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LEONARDO ELECTRONIC ALMANAC

SPECIAL ISSUE

DAC 09

after media :

embodiment

and context

Making Inroads: Promoting Quality and Excellency of Contemporary Digital Cultural Practices and Interdisciplinarity

I would like to welcome you to the first special volume of the Leonardo Electronic Almanac. *DACO9: After Media: Embodiment and Context*, is a volume that generated from the conference by the same name that Prof. Penny chaired at the end of 2009.

DACO9: After Media: Embodiment and Context is the first of a series of special volumes of the Leonardo Electronic Almanac that are realized in collaboration with international academic, editors and authors.

Prof. Penny was inspired for this LEA special issue by the continuous developments in the interdisciplinary arena and in the fields of new media and digital art culture. He wanted to collate research papers that would provide the seeds for innovative thinking and new research directions. The authors featured in this volume, to whom we are most grateful for their hard work, will provide the reader with the opportunity to understand and imagine future developments in the fields of digital art culture and interdisciplinarity.

As I look at the electronic file of what we now internally refer to simply as *DACO9* the first issue of the revamped LEA, *Mish Mash*, printed and delivered by Amazon, sits on the desk next to my keyboard. The possibilities and opportunities of e-publishing, which also has physically printed outcomes, provide me with further thoughts on the importance and necessity of the work that is done by 'small publishers' in the academic field. The promising news of a new open access journal to be launched by The Wellcome Trust or the 'revolution' of researchers against Elsevier through the website http://thecostofknowledge.com/ with 9510 Researchers Taking a Stand (Thursday, April 12, 2012 at 10:57 AM) highlights the problems and issues that the industry faces and the struggles of young researchers and academics.

The contemporary academic publishing industry has come a long way from the first attempts at e-publishing and the revolution, if it can be defined as such, has benefited some and harmed others.

As the struggle continues between open access and copyrighted ownership,[1] the 'revelation' of a lucrative academic publishing industry, of economies of scales, of academics exploited by a system put in place by publishing giants (into which some universities around the globe have bought into in order to have an internationally recognized ranking system) and the publishers' system of exploitation structured to increase the share of free academic content to then be re-sold, raises some essential questions on academic activity and its outputs.

The answers to these problems can perhaps be found in the creativity of the individuals who participate in what is, at times, an harrowing process of revisions, changes, reviews, replies and rebuttals. This is a process that is managed by academics who donate their time to generate alternatives to a system based on the exploitation of content producers. For these reasons I wish to thank Prof. Simon Penny and all the authors who have contributed to *DACO9: After Media: Embodiment and Context*.

Simon Penny in his introduction to this first LEA special volume clearly states a) the importance of the *DACO9* and b) the gravitas and professional profile of the contributors. These are two points that I can support wholeheartedly, knowing intimately the amount of work that this volume has required in order to maintain the high standards set by *Mish Mash* and the good reception it received.

For this reason in announcing and presenting this first special volume I am proud to offer readers the possibility of engaging with the work of professionals who are contributing to redefining the roles, structures and semantics of new media, digital art practices and interdisciplinarity, as well as attempting to clarify what digital creativity is today and what it may become in the future.

The field of new media (which are no longer so new and so young – I guess they could be better described as middle aged, slightly plump and balding) and digital practices (historical and contemporary) require new definitions and new engagements that move away from and explore beyond traditional structures and proven interdisciplinary partnerships.

DACO9: After Media: Embodiment and Context is a volume that, by collating papers presented at the DACO9 conference, chaired by Prof. Simon Penny, is also providing recent innovative perspectives and planting seeds of new thinking that will redefine conceptualizations and practices, both academic and artistic.

It also offers to the reader the possibility of engaging with solid interdisciplinary practices, in a moment in which I believe interdisciplinarity and creative practices are moving away from old structures and definitions, particularly in the fraught relationship between artistic and scientific disciplines. If 'cognitive sciences' is a representation of interdisciplinarity between artificial intelligence, neurobiology and psychology, it is also an example of interdisciplinary interactions of relatively closely related fields. The real problem in interdisciplinary and crossdisciplinary studies is that these fields are hampered by the methodological problems that still today contrapose in an hierarchical structure scientific methodologies versus art and humanities based approaches to knowledge.

This volume is the first of the special issues published by LEA and its appearance coincides with the newly revamped website. It will benefit from a stronger level of advocacy and publicity since LEA has continued to further strengthen its use of social platforms, in fulfillment of its mission of advocacy of projects at the

intersection of art, science and technology. *DAC09* will be widely distributed across social networks as open access knowledge in PDF format, as well as being available on Amazon.

I extend a great thank you to all of the contributors of *DAC09: After Media: Embodiment and Context* and wish them all the very best in their future artistic and academic endeavors.

Lanfranco Aceti
Editor in Chief, Leonardo Electronic Almanac
Director, Kasa Gallery

REFERENCES AND NOTES

1. Thomas Lin, "Mathematicians Organize Boycott of a Publisher," *The New York Times*, February 13, 2012, http://www.nytimes.com/2012/02/14/science/researchers-boycott-elsevier-journal-publisher.html (accessed March 20, 2012).

Two decades of Digital Art and Culture

An introduction to the LEA DAC09 special edition

by

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This volume of LEA is composed of contributions drawn from participants in the 2009 Digital Art and Culture conference held at the University of California, Irvine in December 2009. DAC09 was the eighth in the Digital Art and Culture conference series, the first being in 1998. The DAC conference series is internationally recognized for its progressive inter-disciplinarity, its intellectual rigor and its responsive-ness to emerging practices and trends. As director of DAC09 it was these qualities that I aimed to foster at the conference.

The title of the event: After Media: Embodiment and Context, was conceived to draw attention to aspects of digital arts discourse which I believe are of central concern to contemporary Digital Cultural Practices. "After Media' queries the value of the term 'Media Arts' – a designation which in my opinion not only erroneously presents the practice as one concerned predominantly with manipulating 'media', but also leaves the question of what constitutes a medium in this context uninterrogated. 'Embodiment and Con-text' reconnects the realm of the digital with the larger social and physical world.

'Embodiment' asserts the phenomenological reality of the fundamentally embodied nature of our being, and its importance as the ground-reference for digital practices. 'Embodiment' is deployed not only with respect to the biological, but also with reference to material instantiations of world-views and values in technologies, a key example being the largely uninter-rogated Cartesianisms and Platonisms which populate computational discourse. Such concerns are ad-dressed in contemporary cognitive science, anthropol-ogy and other fields which attend to the realities of the physical dimensions of cognition and culture.

'Context' emphasises the realities of cultural, historical, geographical and gender-related specificities. 'Context' brings together site-specificity of cultural practices, the understandings of situated cognition and practices in locative media. The re-emergence of concerns with such locative and material specificity within the Digital Cultures community is foregrounded in such DAC09 Themes as Software and Platform Studies and Embodiment and Performativity.

The DAC09 conference included around 100 papers by an international array of contributors. In a desire to be maximally responsive to current trends, the confer-ence was to some extent an exercise in self-organisa-tion by the DAC09 community. The call for papers and the structure of the event was organized around nine conference themes which were themselves the result of a call to the community for conference themes. The selected themes were managed largely by those who

proposed them. Much credit for the success of the event therefore goes to these hard-working 'Theme Leaders' : Nell Tenhaaf, Melanie Baljko, Kim Sawchuk, Marc Böhlen, Jeremy Douglass, Noah Wardrip-Fruin, Andrea Polli, Cynthia Beth Rubin, Nina Czegledy, Fox Harrell, Susanna Paasonen, Jordan Crandall, Ulrik Ekman, Mark Hansen, Terry Harpold, Lisbeth Klastrup, and Susana Tosca, and also to the Event Organisers: David Familian, Michael Dessen, Chris Dobrian, Mark Marino and Jessica Pressman. I am particularly grate-ful to Ward Smith, Information Systems Manager for DAC09, who for two years, as my sole colleague on the project, managed electronic communications, web de-sign and the review and paper submission processes amid, as he would put it, a 'parade of indignities'. In the several months of final planning and preparation for the event, the acumen and commitment of Elizabeth Losh and Sean Voisen was invaluable.

I first published on what we now refer to as digital arts in 1987. [1] Not long after, I was lucky enough to have the opportunity to attend the first ISEA conference in 1988. Since that date I have been actively involved in supporting the development of critical discourses in the field, as a writer, an editor and an organizer of events. My role as director of the DAC09 conference gave me a perspective from which to reflect on the state of digital arts discourse and its development over two decades. As I discussed in a recent paper, [2] the first decade on media art theory was a cacopho-nous interdisciplinary period in which commentators from diverse fields and disciplines brought their exper-tise to bear on their perceived subject. This created a scenario not unlike that of various viewers looking into a house via various windows, none of them perceiv-ing the layout of the house, nor the contents of the other rooms. In the ensuing decade, a very necessary reconciliation of various disciplinary perspectives has occurred as the field has become truly a 'field'.

While post structuralist stalwarts such as Deleuze and Derrida continue to be referenced in much of the more critical-theory oriented work in Digital Cultures, and the condition of the posthuman and posthumanist are constantly referenced, theoretical reference points for the field are usefully broadening. The emerging field of Science and Technology Studies has brought valuable new perspectives to media arts discourses, counterbalancing the excesses of techno-utopianism and the sometimes abstruse intellectualism of post-structuralist theoretical discourses. In this volume, Mark Tuters provides an exemplar of this approach in his *Forget Psychogeography: Locative Media as Cosmopolitics*, bringing Rancière and Latour to bear on a discussion of HCI, Tactical Media and Locative Media practices. Tuters provides a nuanced argument replete with examples which questions the sometimes, superficial and dogmatic re-citation of the originary role of the Situationists with respect to such practices. At DAC09, Connor McGarrigle also took a thoughtful revisionist position with respect to the Situationists. [3]

In this context, the new areas of Software Studies and Platform Studies have emerged and have been nurtured in previous DAC conferences. In this spirit, Chandler McWilliams attempt to "thread the needle between a reading of code-as-text that obfuscates the procedural nature of code, and an overly techni-cal description of programming that reinstates the machine as the essential arbiter of authentic acts of programming" is emblematic of the emergence of Software Studies discourses which are quintes-sentially interdisciplinary and erudite on both sides of the science wars divide. Similarly, Mark Marino's meditations on heteronormativity of code and the Anna Kournikova worm call for what he calls Critical Code Studies, here informed by queer theory. In their proposal for an 'AI Hermenteutic Network' Zhu and Harrell address the question of intentionality, a familiar theme in AI critical discourse (i.e., John Searle 'Minds,

Brains and Programs' 1980). Citing Latour, Agre, Hayles and others, they offer another example of the science-wars-sidestepping technical development based in interdisciplinary scholarship noted in the discussion of Chandler McWilliams' contribution.

Another trend indicative of the maturation of this field is its (re)-connection with philosophical discourse. In this context, the deep analysis of Electronic Literature in terms of Wittgensteinian Language Games by Mauro Carassia is something of a tour de force. While a tendency to extropianism is here not explicitly discouraged, this discussion places such technological practices squarely as indicators of transition to post-human subjectivity, and in the process, open the discussion to phenomenological, enactive and situated critiques as well a drawing in the relevance of pre-cognitivist cybernetic theorisation.

One of the aspects of contemporary media arts discourse which I hoped to foreground at DAC09 was questions of embodiment and engagement with contemporary post-cognitivist cognitive science. Several papers in the current collection reflect such concerns, and indeed they were foregrounded in several conference themes. One example of the value of the application of such theory is evidenced in Kenny Chow and Fox Harrells leveraging of contemporary neourscience and cognitive linguistics in their deployment of the concept of "material-based imagination" in their discussion of Interactive Digital Artworks. In a quite different approach to embodiment and computation, Carrie Noland discusses choreography and particularly the choreography of Cunningham, with reference to Mauss and Leroi-Gourhan, and with respect to digital choreographic tools.

The DAC community did not choose to make Game Culture a focal theme in DAC09 – perhaps because the field has grown so quickly and has built up a struc-

ture of conferences and journals. Nonetheless, gaming culture was referenced throughout the event, and was the subject of numerous presentations, such as Josh and Karen Tannenbaums reconsideration of 'agency as commitment to meaning', which addressed the acknowledged problematic of the tension between authorial and user agency in terms of a critique of the humanist subject. Like wise, phraseology such as Boluk/Lemieux's: "player performance in and around games has matured to the point of beginning to express underlying serial logics through heavily mannered gameplay mechanics" (in their contribution to this volume) signals the establishment of a mature and erudite critical theory of games and gaming. On a more technical note, Sullivan/WardripFruin/Mateas make an argument for enriching computer game play by application of artificial intelligence techniques to the authoring of 'quests'.

As Digital Arts became established as a practice the question of pedagogy inevitably arose – what to teach and how to teach it. Though rhetorics of convergence pretend to the contrary, one cannot dispute the profound epistemological and ontological dilemmas involved in attempting to bring together intellectual environments of such disparate communities as engineers, artists and critical theorists, in the classroom and the lab. Interdisciplinarity was therefore the ground upon which these programs were developed, and each context inflected that idea with its own color. My own reflections on the subject are published at *Convergence.* 4 It therefore seemed timely to address pedagogy at DAC09. In the process of elaboration of digital cultural practices, such emerging practices have themselves come into consideration as pedagogical tools and systems. In this volume, Elizabeth Losh surveys and discusses various pedagogical initiatives (mostly in Southern California) deploying digital tools and environments. In a contribution which crosses between the pedagogy thematic and concerns with

cognition, Harrell and Veeragoudar Harrell offer a report on a science, technology, engineering, and mathematics (STEM) educational initiative among at-risk students which considers the relationships between users and their virtual identities.

In his essay, Garnet Hertz discusses the work of three artists – Reed Ghazala, Natalie Jeremijenko, and Tom Jennings. None of them 'media artists' in the conventional sense, they, in different ways and for different purposes, re-purpose digital technologies. Rounding out this volume is presentation of two online artworks by Sharon Daniels which were presented at DAC09. *Public Secrets* and *Blood Sugar* are elegant web-based art-works, both poetic and examples of a committed activist practice.

In my opinion, this collection offers readers a survey of fields addressed at DAC09, and an indication key areas of active growth in the field. Most of them display the kind of rigorous interdisciplinarity I regard as characteristic of the best work in the field. While the science-wars rage on in certain quarters, in media arts discourse there appears to be an attitude of intelligent resolution – a result in no small measure of the fact that a great many such commentators and theorists have taken the trouble to be trained, study and practice on both sides of the great divide of the 'two cultures', and to take the next necessary step of attempting to reconciling or negotiate ontologies traditionally at odds. This professional profile was very evident at DAC09 and is represented by many of the contributors in this volume. Such interdisciplinary pursuits are in my opinion, extremely intellectually demanding. The obvious danger in such work is of superficial understandings, or worse, a simple re-citation of a new canon of interdisciplinary media studies. Dangers that, happily, none of the papers grouped here, and few of the papers presented at DAC09, fell victim of. ∎

The electronic proceedings of DAC09 are available at this link: http://escholarship.org/uc/ace_dac09

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2. "Desire for Virtual Space: the Technological Imaginary in 90s Media Art," in *Space and Desire. Scenographic Strategies in Theatre, Art and Media*, eds. Thea Brejezk et al. (ZHdK Zurich: Zurich University of the Arts, 2010).
3. This paper, and all DAC09 papers referenced here, are available as part of the DAC09 proceedings, online at http://escholarship.org/uc/ace_dac09 (accessed March 2010).
4. Simon Penny, "Rigorous Interdisciplinary Pedagogy: Five Years of ACE," *Convergence* 15, no. 1 (February 2009): 31 - 54.

Leonardo Electronic Almanac
Volume 17 Issue 2

Screen capture from *Public Secrets* [http://publicsecret.net]
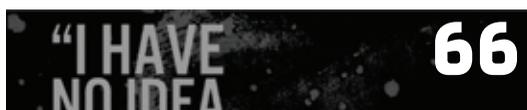
PUBLIC RECORDS / SECRET PUBLICS

Information Architecture for New Political Subjects

ABSTRACT

Does new media matter at sites of social injustice? Can information architecture expand the public sphere, reveal human rights abuses, represent marginalized communities, enable new political subjects and expose social injustice at critical "sites" of public interest and responsibility? Can new media effectively provide the public of the "first" world with an immersive experience of the "third" world within it – our "secret publics"? *This paper describes two new media documentary projects,* Public Secrets [http://publicsecret.net] *and* Blood Sugar [http://bloodandsugar.net] *that attempt to catalyze political action and influence the development of just and sustainable public policy.*

by

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In my research I employ a variety of media and methodologies – from the design of information architectures and data visualizations, to ethnographic and documentary practices – in order to reveal the Human Rights abuses that marginalized persons suffer on a daily basis and to promote alternatives to the state policies that allow these abuses. I collaborate with non-profit organizations and their constituents to produce Public Records – like *Public Secrets* and *Blood Sugar* – these online audio archives of recorded conversations with incarcerated women and injection drug users are public records that acknowledge and legitimize the histories and lived experience of socially "othered", un-authorized subjects – Or what I think of as our secret publics.

I see myself as a context-provider, shifting the role of the artist from providing content to providing context. A context provider does not attempt to speak for others but rather, induces others to speak for themselves by providing both the means, or tools, and the context where they can speak and be heard. In my writing I trace a thread through social theory that ties the po-

tential for self-representation to social change. In my creative practice I take hold of this thread.

First I engage with a group of participants and collect their stories – then I become a kind of information architect – designing the structure of a database that both circumscribes and describes a "site" of socio-economic and political experience. Rather than building a single road across that site to get from point A to point B (or the beginning of an argument to its resolution) I attempt to map out an extensive area – say, 100 square miles. In the case of the project *Public Secrets*, this territory consists of approximately 500 statements made by incarcerated women which reveal the secret injustices of the war on drugs, the criminal justice system and the prison industrial complex. *Public Secrets* is designed to set the viewer down within the boundaries of this territory and allow her to find her own way – to navigate a difficult terrain, to become immersed in it, and, thus, to have the kind of transformative experience that only occurs when one steps

out of context in order to experience the world from a perspective radically different than one's own.

Before I started visiting the California Correctional Women's Facility (CCWF) in 2002, I held, on an intellectual level, a rather typical, liberal distaste for the idea of prisons but I made no effort or commitment to act on this opinion. After spending time at the prison – after meeting the women inside and, visit after visit, hearing one after another testify to the same egregious, pervasive, human rights violations, the position that I held on an intellectual level turned into an emotional and political commitment. It was the weight of the evidence, the repetition, the shared experience threaded through the vast amount of testimony, the scale of the "site" of the social problem and my immersion in it that changed me. That is precisely the experience that I hope to provide for the visitor to the "sites" of social injustice that I address.

In 2001 I lived in an artists' live/work space in east Oakland. There was an HIV prevention program down the street that ran an open needle exchange three nights a week. I believed in the efficacy of needle exchange, (albeit in an intellectual and somewhat detached way). I was intrigued by the paradoxical, outsider-subject of addiction, the messy socio-political borderline between dependence on licit and illicit drugs, the mystery and violence of the needle.

Screen capture from *Public Secrets* [http://publicsecret.net]

Screen capture from *Public Secrets* [http://publicsecret.net]

I had reason to want to escape the privileged isolation of my own sphere – to cross over into another world. This desire was sincere but also driven by curiosity, even voyeurism, and naiveté. I volunteered at the exchange. Eventually I started to interview people who came to the tent site to swap needles. I got to know one of the women rather well – the woman that I call A_____ in the project *Blood Sugar*. The needle exchange was the last frayed layer of the social safety net for someone like A_____. I learned a lot from her about the third world inside the first. I learned that the realities of poverty, racism, social isolation, trauma, sexual abuse, and sex-based discrimination can make a person, even an extraordinarily intelligent person, vulnerable to addiction and psychosis. I learned a lot from A_____ about desperation and about resilience. I learned that the complex struggle over civil liberties and social rights in electronically mediated information space is materially different from the one on the street. There is another public outside – a secret public that is simultaneously visible and invisible, and to most, illegible and incomprehensible. The men and

women who spoke with me at the needle exchange, and allowed me to record our conversations, are part of this secret public. They deserve to be heard and understood. The accounts they give are not natural, objective descriptions of an unambiguous reality. None of the addicts I met at the exchange presented the identity of the "righteous dopefiend". On the contrary, each act of self-narration began with a kind of confession of weakness or disease. The messy details of each life history would then unfold according to the syntax and grammar of the disease-and-recovery discourse that is learned in the kind of quasi-therapeutic setting where we met. But the fact that the telling is inflected by its context does not mean that the lived experience related is any less real, or powerful, or deserving of attention.

Screen captures from *Blood Sugar* [http://bloodandsugar.net]
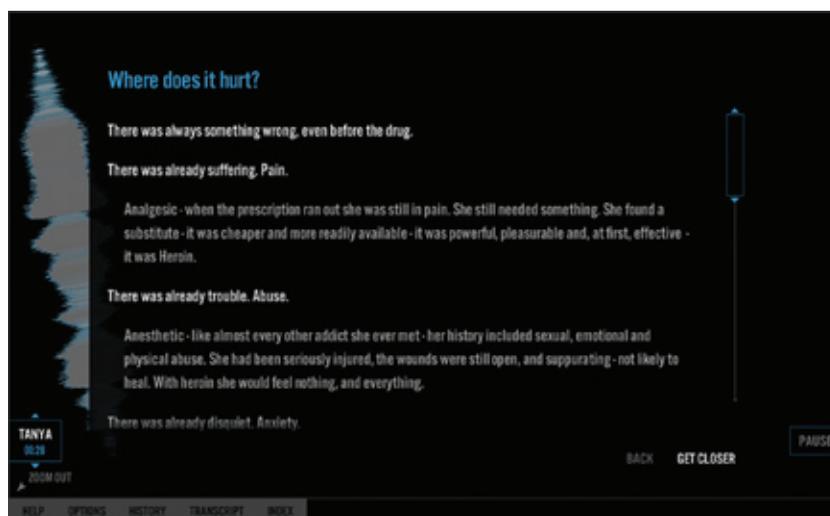
The result of this process, *Blood Sugar*, provides an interface to the many hours of conversation I recorded at the needle exchange. In the interface, each individual interlocutor is represented as a waveform or "audio body" – these audio bodies are linked together through "parasitic" connections revealed in their stories of pain, violence, abuse, despair… overall the space these bodies inhabit and the way they are encountered by the viewer is structured in terms of both the social and biological construction of addiction – at the boundary of the skin. The recorded interviews are framed by a series of texts that I have written in response to a set of somewhat rhetorical questions such as "what do we hold against the drug addict?" The texts take the form of anecdotal theory, which incorporates my research into the neuroscience of addiction with my experience interacting with the clients of the needle exchange.

It is my hope that *Blood Sugar* provides a "proof" (in the mathematical sense of the word - In the sense of evidence – and also in the sense used in printing – a trial, a limited number or set of preliminary impressions –) of the following three premises or statements:

First, that through the use of new media we can effectively provide the public of the "first" world with an immersive experience of the "third" world – our "secret publics"

Second, that new media and information technologies can produce new modes of signification and address, alternate aesthetics and models of authorship, and more open, participatory public spaces.

Third, that when new media technologies are employed to represent marginalized communities, reveal human rights abuses, or expose social injustice at critical "sites" of public interest and responsibility – new political subjects are enabled and the public sphere expands

To understand *Public Secrets* and *Blood Sugar* as works of art, one must move from questions of aesthetics (what is beauty?) or ontology (what is art?) to questions of pragmatism (what can art do?). It can empower speech, change perceptions, ask tough questions and make radical demands. ∎

Public Secrets – http://publicsecret.net
Blood Sugar – http://bloodandsugar.net

TANYA
01:50

PAUS

loss

illness

MARCUS

PALLEYdisorder

LELANI

MICHELLE

BEA   drugs

JOHNNY KIM
CARLOS   RON

AMALIE

CHRIS

BEVERLY

violence

ZOOM OUT

HELP   OPTIONS   HISTORY   TRANSCRIPT   INDEX

Screen capture from *Blood Sugar* [http://bloodandsugar.net]