Walled Garden

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VIRTUEEL PLATFORM

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Introduction:

Walled Garden

Walled Garden was a 2-day international conference that took place in Amsterdam on 20 and 21 November 2008.

A walled garden, with regards to media content, refers to a closed set or exclusive set of information services provided for users (a method of creating a monopoly or securing an information system). This is in contrast to providing consumers access to the open Internet for content and e-commerce. Wikipedia, June 2008

Walled gardens are spreading online while blogs and personal profile pages become over-digested, egocentric and retreat to be at best useful sources of information for marketing agencies. And after an energetic – and usually shortlived – start, most newly formed networks quieten down, losing their spontaneity and momentum. Is this tendency also affecting the accessibility of information and knowledge? The objective of the Walled Garden conference was to discuss terms of public access to the vast databases of information and to explore a sustainable architecture for the availability of tools and information exchange.

In 2007 Virtueel Platform organised *Culture 2.0*, an international conference and laboratory to introduce Web 2.0-thinking into the creative processes and strategies of cultural institutions.
From a practical starting point – in which ways could the developments be applied in the cultural sector? – we investigated whether embracing Web 2.0 tools and thinking would generate new and other forms of content or approaches – or threaten culture as we know it. Now that the tools are in place and people have begun to find their way, the time had come to investigate more specific experiences and challenges surrounding the Web 2.0 hype. What are the success factors and failures of Web 2.0 and can we imagine and initiate new tools and strategies for the future Web?

Reacting to the rising tendency towards online gated and closed communities we wanted to address issues of identity, mobile communities and networks. Many questions arose.

What are the social processes underlying these systems and how does the interplay between new technologies and people's lives vary according to cultures and institutions in different parts of the world and among different social groups? What are the new inequalities introduced by differential access to infrastructure of wireless communication in a world based on connectivity?

Through exploration, experimentation and exchange of knowledge we approached the development and future challenges of the current Web 2.0. Inspiring conversations with a variety of online experts and professionals in the digital field shaped our initial Walled Garden idea. From the very start of the process we set up our own Walled Garden, a semi-closed online environment, which allowed the invited experts to continuously feed back on our initial suggestions and influence the parameters of our working process. Strands and topics for the conference were proposed and shaped by collective conversation. Closer to the conference, we opened up our Walled Garden to the public, inviting participants to observe the process. The conference itself consisted of conversations in the form of structured group dialogue, open plenary sessions, discussions and face-to-face meetings with artists, researchers, theorists and technologists.

In the end eight different working groups covered the following topics: Mapping the Walled Gardens (Sabine Niederer and Richard Rogers), FLWR PWR: Tending the Walled Garden (Matt Ratto), Art and Net Ontology (Edward Shanken), Social & Semantic Serendipity (Tapio Mäkelä and Adam Somlai-Fischer), The Network as a Laboratory of New Forms (Bronac Ferran), Relational Intervals (Erin Manning), Future Cultural Organisations (Aymeric Mansoux), and Horizon Projects (Tom Klinkowstein). Participants signed up to one group for the 2-day conference period. In between the intensive sessions, stimulating plenary interceptions came from the second life world There.com (Celia Pearce), included a Twitter treat and dazzling video animation (Mez Breeze), and an insight into gaming as a means to change the world (Claudia Rodriguez).

So, what did Walled Garden teach us about the future public garden?

Knowledge and awareness

It became clear that the level of knowledge and awareness among large parts of society about the implications of the use of social networking sites is very low. Apart from an urgent need for education on the basic practicalities we need to consider and question how individual data and profiles will be used in the future. 'The next war might be a Data-War.'

Networks and experimentation

Network experimentation takes place within the mixed ecology that many artists, designers, programmers, researchers inhabit while intervening and playing with proprietary formats and commercial processes. Networks can be regarded as open laboratory models that offer space for early innovation, and which will emerge and become visible to much larger audiences. These sites for public experimentation did not exist previously, and whilst there are still constraints, there is a need to increase the degree of access if we want to facilitate growth and development

Innovation and knowledge distribution

Much online innovation stems from a combination of user-generated activity and commercial systems. However, currently there is lack of qualitative data, evidence and empirical research regarding the use of Web 2.0 tools. Mapping and data visualisation methods prove valuable in tracing the often still messy boundaries and walls, finding the lay of the land and identifying where innovation can occur. There is a potential role for intermediaries to broker and negotiate in these spaces for knowledge and information exchange.[1]
The key challenge is how to regain agency in these spaces and gain more knowledge about what is currently happening. It is crucial to improve and strive for more network literacy and establish rules of engagement.

Future and past

Walled Garden suggested that our future lives will entail a whole range of new challenges: Facebook Sentimentalism; Scalism Sects (moving from the nano to the galactic); Time Shifting (living at different time zones at will); or Surrogate Selves (taking over decisions for you). Fictionalise what might happen and then experiment to explore these frontiers of science

1
As a concrete example, the 'Leaky Garden' tool (http://www.leakygarden.net), which was developed during Walled Garden, shows which 'walled gardens' leak, and which are watertight. Social network sites and other Web 2.0 services with usernames and logins are analysed by the amount of indexed items in Google. How often have the usernames from the 2.0 sites been indexed by Google? Leaky Garden shows the quantity of leaks per 2.0 service.

and future: unexpected futures come from unintended events.

Although our Walled Garden provided fertile soil, we felt there was an array of questions that had been touched upon but not expanded on, and invited our fellow gardeners to stroll, ponder and dig deeper. So, with the following questions in mind and the outcomes of their working groups we asked each of the moderators to write an article, based on the following questions:

– Supposing that we have reached a plateau, and what were once innovations have now settled into patterns of informal and familiar use: What future developments are on the horizon, and what are opportunities and challenges?

– An important step is to find and establish 'agency' in online environments. To what extent could (media) artists, practitioners, researchers influence next steps?

– Under the assumption that we might have already entered a new phase of working, how can we acquire new ways of thinking and become aware (of the implication) of changes?

This publication, the articles together with reporters' notes, quotes, photos, and complemented by our online Walled Garden should be seen as seeds for thought and future gardens. While the exploration has started, it is still a long road towards implementation.

Thanks to our fellow gardeners – moderators, presenters, reporters and participants without whom the garden will not flourish.

Annet Dekker
Annette Wolfsberger Virtueel Platform

Annet Dekker is programme manager at Virtueel Platform. Subjects of interest are the influence of new media, science and popular culture on art and vice versa. For the past eight years she was head of exhibition & education and managed the artist in residence program at the Netherlands Media Art Institute in Amsterdam. Next to her activities at Virtueel Platform she is an independent curator and is studying for a PhD at the Cultural Studies department of Goldsmiths College in London, under supervision of Matthew Fuller.

Annette Wolfsberger is programme manager at Virtueel Platform. She produces and researches within the fields of media arts and contemporary & popular culture. Previously, she directed Enter_Unknown Territories, an international conference and festival for new technology art, business and research in Cambridge (UK). Annette is also part of the team that organises Sonic Acts.

For more background information on the Walled Garden event see: http://sites.google.com/site/walledgardenconference/.

'Visions for near futures are mostly overrated and visions for far futures are underestimated.'

(after Bill Gates)

'Facebook Sentalism: wasn't that a wonderful naive period.

Scalism Sects: talk simultaneously about nano, galactic, etc.

Timeshifters: live in different timezones at will.

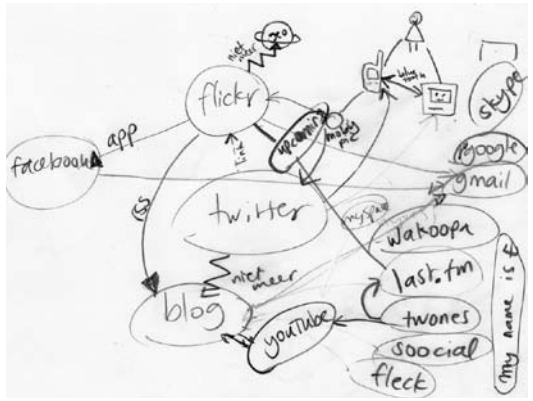
Surrogate Selves: taking over decisions for you.'

Horizon Project
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

‘In order for a network to sustain itself, it has to be personalised’.

‘Javascript is the enemy of analysis!

Cookies are tentacles!’



Mapping Walled Garden
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

The Conference: Working Groups

International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

The Network as Laboratory

Bronac Ferran

'The Network is the Laboratory – metamorphosis, osmosis, osis (condition, process, action).
If Social networking is at the adolescent stage – what will happen when it grows up?'

Can the Network be seen as laboratory of new forms and social collisions? A co-laboratory / a space where chance and order collide?

Five years ago we may not have imagined how today's Internet would be used. Those were the early days – the primeval forest, messy, chaotic, full of the elements, unforeseen events and creative potential. Is it more interesting now? Are we now at the end or the beginning of the 'network as laboratory': as testbed, a space for social and formal experimentation?

Can we now see the networked space in itself as a site for experimental research? What new tools and resources might be emerging now? What future developments are on the horizon (grid computing, academic research links, etc)? How might policy frameworks evolve in the context of networked innovation?

Let's look across the world. Let's ask others and ourselves what we expect to see in five or even fifteen years' time and how things might develop in the meantime... How might media artists influence next steps? And how much does this matter in an era of ubiquitous creativity? If the network itself is the (co) laboratory then isn't it best to get in there and roll our sleeves up and make it happen?

Mapping the Walled Gardens: Digital Methods for Researching and Visualizing Networks on the Web

Sabine Niederer and Richard Rogers

'What happens when we have friended our old friends on MySpace and have written professional testimonials on LinkedIn, have scribbled our entire music libraries on last.fm and have written on many walls on Facebook? Can networks be open, sustainable and valuable? Or does a network only work when it's a walled garden?'
Walled Garden was an event dedicated to the future of the Web as 'walled gardens', as stated in the description of this event. A mapping exercise could reveal where the commons are, where the walls stand, how high they currently are, and who's tending them.
The workshop participants worked with the tools and methods of the Digital Methods Initiative, focusing on the 'natively digital', in researching and visualizing the 'walled gardens' of the Web.

The analyses may lead to device critiques – exercises in deconstructing the political and epistemological consequences of algorithms. They may lead to critical enquiries into debates about the value and reputation of information.

Visualizations contribute to the changing notions of Web space over the past decade – be it the virtual roundtable, the sphere, the network, the cloud or the 'revenge of geography' in the current locative period. Other visualizations are explicative, or recipe-like, providing step-by-step methods and findings, for example, about the quantity and intensity of content circulation.

Working Group 3

Social and Semantic Serendipity: Crafting Networked Environments for New Media Arts and Culture

Tapio Mäkelä and Adam Somlai-Fischer

'Rhetoric of open and free in the context of software and networks, besides being sites of useful and creative practices, have become idealised dogmas. In networked communication in general, as well as in new media art and content creation, we will increasingly need a sense and sensibility of combining open and closed as tactics, rather than as ideals. In my walled garden, there are many gates with different protocols for entering and leaving. Also its walls are porous. Visiting my garden proper will require a keyword combination, or being part of a social network assemblage. There are waiting rooms, and a huge compost for spam. I eagerly look forward to life beyond e-mail.'
(Tapio Mäkelä)

What can be done, in practice, to improve the communication intense, spam infested lives of new media practitioners and organisations? In order to open up this discussion the workshop leaders conducted an autopsy of contemporary, networked communication and publishing media environments.

The future of Internet as a whole was not solved, but it is ironic that the most software literate cultural practitioners cannot improve their every day digital/analogue lives. While drafting a modular synthesis of a social and semantic software that could be crafted they wanted to open a conceptual and critical debate. To distinguish our communication and software design practice from that of the functional mainstream they insisted on raising the approach of serendipity.

Subtopics were:
- Life beyond e-mail (as we know it)
- Contextual communication with media objects and design process
- Information ergonomics
- Challenges of transdisciplinarity
- Borderlines of open and closed networks, private and public
- Interpretation vs. control, unexpected vs. teleological

Working Group 4

Future Cultural Organisations

Aymeric Mansoux

'Enough of those serious play group therapies! Enough of those brainstorm meetings! Enough of those project manager group planning sessions! Enough of those power point powered informal get togethers! Let's just make things happen. Now.'

Within the 'future cultural organisations' the participants attempted to sketch a fictional organisation using networks as a playground. From the personal experience of the participants, they tried to filter which online services make a difference and what are the pros and cons of online autonomy in the post Web 2.0 era. To inspire the group and help design an organisation there were presentations by Pedro Soler, Dave Griffiths and Martin Howse.

The workshop also looked at the following subtopics:
- API heaven and the end of privacy
- Limitation of superrationality applied to organisations and collectives
- Towards a natural transciplinary nature of organisations
- Creativity as the combination of community garden and greenhouse
- Smaller and better modular approach to collaboration
- Delegation and outsourcing
- Social sustainability vs. structural sustainability
- Grow your own, do it your self and community bootstraping
- Run your own server vs. outsourcing

Working Group 5

FLWR PWR: A Collaborative 'Critical Making' Session Where the Making and the Thinking Go Hand in Hand

Matt Ratto

The participants used pre-assembled electronic components and craft materials to build electronic flowers. These flowers 'talked' to one another using light patterns and, in doing so, gain and expend energy. Through programming they can be more open or more closed, more aggressive or more sharing. The style of programming effects the individual flower just as well as the survival of the garden as a whole.

The result was an interesting visual display, but also it was a means to open and inform discussions relevant to the topic of 'walled garden', like: the porosity of boundaries; the necessity for both inclusion and exclusion as part of community; the power of exchange.

The physical construction has an impact on how directional the plant is able to communicate: Do you place the light sensors up high so that it can see many directions and at a distance, or do you place your display lights up high so that it can be seen? Do you focus all of your sensors in one direction for increased sensitivity, or do you spread them out in order to cover more terrain?

Software configuration affects the plants behaviour: Do you give it an aggressive communication pattern where it constantly broadcasts its pattern or do you have it spend more of its time listening for others patterns? Do you try to conserve energy in order to last a long time, or do you spend energy in the hopes of attracting other plants?

Working Group 6

Relational Intervals, or How to Make the Network Felt

Erin Manning

'Radical empiricism is about how the in-between of process in-forms the work of thought. Walled Garden is a multi-disciplinary investment in how the network makes operative this kind of thinking in process.'

This workshop explored the question of the relational interval as the between where thought takes place that exceeds the platforms of its expression. At stake is the in-between in the event itself, and together the participants explored and worked to create activities that animate these intervals – the spacetimes of experience between scheduled events, lunch breaks, after-event times, etc. How can the in-between spacetimes of experience activate the thinking of the event? How can event-thought creates new kinds of networks – new in their ontogenetic potential, new in their status as relational intervals?

The proposition was to make apparent the connective tissue of the Walled Garden event; bring into appearance the network beyond its actual nodes. Explore modes of process that can interweave with existing modalities of networking such as those taking place within the Walled Garden event. Ask how transversal linkages can be created with and within a process already underway. Invent techniques for relation that subtly alter the fabric of the network by tweaking the affective tonality of the event.

Art and Net Ontology: Reviewing the Past/ Envisioning the Future

Edward Shanken

'There is not the slightest indication that nuclear energy will ever be obtainable. It would mean that the atom would have to be shattered at will.' (Albert Einstein, 1932)

'I think there is a world market for maybe five computers' (Thomas Watson, Chairman of IBM, 1943)

'If history is doomed to repeat itself, is it possible to miscalculate the future less radically than did the great minds of the past? What can we learn about the future from the role art plays in envisioning and inventing it?' (Edward Shanken)

Alan Kay is credited with the adage, 'the best way to predict the future is to invent it'. The role of artists is particularly interesting in this regard, as the invention and development of one-point perspective, photography, VR CAVE's and various other technologies were fuelled by artists. Artists also play a more symbolic role in inventing the future.

This workshop examined historical and contemporary works of art that envision the future of networked communications. What can we learn from the prescience of past artists and designers as we contemplate the relationship of current artistic practices to the future?

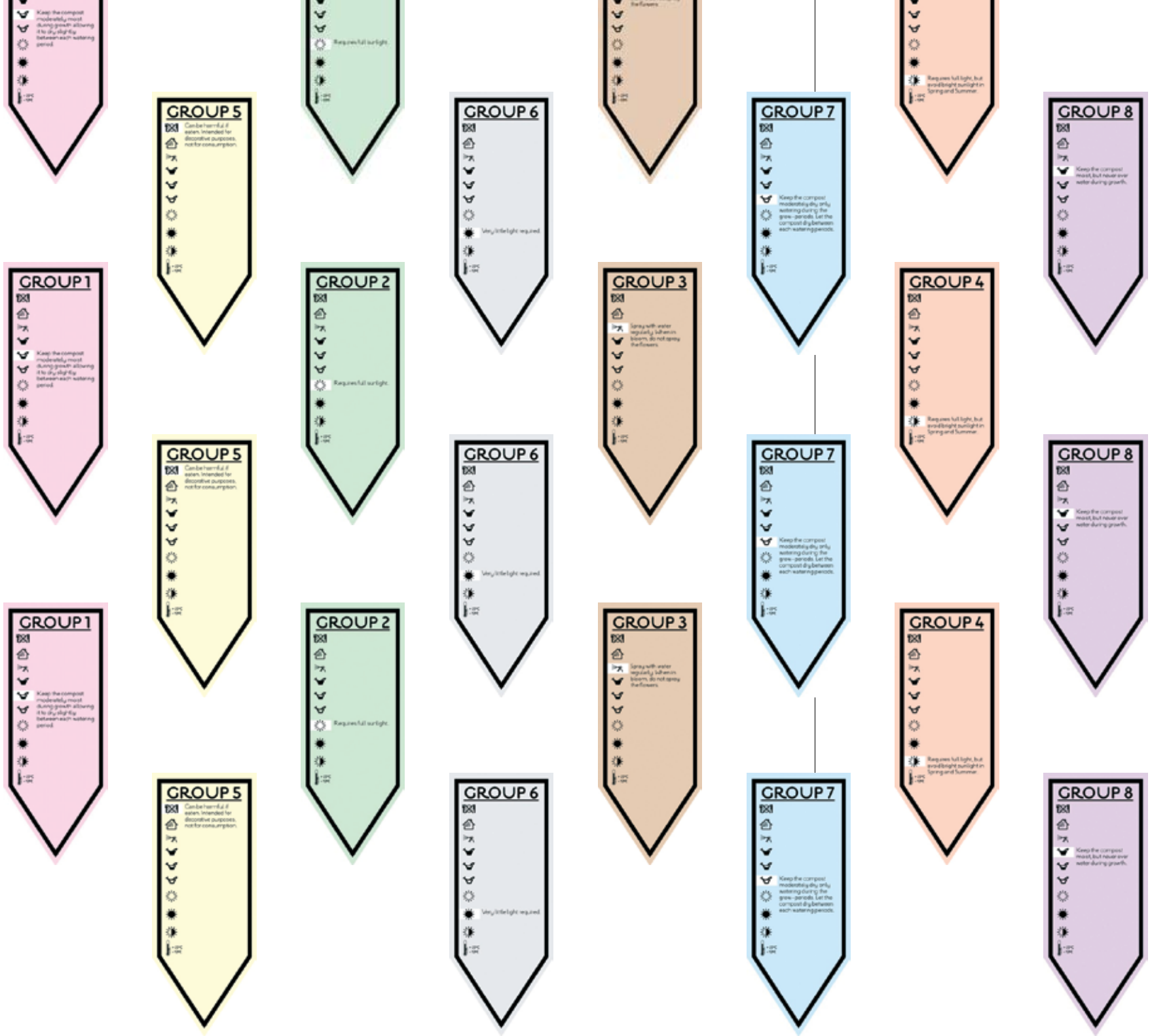
Horizon Projects

Tom Klinkowstein

'We are the people we've been waiting for imagining a future, whether or not it comes true, is what makes us happy'.

What can we learn from the predictions that never materialized to better look at the future? Conventional thinking about the future is linear, limited to tunnelled 'flash light' extrapolations of current visions. Our goal with the Horizon Project is to see beyond these narrow beams.

We visualize new rhythms, manners, rituals, services and products arising from future hypothetical, 'impossible' cultural, political, technological or other conditions and then, 'look back from the future' to examine present-world challenges through the filter of the invented future-frame.



Badges Working Groups
Designed by Studio Léon&Loes

14 February 2030

Tom Klinkowstein
http://www.mediaa.com
Carla Gannis
http://www.carlagannis.com

Tom Klinkowstein is President and Creative Director of Media A, LLC, an internationally recognized design and consulting group. Klinkowstein previously taught in the graphic design department at the West Brabant Art and Design College in the Netherlands and since 2000, a Professor of New Media at Hofstra University on Long Island. He is also an Adjunct Professor in the Graduate Communications Design department of Pratt Institute in New York. His work has been shown in art centers, museums and galleries throughout the world, including the Centre Pompidou in Paris and the Venice Biennale in Venice, Italy. Tom Klinkowstein's most recent project (with Irene Pereyra and others) is entitled, *A Day In The Life Of A Networked Designer's Smart Things Or A Day In A Designer's Networked Smart Things, 2030*, about the future of design, was created for the Singapore International Design Festival in December, 2007.

Carla Gannis, originally from North Carolina, currently lives and works in New York. Trained as a painter and having received her BFA from The University of North Carolina at Greensboro and her MFA from Boston University, Gannis shifted to producing digital print and multi-media installation work in the late 1990s. She has exhibited in solo and group exhibitions both nationally and internationally. She is currently on the Digital Arts teaching faculty at Pratt Institute in Brooklyn and The School of Visual Arts in New York.

14 February 2030, 22:30-22:59 UTLT
(Universal Terrestrial/Lunar Time)

subject: your questions, re: Walled Gardens

from: Tom Klinkowstein, Carla Gannis

to: Virtueel Platform, Amsterdam

via: temporal tunneling email, 6 February 2030 > 6 February 2009

Transliterated from a Blog-Con* between Tom Klinkowstein, Designer, New York and Jamestown Lunar Colony, and Carla Gannis, founder, ART-ificial movement, en route via hypersonic transport from Mumbai to the Blue Ridge Mountains.

In the background, for ambiance, lyrics by MOMUS, sung to the tune of Steve Reich's 'Music for 18 Musicians'.

* Blog-Con: a sensory-centric conferencing system employing gestures; a 10th-generation descendent of a blog.

Steve Reich's 'Music for 18 Musicians':

Appalachian mountain girl
Coming home to me
Appalachian mountain girl
Keep me company
Won´t you come and
comfort me
Electronically
Appalachian mountain girl
Coming home to me

Electronic mountain girl
Say you´ll always stay
Electronic mountain girl
Never fade away
If you should ever fade away
I would fade to grey
Electronic mountain girl
From the Appalachia Way

Electronic mountain girl
Say you love me do
Electronic mountain girl
And your love is true
When I look into your eyes
Appalachia blue
I spend my life coming home to
Electronic you

Electronic mountain girl
If I had my way
Electronic mountain girl
By your side I´d stay
I´d stare into your deep
blue eyes
Every night and day
Electronic mountain girl

What technological changes would surprise a visitor from the first decade of the 21st Century to 2030?

TOM KLINKOWSTEIN

That era (the first decade) was just so heavy with things dedicated to a single purpose. When in the mid-2020s quantum computing came out of the lab and into EVERYTHING, we realized we could breathe this stuff in, paint it on, spray it around the room like deodorizer, ingest it with dessert, gulp it down with the morning coffee. Invisible and almost too-cheap-to-charge-for augmented intelligence that wafts through our lives like the comforting aroma of freshly baked bread.

CARLA GANNIS

Skynning. Sometime in the 'Naughties' (2000-2009) my mom showed me a photo of the 93-year-old Louise Bourgeois, her face was lined, dimpled and marked like an exquisite topographic map of the universe and her eyes twinkled conspiratorially. She was the most beautiful woman I had ever seen. That night, I dyed my hair gray, drew character lines on my face and I tried to learn to squint–I was deep into old age lust, presaging Skynning–the etching of sensor and communications engrams onto the epidermal layer.

What changes to societal moirés?

TK

In the late Naughties, there was talk of Walled Gardens–they meant the old Internet and how cozy, micro-exclusionary enclaves were being formed then cordoned off from the hoi polloi of the larger net. A few years later, 'The Gardeners' (retirees who described themselves as 'crotchety Internet social activists'), staged political theatre of a sort. They literally carried large stanchions into Starbucks, Business Class commercial aircraft cabins, university classrooms and the like, and would partition off physical spaces to conform to Facebook Friends groupings. The absurdity of it all was more or less the end to the walling era.

CG

Being 'over the hill' (too old) when one reached 70, 80 or 90, when one no longer had that old-style sexual oomph, or what more politely what was referred to in the Twenty-Teens as 'ocsed' (outliving cultural significance).

An obsession with youth gave way to a lust for wrinkly, crinkly, deeply knowledgeable, sensory augmented, centenarians. 105-year-olds became the new it-guy and it-gals, loaded as they were to the (artificial) gills with millions of exabytes of memories and the sly coyness that only 10 decades of multi-realm experience can bring.

What personal changes?

CG

My mother was an accomplished digital artist. Her idol was C. Lady Ada Lovelace, the first computer programmer (mid-19th century!). Mom gave me a book by Charlotte Perkins Gilman written in 1915: *Herland*. Within this utopia there was no allowance for contradictory impulses.
I, her daughter, exist as a prism without conflict. I celebrate an embrasure of multi-personages, I live Anais Nin's 20th-century rant: 'I will not be just a tourist in the world of images, just watching images passing by which I cannot live in, make love to, possess as permanent sources of joy and ecstasy'.

TK

I reconfigure my analytical, political and economic faculties through a prism of the hundreds of millions of smart things, semi-sentient environs and the co-decisive choices made by thousands of my closest friends, hundreds of thousands of times each day.
A prism without conflict, that's what they were so fearful of with their Walled Gardens! Quoting myself from a recent lecture at the Design Thinking Institute, '…give me life, liberty and the pursuit of the reflected, rearranged, reified, unclassifiable, living-in-between-the-words-and-the-data-sets. My inalienable right to 10^4 power personas, to travel through nanotubes, play with puppies incarnated from smart dust, act out King Lear in an imagined 22nd-century Macy's window; to resurrect Kirk, Buckminster Fuller, Ghandi, Steve Jobs, Abe Lincoln – and my hair looks just right doing it.'

How has the concept of work changed?

TK

Not sure, but this is what I'm working on:
-Research for terrestrial-based participatory 1/6th gravity experience using sensor nets connected to the cultural, scientific, and commercial life of Jamestown prototypical lunar colony.
Primary goals of the engagement: maximize terrestrial participation in colony life; encourage earth-based businesses to use lunar spin-off technologies; help maintain public support for $1.75 billion/day colony cost.

Other related research:
-Review colony's cultural history, including failed attempt to introduce color into moon's grayscape.
-Look into ongoing debate with neurologists and linguists in fourteen countries and on the moon regarding the possibility that the effects of 1/6 gravity on brain neural pathways may explain colony residents' predilection for enormously long run on sentences.
-Create 4-D diagrammatic narrative for potential lunar tourism venture on human response to hypoxia-motion sickness stress disorder as a predictor of the space sickness syndrome in pre-teen astronauts.
-Investigate sensory and motor function robotic manipulandum in relation to disturbances of balance, locomotion, and whole-body coordination. Question: is there total reorganization of skeletal-motor movement control upon re-entry to 1g?

CG

Now I don't want to get all gendery here, but in my mother's day they did say that women's brains were particularly adapted to multi-tasking. The collective sharing of thought and action patterns (particularly popular with women), made possible by T.P.S. (Thought Positioning Satellites), led to highly increased capacities in the brain's 'executive control' processes of the prefrontal cortex and other key neural regions such as the parietal cortex. This in turn begat the whole Think It / Have It movement (a.k.a., 'proactors', or users/citizens who play a role in the continual renewal of a brand), which at one point in 2027 employed over 11% of the world's population.

How did designers, artists and researchers influence the evolution of what used to be called the 'online environment'?

CG

It was artists as the first adapters to O.I. (Other Intelligence)¬–the deeply intimate connection to the members of one's poly-communities through personal sensor nets. Separation between the old online world and what remained outside of it became largely semantic.

TK

The divisions in my profession of earlier decades gave way to multidisciplinary designer/directors who orchestrate interests, technologies and relationships across all realms.

Near-unlimited digital storage has led to a collective memory of everything; trust in the convergence of information, privacy, and security has followed. In everyday events, I see the traces of an established, trusting, and deeply comfortable relationship between designers and their smart things; a relationship fostered by self-managing systems that present a rich palette of options for knowledge gathering, task time-shifting, nomadism, well-being and civic engagement.

The smart objects surrounding me act according to a well-balanced ecology of action/reaction. They are agents of change, challenge, and ease, capturing data, engaging in dialogues among themselves and with me; feeding data, compiling and documenting it, and influencing and effecting actions without direct supervision. Reliable, helpful, and supportive, the smart things ingratiate themselves into every niche of my life without imposition. They are the quiet technology that earlier pioneers craved.

And the 'classic' (material) world?

CG

Computer art began around the 1950s with artists writing algorithms. By the late 1990s, media artists were no longer doing their programming. Because artists no longer had to additionally be scientists and technicians, creatives from other concentrations began to implement digital tools and technologies into their more physical media. Thanks to this lead, the digital world and the material world 'kissed and made up' after decades of not talking to each other. So the physical world

is no longer this stolid thing, it has ambitions, it has tendencies, it is part of our body politic, it has a kind of semi-sentient presence that can be frightening, caring or sexy.

TK

This reminds me of Plato's dialogue, 'The Symposium', in which Aristophanes describes the beginnings of the two genders. He suggests that originally human beings were big blob-like entities, with double sets of all the appendages, legs, arms and sexual organs. Zeus split them apart for being too full of themselves. Since that time, we have been trying to put ourselves back together again.

That searching for the original other half may be futile, but the trip itself is very important. The quest for unity, the urge to reunite what is split apart is an artful-designerly impulse. It restores things to their proper balanced aesthetic. It is trying to be a thing of beauty. That was the aim of media artists, researchers, designers and professors of interactive media of the early 21st century, with their writings, conferences, projects and experiments. They were attempting to bridge the divided realms of the virtual and the physical and make beauty.

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"Search" is becoming the new "organise".'

'It's all about building filters.'

Future Cultural Organisations
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

‘A walled garden has:
- entrances and exits
- there are keepers with a gardener’s mentality: content tending, no weeds, no dog droppings, no trash
- control is at the gate, security, surveillance, gatekeeping.’

Mapping Walled Garden
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

Post-Demographic Machines

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Post-demographics?

Leading research into social networking sites considers such issues as presenting oneself and managing one’s status online, the different ‘social classes’ of users of MySpace and Facebook and the relationship between real-life friends and ‘friended’ friends (Boyd & Ellison, 2007). Another set of work, often from software-making arenas, concerns how to make use of the copious amounts of data contained in online profiles, especially interests and tastes. I would like to dub this latter work ‘post-demographics’. Post-demographics could be thought of as the study of the data in social networking platforms, and, in particular, how profiling is, or may be, performed. Of particular interest here are the potential outcomes of building tools on top of profiling platforms, including two described below. What kinds of findings may be made from mashing up the data, or what may be termed meta-profiling? Elfriendo.com is an application that profiles a set of friends. It allows one to compare the tastes of a set of friends to those of another, using MySpace data. Which TV shows are most referenced by those who have friended Barack Obama? How do they differ from those shows as well as books, music and movies from John McCain’s ‘friends’ online? (The small case study was performed prior to the U.S. presidential elections in November, 2008.) The second example of post-demographic work described here is the Leaky Garden Project (leakygarden.net), which furnishes a list of online services a particular user has subscribed to. One ‘profiles’ an individual (username) from the accounts taken out in Web 2.0 applications. Subsequently one sees the amount and also the details of the username’s activity per platform, if, that is, the user’s traces have been indexed by the major search

engine, Google. These are 'leaks' in the so-called walled gardens, a term I return to.

Conceptually, with the 'post' prefixed to demographics, the idea is to stand in contrast to how the study of demographics organizes groups, markets and voters in a sociological sense. It also marks a theoretical shift from how demographics have been used 'bio-politically' (to govern bodies) to how post-demographics are employed 'info-politically,' to steer or recommend certain information to certain people (Foucault, 1998; Rogers, 2004). The term post-demographics also invites new methods for the study of social networks, where of interest are not the traditional demographics of race, ethnicity, age, income, and educational level – or derivations thereof such as class – but rather of tastes, interests, favorites, groups, accepted invitations, installed apps and other information that comprises an online profile and its accompanying baggage. As with Elfriendo and the Leaky Garden Project, the question concerns, which approaches and methods may be brought to bear in order to create new derivations from profile information, apart from niches and other, more specific products of behavioral marketing (Turow, 2006)?

Post-demographics is preferred over post-demography, as it recognizes popular usage of the notion of a 'demographic', referring to a segment or niche that may be targeted or polled. Crucially the notion attempts to capture the difference between how 'demographers' and, say, 'profilers' collect as well as use data. Demographers normally would analyze official records (births, deaths, marriages) and survey populations, with census taking being the most well known of those undertakings. Profilers, contrariwise, have users input data themselves in platforms that create and maintain social relations. They capture and make use of information from users of online platforms.

Perhaps another means of distinguishing between the two types of thought and practice is with reference to the idea of 'digital natives', those growing up with online environments, and unaware of life prior to the Internet, especially with the use of manual systems that came before it, like a library card catalogue (Prensky, 2001). The category of digital natives, however, takes a 'generational' view, and in that sense is a traditional demographic way of thinking. The post-demographic project would be less interested in new digital divides (digital natives versus non-natives) and the narratives that emerge around them (e.g., moral panics), but rather in how profilers recommend information, cultural products, events or other people ('friends') to users, owing to common tastes, locations, travel destinations and more. There is no end to what *could* be recommended, if the data are rich and stored.

Social networking sites as object of post-demographic study

'We define social networking websites here as sites where users can create a profile and connect that profile to other profiles for the purposes of making an explicit personal network' (Lenhart & Madden, 2007). Thus begins the study of American teenage use of such sites as MySpace and Facebook, conducted for the Pew Internet & American Life Project. 91% of the respondents use the sites to 'manage friendships'; less than a quarter use the sites to 'flirt'. Leaving behind surveys of user experiences for a moment, what is not as well known is what 'non-users' do with social network sites, with the occasional exception, such as the enquiry into how spammers leverage MySpace (Zinman & Donath, 2007). Non-users are those who do not manage friendships or flirt, but still visit the sites and read the profiles. They also may be interested in the data sets, and in automated means of capturing them, such as making use of the APIs (or application programming interface), or screen-scraping the pages. With 'post-demographics', the proposal is to make a contribution to the non-user studies – those profilers and researchers that both collect as well as harvest (or scrape) social networking sites' data for further analysis or software-making, such as mash-ups.[1]

1
Non-users refer to profilers. Of course, profilers also may be users of the platforms, and most probably are, for one's sense of what may be mined, and how it may be analyzed or mashed up, would come from usage, with at least a minimal level of activity.

How could one characterize the difference between the databases of online platforms and the databases of old (and new) that profile people to 'sort' them (Gandy, 1993)? Database philosophers were once deeply concerned about mandatory fields and field character limits – the number of letters and numbers that would fit on each line in the electronic or hard copy form. The paucity of fields and the limited space available for an entry would impoverish the self, similar to how bureaucracy transformed individuals into numbers (Poster, 1991). People could not describe themselves fittingly in a few fields and characters.

Other critiques of early database profiling practices pointed out that the 'anomaly' was the most significant output of analysis. Certain people (in the sense of data constructs) would stand out from the rest, owing to their lack of statistical normalcy. In a cultural theory sense, the database became the site to derive the other.

What may be derived from the new databases? More otherness? Now, with online platforms, there are longer character limits, more fields, and far greater agency to author oneself, or as one scholar aptly put it, 'to type oneself into being' (Sunden, 2003). 'Other', that last heading available on the form, standing for difference, or taxonomic indeterminacy, has been replaced, generally speaking, by 'more.' For example, the user is invited to 'write note', a freestyle field that provides opportunities for further self-definition and self-presentation. Now that the

database is reaching out, providing you with more space to be yourself, questions may be posed. What does your form-filling say about you? Do you fill in the defaults only? Do you have many empty fields? What do your interests, and those of your friends, tell the profiler?

From a post-demographics perspective, the profile, together with the entities in orbit around it, lies at the core of research. Profilers are interested in what to do with all the 'interests' and 'favorites'.

You are media

What surrounds the profile? Generally, it has been observed that the Web, or at least a part of it, has new 'glue', or 'plasma' in the Latourian sense (Latour, 2005). Where once hyperlinks tied sites together, now the social networking sphere is viewed as less of a hypertext than a hyper-object space. From this perspective, the Web is more social than informational. The network has profiles as its nodes, with links between friends as well as social objects, not to mention 'social' third-party applications, socially derived recommendations as well as adverts (Knorr Cetina, 2001; Engeström, 2005). An initial question is how sociality is organized.

For one's profile, the user is invited to fill in certain personal information and list favorites. The fields for age, gender and location are still present; yet profiles invite the post-demographic, with requests for media listings, as favorite movies, music, TV shows, books, etc. It also asks for and stores media files, as pictures, clips and tunes. Once the profile has been completed (for the time being), the social linking begins. One 'friends' (the new verb), shares, joins groups and accepts invitations for events.

Sociality breeds more of it. The more social you are, the more prominent you become, in a presence sense. That is, your own activity boosts you on other (friends') pages, be it a tweet, wall writing, or comment, which may appear as running entries on other (friends') pages (Facebook). The platforms continually encourage more activity, inviting commentary on everything posted, and recommending to you more friends (who are friends of friends). With all the ties being made, and all the activity being logged, the opportunities for analysis, especially for social network researchers and profilers, appear to be boundless.

There are of course constraints. Certain of these concern the issues involved in harvesting the data, and making derivations. Which social networking sites are scrapable, and to which extent? When, and under which conditions, is it acceptable to harvest data? Apart from data collection, at issue is also data

usage. The depersonalization of the data would be helpful in particular ethical discussions of social network site analysis, however much celebrated cases have shown 'why "anonymous" data sometimes isn't' (Schneier, 2007). There are norms for data usage, the most basic of which is user consent. When signing up, the user makes an agreement with the platform, and there are terms of use for both parties, as well as a service privacy policy. Of crucial importance however is the blurring of the line as to who is the primary agent of ensuring privacy. Arguably, on social networking sites, the user is assuming more and more responsibility for privacy, in the settings chosen. Whilst the services have thought through the default settings, the user is the one who lets his or her guard down, if you will, by changing the profile viewing setting from friends only, to friends of friends, which is the maximum exposure level inside Facebook.

How do social networking sites make available their data for profilers? Under the developers' menu item at Facebook, for example, one logs in and views the fields available in the API. Sample scripts are provided, as in 'get friends of user number x', where x is yourself. Thus the available scripts generally follow the privacy culture, in the sense that the user decides what the profiler can see. It becomes more interesting to the profiler when many users allow access, by clicking 'I agree' on a third-party application.

Another set of profiling practices are not interested in personal data per se, but rather in tastes and especially taste relationships. One may place many profiling activities in the category of depersonalized data analysis, including Amazon's seminal recommendation system, where it is not highly relevant which person also bought a particular book, but rather that people have done so. Supermarket loyalty cards and the databases storing purchase histories similarly employ depersonalized information analysis, where like Amazon, of interest is the quantity of particular items purchased as well as the purchasing relationships (which chips with which soft drink). Popular products are subsequently boosted. Certain combinations may be shelved together.

Post-demographic machines

Whilst they do not describe themselves as such, of course the most significant post-demographic machines are the social networking platforms themselves, collecting user tastes, and showing them to others, be they other friends, everyday 'people watchers' or profilers. Here however I would like to describe briefly two pieces of software built on top of machines, in the post-demographic analytical spirit, and the kinds of research practices that result.

Elfriendo.com is the outcome of thinking through how to make use of the profiles on the social networking platform, MySpace. At Elfriendo.com, enter a single interest, and the tool creates a new profile on the basis of the profiles of people expressing that single interest. One may also compare the compatibility of interests, i.e., whether one or more interests, tunes, movies, TV shows, books and heroes are compatible with other ones. Is Christianity compatible with Islam, in the sense that those people with one of the respective interests listen to the same music? Elfriendo answers those sorts of questions by analyzing sets of friends' profiles, and comparing interests across them. Thus a movie, TV show, etc. has an aggregate profile, made up of other interests. (To wit, Eminem, the rapper, appears in both the Christianity and Islam aggregate profiles, in early February 2009.)

One also may perform a semblance of post-demographic research with the tool, gaining an appreciation of relational taste analysis with a social networking site, more generally.[2]

It is instructive to state that MySpace is more permissive and less of a walled garden than Facebook, in that it allows the profiler to view a user's friends (and his/her friends' profiles), without you having friended anybody. Thus, one can view all of Barack Obama's friends, and their profiles. Here, in the example, one queries Elfriendo for Barack Obama as well as John McCain, and the profiles of their respective sets of friends are analyzed. The software counts the items listed by the friends under interests, music, movies, TV shows, books and heroes. What does this relational taste counting practice yield? The results provide distinctive pictures of the supporters of the two presidential candidates campaigning in 2008. The compatibility level between the interests of the friends of the two candidates is generally low. The two groups share few interests. (The tastes of the candidates' friends are not compatible for movies, music, books and heroes, though for TV shows the compatibility is 16%. See figure one.) There seem to be particular media profiles for each set of candidate's friends, where those of Obama for example watch the *Daily Show*, and those of McCain watch *Family Guy*, *Top Chef* and *America's Next Top Model*. Both sets of friends watch *Lost*.

2
One gains only 'a sense' of how analysis may be performed, and the kinds of findings that may be made, because Elfriendo captures only the top 100 profiles, thus providing only an indication, as opposed to a grounded finding from a proper sampling procedure.

The Leaky Garden Project

'Social networks require a degree of exclusion to work properly, (Shirky, 2003). Whilst commonly associated with certain social network sites, the term walled garden also refers to a business practice, notably in the software and hardware industries, where one firm's formats are incompatible with another's, thereby keeping the consumer 'locked in' (Arthur, 1989). Mobile phone rechargers come to mind, where Nokia's does not fit a Motorola phone, and vice versa. One of the arguments used in favor of

Figure one: The interests of Barack Obama's and John McCain's MySpace friends, 10 September 2008. Elfriendo.com, Govcom.org Foundation, Amsterdam, 2008.

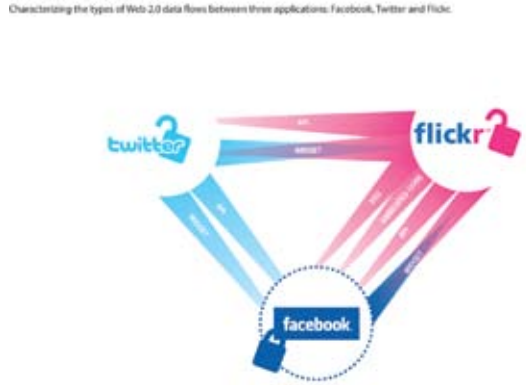

Figure two: Walled Garden Data Flows. Digital Methods Initiative, Amsterdam, 2008.

lock-in is that dedicated hardware ensures the proper functioning of the technology. AT&T, with its historical slogan of 'one company, one system, universal service', made this argument repeatedly, in efforts to disallow 'foreign', or third party products and services, to run on the phone system, until the MCI lawsuit, and subsequent anti-trust work, finally unwound the Ma Bell monopoly in the 1970s and 1980s. With social networking sites, the notion of a walled garden cannot be applied as effortlessly. Social networking sites, especially Facebook, encourage third-party applications, in the new media style, with the realization that not only users' content, but also users' applications increase the value as well as levels of participation. This is the classic argument concerning the inversion of the 'value chain' in online games as well as in the entire Web 2.0 industry, summed up in the idea that the more who use it, and contribute to it, the better and more valuable it becomes (Shirky, 2008). (Like the now famous graphic by Bruce Clay that shows the dependencies between search engines, in a kind of data eco-system approach, see in figure two a rendition of the flows between leading 2.0 services, Facebook, Flickr and Twitter (Clay, n.d.).)

Here the question concerns, just how walled are these gardens? Apart from examining the data flows between applications, as above, the question of the permeability and penetrability of the platforms also may be approached by examining whether and to what extent each is indexed by search engines. In order to do so, leakygarden.net sits atop a machine that checks the availability of a particular username across a growing list of Web 2.0 applications. Usernamecheck.com is a useful service. When considering a new username, you may wish to know if and where it is taken, across the broader landscape of platforms. Here usernamecheck.com is repurposed, and in the first instance made into a profiling machine. Type in a username and check which services a person uses. Here the project researchers observed that generally speaking people seem to have two usernames, an alias as well as the real name (first and last name) as one word. Thus one may need to perform two queries for a fuller picture. Subsequently, leakygarden.net looks up references to the username. Does Google return pages from that username per platform? In all, the Leaky Garden Project shows which 'walled gardens' leak, and which are watertight (see Figure three).

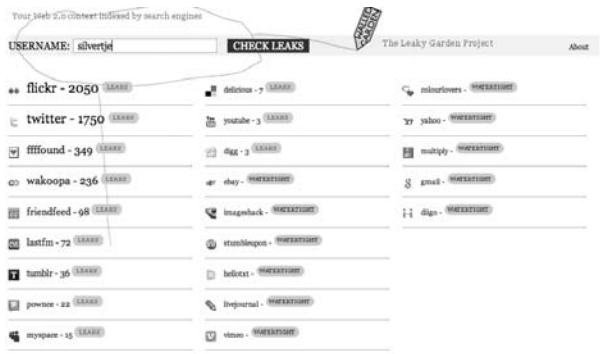

Figure three: Username service subscription profile of 'silvertje' (Anne Helmond), including the 'leaks', or the amount of silvertje references per service, indexed by Google. Leakygarden.net, Govcom.org Foundation and the Digital Methods Initiative, Amsterdam, 2008.

Conclusion: What would Nielsen do?

Two methods dominate old media-style 'audience' research, the hand-written diary of a TV viewer or radio listener and the automated meter, registering how long a TV or radio channel is on, per household or household member. The diary technique is still in use, with the Nielsen company sending out a survey pack to its randomly selected families four times per year to record viewing habits during the so-called 'sweeps weeks'. Each person surveyed provides demographics, and a list of the shows they watch. Advertising is subsequently targeted to a TV show's demographic, with soap operas being the classic case of ads tied to a type of show. Because of survey effects, i.e., people changing their viewing habits owing to their need to keep a diary and fit a profile, an automated technique may be preferred (Stabile, 1995). In the United States, such recording devices were first employed for radio listeners, with the introduction in the 1940s

of the Nielsen audimeter, which registered which frequency a radio was tuned to, and for how long (McLuhan, 1951). The results were useful for advertisers, and remain so. Of the initial study performed with the audimeter in 1942, *Time Magazine* wrote: 'When the star of one of radio's most popular nighttime shows said "Good night", listening dropped sharply. The sponsor's closing commercial was heard by only a fraction of the program's audience' (*Time Magazine*, 1943). Nielsen's automated television ratings began in the 1950s, and were taken to the next level with the black box known as the Storage Instantaneous Audimeter, which captured TV viewing of each set in the household, sending data back to headquarters daily through a phone line. 'People meters' have been employed since the 1980s, where each member of the household has his/her own button on the remote control. Behind the button, in the database, are the user's age and gender, and the meter on top of the television is tagged with a location.

TV shows are rated through a point system, with one point given per percentage of all households watching. Advertising rates are subsequently expressed in cost per point. A show has an expected rating (based on history) as well as an actual rating. Of interest to the advertisers is the 'post-buy' calculation of actual audience reach, that is, whether their advert actually had the expected audience types and numbers. Was the advert a good buy?

Should post-demographics emulate the Nielsen machines and metrics? Are there post-demographic equivalents to the machines and their metrics? Indeed, one may transfer the counting method from TV audience research to social net-working sites, using the available interest fields as well as basic demographic data (gender, age and location). Thus one may tally references to a particular interest across an entire social networking platform, as colleagues and I did for Hyves in the Netherlands in 2007 (see figure four). (No demographic data were used in the example.) Among the types of favorites at Hyves are brands, and Hyvers, as the users are called, fill in that field, albeit often without the care and diligence that would be demanded of a Nielsen family member.

Figure four: Word cloud of the most referenced interests across the entire social networking platform Hyves, Govcom.org Foundation, Amsterdam, 2007.

Examples of 'non-cooperative' Hyvers' brands field (to 6 August 2007):

My Style is My Brand
ben geen merkentype
Houd er niet van ge(brand)merkt te worden
ik ben niet zo van de merken
I don't spend much time thinking about brands
Daar doe ik dus ff lekker niet aan mee he
Ik merk het
geen zin in aanvinken

How to tidy the data and make ratings? What would Nielsen do? One could strive to transfer the audience research technique to the new medium. Perhaps particular Hyvers would agree to become Nielsen social networkers, and provide meticulous up-to-date profiles. The fields would be monitored by Nielsen for changes in interests and tastes, and ratings could be provided with a point system, where fans are the equivalents of viewers.

As unlikely as the proposal may sound, it points up the larger question of whether and when to import standards methods of study onto the new medium. It also raises the question of the uses to be put to post-demographics.

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Social Networking Beyond Medieval Economies

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Degrees of closure

An insistence on open systems and sharing has transformed practices around intellectual property, becoming radically 'shareful' on the one hand, and sharply protectionist on the other. These boundaries have blurred fundamentally within business models of Facebook, MySpace, and Last FM, as shared data and network relations become the property of companies that run these services. In a sense, social networking under their license terms is like growing flowers in somebody else's garden, or rather, living within a medieval city where life goes on as usual, but the premises and large parts of the citizens' livelihood are owned by and benefit the landlords. For economic and intellectual property reasons alone, there is a need to develop different kinds of walled gardens, where the gardeners co-own the premises, and can determine how porous or strong the walls are.

My main argument in this essay is to say that openness or freedom on the Internet are relative terms, the politics of which are determined by who controls access to data (especially of users) and how political, monetary and affective economies[1] are based on processes of virtual walls, be they filters or social network boundaries. Contrary to common arguments, I contend that constructing and protecting intellectual, political and creative openness may require degrees of closure. In logistic terms, think about peer-to-peer file sharing as an example: in order for file sharing to function, the identities of the sharers need to be protected. In domains where governments seek to control dissent (consider The Great Firewall of China) to subvert one needs to be covert. At the other end of the open-closed spectrum, traditional corporate intellectual property regimes seek to own, protect and hide from the public the different types of knowledge that they can benefit from. One can very easily conclude that the questions of open and closed vary fundamentally depending on what is enclosed and excluded, and in what context. This notion suggests that 'freedom' as a variable between open and closed, or as a generic notion regarding Internet practices, is a very blunt critical tool. Freedom is often translated as technical or logistical openness; as access to networks, hardware or software code. For the hacker scene, to be closed means to join the enemy. Binary debates between free software and open source software are often about technological structuralism that does not situate software in contexts of use. I want to challenge this binary positioning by suggesting that there is a need to articulate between different 'frees' and freedoms by situating technologies through practices into specific socio-cultural, economic contexts. This allows you to question what constitutes the political with regard to software.

1
Sarah Ahmed describes emotionality as an affective economy, in which emotions circulate as if in a network of objects, bodies or signs without positively residing in one. In an affective economy 'emotions involve relations of displacement and difference…' 'emotions do not inhabit any-body or any-thing, meaning that "the subject" is simply one nodal point in the economy, rather than its origin and destination. This is extremely important: it suggests that the sideways, forwards and backwards movement of affective economies is not contained within the contours of a subject, but moves across or between subjects, objects, signs and others, which themselves are not locatable or found within the present.' (Ahmed 2001, 4-5), In social networks, the present is lost between rapidly changing asynchronicities, where representations of self mingle with data objects that are shared or tagged with affect. Affect marks and demarcates intensification within social networks.

A speculative future social network

How should one consider the thickness of walls in walled gardens within critical media practices? Given the level of complexity of the configurations media arts and creative new media practitioners construct for installations, performances and other work, it is surprising how little communication tools or media frameworks to facilitate meetings or shared work have been re-engineered by them. If everyday life media environments have changed, wider currents such as social software or user driven content platforms have driven these transformations. Mailing lists are still the most commonly used 'social network platforms' for media artists, theorists and activists. However, as open as these formats are, during the last decade and a half several mailing lists have proven to be vulnerable to flame wars and other intrigues around power and identity. Could more sustainable methods, both technical and social, emerge by combining media critical thinking and latest semantic web software techne? I am rather tired of listening to people critiquing commercial platforms like Facebook, unless they can offer alternatives to what social software should look like. Knowing how complex it is to create software in practice, I would call my description of a desirable future social network

platform as a speculative envisioning of a non-negative walled garden that I would like to participate in.

I would like to imagine what a social networking platform focused around criticality and creativity could look like. I will call it 'Three degrees of critical difference' – or just Three Degrees (in contrast to Six Degrees of Separation). In my future walled garden[2]:

1.

The people who submit information control their content and IPR (intellectual property rights). Each participant in the platform will decide whether s/he accepts advertising that supports further development of the platform, or alternatively, advertising which funds social and ecological projects.

2.

Users tag their profiles with various critical and media practices, according to whose work they appreciate, use, or construct. For example, readers of a particular text, or an author may choose to be introduced to one another. Or, if say, ten such references match, an introduction is made available. Similarly, users of particular artistic software, developers of FOSS (Free, Open Source Software) projects may want to be identifiable.

3.

Projects that are under construction and seeking contributions are distributed in the network.

4.

Client software is built allowing access to messaging and to the forum, and editing of your own profile off-line.

5.

A Curriculum Vitae + portfolio repository enables users to submit proposals to several festivals and organisations without replicating data endlessly. A submission engine for conferences, exhibitions and other events is integrated in to the platform.

6.

A research module identifying research methods, shared interests, future directions, funding possibilities, job opportunities, calls for proposals, essays helps to reduce replication of data on several mailing lists. In order to do this, a unique document or post identifier code is introduced. many criss-crossing mailing lists.

7.

Networksonomy: instead of folksonomy of Internet at large, keywords and methods of tagging are developed within communities of interest, creating ontologies that matter.

2
If you have seen an American talk show by Conan O'Brien, think of this as 'In the year two-thousand' kind of exercise: http://www. youtube. com watch?v=87soTsQjf5Y. This said, speculation can lead to practical solutions some times.

8.

Hidden or visible filters can be created to mark political or other interests, yet linking silently those who want to connect. Especially designed for those of us working with different local or international profiles.

9.

An open API (application programming interface) for developing plug-ins to the platform is published, yet an ethical code is created for what may be finally connected to the platform and how it should be tested before inclusion, making sure no outside use of network data is allowed. Various algorithms and protocols are needed to detect commercial or political misuse attempts of the platform.

10.

Your private contact card becomes part of a shared database amongst your trusted peers, your professional contact data amongst your professional network, if you so desire.

11.

The platform provides an authentication service that tags messaging or content coming from your network as trusted. This will radically impact how you can prioritise your daily communication and online behaviour.

The resulting platform would be neither closed nor open, but as open as its users want it to be. Closedness emerges with misuse and disinterest, openness follows synergy, and patterns of recognition. Three degrees means you, your friends, and those that match patterns of metadata and network behaviours that you have defined, or allowed the platform to generate for you. In other words, your metadata + network patterns become a key with which to open various gates to your garden, and to those of others. Critical difference emerges from possibilities of scaling the network up and down depending on multiple factors, creating gardened patches of growing discourse, intimate dialogue, sites of disagreement and debate, and various pools of thought.

How to interface with Facebook?

If this is a speculation of a social software-to-be, it is only fair to consider in more detail how to interface with Facebook. A number of features make an application like Facebook popular at the moment: *affective interaction*, powerful *representation of the self* connected with intersubjectivity, and a certain *network sublime* that partly results from the two. Network sublime is also about sheer perception of connectedness itself over distance and asynchronicity; one can argue that Internet users have an affective relationship to the very medium and different (new) platforms on it. One only needs to think how in everyday

conversations people talk about spam, data overflow, what happened online and so on.

According to Mark B.N. Hansen, affectivity is more than a supplement to perception (Deleuze) and more than a correlate to perception (Bergson). He argues that it is in contrast to perception, the modality 'through which we open ourselves to the experience of the new. In short, affectivity is the privileged modality for confronting technologies that are fundamentally heterogeneous to our already constituted embodiment, our contracted habits and rhythms' (Hansen, 2006, 133). Hansen makes the argument in the context of discussing an interactive installation by Kirsten Geisler, *Dream of Beauty 2.0* (1999). In the artwork, a digitally generated female persona reacts to a participant's voice. Hansen calls the experience 'an affective interfacing with what I shall call the "digital facial image" (DFI)'. Hansen proposes DFI as an alternative to predominant models of human-computer interface (HCI), which has 'a fixed repertoire of functions and icons'. DFI, instead, offers an 'open-ended, positive feedback loop linking information to the entire affective register operative in the embodied viewer-participant' (Hansen, 2006, 129-130). In other words, for Hansen, affective experiences are primarily related to representations of the human body as part of the visual digital interface. In the different media art examples he uses, the affect-image is based on different types of disjunctions between the digital representation of the human face and its analogue 'relative'. Affectivity is thus mostly positioned within the realm of the visual, where excess of digital image in scale, speed, density, deformity, collage form or relationship of the image with sound is somehow off-sync with an expectation based on 'non-digital experiences'. Interaction, participants' choices are not central to Hansen's interpretation of the work except in the profound way through which it, in principle, positions the user as an embodied individual within the informational process.

I would argue that with Facebook, the facial representation of the embodied self is a crucial element in giving one's profile an affective interface, yet visuality of a platform like Facebook is only a fraction of that interaction which constructs a deeper binding between different actors in a social network. Textual play that already emerged with early MUDs and MOOs (yet not spatialised within Facebook; a better example here would be Habbo Hotel), different play scenarios, communication modes, and sharing practices on Facebook constitute its 'affective interaction'.

To return to Hansen's proposal to an alternative to HCI through DFI, a fundamental question is to wonder whether HCI even attempts to deal with the same questions as he does. HCI mostly deals with what is known as the computer

interface, which in turn comprises different combinations of standard hardware and software. Traditional forms of HCI are not able to grasp the various levels of social network interaction; rather, we need to begin to talk about HNI, Human Network Interaction. This in turn will pose interesting challenges to how one should understand interactive art in a networked context (for later discussion). As a side note, but an interesting argument, I want to suggest that the 'failure' of net art and its practitioners moving to 'software art' could have been the result of their insistence of HCI, an interface and software driven approach. When Internet became vastly populated, many media artists who liked to consider themselves pioneers and technology avant-gardes went in to hiding in the command line box, while a living, hybrid social use of Internet (especially now in many more parts of the world than in 1996) was no longer interesting for them. I would argue that in order to be truly political one needs to be interested in the popular, the populated, the social, and the contexts of media use. So if it has been central to media arts to challenge conventional human computer interfaces, it would only be logical to begin work to challenge Human Network Interfaces rather than dismiss them.

Affect, control and positivism of networks

Social networks are constructed as much through non-liking as they are by creating connections according to liking. Sarah Ahmed, in her discussion of affect and embodiment, says that '(i)f likeness is an affect and effect of identification, the unlikeness, or difference as a lack (of likeness), becomes an affect of forms of dis-identification that work to read the bodies of others' (Ahmed, 2001, 18). One central critical issue that media art networks share with Facebook is that they are often based on the positivist affect of likeness, while critical differences tend to reside at the edges of networks. Networks themselves produce difference, but often rather than being debated, difference is produced at the very boundaries of the network. One aspect of critical difference that I propose to consider is to enable interconnections between networks based not only difference, but on disagreement and debate, to foster a kind of negative dialectic towards network positivism.

Network positivism is often manifested through the mere existence of a network, not through the practices that happen through them. The other end of the spectrum is network paranoia; seeing networks as sites of surveillance and exploitation. Wendy Chun argues that the relationship between paranoia, freedom, and control technologies is the question of language, and reduction of language to commands (Chun, 2006, 271). She has discovered how William Burroughs, who inspired Gilles Deleuze's writing on control societies, insisted that control arises from words. Without resistance, Chun argues, one is 'used' rather than controlled. 'This implies that control

Screenshots of 'Social and Semantic Serendipity', Walled Garden, 2008.

requires free will, and so what we take to be freedom, the ability to decide, is the basis for control'. Chun goes on to discuss Franz Fanon, for whom speaking is about 'taking on the weight of a civilisation'. Through language, Chun argues, the coloniser 'fixes' the colonised as inferior (Chun, 2006, 273-274). To a large degree debates that deal with cultural difference and rights for self-expression (not only words but also images) depends on how flexible the control-freedom is. Chun contends 'we must explore the democratic potential of communications technologies – a potential that stems from our vulnerabilities rather than our control' (Chun, 2006, 297). Chun points to a vulnerability, whether it has to do with words, images, sound, information architectures, or interaction design. I see this vulnerability as having to do with accepting not the control of words but interpretation, that there is no mis-interpretation or misuse but different user experiences and generated affects, possibly knowledge that takes place in network interactions. Submitting your intimate relationships and memories to a social software platform like Facebook is also about surrendering control and becoming in a sense vulnerable. Whereas Chun emphasizes the technical notion of participating in a network, I consider the power relations on networked platforms to be formed more through content and communication, and points of contact between different actors. Perhaps the possibility to manipulate, to alter, to modify and to produce is primarily also an affective aspect of the interpretation of computer mediated experience at hand that has to do at least with potentiality of control? With network games, though, and in chat rooms, for instance, letting go of control is a key element, and this may be a crucial aspect to human communication and play, especially on Facebook. To paraphrase Chun, when you submit, you submit (willingly).

Networks that do not ossify

In the same manner as Internet is not a singular phenomenon, future social networks will not be monolithic but rather interconnected modular hybrids. I would argue that the dynamics of networked media cultures are not dependent on new code, even though new enabling software will certainly be written and is also required. Maybe the dynamism is generated at the intersection of social behaviour, construction of knowledge and necessarily a sense of serendipity, and resistance. Perhaps more important than re-engineering through DIY technologies is to re-imagine through social, cultural and political practices. Even if it may sound banal, I am suggesting that we put culture before technology.

I often take interdisciplinary refuge with Mieke Bal's *Travelling Concepts in the Humanities*, in which she suggests that instead of a single methodology, traveling concepts across different disciplines may be clashed against one another to produce new knowledge. Mieke Bal claims that interactivity between subject and object without a binary or a vertical opposition between the two is the foundation for the methodological shift to concepts she is proposing. In her view, concepts are dynamic as they also oscillate between being a word and being a concept (compare with my discussion of 'free' and 'freedom', or open and closed above). Concepts are about focusing interest, and this process is connected with intersubjectivity (versus objectivity). Bal argues against Karl Popper, or 'Daddy Methodology' as she calls him, that concepts should not have definitions that everyone could agree on. Interestingly, Bal says that her motivation to work with the concept of intersubjectivity was for 'its insistence on the democratic distribution of knowledge' (Bal, 2002 12, 13-34).

Although Bal's use of the term interactivity does not stem from close reading of new media, it is still interesting to propose in the context of her writing that perhaps interactivity as a site of meaning (and experience) can gain its potential when an interactive situation is described as intersubjective, not as intermachinic. Intersubjective interactivity remains open for interpretation and awareness of difference (computers are poor interpreters of critical thought). Respectively, negotiating experience with others constructs an intersubjective situation, which for a theory of networked experience could mean that it is an extension of interactive experience. Networks can become 'non-dynamic' like disciplines, but if they remain interactive and maintain focus with concepts as expressed interests, that is, tied to subjects, human (computer mediated) networks do not ossify. We need to start to think about social networks beyond the social contact, the act of friending, to see them also as sites of experience, modes of communication, living archives, co-created publications and so on. This complexity is a necessary companion to understanding Facebook as something other than monolithic software, and to be able to imagine alternatives to it.

In 1976 Queen Elizabeth II of England sent her first e-mail. It was an act of wonder and amazement with a strong sense of technological sublime. Hardly anyone today would address e-mail with sublimity, rather, it is an arcane, spam-infested mode of network communication. Social networking and online games, rich mobile phone applications like Twitter are talked about with a similar sense of network sublime that was once granted to e-mail. Facebook in ten years from now will sit comfortably in domesticated media history, and other attractions will take its place as novelties. However, old media forms such as e-mail or an e-mail client called Pine are very persistent. Many programmers and theorists even fancy them 'pure & original'. I personally look forward to life beyond e-mail, mailing lists, and arrogant Web 2.0 business models. I would like to see a radical e-mail type solution, which abandons open inboxes in favor of gateways determined via a social networking

tool. Instead of one inbox, I imagine several waiting rooms in my walled garden, and a visual interface to support in *ars memorativa* tradition, levels of importance, intimacy, agency, memory, and degrees of forgetting. I welcome considerate, moderated, yet surprising networked environments that also foster serendipity, friction, interventions and continuous interpretation and redefinition.

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FLWR PWR – Tending the Walled Garden

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< Imagine a garden of dream flowers, powered by duracell, made of abandoned Starbucks coffee cups, styrofoam cubes cut from the latest iMac packing materials, a brain made in Italy, a blossom made by 1/2 Tod 1/2 Bot. The flowers glow with an eerie pulsating glow, sending secret missives across a darkened room. Some flowers horde their individuality, resisting attempts to transform, to change. Others broadcast their distinctive natures broadly, encouraging nearby flowers to go with them, to be like them. Still others promiscuously adopt the patterns of others, reproducing, syncing, connecting. They live, they die. The garden flourishes, it declines.>

Introduction

Web 2.0 technologies offer us enhanced ways to interact and share information, to collate and collect perspectives, and to receive feedback on ideas and creative work. The expectations associated with these socio-technical networks are vast but there are potential issues as well. The plan for the 'flwr pwr' workshop was to create a series of shared construction exercises that could facilitate and inform discussions around 'walled gardens' and provide some common ground for thinking through the social issues involved. We call this technique 'critical making' as a way of drawing connections between thinking and conceptualization on critical social issues and shared practices of material construction.

The 'flwr pwr' critical making scenario involved the construction of a physical type of cellular automata. Using pre-assembled and coded components, workshop participants constructed simple electronic agents called 'flwrs' that 'talk' to one another using infrared light patterns. They can be programmed in various ways – to be more open or more closed, more aggressive or more sharing. These behaviors effect each agent's individual survival as well as the survival of the network as a whole.

Configuring the agents to communicate with each other in various ways serves as a method for linking and expressing various perspectives on information and networks. The agents (and the network itself) thus become a kind of boundary object (Star and Griesemer, 1999) that facilitates exchange and sharing across disciplinary boundaries as well as being a mode of engagement that explicitly connects technical work and social analysis.

The objectives of the workshop were to use the flwrs, the shared experience of making, configuring, and reconfiguring them, and the interactions we observed between them to explore the themes of the conference. Of particular interest to us was to think through some of the structural characteristics of network technologies and the possibility of individual agency and emergence within them. In order to cast light on these issues we adopted various concepts from critical literature on information and social organization and made metaphoric linkages between these concepts and particular configurations of the flwrs. More abstractly, the workshop was intended to explore some of the limits of abstract notions of 'network' and the ways this notion tends to pre-suppose discrete, homogenous, equal agents working within a space of pure and perfect communication.

It is important to note at the onset that the flwrs were not intended to be a simulation but rather a metaphor for the structures and relations of network technologies and walled gardens. Building and configuring them to communicate with each other in various ways served as a mode of engagement with the themes and issues raised in the conference. In the sections below we first provide more information about critical making, describe the flwr project in more detail, and end with some reflections on the challenges of this kind of experimental process.

Critical making

At a meta-level, Critical Making aims to focus attention of the ways in which materially-engaged activities provide cognitive resources for thinking through complex individual, social, and societal issues. In other words, critical making is an elision of two typically disconnected mode of engagement in the world – 'critical thinking', often considered as abstract, explicit, linguistically-based, internal and cognitively individualistic; and 'making', typically understood as material, tacit, embodied, external and community-oriented.

A critical making project involves three iterative stages. It begins with the review of relevant literature and compilation of useful concepts and theories. This is mined for specific ideas that can be metaphorically 'mapped' to material prototypes, and explored in the following stages. Next, groups of scholars, students, and/or stakeholders jointly design and build technical prototypes. Rather than being purposive or fully functional devices, prototype development is used to extend knowledge and skills in relevant technical areas as well as to provide the means for conceptual exploration. Finally, an iterative process of reconfiguration, conversation, and reflection begins. This process involves wrestling with the technical prototypes, exploring the various configurations and alternative possibilities, and using them to express, critique, and/or extend relevant concepts, theories, and models.

With its emphasis on critique and expression rather than technical sophistication and function, critical making has much in common with conceptual art and design practice, particularly in the tradition of critical design (Dunne, 1999.) However, it differs from these practices in its focus on the constructive process and explicit connections to specific scholarly literature. Critical making emphasizes the shared acts of making rather than the evocative object. The final prototypes are not intended to be displayed and to speak for themselves. Instead, they are considered a means to an end, and achieve value though the act of shared construction, joint conversation and reflection. Therefore, while critical making organizes its efforts around the making of material objects, devices themselves are not the ultimate goal. Instead, through the sharing of results and an ongoing critical analysis of materials, designs, constraints and outcomes, participants in critical making exercises together perform a practice-based engagement with pragmatic and theoretical issues. Our sense is that this method can be particularly useful around 'wicked problems' (Rittel & Webber, 1973; Coyne, 2005) – issues in which no consensus exists around defining the problem or potential solutions. Using a shared process of making as a common space for experimentation encourages the development of a collective frame while allowing disciplinary and epistemic differences to be both highlighted and hopefully overcome.

Exercise: tending the Walled Garden

During the two days of the 'flwr pwr' workshop, participants built electronic flowers using pre-assembled electronic components and craft materials (paper cups, styrofoam, cardboard, etc.). These flowers 'talk' to one another using infrared light patterns and, in doing so, gain and expend energy. They are programmed in various ways – to be more open or more closed, more aggressive or more sharing – which has an effect on each flower's own individual survival as well as the survival of the garden as a whole. In addition to resulting in an interesting visual display, the project opens and informs discussions relevant to the topic of 'walled garden'. Flwrs, unlike flowers, live and thrive through the exchange of numerical patterns.

Left by itself, a single flwr will only live for a short period of time, but if set within a garden of other flwrs, the constant exchange of patterns will let them all continue to blossom for a much longer period of time.

The project began before the conference with a review of social science literature. The organizers had defined the 'walled garden' as the organizing metaphor for the conference. We found this idea to be particularly evocative. Images of an increasingly 'walled-off' Internet with small enclaves of gated online communities parsing out tightly controlled bits of information made us think about information exchange and communication as highly relevant. We therefore wanted to explore notions of exchange, information value, difference, and boundaries. From a general literature review we drew three specific concepts we felt gave us and the workshop attendees some purchase. These were the idea of an information 'gift economy' (Mauss, 1925; Kollock, 1998), the notion of 'Information Commons' (Hardin, 1979; Benkler, 2003), and the concept of information 'neighborhoods' (Jacobs, 1961). This literature served to guide our development of the project hardware and software as well as serving as conceptual resources for defining social behaviors in regards to information exchange and deeping our thinking during the making process.

During this pre-conference phase, we were also carrying out technical development on the flwrs themselves. We decided to use arduino microcontrollers as the 'base' for the flwr agents, given their open hardware nature, the large base of existing code, and open community of co-developers. We leveraged existing work on using infrared receivers and transmitters with the arduino (see below for links) and extended this work to develop a more complex communications protocol. We also hand-soldered a component wiring harness which would allow the workshop participants to quickly construct their own flwr by creating a custom enclosure and plugging the harness into an arduino. The software, while complex, was coded to be easily reconfigured by participants. The section (reproduced below) included variables that could be redefined to control how the flwr behaved.

```
//-------------------------------------------------------
// The following are things participants might change

int g_ListenMSecs =1000; // Number of milliseconds during
                            which to listen for patterns from
                            other flowers
int g_TransmitTimes = 5;  // Number of times current pattern
                            will be transmitted per listen phase
int g_DelayMSecs = 100; //   Number of milliseconds to wait
                            between listen/transmission
```


FLWR PWR
Final presentation

```
int g_MyPattern = 17;             // STARTING pattern number
                                     to display (number between
                                     0 and 18)

int g_CurrentEnergyLevel = 1000;   // STARTING energy
                                      level. (When it reaches
                                      0, you die.)
int g_EnergyCostPerLoop = 2;       // Cost of living.
int g_EnergyCostPerTransmission = 10; // Cost of talking.
int g_EnergyGainPerMsgReceived = 1; // Benefit of listening.
int g_EnergyGainPerMsgAffectedBy = 8;  // Benefit of active
                                          listening.

// Specify the way to modify my pattern when I receive another
pattern
// Uncomment only one line in the following function.
void combinePats(int rcvdPattern)
{
   //g_MyPattern  ^=  rcvdPattern;   // bitwise XOR (~add)
                                        the patterns
  return combinePats_GiftEconomy(rcvdPattern);
   //return combinePats_InfoCommons(rcvdPattern);
   //return combinePats_InfoNeighborhood(rcvdPattern);
} // combinePats()

-----------------------------------------------------------
```

The hardware for each flwr includes an arduino and three other components; a blinkM programmable RGB LED for a 'blossom', and an IR LED transmitter and IR receiver to send and receive patterns (metaphorically, 'pollen'). Each flwr starts with a certain amount of energy (a state variable not linked to battery life) and when it reaches zero the flwr dies. While it is alive, it constrantly shows its pattern with a series of color changes and fades displayed on the BlinkM LED. Living costs a small amount of energy in regular installments, sending a pattern costs a bit more. Receiving patterns from other flwrs gives the flwr energy. A flwr's life consists of a constant repetition of listening for other patterns for a certain amount of time and then transmitting a certain number of times. When a pattern from another flwr is received then, depending on how the flwr is configured, a variety of responses occur:

– Gift Economy: If the flwr is configured to (metaphorically) participate in a gift economy, then any pattern received from another flwr is accepted and the receiving flwr begins to broadcast this new pattern; additionally, its energy is incremented. In this setup, all exchanges provide more energy – exchange itself, no matter what its 'content' is valued.

– Information Commons: If this flwr is configured to (metaphorically) participate in an information commons, then as in a gift economy, it will accept and broadcast the patterns it receives, but its energy is incremented only when it receives a pattern that it currently does not hold. Unlike the gift economy setup, here only difference, e.g. information, has value.

– Information Neighborhoods: If this flwr is configured to (metaphorically) participate in an information neighborhood, then it remembers (at most) the 4 most recent patterns it has received, and its energy is incremented only when it receives a pattern that it is not in this set. The idea behind this setup was that in order for the garden to survive, patterns must pass across the network as a whole.

Finally, we wanted to be able to incorporate the notion of 'walled gardens' within the flwr system. We did this by making it possible to define some flwrs as being inside the garden and others as outside. Flwrs inside the garden could receive and use patterns from flwrs both inside and outside of the garden, while flwrs outside could only receive and use patterns from other flwrs that were outside. We likened this to how many protected Web 2.0 sites function. For example, Facebook is able to link outside of its own closed network to other sites on the Internet and thereby receive value from the Internet as a whole, but other sites on the Internet are not able to link into Facebook.

What happened

We started the first session of the workshop with some short explanations of the project, its goals, and the technical characteristics of the arduino platform and the flwrs themselves. Following some discussion, the participants began to install requisite software and to use available craft materials to construct their individual flwrs. Despite the differing levels of existing technical knowledge among participants, everyone seemed to quickly engage in the activity and, despite some initial discomfort, were able to develop their own flwr. Some participants at this point remarked that they were surprised how simple it was to use the pre-made components to create their own unique object. Others, however, questioned the point of the project as a whole and desired more explicit instruction.

Point #1 –

It remains an open question for us as to how much explication is necessary for a project like this. We feel that the level of technical support (e.g. the pre-made components) worked well. However, it does seem like a longer and more explicit conversation about the relevant literature, ideas, theories, and issues being raised should proceed technical work. However, at the same time, we are not sure how much should be pre-defined – how much definition is

necessary to make sure participants feel comfortable with the structure of the event and have critical theoretical resources for discussion, without overly influencing and structuring the agency of individual participants. Since the goal of this event was to think about walled gardens in emergent, unexpected ways, it was important to leave room for new and transformative possibilities.

As the session progressed, we began to configure and reconfigure the flwrs to participate in an overall 'garden'. We first experimented with the flwrs configured to participate in what we termed a 'gift economy' – every pattern that a flwr received and adopted gave it increased 'energy' and longer life. Here participants tried setting their flwrs to survive while also ensuring the survival of the garden as a whole. During this part we discussed the value of reciprocal exchange – everyone has to give in order to survive for the long time, and the dependency of each individual on the reciprocity of the others. We also discovered an unexpected (by us) aspect of flwr behavior – within a few minutes all flwrs adopted the same pattern and the garden became homogenous.

We next tried configuring the flwrs as metaphorically within an 'information commons'. In this configuration, the flwrs could only receive value from patterns they did not currently hold. This drove us to try and maintain difference in the garden as long as possible, since with this configuration, flwrs and the garden quickly dies when all flwr patterns become homogenous. We also discovered the problems of sending too much information – if one or more of the flwrs broadcast their patterns too often, they could saturate the environment and cause no patterns – including their own – to get through.

With both configurations the flwrs tend towards the homogenization of patterns and resisting this proved difficult. However, we did discover that when we configured two or three of the flwrs inside the walled garden with the rest outside, flwrs did not quickly adopt the same patterns and the garden could achieve a kind of dynamic heterogeneity. A conversation ensued about why this might be and we began to discuss the well-known english proverb, 'good fences make good neighbors'. For the first time, we started thinking about the value of walled gardens, rather than just the issues associated with them.

Point #2 –

The discovery that heterogeneity in the patterns was only achieved by configuring the flwrs as inside and outside a wall was an unexpected outcome that transformed our thinking and our discussion on 'walled gardens'. This demonstrates the value of this approach, but also points to a challenge – how to explain this discovery to others without them over-legitimizing our insights. The danger here is that others who have not participated in the project would think we had created a social simulation that 'tested' the notion of walled gardens and thereby 'proved' their value. We address this and other challenges below.

Challenge #1: Balancing technical sophistication and ease of use, problem of tech 'capture'

An important challenge was to create an apparatus or toolkit that allowed participants of various skill levels to become quickly productive – to start exploring and analyzing the critical issues of the walled garden theme – without getting either a) too wrapped up and attached to the technical issues and problems to be solved (e.g., the technical experts, technophiles), or b) discouraged or bored by the need to address arcane technical issues (e.g., the technical novices, technophobes). Equally, we decided the flwr system needed to foster a sense of ownership in the flwr agents. This need was based on our assumption that substantive investment in the flwrs, generated through an involved craft process (hands-on material work), would result in a sense of care and desire to understand the behavior of 'my' flwr in addition to an interest in exploring the behavior of the garden as a whole. Our sense is that this balancing act was successful in the flwr project.

Challenge #2: Modeling vs. conceptual elaboration, misapplication of 'results'

A risk to be avoided was a misunderstanding of what we could conclude from the outcomes in the garden in various configurations. It is very tempting in such cases to interpret what happens as either a *model or simulation* of a theory. For example, if the participants were to use the information commons code for combining patterns described above, and if all of the flwrs died immediately, some might be tempted to conclude that information commons are 'bad' or not compatible with walled gardens. Yet, that was not the purpose of these critical making exercises. Instead, they were intended to support *conceptual elaboration*. We believe that the investment in the making and programming of the flwrs by participants, important for reasons described above, is also important for mitigating these risks as well. The engagement with the flwr at several levels of abstraction supports deeper insights by the maker into the extent to which the behavior, life and death of both the flwr and garden could be validly related to the conceptual and theoretical issues being explored, and where such connections might be more tenuous or unwarranted, hopefully preventing forms of overgeneralization common to naïve 'modeling'.

Conclusions

Overall, we found the experience to be enlightening in regard to social networks and walled gardens and extremely encourag-

ing in regards to the value of critical making. We would like to especially thank the workshop participants for their investment and dedication and the enlightening and productive discussions that characterized our interactions. We would also like to thank Virtueel Platform and specifically Annet Dekker and Annette Wolfsberger for their support of the project.

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http://www.criticalmaking.com

Arduino
http://www.arduino.cc

Arduino and Infrared
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'Design could be about designing for social friction, but there is also a need to think about the next steps – friction or disobedience alone proves unproductive.'

Art and Net Ontology
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

‘We should all become network literate’

‘Networks offer space for early stage innovation to emerge and to become visible to much larger audiences.’

‘Grow powerful through hands-on activity, teach code and value agency in online environments.’

The Network as Laboratory
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

The Art of Surviving in Simcities

Aymeric Mansoux
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Aymeric Mansoux is an artist and musician, member of the GOTO10 collective. His main artistic and research interests revolve around online communities, software as a medium and the influence of FLOSS in the development and understanding of digital art. His most recent projects and collaborations include the 0xA file repository band with Chun Lee, the digital artlife Metabiosis project with Marloes de Valk and the pure:dyne GNU/Linux live distribution for media artists. Aymeric is editor of the *FLOSS+Art* book (GOTO10/Mute), as well as *Folly's Digital Artists' Handbook* which was launched early 2008.

Introduction

Used and abused by many, the notion of ‘2.0, 3.0, x.0’ is mostly jargon that inherited its vagueness from a desire to inflate technological value and its cultural impact. This is nothing but a commercial attempt to resuscitate the dotcom era by promising a future of connected services and communication. Unfortunately there is nothing new in terms of network infrastructure nor in terms of how people have used the Internet to date. At most, another layer of abstraction has been built on pre-existing technology, and some interoperability has been added in terms of data exchange. It doesn't matter though, if all this vapour ends up either up in the clouds, or stuck in condensation on some forgotten server. All of us are experiencing how the use of the Internet and the growing dependence on computation has a serious impact on our everyday lives. There is no need to pretend this is a side effect of new web application trends and their social impact. On the contrary, the transition phase we are experiencing now is rather simple to understand: humanity has started its slow shift from total offline activity to complete online and digitally assisted life.

The outcome of this transition is not yet set in stone, and there are many conflicting visions on and different approaches to how we can project ourselves, and how communication can survive, in those ‘simcities’: utopian data and software network environments, nested in data centres’ towers.

MyLife 2.0, serving the megalithic black box

The 2.0 revolution never happened. Remembering how the whole concept has been 'sold' to the late adapters, or to the dotcom crash victims, the main idea was to power companies of any size with augmented productivity tools focusing on collaboration and wrapped in a fresh and sexy design, with a more personal approach to communication. These tools would be used voluntarily and promoted by employees on blogs and social networks. In fact this was merely an attempt to port the 'casual Friday' to the digital domain.

This obviously failed, just like all the other attempts to link personal life and working life, because most people make a clear distinction between the two. You cannot expect from someone who is already differentiating between private and professional mail accounts to force-blog about his job in the same tone he uses for his hobby web log. The direct consequence of this conflict made the use of so called 'Web 2.0 tools' the exclusive domain of dedicated hired professionals and turned the whole promised revolution into the come back of old-fashioned marketing.

This failure failed to stop the process, however, and perverted it even more with a proliferation of 'fake' blogs and 'fake' profiles on various networks. These were made to look amateur on purpose and their content was carefully crafted in order to give a more human face to impersonal corporations or political groups or merely to try to initiate a buzz around a new product.[1]

Masturbation camps

Of course, the ever-growing success of social network platforms proves that some elements of the face-lifted WWW are very successful. This is true until you take a closer look at what they have to offer. Without a doubt the strong point is to develop and extend social links on an idyllic playground that is either completely generic or themed around a certain topic or hobby. But these networks are illusions, they are virtual constructs in a centralised black box. Not only do they not exist as a complex social mesh, they present very limited serial features.[2] These places are like dictatorial micro societies that imply forced happiness and which ban any form of rebellion or non-conformism towards the stalinist software to ensure there are no traces of you left on the server database.[3]

Some of these social networks are built around a service based on sorting, comparing, distributing and plotting the data you generate by for instance listening to digitally encoded music, by ordering books online, by rating films you've seen in a theatre (or downloaded on a torrent), or any other hack and hobby that can leave a digital trace. Aiming at providing a link between your friends' data and your own, such tools are in fact specifically efficient for one thing: masturbation and exhibitionism.

Very little use is made of the social element of a network. This does not stop people spending their time 'pimping' their data and looking at themselves generating information and virtual links that describe their ability to feed a system with information, over and over again. The social aspect of a network is almost non-existent; friends and other links are just treated as another statistic to look at yourself.

Some will argue that there are forms of collective masturbation and exhibitionism that do add value and bring new ways of exploring digital information: folksonomies. This is true until a system reaches the point where too many communities and cultural context are mixed together, rendering any form of collective tagging incoherent. This cancer of metadata is called meta noise,[4] and simply brings to light the fact that data tagging is only meaningful in the light of individual subjective interpretation. This might work well in small groups that share a common culture and lingo, but it becomes irrelevant when multiple communities work on the same platform.

I'm indexed in Google, therefore I exist

While new platforms are emerging all the time, pushing the limits of web applications for the masses, some of the very few dotcom crash survivors are managing to silently take over the world. A good example is the omnipresent Google, which managed in just a few years to become the invisible proxy to the WWW, and for many, literally became the Internet itself. Many of us are already solely using this search engine to pull information from the Internet, sometimes just typing chunks of URL in the search engine, instead of going to a site directly. This form of voluntary blindness[5] is moving us in to the dangerous situation whereby we outsource the accessibility of the Internet to a company that will take, again with the EULA[6] implicitly accepted, any decision on the way everything is filtered, listed or sorted when the engine is queried. Here again we end up in a black box where the notion of distributed information is very much centralised and moderated.

Full body search before entrance

A probably equally important aspect of these black box network applications is the ability to pull from, and push information to databases. This feature is often presented as an argument for the openness and so called networking ability of these platforms. In fact, what is provided are digital customs for the data (the API)[7] and a digital passport for its owner (an ID or key). This freedom of data is in fact very well controlled and authorises access on an individual basis. The same way a profile might be banned and erased from one of these simcities, access to the data can be completely denied or manipulated. Furthermore, the so called interoperability supposedly brought by various openID projects, in an attempt to bridge together

several web platforms, will just limit the distributed nature of the network even further by promoting a unique database of profiles and identities as a main control.

Data mon amour

These black boxes did not arrive from nowhere. If they are successful today it can only mean that they serve a purpose for most users. It seems that, beyond the slick design and clever marketing of the online 'panem et circenses' platforms, we are permanently high on digital data. It has such a prolific nature that we don't need much to generate it and its mere existence calls for even more digital data creation, in the form of annotations, metadata, discussions and documentation. As a consequence any new gimmick that produces, interprets, filters or processes it is seen as a welcome new fix.[8] For example, productivity fetishists fight to avoid declaring e-mail bankruptcy and, as methodology junkies, they will try the latest workflow trends just like anyone desperate to lose weight will try any new diet.[9] In fact it takes an incredible amount of energy to get things done, inform yourself, communicate with others and at the same time keep the ball rolling when most of your professional activity relies on permanent connectivity. The issue of coping with an overkill of data is an important factor when it comes to choosing between handling the data in your own way or agreeing to the terms of third party services.

Buffer overflow

The problem is that there is too much information to deal with and it is almost embarrassing to see that all of us tend to carry an increasing amount of backup, archives and other collections of primarily obsolete data[10] that is impossible to sort.

Complete outsourcing is becoming more and more popular as it is increasingly difficult to manually handle these huge amounts of personal data. Storing it requires not only hardware and infrastructure but also maintenance and care that not all of us can afford or have time for.

From the computing and storage perspective, network applications become a service that is completely invisible in a similar way to how we receive gas and electricity. In the end we just need storage, and how we get it of little interest, just like we expect to get electricity from the wall socket without caring about its origin.[11] Cloud storage and cloud computing relies on the fact that most people now consider computer services just like other mass distributed commercial commodities. This does not call for reflection on what is digital data today and how we should handle it, it is merely a lazy shortcut. Behind the buzzwords and hype there is no magic, just a combination of utility computing and platform-as-service, both powered by classic shared and virtual servers.[12]

The expansion and popularity of cloud services is starting to shape and modify technology. Servers, which have so far been the main way of distributing and processing digital information over a network, are bound to disappear in favour of highly dense and compact computing hardware in data centres. This generates positive feedback that already has a major effect on mainstream computers that are most likely to end up as simple terminals for a remote operating system relying on various cloud services.[13]

Such mainstream computers already surround us. Branded as netbooks, these machines rely on web applications. Alternative software specifications are more and more geared towards seamless integration of web services within a desktop, while enriching multimedia features at the same time, turning the browser into the new 'operating system'.[14]

Collapsing towers

While we are very much aware of social, ecological, and political issues relating to our everyday lives, it appears that we are totally ignorant of the risks of letting companies decide for us what the future of networks and digital data might be.

For example, the black box system leaves us completely dependant on a certain vendor product. The spreading of FLOSS [Free/Libre and Open Source Software] ideas and mindset has been particularly successful to demonstrate, amongst other things, that closed, proprietary systems not only enslave the user to a certain technology, but are also completely unreliable in the long term. This is illustrated particularly well by those platforms that can decide from one moment to the next to change features or just cease to exist.[15] If your work and income rely on such a platform you might need to think twice about the implications.

Also, the Internet is not a fast-food service and has more to offer than a template culture. Creativity is an essential part of resistance. From the DIY, autonomic[16] or global automatisation perspective, network autonomy is always possible and increasingly easier, even when it comes to web applications or cloud services: if you own it, you can control it.[17] These kinds of efforts, and access to technology are the living proof that there are many possibilities for small groups of people to form different types of collaboration from mutualistic and parasitic, to commensal forms of symbiosis with other network nodes, and to create an alternative cloud in order to provide a more horizontal access to the network and what it has to offer in terms of self organisation and distributivity.

We should always keep in mind that in these simcities, data is the fuel that powers the network. There is no such thing as

DIY datacentre, when the network becomes tangible again.

Datacentre, the architecture of information.

Blinking LEDS, glowing towers, 127.0.0.1 by night.

a free lunch, and when you use 'free' services, be it for private or professional reasons, the toll to pay is the data you feed the system, which is, for the majority of us, personal information. From that perspective, privacy is not a thing of the past, on the contrary, it is the new currency.

Finally, Internet architecture became a mirror of the way civilisation is evolving, building on top of previous technologies and knowledge. We constantly live at the surface of things. Although it could be argued that everything in software is a metaphor, we tend to interpret it as an objective reality, which in turn can only contribute to hiding the true nature of the Internet and computing. The risk here is to lose contact with the physical layer by building higher and higher towers of biased interconnections without understanding their foundations and origins. In doing so we fail to understand that transmitting information is different from communication, letting software be the only real inhabitant of this ever expanding territory.

Endnotes:

1
In most cases these attempts failed or backfired as it does not require much effort or knowledge to see through them. A noticeable example was from Sony's fake PSP fan blog. [http://web.archive.org/web/ 20061210175631/ http://www.alliwant forxmasisapsp.com/blog/] – accessed [2009-02-13 Fri] (text only archive of the now defunct infamous blog).

2
See *Social networks that matter: Twitter under the microscope,* Bernardo Huberman, Daniel M. Romero, Fang Wu [http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2317] – accessed [2009-02-13 Fri].

3
Funnily enough, everyone who signed up for such services and potential shortened database existence, agreed to exclusively let the service provider handle the data and profiles. This is related to the 'I agree' box that needs to be ticked to subscribe, pointing to an End User License Agreement that nobody ever reads.

4
See *Collaborative Tagging Approaches for Ontological Metadata in Adaptive E-Learning Systems,* Bateman, Brooks and Mccalla [http://www.win.tue.nl/SW-EL/2006/camera-ready/02-bateman_brooks_mccalla_SWEL2006_final.pdf] – accessed [2009-02-13 Fri].

5
And also voluntary feeding of the Google database with your interests, thus creating a detailed profile.

6
End-User License Agreement.

7
Application Programming Interface.

8
Just like Skype's features to allow other people to see how many contacts are in your address book, all the connections, posts and references you will ever collect in a social network are more statistical porn rather than a realistic image of the social links they attempt to describe.

9
43folders being a reference in that domain [http:// www.43folders.com/] – accessed [2009-02-13 Fri].

10
Obsolete not only because of its content, but its access is no longer possible as it might have been wrapped in a forgotten, closed proprietary format, or simply because the medium has been damaged.

11
Amazon's Simple Storage Service clearly markets their product as 'a simple web service interface that can be used to store and retrieve any amount of data, at any time, from anywhere on the web'.

12
For example Amazon's Elastic Compute Cloud provides full root access to Linux virtual servers with scalable on demand CPU and bandwidth while Google's App Engine allows developers to develop web applications sitting on top of the infrastructure that runs their own services.

13
Such environments are mostly full operating systems that rely heavily on web services to provide feature rich applications, such as the upcoming Jolicloud operating system ([http://www.jolicloud.com] – accessed [2009-02-13 Fri]) that raised some controversial critics for its heavy inspiration on netbook remix ([http://www.canonical.com/projects/ubuntu/unr] – accessed [2009-02-13 Fri]). In terms of complete remote operating systems, this is already possible using projects such as Debian Live's web boot, that permits the remote booting of a complete operating system via the Internet.

14
Good OS, with cloud 1.0, is probably going to be the first company to propose such a commercial product [http://www.thinkgos.com/cloud/] – accessed [2009-02-13 Fri].

15
They can also decide what to do with the data they store for you, for example the recent (December 2008) divorce between Warner and YouTube which resulted in removing all the videos of the artists linked to the company, but also all the amateur covers, mashups and remixes that might contain material licensed by Warner. [http://uk.reuters.com/article/industryNews/idU TRE4J1EY2008 1220] – accessed [2009-02-13 Fri].

16
Automatic and autonomous, a branch of computing and network systems busy with systems capable of self management.

17
Some web applications, such as Twitter, have their free software equivalent, in this case called laconica ([http://laconi.ca] – accessed [2009-02-13 Fri]) which allows you to host your own microblogging identical to the popular service.

'The new luxury is not to be connected. But who can afford not to be on Facebook?'

'The borderline of private and professional life is increasingly blurring.'

Social and Semantic Serendipity
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

‘Flowers outside the garden should not be too close to each other if they want to survive.’

FLWR PWR
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

‘How much privacy are you willing to give up for comfort?’

‘The social network is a bubble, and viral marketing is its vehicle.’

Future Cultural Organisations
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

‘Home is where ever you want it to be.

Home is in many places at the same time.

Home is everywhere; reconnect the physical world.’

Horizon Project
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

The Network as Laboratory

Bronac Ferran
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Bronac Ferran works part time as Senior Tutor for the Industrial Design Engineering Department at the Royal College of Art in London where among other things she manages theidealaboratory, a space for connecting thinking and research across disciplinary boundaries She is also working freelance as a writer, researcher and consultant and current projects include a cultural mapping of digital culture in Brazil for SICA in the Netherlands and an essay called ‘Rethinking Ownership’ for Arts Council England. She was part of the jury for the 2009 Transmediale festival in Berlin.

‘Subliminal Sniffs..’
‘...We live in the first age when change occurs sufficiently rapidly to make such pattern recognition possible for society at large. Until the present era, this awareness has always been reflected first by the artist, who has had the power – and courage – of the seer to read the language of the outer world and relate it to the inner world (...) inherent in the artist’s creative inspiration is the process of subliminally sniffing out environmental change. It’s always been the artist who perceives the alterations in man caused by a new medium, who recognises that the future is the present and uses his work to prepare the ground for it.’ [1]

Introduction

This essay considers social, participatory web and networked media spaces and considers their role and potential as sites of cultural innovation and experimentation. It adopts a definition of a laboratory as a place for observation and perception. McLuhan’s oft-stated view that content is not the issue was correct. He also said that ‘effective study of the media deals not only with the content of the media but with the media themselves and the total cultural environment within which the media function’. I suggest that in our search for experimentation and innovation in todays’ networks we should observe the functioning of the networked environment in itself as well as the individual and group interaction within this. In this paper I propose that artistic intervention within networked online media is most effective in conjunction with knowledge of coding, programming and other technological systems.
I share also McLuhan’s view of ‘percepts’[2] as more interesting than concepts especially when it comes to considering how

1
The Playboy Interview: Marshall McLuhan, *Playboy Magazine* (March 1969), in *Essential McLuhan.* Ed. Eric McLuhan and FrankZingrone, London: Routledge, 1997.

2
http://en.wikipedia.org/wiki/Percept.

cultural practitioners may achieve effect within networked media environments.

Network emergence

The draw of networked media, linked to its 'many-to-many' distributed function, has been evident since its emergence as ARPANET in the early 1970s in the USA. Devised by the military as a means to avoid communications breakdown if strategic sites were disabled, those accessing it speedily recognised its capacity as an electronic postbox, for sharing jokes, personal stories, etc. The innovation and efficiency inherent in this system was profound and is still making its consequences felt today. The more different people take part the more the network eclipses its premise and fulfils its potential. The Network is a Laboratory. The Laboratory is, partly, the human mind and its engagement and exchange with machines (with code and with techne). As long as the engineering and coding works, the more the communication framework is generative and so it goes, at least for the near future.

Bits and flows

Networked media environments contain, yet exist outside oneself, and offer scope for and give shape to new forms of interaction which enable 'the porous luminosity of exchange'. The point at which networks connect to other networks is the moment of 'exchange' which opens up a space for hybrid, diverse connections. Perhaps these are not so much spaces of innovation but spaces of intensification – of 'bits and flows'. In these interactive spaces, new possibilities exist for cultural, technological and other fields to combine and recombine.

Network literacy

In our two-day workshop during Walled Garden in November 2008 we focused on 'The Network as Laboratory and Laboratory as Network'. Our goal was to see where, if anywhere, we felt there are sites of artistic or cultural innovation and experimentation within the current Web 2.0 landscape and to decide if and how these experimental zones might be increased, expanded or further developed to inform potential future developments. Participants revealed that they use social networking sites regularly to inform their professional work but do this in an ongoing experimentation with personal and professional identities which combine and sometimes conflict within contexts for self-expression and exchange. Having been invited to consider ways in which a future Web 3.0 might offer other ways for cultural practitioners to become more visible or effective, we considered also ways in which artists were intervening and operating now in critical and investigative ways within existing social network spaces. We concluded that Web 2.0 environments can offer constraints and restrictions which can stimulate intervention and critical reflection.

The group agreed that enhanced network literacy and awareness raising of how networks work was a vital step not only among current users but also future users (today's children) for example with respect to issues such as privacy and ownership of personal data. We suggested that network literacy/network studies was as important for the future generations as learning the alphabet for a previous generation. We questioned how far media literate artists would go to engage with such an agenda if it involved going into educational or 'community' contexts, passing on skills such as learning how to build systems, take computers apart etc. We recommended they consider such coalitions.

Data wars

Our group also dwelt for some time on issues related to awareness or lack of it about ownership of personal data on social networking sites. We speculated on future 'data wars' - and were intrigued to note the recent 'uprising' of Facebook users protesting against the company having asserted new proprietary rights to material on the site. The scale and intensity of the protest led to a reversal of a decision which the company (presumably) thought be uncontested. In his blog on 16th February 2009 Facebook founder Mark Zuckerberg points to a clear paradox:

> 'People want full ownership and control of their information so they can turn off access to it at any time. At the same time, people also want to be able to bring the information others have shared with them – like e-mail addresses, phone numbers, photos and so on – to other services and grant those services access to those people's information. These two positions are at odds with each other. There is no system today that enables me to share my e-mail address with you and then simultaneously lets me control who you share it with and also lets you control what services you share it with.'

A year earlier, in February 2008, Josh Catone (at ReadWriteWeb)[3] wrote of Facebook's attempts to woo artists and musicians to use the mainstream site to market and promote their work. He said:

> 'MySpace still offers a lot more visual customization than Facebook – a good and a bad thing – and artists who are keen to have more control over their brand and want to be more creative with their Web presence, will appreciate MySpace's open canvas compared to the strict templates that Facebook offers. Having said that, it's the network effects that will be of most interest to artists overall, with regards to either site, and to that end, Facebook's large userbase and virally efficient platform will appeal greatly.'

3 http://blogs.zdnet.com/social/?p=413.

During the previous two years millions and millions of people, including many involved in the media cultural sector, have stepped onto the social networking bandwagon to share their closest thoughts and images with people they may never have even met. The group decision not to submit to a new constriction which they may not even have noticed a few years ago, indicates a new network awareness and, a co-evolution with and within the system. Cultural commentators and media analysts can play a role in shifting grounds of expectation. There are certainly many areas of contestation and disagreement – as a quick glance at a site like adotas[4] will show.

4 http://www.adotas.com/.

Sharism

The dramatic 'turn' and volte-face of Facebook in response to user protests may also show an increasing awareness in our increasingly networked society of ways to intervene in and change 'power' decisions in collaborative and collective ways. In this sense we can perceive a shift in something that we might call collective intelligence or group mind, which was not neccessarily visible over the horizon even towards the end of 2008.

One response among cultural practitioners is to group like with like or to develop online clubs[5] with shared ownership and semi-public value models. The Mediamatic network site[6] offers one example of this kind of experiment. Similarly, and perhaps less effectively, the Picnic Festival network site attempts to be both mainstream and culturally specific in its offer. Controlling yet using semi-open network models online may be a way forward for established cultural organisations in search of 'sectoral value and visibility in the online environment' yet do not wish to be wholly subsumed into proprietary and commercially driven sites.

5 http://appropriatesoftware.net/foundation/Clubs.html.

6 http://travel.mediamatic.net/page/1975/en.

It is worth noting here the views of eminent Chinese blogger and cultural entrepreneur, Isaac Mao. His current work exploring the idea of sharism[7] could have some strong messages for e-cultural agencies wishing to utilise and exploit the potential of online media. He describes how 'the emergence of Social Applications that can communicate and cooperate, by allowing people to output content from one service to another, is letting users pump their memes into a pipeline-like ecosystem. This interconnectedness allows memes to travel along multiple online social networks, and potentially reach a huge audience. As a result, such a Micro-pipeline system is making Social Media a true alternative to broadcast media. These new technologies are reviving Sharism in our closed culture.'

7 http://freesouls.cc/essays/07-isaac-mao-sharism.html.

It is clear that from Mao's perspective (as a blogger in China – a country where definitions of openness vary greatly from for example Western Europe and where systems of family

connections are powerful balances to state control) that networked media spaces offer enormous opportunities for new insights and new relations to emerge. In this sense, we need to also register the importance of context and place. But in terms of time, Robert Hooke – a great British natural philosopher who worked over 300 years ago – spoke of 'a continued Chain of Ideas coyled up in the Repository of the Brain'[8] of which the 'soul' was 'apprehensive' – a beautiful description of the sense we have today of our networked selves and their sense of connectedness.

8 http://www98.griffith.edu.au/dspace/bitstream /10072/15207/1/46784_1.pdf.

Artistic strategies

Marshall McLuhan would no doubt have found these kinds of data wars and other networked developments fascinating. He foresaw the need for such an evolution in consciousness:

> '..Today, in the electronic age of instantaneous communication, I believe that our survival and at the very least our comfort and happiness, is predicated on understanding the nature of our new environment because unlike previous environmental changes, the electric media constitute a total and near-instantaneous transformation of culture, values and attitudes. This upheaval generates great pain and identity loss, which can be ameliorated only through a conscious awareness of its dynamics. If we understand the revolutionary transformations caused by new media, we can anticipate and control them; but if we continue in our self-induced subliminal trance, we will be their slaves. Because of today's terrific speed-up of information moving, we have a chance to apprehend, predict and influence the environmental forces shaping us – and thus win back control of our own destinies. The new extensions of man and the environment they generate are the central manifestations of the evolutionary process, and yet we still cannot free ourselves of the delusion that it is how media is used that counts, rather than what it does to us and with us.'[9]

9 The Playboy Interview: Marshall McLuhan, *Playboy Magazine* (March 1969), in *Essential McLuhan.* Ed. Eric McLuhan and FrankZingrone, London: Routledge, 1997.

McLuhan here establishes the ground for the superseding of the traditional 'artist as seer' role. In a very important way, his insights account for and prefigure the emergence of broad based cultural movements such we are seeing today, which are happening outside traditional art forms and cultural spaces. If we see these spaces as walled gardens then activities such as are happening on YouTube (which are open to anyone with network access to view) represent a lowering of thresholds of access to creativity which any public funding agency for the arts should be glad to see. What is worthy of more attention in this era of transition towards participatory content is a question of how far patterns of production, consumption and critical reflection that apply in the offline universe are reproduced or otherwise (shifted/transformed) in terms of what is happening

online. It would appear that in fact there is little difference in terms of proportions of people who occupy roles as producers or consumers in offline and online environments, though it is true that the numbers of people engaging in critique – using the medium, usually, of language has increased significantly. There is no doubt that language – of all the art forms – has had many of its roots replenished within the context of the digital universe – alongside the spread of multimedia (audio/visual combined) communication systems. Whilst we can only touch on this subject here, the web as language laboratory is a key field for further research.

On a well read blog Ishak Kang[10] states: Web 1.0 was you, Web 2.0 was us, Web 3.0 is me. And he defines this further:

> 'A Web 3.0 customer will be an active participant in the lifecycle of the product. They will not return the product because they don't know how to use it. Because Web 3.0 is also largely considered to consist of the principles of the Semantic Web, the open structured metadata will assist the customer in choosing the right product, supporting its proper usage and assist with its end-of-life logistics. With a back channel established between the product and the supply chain, a feedback cycle is established and manufacturers will gain the end user customer relationship they desire.'

10 http://dotui.wordpress.com/author/dotui.

If he is right about this – and leaving aside the notion of customer at least for the media arts part of the cultural spectrum – what might this mean for the e-culture sector? Do they really wish to engage with this kind of openess to feedback from users/customers/participants and is this really the right question? What might be the potential for cultural organisations to adapt to take into account future network users and how might they become empowered to intervene in and influence the language that describes this? Can they also somehow influence the underlying codes? Where are the spaces of exchange between software programmers and artists?

Those active on lists like bricolabs,[11] which comprise coders/programmers/artists/researchers etc., can build solidarity and deepen relationships through sharing. Issues such as censorship, privacy, globalisation are actively debated but in highly personal ways. It can be argued that such sites offer a space for the emergence of a collaborative modality or formation of a (now old-fashioned term) community of knowledge, gathering to itself a certain power based on harnessing distributed and disparate energies – within, ostensibly the public domain. Given the prevalence of other attractions online, such small-scale independent developments act, arguably, almost like clubs. If you like the decor and get along with the other members, you will probably want to join (and most importantly join in). In terms of hierarchies and leadership, networks like bricolabs are also experiments – take 150 or so people living in various parts of the world. What do they share? What may they hold in common? One might see a facility with programming languages and a capacity to code or to make/break/create/recreate aspects of the technological systems as somehow badging those who are more adept from those who aren't. There is discussion on the bricolabs list about coders as contemporary alchemists or techno-shamans.. certainly it is a laboratory and certainly it is a network.

11 http://www.bricolabs.net.

Conclusion

Reflecting on the digital world Manuel Castells suggests in his important work *The Rise of the Network Society*[12] that 'the unit is the network' and asserts:

> 'There is indeed a common cultural code in the diverse workings of the network enterprise. It is made of many cultures, many values, many projects, that cross through the minds and inform the strategies of the various participants in the networks, changing at the same pace as the network's members, and following the organisational and cultural transformation of the units of the network. It is a culture, indeed, but a culture of the ephemeral, a culture of each strategic decision, a patchwork of experiences and interests rather than a charter of rights and obligations. It is a multifacted, virtual culture, as in the visual experiences created by cyberspace by rearranging reality. It is not a fantasy. It is a material force because it informs, and enforces, powerful economic decisions at every moment in the life of the network. But it does not stay long: it goes into the computer's memory as raw material of past successes and failures. ...any attempt at crystallising the position in the network as a cultural code in a particular time and space sentences the network to obsolescence, since it becomes too rigid for the variable geometry required by informationalism. The "spirit of informationalism" is the culture of 'creative destruction' accelerated to the speed of the optoelectronic circuits that process its signals.'

12 *The Rise of the Network Society*, first published 1996, Vol. 1 of *The Information Age: Economy, Society and Culture*. Oxford: Blackwell, 1996.

Castells here locates the innovation we have been sketching out above, and takes it further to suggest that inherent in the network enterprise is the culture of 'creative destruction'. There is no doubt that contemporary shifts in business and distribution models hold major challenges for many contemporary arts organisations and industries such as film and television. Speculation is essential, as is experimentation in such a period of transition. Clearly there is a tension in many areas between sharing and making money, and arts organisations are often hesitant about which way to jump. So, too, is Hollywood.

'Are cent article'[13] on how the film industry was meeting new media challenges in the *Guardian Newspaper* in the UK described an industry on the brink, 'made up of many global behemoths, it can't change quickly. So while a tiny group of Norwegian soldiers can post their own parody of life in Kosovo – a stinging critique of the UN sung as an ironic pastiche of a Beach Boys song – directly onto YouTube, the million dollar film industry is paralysed'. This is potentially a fruitful scenario for smaller arts companies which instinctively grasp the direction of change and can capitalise on it without losing their basic raison d'être or audience. However the notion of a walled garden, with its implications of safety and pasture, is inadequate to face the opportunities that lie in future web scenarios. Whatever scenarios lie ahead they will need artists to scale the walls and to run swiftly in growing numbers through and past the you, the me and the us.

13
'Borderless Thinking', Graham Vickers, *The Guardian Newspaper,* 23rd February 2009.

'Network experimentation lies in the mixed ecology where many artists, designers, programmers, researchers are working, while intervening and playing with proprietary formats and commercial processes.'

The Network as Laboratory
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

‘The problem of the notion “art for art’s sake”, is excluding art for other things, resulting in a limited set of aesthetic values.’

‘Is autonomy in the arts possibly something we can do without?’

Art and Net Ontology
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

Inventing the Future: Art and Net Ontologies

Edward Shanken
http://artextra.com
in conversation with
Annet Dekker

Edward A. Shanken writes and teaches about the entwinement of art, science, and technology with a focus on interdisciplinary practices involving new media. He is Universitair Docent in New Media, University of Amsterdam, and a member of the Media Art History faculty at the Donau University in Krems, Austria. He was formerly Executive Director of the Information Science + Information Studies program at Duke University and Professor of Art History and Media Theory at Savannah College of Art and Design. He edited *Telematic Embrace: Visionary Theories of Art, Technology and Consciousness* (University of California Press, 2003) and is author of *Art and Electronic Media* (Phaidon, 2009).

ANNET DEKKER

In the Art and Net Ontologies Workshop (ANOW) you set about imagining how we might avoid erroneous predictions that were made in the past as we think about the future from the position of the present. You quoted Alan Kay who said ‘the best way to predict the future is to invent it’, but on the other hand, as you note in the ANOW description, some really brilliant people who did invent the future also made some really bad predictions about it. As you point out, for example, in 1932, Albert Einstein did not believe that nuclear energy would ever be obtainable, and in 1943, IBM chairman Thomas Watson foresaw a ‘world market for maybe five computers’. How can we become more aware of the process of change and gain a better understanding of its ramifications?

EDWARD SHANKEN

The group discussed the importance of adopting a broad disciplinary perspective in order to gain insight into current developments and their implications for the future. Historically, many developments that ultimately attained great social significance had simultaneous conceptual roots across disciplines. At some point in the writing of intellectual history one of those disciplines gets credit for having the brilliant idea that changed the world. But if one looks more closely, very similar ideas were percolating in multiple fields. I’m not suggesting a positive zeitgeist theory; rather, this is an observation that might be useful for helping to understanding the larger contours of social and cultural shifts.

So, the question becomes, 'How can we look at what's happening today in science, humanities, arts, and see interconnected kernels, parallel percolations, that could be actualized in the future?' It seems to me that if there are deep relationships between ideas surfacing in different fields, then the likelihood of those core concepts manifesting collectively in the future is probably greater than if we identify a key idea in one field and try to extrapolate the future from that.

For example, cybernetics was fundamentally interdisciplinary in nature from its origin. Its underlying concepts: feedback loops, homeostasis, and the idea of control and communication, allowed parallels to be drawn between biology and engineering, animals and machines. Information theory provided a common language – both technical and metaphorical – for various disciplines to communicate with each other. How does that moment of intellectual history map onto what's going on in our time – onto core ideas that are being developed in computer science, philosophy, art, biology, and interdisciplinary research taking place at their myriad intersections? If we can make the sorts of connections that cybernetics made in the 1940s, maybe we can get a deeper sense of how conceptual convergences now occurring across various disciplines will impact cultural and social development in the future.

AD

What role is art, or the artist, playing within this shaping of a future? Does the notion of 'art for art's sake' still play a role?

ES

I think that artists play an important role in developing and cultivating ideas that have a significant impact on culture. It is hard sometimes to identify what it is that artists do and how that affects society. The language of art is not as readily legible as the languages of mathematics or philosophy. It takes an arguably more abstract form of interpretation to comprehend not only the concepts in art and the potency of art as concrete act, but to understand how art impacts the world on many levels.

ANOW discussed this question at length. There are forms of activist art that focus on an immediate key issue, comment on it, create awareness about it, spur debate, and insert themselves into a public discourse. Hans Haacke's critiques of the institutional structure of museums and patronage offer a good historical example of this sort of theoretical engagement from the late 1960s. By contrast, the Guerilla Art Action Group were involved in a more *Realpolitik* approach to artistic activism at the time, using protest in art contexts as a medium for resistance. Today, Josh On's *They Rule*[1] can be seen as paralleling Haacke's approach. In the tradition of Guerilla Art Action Group, RTMark and the Yes Men currently use tactical media; direct protest, and political satire in a way that has more immediate effects on the social landscape.[2]

On the other hand there are ways that art affects the unfolding of society and culture that are much more insidious, and less immediately visible. This harks back to John Latham's notion of 'time-base' – the idea that different forms of cultural production affect things in different time frames.[3] This idea has recently been reasserted by Stewart Brand and the Long Now Foundation.[4] Fashion, for example, changes seasonally and affects things on the surface layer. Other layers, like government, or economic systems, are slower to change because they exist at much deeper levels of cultural, social, material organization. While art is often confused with fashion, particularly by the art market, the more profound effects of art are not immediate and take place at deeper structural levels. So art that is not openly political in content could embody very revolutionary concepts that, over time, seep into culture. This typically occurs through some form of popularization, as in the case of Gustav Metzger's theories of autodestructive art[5] which inspired a young art student named Peter Townshend of The Who to smash electric guitars during concerts in the 1960s. Art historian Kristine Stiles has theorized this transference of ideas from Metzger to Townshend as an example of the process by which the most advanced conceptual developments in visual art are transmitted in insidious ways to become incorporated into popular culture.[6] I liken it to the way that a minor distortion in something small – like a pebble in a little snowball – can cause a major reshaping as the form accumulates and grows, transforming a ball into an oblong orb. This principle explains one of the significant ways that art impacts society, so it is important that it is understood; otherwise art can easily be misconstrued as ineffectual and inconsequential, as decorative or illustrative rather than integral and constructive.

Along these lines, ANOW debated the question of the autonomy of art. Although there was no consensus on this issue, we generally agreed that art is always becoming, that it is not fixed and that there is always a tension between autonomy and continuity. I think the romantic notion of 'art for art's sake' is one of the most destructive and unfortunate concepts about art. It is an illusion to imagine that art exists autonomously. Art is inextricably bound up and related to all other forms of cultural production and intercourse – economics, politics, religion, and so on. By attempting to segregate itself in its own private cloister, art dooms itself to inconsequentiality. At the same time, it's important that artists have the autonomy to experiment without many of the constrictions that apply to other forms of cultural production. As a liminal space, in Victor Turner's sense[7] art can offer a zone for creative research that allows practitioners the freedom to create things that would be unjustifiable or unsafe in other disciplines but that are important to experiment with. This function – of creating virtual models of the future that can be experienced in the present – is one of the vital roles of art, what Jack Burnham (following McLuhan) referred to as a 'psychic dress-rehearsal for the future'.[8]

AD

In your working group the breakdown of disciplinary boundaries also became an important strategy to overcome the art for art's sake dogma. You spoke about the more pervasive and complicated breakdown of disciplinary boundaries. In this regard, you stated, 'The phrase "everyone as artist" could be formed into "no one an artist", and art ceases to be a meaningful category. What we are left with is

1 http://www.theyrule.net/.

2 http://rtmark.com/ http://theyesmen.org/.

3 John Latham, *Art After Physics*. London: Hyperion, 1991.

4 http://www.longnow.org/.

5 http://radicalart.info/destruction/metzger.html.

6 Kristine Stiles, 'The Destruction in Art Symposium (DIAS): The Radical Social Project of Event-Structured Art.' Ph.D. diss., University of California, Berkeley, 1987.

7 Victor Turner, *The Ritual Process: Structure and Anti-Structure*. Chicago: Aldine, 1969.

8 Jack Burham, *Beyond Modern Sculpture: The Effects of Science and Technology on Art Today* (New York: Braziller) 1968; 376.

trying to figure out what the problems are and how to solve them, by any means necessary, as a collective practice, joining whatever skills we have at our disposal and trying to figure out ways of sharing those skills, in a synthetic and hybrid process.' Could you elaborate on this a bit more?

ES

Yes, if we accept that art is not autonomous and agree that it is, like science or industry, a form of cultural inquiry and production, then we must ask ourselves, 'What, if anything, is unique to art? What makes certain problems the domain of science or economics or art?' The sorts of disciplinary-specific practices that have developed in the West, the sorts of methods and techniques for identifying problems, processing information, understanding situations, and positing solutions, all have their strengths and weaknesses. Specialization has resulted in the development of very effective tools for solving problems. But if all you have is a hammer, then everything looks like a nail and the operational procedure is preordained. So a scientist or an artist might not even be framing an object or field of inquiry in a useful way, much less asking good questions about it. If we just put down these disciplinary hats and developed a common language for discussing our practices, we might conceptualize shared observations in different ways and approach solutions to problems with a broader range of tools. My sense is that transdisciplinary research involving artists and scientists engaged in hybrid practices will generate forms of creativity and innovation that do, as Alan Kay suggests, invent the future.[9]

Regarding my attitude toward Beuys' notion of 'everyone an artist' and my provocation, 'no one an artist', I wanted to challenge the idealistic notion that everyone has a hidden artist inside them waiting to be released. If that were the case, then everyone should also be a scientist. Can you imagine the great quantum physicist Werner Heisenberg saying, 'Everyone a scientist'? The fact is that everyone isn't an artist any more than everyone is a scientist. Sure, humans are innately creative beings and anyone can be a dilettante with watercolors, but anyone who tries to be an artist by vocation realizes very quickly that either they are not sufficiently talented and/or that being an artist is not all that it's cracked up to be – that the mundane reality and economic challenges of being an artist are far from the romantic, imaginary conception of unbridled, individual creative expression. So there is a blurriness about what it is to be an artist and a misconception that everyone is or could be one. The wall separating artists from non-artists seems to be more permeable than that between physicists and non-physicists. This differential blurriness offers both fluidity and tension. On one hand there is much greater permeability across previously constituted boundaries. On the other hand, other boundaries are cropping up, which is not necessarily a bad thing.

One of the key concepts that emerged from the working group was the relationship between friction and non-friction, or lubricity. Friction can be both creative as well as destructive, and lubricity can also be both creative but also destructive. There must be balance between them. This is not new wisdom but is central to Taoist thought. As the I Ching notes: 'Unlimited possibilities are not suited to man; if they existed, his life would only dissolve in the boundless. To become strong, a man's life needs the limitations ordained by duty and voluntarily accepted. The individual attains significance as a free spirit only by surrounding himself with these limitations and by determining for himself what his duty is.'[10]

AD

Can you name a current example?

ES

An example of this balance between friction and lubricity, between limitations and boundlessness in digital art is the controversy in February 2009 over Wikipedia Art.[11] The artists proposed a work of art, the nature of which demands that it be hosted on Wikipedia. This creates friction. Because that context, which is the only context the work can coherently exist in, is hostile to anything that is not verifiable by Wikipedia standards (essentially a reference in a peer review publication). As there were, at the time, no peer review publications that asserted the authenticity of Wikipedia Art as a *bona fide* art project, the editors deleted the entry.

9
See my, 'Artists in Industry and the Academy: Collaborative Research, Interdisciplinary Scholarship, and the Creation and Interpretation of Hybrid Forms,' *Leonardo* 38:5 (2005): 415-18.

10
The I Ching or Book of Changes, Richard Wilhelm, trans. Princeton: Princeton University Press, 1990. p. 232.

11
http://wikipediaart.org/.

12
For more on the ideological construction of boundaries, see Thomas F. Gieryn, *Cultural Boundaries of Science: Credibility on the Line.* Chicago: University of Chicago Press, 1999.

Wikipedia itself is an excellent example of a walled garden. It has very strict rules, and there are good things about those rules and there are bad things about those rules. Wikipedia's rules are meant to ensure that the information in the online encyclopedia is accurate. But those rules also prevent the publication of some potentially valuable information. The Wikipedians accept that trade off because in a larger ecology of scholarly information, Wikipedia is struggling for recognition and acceptance as a respectable, *bona fide* encyclopedia and must uphold certain standards in order to attain that status.

Wikipedia Art was not censored by Wikipedia. Indeed, the artists provoked the Wikipedians, who responded in a way that was coherent with their rules. Nonetheless, the clash of two incompatible systems – Wikipedia Art and Wikipedia – generated a great deal of tension, demonstrating the limits of each and resulting in fascinating caricatures of artists trying to break rules and encyclopedists insisting on observing them. The theatricality of the interaction was as remarkable as it was predictable.

This clash illustrates the process of negotiation between diverging value-sets that occurs during the shuffling and reconfiguration of boundaries and walls.[12] This is an ongoing process: things build and build and build on themselves such that highly disputed concepts can become so naturalized that it may become difficult to imagine what it might have been like to envision the world from the perspective that challenged them. For example, in the twenty-first century, it is difficult for the untrained eye to grasp what was so radical about Impressionist painting in the mid-nineteenth century. Although Wikipedia Art mounted an intense attack on the inherent values of Wikipedia, it has not succeeded in changing them. If Wikipedia Art ultimately succeeds in posting an enduring entry in Wikipedia, it will be interesting to see to what extent that page strictly follows the rules and to what extent it alters the encyclopedia's inherent value system. But perhaps what is most interesting about Wikipedia Art is that,

at the moment, it inhabits an in-between space. It exists virtually. Although there is no Wikipedia Art page in Wikipedia proper, documentation about the debate between the artists and the Wikipedians currently exists as part of the Wikipedia archive.[13] This form of quasi-existence demarcates a somewhat paradoxical ontological state, a condition of virtuality that seems to be an increasingly prevalent or explicit characteristic of contemporary being. The forms of creativity, communication, and productivity that emerge under these conditions may offer useful insights into the future.

With regard to the previous question of frictions and lubricities, it is important to note that this is not necessarily connected to the digital. Digital technology has enabled ideas to develop in a certain way that were already emerging in existing practices. It constrains their development in certain ways, and it enables the potential for them to develop in certain ways. In the essay, 'Deleuze and the Genesis of Form', Manuel DeLanda uses the wonderful figure of a soap bubble to illustrate this. The bubble isn't the essential form of soap. Soap can take on many forms: it can be liquid, it can be powder, it can be solid,and it can also be a bubble. It attains that form due to the internal organization of its molecular structure in connection with certain environmental conditions – under the right level of pressure, internally and externally.[14] It is useful to think of technology along similar lines: that it is simultaneously a constraint and a force that, along with many other constraints and forces, affect the actualization of society at multiple levels.

The same can be said about the relation between digital walled gardens and the Internet. Their actualization is shaped by the historical baggage that is both a constraint of any present as well as a momentum that enables that present to become something that the past was not. Following DeLanda's metaphor, this ideological, technical, cultural, social, disciplinary baggage might be inclined to actualize a solid form; the momentum pushes in that direction and it may be difficult for the virtual material to take a form other than that under those circumstances. But nothing is fixed. Values are always changing, and new technologies, concepts, practices are emerging that enable the virtual material to take on another sort of form or phase-state of being – to become, for example, a bubble. Digital media plays that kind of role, it's part of a whole ecology of constraints and forces, frictions and lubricities, moving from the past into the future through the present.

AD

In your workshop it was stated that, 'Design could be about designing for social friction, but there is also a need to think about the next steps, as friction and disobedience alone might prove unproductive'; How can artists make relevant contributions to envisioning and constructing the future? What are the next steps?

ES

Whereas in the past, boundaries were strictly drawn along lines of nation-states, which were both political and economic as well as social and cultural, now we see tremendous hybridization and interdependency. This is visible in the globalization of economic markets, in various fields of research, where international teams collaborate together, and in the growth of interdisciplinary research where teams come together from various fields. It is visible as well in social exchanges where people increasingly interact over distances that implicitly transcend national and geographic boundaries, and form communities on the basis of affinities of interest rather than local proximity. It will be interesting to look for parallels between these groups: What are the frictions and lubricities that drove or enabled them to flow beyond previous boundaries? What new frictions and lubricities emerged and how were they dealt with? How are they independently yet simultaneously, and perhaps in similar ways, expanding the limits of social organization, exerting pressures and opening spaces that alter the shape or phase-state of culture?

Paul Virilio's notion of the 'integral accident' was an important concept in the ANOW group's discussion. Virilio's critique of globalization and the mediatization of western technoculture suggests that as we lose the knowledge and wisdom that attends direct, immediate experience, catastrophic futures are already and unavoidably foreclosed.[15] If we can reveal the mythic structures that order our present and generate the inevitably violent future accidents of which Virilio forewarned, then perhaps we can chart a more peaceful path or at least step into the future more gingerly and with greater perspicacity. The history of western art was interpreted by Jack Burnham as a progressive revelation of the mythic structures that order the very notion of art in the west.[16] Artists reveal not only the mythic structures of art but also reveal the larger mythic structure of western epistemology, of which art is a subset. This role of art may provide an important function vis-à-vis the integral accident.

Along these lines, I'm asking myself what can be learned from the friction between the artists behind Wikipedia Art and the editors of Wikipedia, which generated a debate of great passion, intensity, and anger over what was essentially an epistemological question. Was the Wikipedia Art debate an integral accident waiting to happen? Why did the actors in this drama get so upset when it seemed clear that they were playing very conventional roles and predictably yanking each other's chains? How could they have communicated their differences of opinion in a more mutually respectful way? Could such frictions in the liminal space of art serve as a psychic dress rehearsal for more peaceful and constructive forms of debate and production?

Such questions are related to a key points that emerged from the ANOW discussion. As is typical in a diverse group of individuals, there were obvious frictions between members who had difficulty communicating with each other using a shared vocabulary and who held very different values and belief systems. Collectively, we agreed that it was of utmost importance to acknowledge and respect another's point of view - not just to pay lip service to it, but to really inhabit it. This concept is easier said than done. In order to explore this maxim, we performed an exercise during which each

13
http://en.wikipedia.org/wiki/Wikipedia:Articles_for_deletion/Wikipedia_Art.

14
DeLanda, Manuel, 'Deleuze and the Genesis of Form', *Art Orbit* 1: 1 (Mar 1998) http://artnode.se/artorbit/issue1/f_deleuze/f_deleuze_delanda.html.

15
Virilio, Paul, *The Original Accident.* Trans. Julie Rose. (Cambridge, UK: Polity, 2007): p. 38.

16
Jack Burnham. *The Structure of Art.* New York: George Braziller, 1971.

person took on the persona of another person in the group and interacted with the others as though they were this person. Everyone quickly realized was that it is extremely difficult to inhabit the persona of someone else consistently. But the exercise also generated insight into the coherency of another's world-view. That worldview may be completely different than one's own, and feel very unnatural to try to perform, but by playing it out, one gains a better sense of the logic of what it is like to be that person. In doing so, one gains a greater sensitivity to other's values and beliefs. Earlier I suggested that the virtual existence of Wikipedia Art might offer a potentially useful ontological frame for considering alternative forms of presence and being. Perhaps digital virtuality can be a sandbox in which people can play and experiment with identity, knock down conventional boundaries, and forge alternative forms of being and relationship. Only by attaining greater sensitivity and tolerance and by developing platforms for collective communication can the fences of digital walled gardens be scaled and can artists involved in boundary-crossing, hybrid, transdisciplinary research achieve their potential for creatively inventing the future.

'Develop techniques beyond registering/ describing/ reporting for making felt the intensity of the taking-form of an event.'

'Make collaboration the process, not the result of the process.'

Relational Intervals
International Working Conference
20 & 21 November 2008
Lloyd Hotel, Amsterdam

‘To intervene at the threshold means working at the threshold, inviting a collaborative process that erupts as an emergent event.’

‘Activate the collective tissue of the event as well as its outcomes.’

Relational Intervals
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‘Walls can be good! It depends on where they are.’

FLWR PWR
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‘Challenge traditional notions of HCI (Human Computer Interaction) and usability research in order to create a sociology of net work and net leisure.’

‘If my garden is open how can I be the gardener to maintain parallel identities and who is the scarecrow?

I want to have a say in what’s going on in my garden.’

Social and Semantic Serendipity
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7 Propositions for the Impossibility of Isolation,
or, the Radical Empiricism of the Network

Erin Manning
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http://www.inflexions.org

Erin Manning directs the Sense Lab, an interdisciplinary research-creation environment that explores thought in motion. She is especially interested in the sensing body in movement and has been developing a theory of preacceleration that attempts to address the virtual openings movement calls forth. Her books include *Politics of Touch* (2007) and the forthcoming *Relationscapes: Movement, Art, Philosophy* (MIT 2009). Her artwork similarly explores the relationship between movement and concepts in the making.

1.

Thoughts and things are one

‘Thoughts in the concrete are made of the same stuff as things are.’ (James, 1912).

Begin with concern for the network and its modalities of process. Understand concern as that for which and through which thought is activated. Think concern for the event as the terminus through which the process of taking-part begins to take form. Note that the process and the thought are difficult to keep assiduously apart. Become cognizant of the fact that thoughts and activities interrelate. Explore how thought itself becomes a networking. Take note that thought and things seem connected. Take note that things aren’t as stable as you thought they were.

Take William James’ example: the pen.

> ‘This pen is…in the first instance, a bald *that*, a datum, fact, phenomenon, content, or whatever other neutral or ambiguous name you may prefer to apply. […] To get classed either as a physical pen or as someone’s percept of a pen, it must assume a *function*, and that can only happen in a more complicated world. So far as in that world it is a stable feature, holds ink, marks paper and obeys the guidance of the hand, it is a physical pen. […] So far as it is instable, …coming and going with the movements of my eyes, altering with what I call my fancy, continuous with subsequent experiences of its “having been” (in the past tense), it is the percept of a pen in my mind. Those peculiarities are what be mean by being “conscious” *in a pen*.’ (James, 1912: 123-124, my emphasis).

In a pen? 'In' because it is pen-ness which has concern for the event's coming-together, in this instance. 'In' because in James there is no primacy of the human subject as the instantiator of experience and experimentation.

Having concern for the event suggests that the event is the force through which thought-things take form. This taking-form occurs at the precipice where thought and things collide in an experience of the not-yet. What emerges: neither pen-in-itself (as object already constituted) nor thought-in-itself (as thought *of* the pen). The event: a new variation on penning.

The thought-thing relation is often located within web-based networking as the human/computer interaction. This stabilizes not only the terms themselves, but the potential of their convergence. Hierarchically divided, there is no question where the process begins and ends: in the human. With James, this hierarchy is undermined. Knower and known are no longer situated at the predictable extremes of a given relation. Knower and known are co-constituted in and by the event itself. This is what is meant by being conscious in a network.

When knower and known diverge from their predictable standpoints, the idea of network shifts dramatically. The knower is the subject of the event, the known the object as shifting quality or objectness. The knower is an actualized set of conditions emergent in relation to a series of propositions. This relation does not assume a predictable configuration. What is knower may become known under a different set of criteria. The knower is not necessarily the human. In James' example, the pen-event is the experience of how the pen as thing becomes pen as thought, and vice versa.

This is an additive process. Usually thought is directly aligned with consciousness. In order to separate consciousness from experience, thought is subtracted from consciousness, leaving consciousness 'outside', looking-in on the event. In James, consciousness is an aspect of experience. 'Experience, I believe, has no […] inner duplicity; and the separation of it into consciousness and content comes, not by way of subtraction, but by way of addition' (James, 1912: 9). To subtract would be to make consciousness a priori – to place it outside and beyond experience. Such a placement situates consciousness firmly in the human, neutralizing the spacetime of experience by casting it always as secondary. As in Kantian thought, consciousness then acts on an already-constituted set of relations within a stable conception of spacetime. Consciousness *added* makes consciousness one aspect of the event. It allies consciousness to the pliable thought-object of which the event is made. To come back to the pen: instead of situating the bearer/knower in the human subject and the thing/known in the pen, James makes

pen-ness the junction through which thought and object collide. Conscious experience is the event. In the pen.

2.

The percept is out there

'If you agree that the perceptual object is not an idea within me, but that percept and thing, as indistinguishably one, are really experienced there, outside, you ought not to believe that the merely thought-of object is hid away inside the thinking subject.' (James, 1912: 19)

Gilbert Simondon has a word for the thing-thought at work: a technique. A technique is a set of relations that activates new conditions for thought/action. Within the Walled Garden conference, our technique was subtle intervention into the networking process of the actual event. We proposed to fashion a mode of intervention that would stimulate thought-in-action, working at the threshold of perception. Our goal was not to directly intervene in the nodes of the network (the workshops or plenary sessions), but to make palpable the virtual connective tissue that held the spark of of the Walled Garden event's networking potential.

Techniques are directly allied to thought in emergence. They are processes that work with the relational potential of that which is already underway. Their goal: to activate new forces for thought. Our practice: to make thought felt such that it might transduce into the network and its nodes. A technique is inherently metastable. 'It is the thing as power and not its structure that technique seeks, matter as reservoir of tendencies, qualities and proper virtues.'[1] A process becomes a technique when it makes palpable the inherent potential of a milieu. All techniques require iteration, repetition, but no technique can survive without difference. A rigorous technique makes felt the interval of the not-yet-thought *in* thought. Such a technique not only intervenes within existing processes – it creates new modes of thought.

Indeterminate and ontogenetic, thought is active in the multiplicity of its time-slips. But it does this always in tandem with the thing. The thing forces thought toward its realization in the field of consciousness. Without the thing, there is no motor for thought's emergence into an actual event. Thing here is not object preformed but objectness fielded by its relation to thought.

The thought-thing continuum activates the nexus of experience through which a singular set of potential relations becomes an event. Thought as technique is a tending towards. It opens the event to its fielding of experience. It activates and adjusts the passing from pure experience to the nowness of the event's actual occasion. 'The things in the room here which I survey,

1
My translation from Gilbert Simondon, *Du mode d'existence des objets techniques,* (Paris: Editions Aubier, 1958) 'C'est la chose comme pouvoir et non comme structure que la technique recherche, la matière comme réservoir de tendances, de qualités, de vertus propres' (203).

and those in my distant home of which I think, the things of this minute and those of my long-vanished boyhood, influence and decide me alike, with a reality which my experience of them directly feels' (James, 1912: 20).

Thought is feeling-with. For James, things-thought "decide me", create a reality "which experience feels." No subject here that iterates a final taking into account. The thought-thing is the event. As the thought transduces into a becoming-event, it actively merges with the thing's potential in this singular configuration. The event is the remarkable point of this wider experimentation with thought-thingness. Thought *things*, emerging as event with the world worlding.

James calls this the 'not-me character of my recollections' (1912: 20). Not-me is a singularity. This singularity is relational. It makes the nexus felt even as it singles itself out from an infinity of potential concurrent experiences. These experiences are not 'inside' consciousness. They make (consciousness) work (*ils font oeuvre* – Etienne Souriau[2]). 'The work [oeuvre] resulting from the exigency of creation, of this sensitivity to places and moments of exception, does not copy the world or man, but prolongs them and inserts itself in them.'[3]

3.

Make consciousness a field

A field is open, ontogenetic. It (e)merges with experience but does not precede it. It focalizes the forces of potential for an emergent event. It forces a recombination of figural structures and qualities of ground. Itself not a ground, it nonetheless grounds potentiality into an actualisable network of relations that themselves activate new relations of figure-ground. Figure is never pre-formed, nor is ground. Figure-ground is an intense web of shifting relations through which remarkable points appear. Remarkable points are palpable in the field of consciousness as the felt determination of the nowness of experience.

Thought couples. Key points activate this coupling, a coupling which invariably opens thought to the unfathomable. 'Some couplings have the curious stubbornness of fact' (James, 1912: 21). Fact emerges out of relational couplings; it does not precede them. Facts entice a coupling that tranduces into remarkable points. Consciousness feeds on these remarkable points, itself a fielding of a given assemblage of thought-things that stubbornly resist dismissal. Stubborn facts turns what Whitehead calls 'potentiality for process' into 'actual occasions'. '"Actuality" is the decision amid "potentiality". It represents stubborn fact which cannot be evaded' (1938: 43). Stubborn facts limit and provoke. They limit the infinite potential of thought and provoke the creation of a new nexus of experience. They make

2
Etienne Souriau, *Les différents modes d'existence*. Paris: Presses Universitaires de France, 1943.

3
My translation from Gilbert Simondon, *Du mode d'existence des objets techniques* (Paris: Editions Aubier, 1958) 'L'oeuvre, résultat de cette exigence de création, de cette sensibilité aux lieux et aux moments d'exception, ne copie pas le monde ou l'homme, mais les prolonge et s'insère en eux' (184).

felt the eventness of experience in the now. They are singular, but not individual.

Making consciousness a field shifts consciousness from human self-interest and situates it in the emergent network of relations out of which a singular worlding occurs. It cannot capture everything that is at stake – many of its tendencies remain unexpressed and unlived. Virtual events, they affect the tending-toward which is *this* singular movement of thought. These feed the becoming-event with a collecting and collective tendency that makes felt the more-than of any given experience. Experience is first and foremost collective: an immanent coupling of thoughts-in-the-doing and things-in-the-making.

The taking-form of a field consciousness has the quality of a vertiginous oscillation of figure and ground.

4
Day 2 experiment: (during plenary session):
1: Rearrange the chairs into constellations that make new kinds of relations possible. Create circles, turn chairs back to back, face chairs in different directions.
2: Bring mandarins and offer them to people by throwing them across the room. Create a network of desire around the mandarins? Speak up, altering the volume of the space.
3: Greet people warmly and offer them coffee.
4: Write messages and leave them on their chairs, asking them to continue the process by passing messages around.
5: Initiate relational processes (through conversation, touch etc).
6: Make sure no one registers that 'something' is taking place.
Group Observations:
- Afterwards – although we never mentioned that we had opted not to 'report' on our group process, no one opted to continue with their task of 'reporting'.
- Workshop groups rearranged themselves with people switching workshops and becoming more interested in processes occurring outside their 'home' bases.

4.

Do not translate: transduce!

The network out of which an actual occasion individuates is transductive. It moves continuously across processes, while jumping registers. It proposes horizontalizing tendencies between modalities of thought-things which allow for metastable passage from one mode to another without first relying on already-constituted object relations.

Think of a conference. Nodes of encounter are pre-established: workshops, lunches, coffee breaks. Other nodes of encounter are more backgrounded: cigarette breaks, bathroom run-ins, conversations-on-the-side. No conference functions seamlessly. On one plane, it runs its course: plenary sessions are held, workshops are attended, lunches are eaten. On a transversal plane, however, subtle shifts occur: tiredness becomes contagious, a conversation persists even after it ends, laughter sparks a new insight. These horizontalizing tendencies do not directly undermine the plane of organization, but they do affect it. What shifts is subtle but tangible: thresholds of perception are tweaked. What on the first day was a room of chairs facing a screen for a one-way conversation becomes the locus for new forms of relation.[4] The forms of relation in turn affect the group process, altering the conjunction between nodes and the conjunctive tissue of the network.

Object relations become field relations. The thought-thing nexus is infinitely constituting. No object is pre-constituted. Even something as seemingly stable as a chair becomes a modality for new processes of thought/intervention. Thought-things individuate co-constituting the event at hand. They transduce the singularity of their eventness by becoming intervals, activities for the making-actual of potential. 'The peculiarity of our experiences, that they not only are, but are

known, which their 'conscious' quality is invoked to explain, is better explained by their relations – these relations themselves being experiences – to one another' (James, 1912: 25).

The passage between knower and known is not linear, not transferable to a new series of conditions. How knower and known set themselves into relation has a lot to do with the terminus that propels the becoming-event. The terminus is the potential of thought-thing's eventness. Not the goal, but the impetus for the actualization of an event. The terminus activates the event's innate tendency to become. Transduction from the pull of potential eventness to the creation of a new and beckoning nexus, unpredictable, always, in its relation of knower/known. The event worlds me before I create it.

5.

Make the network a pure experience!

There is a tendency to ask a given site to stand-in for the network. We think it's the landing onto Facebook that constitutes the networking. On the web, this is not surprising: the connective tissue that networks sites is experienced by most as little more than the frustration of waiting. No joy in the relation here. Empiricism flirts with teleology: let me just get there already! Why is the network so slow?! Forget the walledness of the garden – any site that takes time seems walled from experience.

But note that this waiting also *makes* time. It activates a new set of relations, sparking new modes of thought. This can only happen when the 'you' of the equation no longer sets up the experience at hand. Make the knower the relation itself. Radical empiricism means making way for the conjunctive and disjunctive sets of relations that activate a given event. 'The relations that connect experiences must themselves be experienced relations, and any kind of relation experienced must be accounted as "real" as anything else in the system' (James, 1912: 42). The radical of radical empiricism does not deny the frustration of waiting – or of being blocked from a site. It makes this waiting the very stuff of experience.

The waiting – the making-time for experience – is where experimentation remains open. At the landing onto the site/node, the experiment with making time has reached its zenith. It becomes its own actual occasion; it culminates. New events are infinitely possible from this sited node, but the potential of this singular event has come to a close.

There is no single time of waiting. The time of waiting is a time of emergent relations, relations, as James says, of different degrees of intimacy. In the online world, if we no longer posit a duality of subject (human) and object (computer/web) and

work instead with the everchanging sets of knower-known relations, we find that thought-things collide most forcefully in the not-yet of a node's actualization. The networking happens not in the actualization of the node, but in the connective tissue of its tending-toward.

How the potential for emergence is unleashed is what makes the difference. Key is realizing that knower and known are never guaranteed in advance. Radical empirical network thinking demands taking as *real* all of the virtual conjunctions around which knower/known constellations emerge. An empirically radical approach opens itself to the potential that knower and known exist not as distinct entities in a dichotomous system, but as continuous-discontinuous tendencies in the open interval out of which events emerge.

The interval that makes time for the event is not an empty locus for waiting, but a potential for a different kind of connectibility. Remember: we are still in the register of transduction. The impetus for a shift in register activated by the relational interval may lead toward the connective tissue of a different network: it may lead to the kitchen for a glass of juice which may lead to the cat which may lead to the couch which may lead to a nap. Or simply back to the computer to check the status of the latest tab.

6.

The first experience knows the last one

You have ten tabs open. The movement between them moves you before you move it. As they slowly shift from loading to appearing, you find yourself distracted by the proliferation of in-betweens the waiting has prompted. Distraction, boredom, half-mindedness. These are the terms we give to the waiting, to the interval that we too often assume is passive. What we don't give credence to is the multiplication not only in degree (the many tabs open) but also in kind (the different modes of activity the waiting solicits). Habit plays a role here – a habitual repetition already informs the waiting. There is a certain order that we maintain, especially when we want to believe we are in control.

When knower becomes the field of relations itself, it is no longer the human subject who makes all decisions. 'Knowledge of sensible realities […] comes to life inside the tissue of experience. It is *made;* and made by relations that unroll themselves in time' (James, 1912: 57). What happens happens in a field of felt transitions where 'the first experience knows the last one' (1912: 56). If the knower and known do not answer to each other, the experience has remained virtual. It affects the event at hand without doing so within the register of actual knowing.

The end of an experience is rarely the node-in-itself. The node is rather the initial concern – the terminus – for the becoming-

event. The terminus is what prompts the event to take place. It makes way for the unfolding of an event within parameters that feed the singularity of that particular knower-known constellation. But this terminus rarely holds to initial conditions, open as it is to the new arraw of relations prompted by its emergence. This web of relations is embedded in an infinity of potential that far exceeds the actual configuration of a given node. Websites or network nodes are potential stopping points within a network that flows beyond the Internet, folding, always, through the thought-thing constellation.

James makes an important distinction between 'knowing as verified and completed' and 'knowing as in transit and on its way' (James, 1912: 67-8). It is only when the knowing terminates in an actual percept that we can know 'for certain that from the beginning it was truly cognitive of *that*' (68). Until the end of this process, the knowing is immersed in a quality of openness and undecidability. And yet, as James says, *the knowing was there*. Knowing is not an absolute concern for the end-point. It is a modality wherein the coincidence of thought and thing produces a feeling for immanent relational potential. Go back to the web example: 'surfing' can stand in for the undecidability of a knowing which is incipiently there even as it is 'not yet'. Virtual knowing makes felt the connective tissue of network experience: 'the immensely greater part of all our knowing never gets beyond this virtual stage' (68).

7.

Relational intervals, or, how experience comes to us

'We live, as it were, upon the front edge of an advancing wave-crest, and our sense of a determinate direction in falling forward is all we cover of the future of our path. It is as if a differential quotient should be conscious and treat itself as an adequate substitute for a traced-out curve. Our experience, inter alia, is of variations of rate and of direction, and lives in these traditions more than in the journey's end' (James, 1912: 69).

We act on tendency as tendency acts on us. Is there agency? Of course. But not solely or even primarily in the human subject. Events are propelled by the knowing which is the thinking/thinging at work. In the relation. Will this lead to new ways of experimenting the network? Yes it will, as long as we don't give in to the idea that the network is an open field strictly delineated for our conscious experience. If we situate the network that way, we become the knowers of a system of possibility that remains limited by the breadth of choice that directs our conscious decisions. If instead our focus turns to the connective tissue of networking thought, a web of tendencies emerges that curve spacetime into unknowable configurations of knower/known. From limited possibility to infinite potential.

It is not about us as purveyors of the network. It is about the network's potential to gather tendencies in the making. It is about the network's radically empirical potential to make the interval felt. This interval is ontogenetically more-than – it will always exceed our limited expectations.

Experience grows by its edges. Tendential events breed tendential events, opening the way for continuities and disjunctions. Events are cognitive of each other in an open field of consciousness. The open field of consciousness is a nexus of experience that feeds actual occasions transductively. Every event is its own cause.

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Artist Presentations

_ Augmentology 1[L]0[L]1_
Mez Breeze

2030 – A Day in the Life of...
Tom Klinkowstein, Irene Pereyra

AENIMAE
Aenimae

Alternate Reality Games for Social Change
Claudia Rodriguez

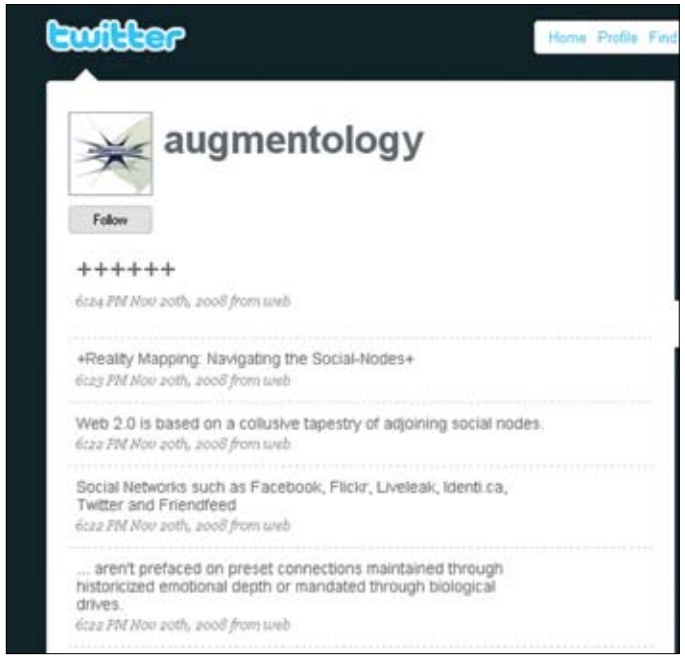
Metabiosis
Aymeric Mansoux, Marloes de Valk

Trans-Ludic Practices in Play Communities
Celia Pearce

AUGMENTOLOGY 1[L]0[L]1

Mez Breeze

AUGMENTOLOGY: [redacted]



Twitter conversation between Mez Breeze (Augmentology) and silvertje (Anne Helmond), Walled Garden, 2008.

The presentation offered a visual re-working of 'tweets' [microblogged text snippets] describing the concepts of _Versionals_, _Reality Mapping_ and Mez's _Augmentology 1[L]0[L]1_

PROJECT
Augmentology 1[L]0[L]1 explores concepts that shape and are shaped by an extensive range of online/synthetic encounters. These concepts are formed through principles generated internally within specific online environments. The aim of the Augmentology project is to construct a new discipline, which is to be formulated and documented appropriately online. This discipline is not intended for traditional academic ratification. Augmentology does not adhere to canonised standards of referencing and/or validation. All materials linked are accessible online. References are presented in order to encourage link-based, rather than directional, information accumulation. These references include a mixture of verifiable and speculative sources. Each entry is constructed to reflect how participants absorb information within attention economies and synthetic environments. The entries are designed to function within a system dependent on embedded information streams. Concepts are condensed to reflect this.

BIOGRAPHY
Mez Breeze is a Futurist who has had a sustained presence in synthetic realities for over two decades. She is also an established net artist and game theorist who practices 'Poetic Game Interventions' [the creative manipulation of MMO parameters in order to disrupt or comment on various aspects of augmented states].
The impact of her unique code/net.wurks constructed via her pioneering net.language mezangelle has been compared with Shakespeare, James Joyce, Emily Dickinson, and Larry Wall. Mez has exhibited extensively since the early 1990s.

http://arsvirtuafoundation.org
http://augementology.com

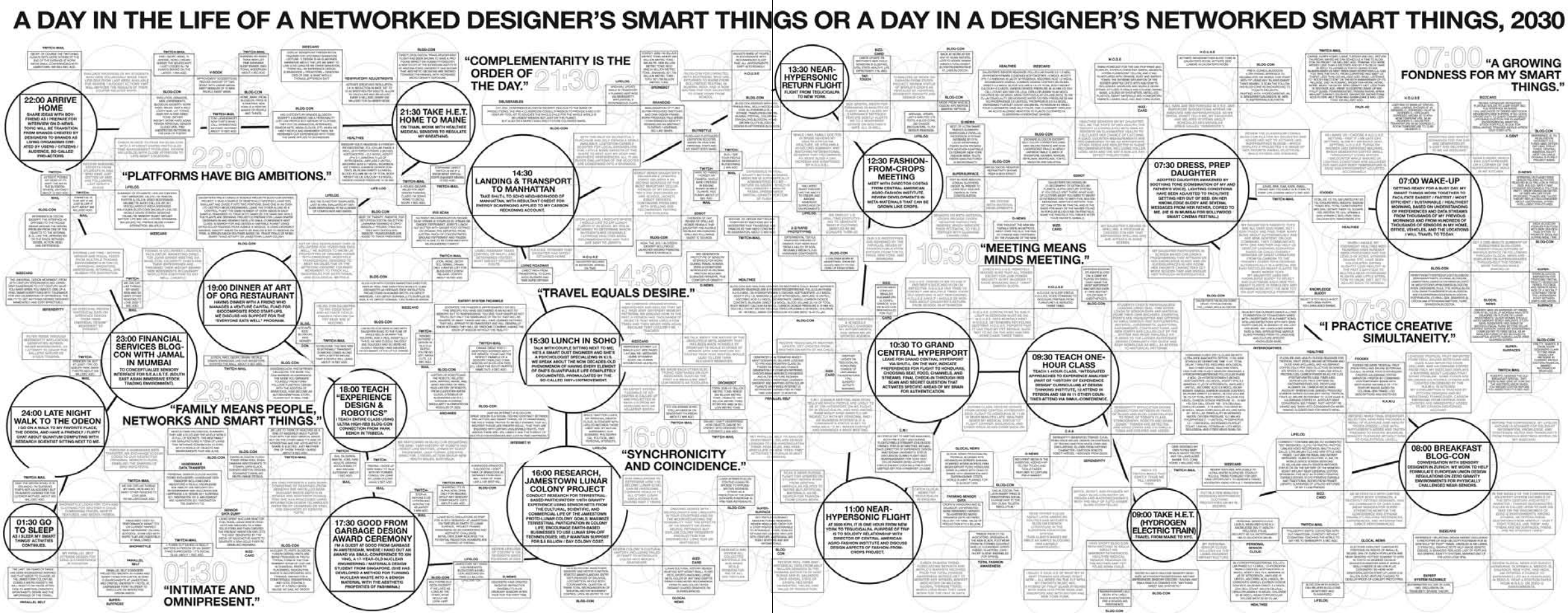
2030 –
A DAY IN THE LIFE OF...

Tom Klinkowstein
Irene Pereyra

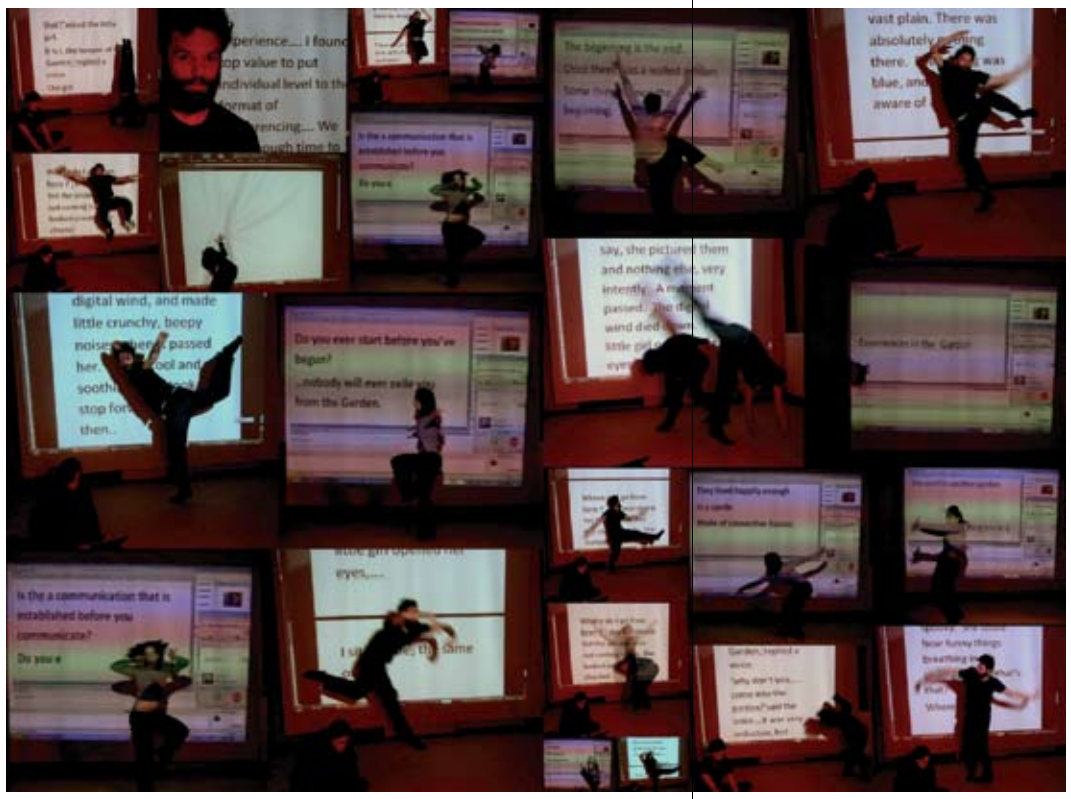
PROJECT
A diagram about a day in the life of a designer in the year 2030. Created for the 2007 International Design Festival in Singapore, and made with the help of Amarides Montgomery, Alexandra Deschamps-Sonsino, Carolyn Lloyd, Bruce Sterling and Scott Klinker. The fictional designer goes about her day with the help of all her smart things and intelligent environments, which feed, compile and document data, and also influence and affect her actions, but without direct supervision.

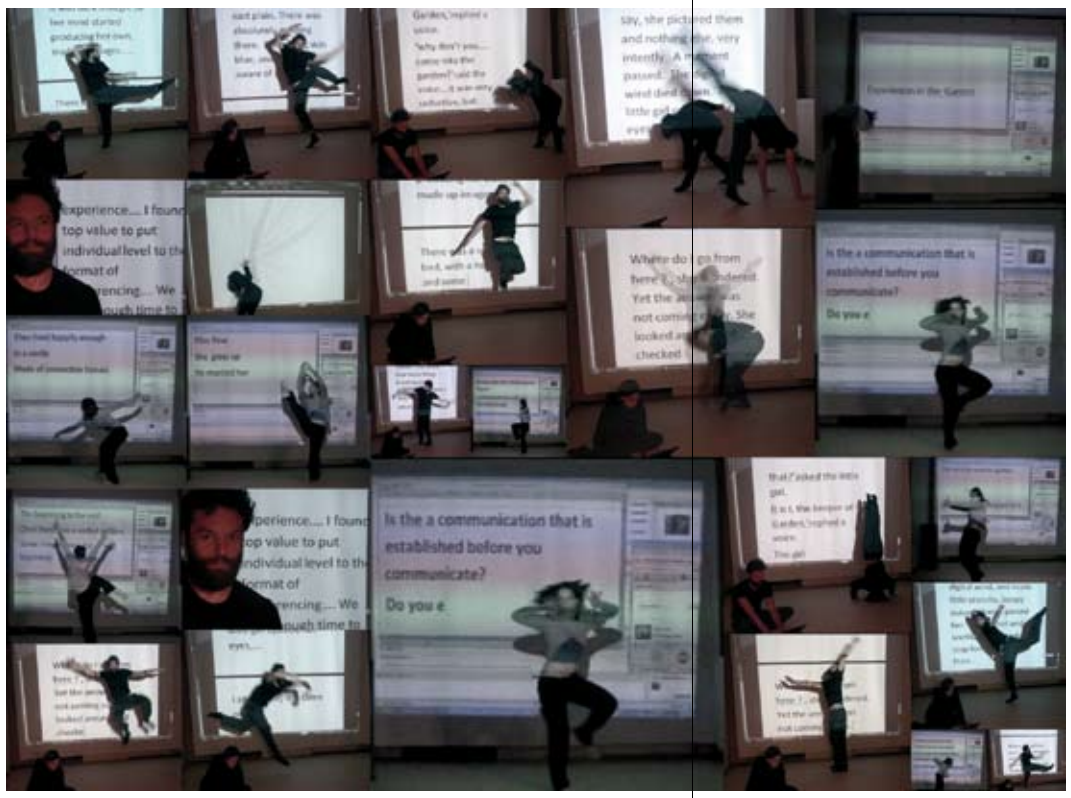
The diagram was on display in the Designcenter De Winkelhaak in Antwerp, Belgium from June 2008 until September and at Lloyd Hotel during Walled Garden, 2008.

http://www.irenepereyra.com
http://www.mediaa.com



AENIMAE
Performing Creativity Platform





PROJECT
AENIMAE made a special performance which was a reaction to the Walled Garden conference and the result of many discussions they had within the AENIMAE working group. It is a fairly long (on purpose) series of connected experiments. The result was made into a video, and viewers are encouraged to watch the whole video or to put it on and allow it to play while going about their other business, as a peripheral on-screen activity.

BIOGRAPHY
AENIMAE, Performing Creativity Platform is 'a collective action and re-(en)action of connecting artists and cultural development supporters'. Speaking to a gap in cross-boundary communication within the fields of the arts, AENIMAE seeks to mobilise creative approaches to social change and development using new media and innovative collaborative techniques. AENIMAE's motivational drive is to fill in the lack of technological capacity and availability of both real and virtual spaces with the aim of connecting individuals (creators, co-creators, active receivers) internationally.

http://www.aenimae.eu

'Particularities of relations, layers of comprehension, mediation and permeability…where do we fit in the tangible experience? In our walled gardens… the in-between processes fill up the encounters, the stories to tell… they manOEUVRE between the words, chunks of text, and discourses; they fill in the connected spaces; they dwell, to finally become… momentous add-ons.'

ALTERNATE REALITY GAMES FOR SOCIAL CHANGE

Claudia Rodriguez

'If you want to change the future, play with it first', or: Can games change our future?

'Alternate Reality Games (ARGs) are creating multiple levels of narrative through websites, telephone calls, e-mails, posters, people on the street and many more ways that we haven't yet seen. It is part theatre, part cinema, part the film *The Game*, part consipracy theory, part online chat and part old-fashioned story telling.' Andrew Losowsky, 2005.

Claudia Rodriguez Ortiz tested the premise if Alternate Reality Games could change the future. According to Rodriguez their 'collective play can save the world'. We can use the immersive experience to 'experience a possible future from the inside', raise consciousness, apply ourselves collectively to a real problem, via a form of safe haven where we can crowdsource complex problems and spark future-changing action.

BIOGRAPHY
For many years, Claudia Rodriguez has been a consultant in strategy, product development and innovation. She is partner of Ahead of the Game, a company that develops ARGs for communication, education, assessments and recruitment. She has a background in engineering from MIT, where she developed artificial intelligence vehicles. She was also the founder of Volantia, an information extraction software company. She has ample experience in all aspects of project creation: technology development, business strategy, management and fund-raising.

http://aheadofthegame.eu

METABIOSIS

Aymeric Mansoux
Marloes de Valk

Metabiosis – Dependence of one organism on another for the preparation of an environment in which it can live.

PROJECT
Metabiosis is a collection of experiments about software art and digital processes. We are developing, writing, sketching, investigating and working on a series of pieces, or nodes, that are connected with each other. Each node is motivated and built around the questions left by the previous one. Because we are working in a modular way, we cannot predict the eventual results. Metabiosis is an artistic experiment for those who are curious about so-called generative and self-organising systems in the ever growing ecosystem of connected machines.

http://metabiosis.goto10.org

BIOGRAPHY
Aymeric Mansoux is an artist and musician, member of the GOTO10 collective. His main artistic and research interests revolve around online communities, software as a medium and the influence of FLOSS in the development and understanding of digital art. His most recent projects and collaborations include the 0xA band with Chun Lee, the digital artlife Metabiosis project with Marloes de Valk and the pure:dyne GNU/Linux live distribution for media artists. Aymeric is editor of the *FLOSS+ Art* book (GOTO10/Mute), as well as *Folly's Digital Artists' Handbook* which was launched early 2008. http://320x200.goto10.org/.

Marloes de Valk is a Dutch digital artist. She is part of GOTO10, a collective of artists and programmers working in the field of digital art Free/Libre Open Source Software. She studied Sound and Image at the Royal Conservatory in the Hague, specialising in abstract compositional computer games, HCI and crashing computers. Her work consists of audiovisual performances and installations, investing machine theater and narrative of digital processes. She is currently collaborating with French artist Aymeric Mansoux on Metabiosis, a project investigating the ups and downs of data packets living in a world of connected ecosystems. From August 2007 until January 2008 she was editor of the *Digital Artists' Handbook.* http://no.systmz.goto10.org/.

TRANS-LUDIC PRACTICES IN PLAY COMMUNITIES

Celia Pearce

Artemesia and Uru Refugees present in There.com at Virtueel Platform: Walled Garden.

Avatars Celia Pearce

Uru-Thereians explore one of their members' latest Uru-inspired creations in There.com

PROJECT

Celia Pearce presented remotely her ongoing research with the Uru Diaspora via the virtual world There.com. This online community became refugees when its massively popular multiplayer game *Uru: Ages Beyond Myst*, closed down in early 2004. Subsequently hundreds and possibly thousands of players migrated into other games and virtual worlds, establishing a trans-ludic diaspora. In this presentation, Pearce's avatar, Artemesia, gave a real-time tour of Uru-themed areas in There.com, touching on some of the themes of her work with this community, including: defining and studying 'emergent behaviour', defining characteristics and styles of play communities, inter-game immigration and practices that cross multiple games and virtual worlds, and 'productive play'.

BIOGRAPHY

Celia Pearce is a game designer, author, researcher, teacher, curator and artist, specialising in multiplayer gaming and virtual worlds, independent, art, and alternative game genres, as well as games and gender. She began designing interactive attractions and exhibitions in 1983, and has held academic appointments since 1998. Currently she is Assistant Professor of Digital Media in the School of Literature, Communication and Culture at Georgia Tech, where she also directs the Experimental Game Lab and the Emergent Game Group.

http://egl.gatech.edu
http://cpandfriends.com

Uru Refugees winning a community award in There.com

Credits

ILLUSTRATION CREDITS

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VIRTUEEL PLATFORM
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