is problematic, even divisive. In the episode 'The Entire History of You,'<sup>51</sup> a chip known as "the grain" is able to record – and play back – everything a person sees and hears. It explores the difficulties presented by the possibility of perfect memory and the clashing points for pro- and anti- attitudes.

Grusin suggests that the premediation of the future "imagines the future as immanent in the present"<sup>52</sup> and we can see evidence for this in the way that the dual logics of both remediation and remediation impact or affect the present, whether or not these visions ever come about. This is perhaps clearest when what used to be considered an intrusive behavior or a taboo becomes a desirable one. Location apps as-

sociated with smart phones were initially perceived as undesirable; the *Augmented ID* concept developed by the Swedish company TAT (The Astonishing Tribe) that uses smart phone and face recognition technology was initially presented by the press as the "stalker app."<sup>53</sup> Their initial design suggested that using the phone's camera, a person could be scanned and the app would display all the available information of that person available through the Internet. It has subsequently been redeveloped to give users control over what social networking information they want to share, and when. New apps such as *Placeme*, which are used to record and share where someone is at every moment using the ID and GPS attached to their smartphone, suggest that what was once undesirable is now becoming acceptable.



**Figure 5.** *TAT augmented ID*, 2009, digital video by TATMobileUI. TAT is a Mobile phone app that allows the user, through facial recognition software, to ID a person in a room and find out all the information posted about that person in social networks. Photo by: Abul Hussain. Used with permission via the Creative Commons Attribution 2.0 Generic license.

#### Identity 'Myning'

Mining (or 'Myning') for data within the Internet means collecting as much personal information as possible. All the personal information disclosed though differ-

ent websites creates very valuable customer profiles full of lifestyle clues, including shopping and spending habits. With all these personal details being made available, privacy and ownership is a big concern. William Odom points to how impossible it is to really 'know where things live' in the cloud:

*two emergent themes run throughout: that posting something online, in today's world, can mean relinquishing control over the things that you care about, but also losing awareness of what exists, where it is, who has access to it, who is accountable for it, and what is being done with it.* <sup>54</sup>

The use of the 'cloud' metaphor is interesting as it seeks to obscure the simultaneously physical yet immaterial reality of these spaces.

Estonian Artist, photographer and programmer Timo Toot's installation *Memopol I* and *Memopol II* created:

*a social machine that maps the visitor's information field. By inserting an identification document such as a national ID-card or passport into the machine, it starts collecting information about the visitor from [inter]national databases and the Internet. The data is then visualized on a large-scale custom display. People using the machine will be remembered by their names and portraits.* <sup>55</sup>

**Figure 6.** *Memopol-2* in KUMU Art Museum / Tallinn, Estonia / 2011. Photo posted by: Ars Electronica. Used with permission via the Creative Commons Attribution-NonCommercial-NoDerivs 2.0 Generic license.



*Memopol* then enables us to make a thorough background check of ourselves, mirroring back to us all the data about us that is recorded online.

So much of peoples' identity is posted, shared and distributed everyday in so many different blogs, websites, social networks, etc. that is easy to lose control of it without even realizing what is happening.

This has been powerfully illustrated by *Lovely-Faces.com*, a fake dating website created by artists Paolo Circo and Alessandro Ludovico through the process of 'scraping' over 1,000,000 faces from Facebook. With these they created 250,000 profiles using a genetic algorithm to categorize people into different personality types. The artists' aim was to "unveil how fragile a virtual identity given to a proprietary platform can be." <sup>56</sup> Many of those who discovered that their profile had been used reacted with anger and dismay, prompting them to rethink their association with social networking websites.

The rules of offline ownership differ vastly from those of digital possession, raising the issue of curating identity online. Who protects personal data? Can it be transferred? Who can legitimately take and use the personal data posted online? What happens with all the personal information posted once the online accounts are closed? Some interesting art projects have been created in addressing some of these questions. The Rotterdam-based sociopolitical project *Web 2.0 Suicide Machine* enables users of Facebook, Twitter and Linked-In disillusioned with spending so much time online to delete their profiles. "Delete all your energy sucking social-networking profiles, kill your fake virtual friends, and completely do away with your Web2.0 alter ego." <sup>57</sup> Meanwhile global art project *Mission Eternity* <sup>58</sup> describe themselves as an information technology-driven cult of the dead. They have 1450 users who have build a community of the living



**Figure 7.** Artist Heath Bunting who runs identity workshops that explore multiple identities. Photo by: Manuel Schmalstieg, 2011. Used with permission via the Creative Commons Attribution-Share Alike 3.0 Unported license.

and the dead that reconfigures the way the information society deals with memory (conservation/loss), time (future/present/past) and death.

### Multi-Identities

The UK 'Government Office for Science' proposes that as a result of hyper-connectivity by 2011;

*there were more than seven billion devices connected to the Internet, and numbers are predicted to reach 15 billion by 2015. Sixty per cent of Internet users in the UK are now members of a social network site, increasing from only 17% in 2007.* <sup>59</sup>

The increase in devices and services connected to the Internet creates a growth in the daily activities that nowadays require a process of identification using technology. In many cases people are managing multiple identities. For example, our Facebook profile may be very different from our Linked-In or Twitter feed, depending on what kind of public face we wish to present in different places.

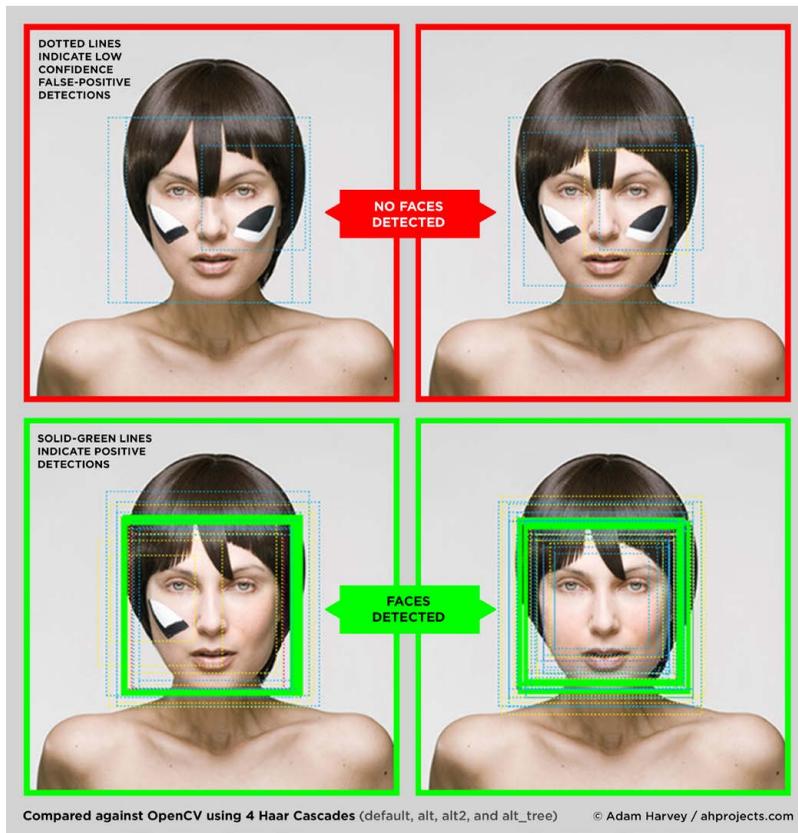
The UK-based artist Heath Bunting's *Identity Bureau* project suggests that the higher up in the class system we are, the better access to status variety we have. His project surveys these "class systems of human being management and produces maps of influence and personal portraits for both comprehension and mobility." <sup>60</sup> Participants in his identity bureau are offered for sale "off the shelf natural persons" that he has created, as well as the opportunity to create their own new identity.

### Public & Private Identities

It used to be easy to keep a personal identity separate from a professional one. However, hyper-connectivity combined with willingness to post personal information in public domains such as the Internet means that attitudes and perceptions towards privacy are

changing, mainly among younger generations. The line between social and work identities is blurring to the point of almost disappearing. It is no news anymore to hear or read about people who have been fired from their jobs for posting inappropriate photos or comments on what they thought was a private social network or blog. Applications such as TAT's *Augmented ID* allow people to look at personal information about a stranger in a public place, changing the nature of what it means to be anonymous in public spaces.

Several art projects are highlighting these issues: *CV Dazzle* by New York based artist Adam Harvey, for example, is a camouflage created from computer vision algorithms, through a clever use of makeup and hair styling, avoiding the legal issues associated with the wearing of masks. The name originates from a type of camouflage used during World War I. This approach has not yet featured in an act of public resistance however; culture and fashion magazines (e.g. *DIS*, a fashion art & commerce publication) have used it in their styling. In an interview for *theartblog.com*, Adam Harvey describes *CV Dazzle* as "...the ticket into the invisible class – men, women and children deleting themselves from the digital eye." <sup>61</sup>



**Figure 8.** New York based artist Adam Harvey has developed forms of makeup and hair styling to avoid and 'fool' facial recognition software. Photo by: Adam Harvey, 2012. © Adam Harvey. Used with permission.

Similarly the *FAGFACE* mask by American Artist Zach Blas, part of his *Facial Weaponization Suite*, develops:

*forms of collective and artistic protest against biometric facial recognition—and the inequalities these technologies propagate—by making masks in community-based workshops that are used for public intervention. The mask is a response to scientific studies that link determining sexual orientation through rapid facial recognition. This mask is generated from the biometric facial data of many queer men's faces, resulting in a mutated, alien facial mask that cannot be read or parsed by biometric facial recognition technologies.*<sup>62</sup>

In a video-interview with the authors last year Blas highlights how some of these forms of IM are being used unauthorized and without an individual's knowledge – for example, in 2001, the Tampa Bay Police used face recognition technologies to search for criminals and terrorists during the Superbowl, resulting in several arrests (but no charges). Blas also highlights

the dangers of these technologies and databases being used for other purposes, such as to identify homosexual men purely from their faces. Through smearing ones face with 'cum,' Blas suggests that "your fagface" can configure "into that which is not identifiable." "We accelerate like this – fuck like this – to become faceless. Because a face is never ours."<sup>63</sup>



**Figure 9.** Zach Blas's *Facial Weaponization Suite: Fag Face Scanning Station* reclaim:pride with the ONE Archives and RECAPS Magazine, Christopher Street West Pride Festival West Hollywood, CA, June 8, 2013. Photograph by David Evans Frantz. Used with Permission.

Face recognition has an inevitable connection not just to historical forms of facial taxonomies and identification systems, but also to futuristic ones. The movie *Gattaca*<sup>64</sup> presents a future scenario where through a eugenic policy, the world classifies its citizens as 'valid' or 'in-valid' depending on whether they have the appropriate genetic makeup; premediating a future where people are willing to sacrifice their own individuality and personal identity for perfection.

The Canada-based artist Howie Woo has created a crocheted mask "for the playful at heart" to fool face recognition and "reclaim our privacy." Woo hopes that his demonstration enables us to protect our privacy and "apply the brakes to the use of face recognition technology in our lives."<sup>65</sup>

It should be noted, however, that the wearing of masks in some situations could be illegal; the wearing of the *V for Vendetta* Guy Fawkes masks adopted by the hacktivist group Anonymous has recently been declared illegal in Dubai.<sup>66</sup>

## DISCUSSION

Within modernity, art & design was largely characterized by utopian visions of the future in which there was a sense of faith and hope. This has been replaced by postmodernism, in which a variety of possible futures are premediated. From the scenarios reviewed here, there is a strong emphasis on the future, or "futurity," as Grusin calls it.<sup>67</sup> More than this, a new form of design, namely 'critical design,' is strongly associated with premediation.

Many of the examples are concerned with creating and stimulating debate around taboos and premediating our responses to these – so that the future may emerge from within the present. In many respects,

however, and despite a wide range of possible futures, it would appear that only certain options are supported. Grusin describes premediation as in some ways transforming the world into a video or computer game where only "some possibilities are encouraged by the protocols and reward systems built into the game."<sup>68</sup> Here only one of the responses involved rejecting technology (*Suicide Machine*); as Brian Arthur states, "to have no technology is to be not human."<sup>69</sup> An increasing part of the game, then, is that we are now all becoming curators, managing our online identities. The increasing incidence of 'life-logging' and 'life-monitoring,' particularly for health purposes, highlights how our lives and identities have now extended into the digital realm, creating volumes of data and information that needs to be controlled, managed and presented in ways that please us not just whilst we are alive, but also after death (*Mission Eternity*).

A great number of the taboos that are emerging relate to the "new model of cyborg"<sup>70</sup> postulated by Andy Clark, and the relationship between our bodies and technology. This is not just through the inclusion of implants within our bodies, but also the extent to which our affective relationships with technological media and wearable objects "ties the body into a cybernetic loop."<sup>71</sup> Within the smart garments and jewellery being developed, this signals a trend towards making the digital physical, and a move away from screen-based to more 'natural' (for example gestural) interactions (*Sixthsense*). Increasingly our sense of self is closely tied to our sense of embodiment, the ways in which we directly encounter the world. However, the nature of our hypermediated world is changing that. "The seeming omnipresence of mobile networked media devices changes the nature of physical embodiment and identity – changes the relationship of proximity, closeness, or intimacy to embodiment."<sup>72</sup> Our sense of intimacy and embodiment is being mediated by technology, giving us a feeling of

liveness and attachment to a future that may or may not happen; rather than enabling us to experience this sense of embodied liveness in the present. <sup>73</sup> Therefore instead of living in the present we are busy living this virtual embodiment of the future. This connects directly to the extent that we as human beings (even at a biological level) are adapting to systems of digital media and devices, through our affective responses to them. W. Brian Arthur suggests that technology is a thing shapes both us, and our lives, whilst simultaneously serving our lives, and that this creates an ongoing tension. <sup>74</sup>

Donald A. Norman highlights another tension, distinguishing between what he calls intrusive and enhancing technologies. Intrusive technologies are those that get in the way of the act – for example, taking photographs – and enhancing technologies are those that require focus, concentration and reflection, such as drawing. <sup>75</sup> Within the scenarios in art and design we can find examples of both intrusive technologies (TAT's *Augmented ID*, *Printing Dress*, *Twitter Dress*) and enhancing technologies (*Biopresence*, Philips's *Skin Tattoo*, the *SixthSense* Device, *Memopol*, *Identity Bureau*). There would appear to be more enhancing technologies that provide opportunities for reflection and focus employed within art projects that design could learn from.

We have found that as a way of both raising awareness about 'persistent identity' and the loss of anonymity and privacy, masks feature strongly – specifically: *Fagface*, *Woowork*, and *Anonymous*. Interestingly, many of these examples resort to using organic materials, such as make up, face paints, sperm and crochet, suggesting analogue resistance to the progressive digitalization of the body and the self. These fears may connect with what both Harvey and Blas talk about: how our sense of self and sense of identity becomes so entwined in digital media that we don't see the me-

dia anymore – it becomes invisible, ergo we become invisible. This was a theme picked up in the Phillip K. Dick' novel that became the film *A Scanner Darkly*, <sup>76</sup> where in the not-too-distant future in Orange County, California, an undercover narcotics agent is known internally in the force only by his code name, Fred. His identity can be kept secret as the scanning suit he dons enables him to avoid recognition; in this scenario, technology threatens to deaden us by taking away our own identity while disguising it with the identities of thousands.

Our identities then are embedded in a variety of social, political and technological networks. We have to accept now that we are becoming 'new model cyborgs' that cannot live without our digital side. Navigating the tensions between the organic and the digital; the extent to which our networked identities shape us or we shape them; whether the digital becomes increasingly physical and expressive will be played out through premediation. ■

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