

Click Festival 15.-17. may 2014 / New Media & Contemporary Culture

click

The paper dimension of the annual Click Festival

Do It
With
Others



Carhartt Radio App

© Carhartt Inc. U.S.A. ® carhartt and carhartt logo are registered trademarks of Carhartt Inc., Detroit, MI 48121, U.S.A.



Carhartt WIP Store Nørrebro
Elmegade 13 / (Birkegade 1)
2200 Copenhagen

Carhartt WIP Store Copenhagen City
Krystalgade 7
1172 Copenhagen

Online Store
www.carhartt-wip.dk

www.carhartt-wip.com

Photo by Alexander Basile

carhartt
WORK IN PROGRESS



This magazine is a collaboration
between ATLAS magazine and the
Click festival.

Editorial team: Kathrine Tschemerinsky,
Andreas Eckhardt-Læssøe,
Tobias Havmand, Kristoffer Granov

Contributors: Philip Martinussen, Ida
Meisling, Kristian Malling Granov,
Asbjørn Riis-Søndergaard, Sara Hornum
Inanloo, Sebastian Gjerding, Kristoffer
Friis, Jon Lackman, Rasmus Cleve,
Andreas Eckhardt-Læssøe,
Maria Marqvard Jensen,
Jacob Skyggebjerg, Jakob Langkjær,
Mads Kamp Christiansen.

Proof: Aileen Bramhall Itani

Translations: Peter Stanners

Photos and illustrations: Alastair Philip
Wiper, Frederik Korfix, Sofie Amalie
Klougart, Bart Nagel, Halfdan Pisket

Cover Art: Rosa Menkman

Graphic Design and Layout:
Casper Øbroe

Pr: Mathias Bacher

Circulation: 4000

Partners: Region Hovedstaden, Statens
Kunsthånd, SNYK, ROSA, Kulturværftet,
Helsingør Kommune

Visit clickfestival.dk for
more information

CLICK Festival

Kulturværftet, Allégade 2, 3000 Helsingør

Email: gsc64@helsingor.dk

Tlf. (+45) 4928 3770

Content

Editorial p.4

By Click Festival

When Data Harvesting Goes Wrong p.6

By Kristoffer Friis

New Media Art Lesson p.12

By Jeremy Bailey



Deliberately Failing p.16

By Ida Meisling

The Digital Power Balance p.18

by Sebastian Gjerding



Much More Than a Voice p.23

By Andreas Eckhardt-Læssøe

The Third Wave p.24

Photos by Alastair Philip Wiper



Barlow: We The Internet p.32

By Philip Martinussen

The Good Old New p.34

By Maria Marqvard Jensen



Half-mad tech-scientist, half outlaw p.41

By Kristian Malling Granov

No one reads adverts... p.42

By Jacob Skyggebjerg



Hackers have been given a bad... p.45

By Kristian Malling Granov

Do It With Others! p.46

By Ruth Catlow and Marc Garrett



Aliens, Violence, Sex and Swastikas p.49

By Mads Kamp Christiansen



Interaction With Machines p.50

By Rasmus Cleve



Mortal Machinery p.51

By Sara Hornum Inanloo

The New French Hacker-artist... p.52

By Jon Lackman

A Peer Among Millions p.61

By Asbjørn Riis-Søndergaard





Do It With Others

Click festival focuses on new media and contemporary culture. The primary purpose of Click festival is to create an open and inclusive platform in which the curious is immersed in this unique and groundbreaking culture and art form through workshops, exhibitions, lectures, and extraordinary concert events. New media has vast potential and at Click creativity, knowledge and visions are shared freely. This year's theme is DIWO - Do it with others.

In your hands right now is the Click Magazine. With a similar focus, but a life of its own. Posing questions on the

relationship between art and technology seems more relevant than ever. What is the critical potential of art in our digitalized world? What are the pitfalls and the undeveloped possibilities? Mikael Fock talks of making postindustrial spaceships that we send out to find new meaning. In that regard new media technology is our vehicle for improving life on planet earth. Just as it is when author Jacob Skyggebjerg points to the new and liberating conditions for making art without the involvement of big cooperations and commercial interests. But just as relevant today seems the need to question how the structures

of power are taking advantage of new technology. Prominent internet-historian George Dyson warns that surveillance is no longer making us safer, but rather more vulnerable. It's a matter of the digital power balance as we can see from Sebastian Gjerding piece on the Dronestagram and the critical potential of web-based art. And that might be the most important insight. Technology belongs to all of us and the immense potential of what we're able to do with it is as big as our imagination. This potential only gets bigger when we do it with others.



—
SEPTEMBER 2014
ODENSE
PHONOFESTIVAL.DK
—



As a child, science writer George Dyson witnessed the building of the world's first computer at Princeton University. But then he withdrew into the wild and became a builder of kayaks who explored nature from a homemade hut he built in a tree. Then he returned to civilisation. "The digital world is as wild as a rainforest," he said. His attention has now turned to challenging data collection.

WHEN DATA HARVESTING GOES WRONG

By Kristoffer Friis



When you have lived out in the forest as long as I have, you develop a very harmonious relationship with nature. The digital world is as wild as nature. Digital organisms are not necessarily more alive than a telephone book, but these strings of code still manage to replicate and develop over time," George Dyson said over a digital connection as he recalled his life in the wild.

"From my time in the British Colombia

rainforests, I saw traces of organisms that weren't necessarily alive, but were still capable of replicating. They are a living binary circuit that develop with great speed. Just like the start of our universe, the digital world is not simply expanding, but rather exploding, outward. So it's impossible to monitor it completely."

A renowned science writer and internet historian, Dyson's insight into the digital wilderness is shaped not only by history, but also by nature. Dyson was



brought up around Princeton University in the 1950s. In this post-war world, if you could dream it, you could build it. Dyson's parents helped shaped the future, and his neighbours were the same inner circle of scientists who developed two of the 20th century's most radical inventions: the computer and the atomic bomb. But what did the future hold for a young man whose formative years were spent embedded in an academic paradise and surrounded by incredible thinkers? For the boy who was patted on the head by the scientists, engineers, and researchers who dreamed up nuclear-powered Martian rovers and the world's first super computer?

As a son of the famous theoretical physicist Freeman Dyson and prominent mathematician Verena Huber-Dyson, the young Dyson spent his childhood surrounded by Princeton University's scientific superstars. Albert Einstein's secretary babysat him. J. Robert Oppenheimer – the 'father of the atomic bomb', who led the secretive Manhattan Project – was also connected to Princeton's Institute for Advanced Study, around which Dyson's childhood revolved. It was here that the mathematician John von Neumann worked on the architecture that supported the world's first computer, MANIAC, in the 1940s, along with his chief engineer Julian Bigelow. Bigelow was a pioneer who, in the 1950s, let Dyson play with electrical components in a barn near the university, even though MANIAC was a secret project and was kept strictly off limits to children.

"Lots of people grow up with neighbours who can fix things, which can be so fascinating to a child. But when you later think about them, you realise that they were rather ordinary people. That was my experience. I grew up surrounded by some crazy folks, and Julian Bigelow fascinated me. He created things. People visited him from around the world to see this machine and run code through it. I later realised that I grew up around the people who created the foundation for the world we live in today," said Dyson, who has written a number of books about technological milestones.

These weird scientists were some of the best in the world, and even though they weren't much good at anything else, it is so incredible that it was these crazy abstract ideas that helped develop the computer. It was very interesting.

Dyson does not think that the digital wilderness needs taming, and is opposed to the NSA's grossly expansive surveillance and data harvesting. He regards whistleblowers like Edward Snowden as saviours. Dyson's latest book tackles the mathematician Alan Turing, who in the 1930s and 1940s already had an understanding of how our digital universe would unfold – perhaps an even deeper understanding than modern intelligence agencies do.

"A Pixar film is just a bunch of numbers on a disk, while operating systems, which are replicated on millions of computers around the world, are even more numbers that are being constantly replicated on computers around the world. Google, Facebook and Amazon are even crazier. They are like gigantic multicellular organisms. All of these species belong to the digital universe. Your recording of this interview over Skype is another example – it is being stored at 44 kilobytes per second. UNCLEAR. That is why you can't tame the digital world. You cannot predict how those 1s and 0s will develop, so it is not possible to have one government in charge of our digital lives. Not because of politics, but because of mathematics. Code just does unpredictable things. The digital universe will never become a pretty national park. It will always remain an unpredictable digital jungle. And that is actually comforting."

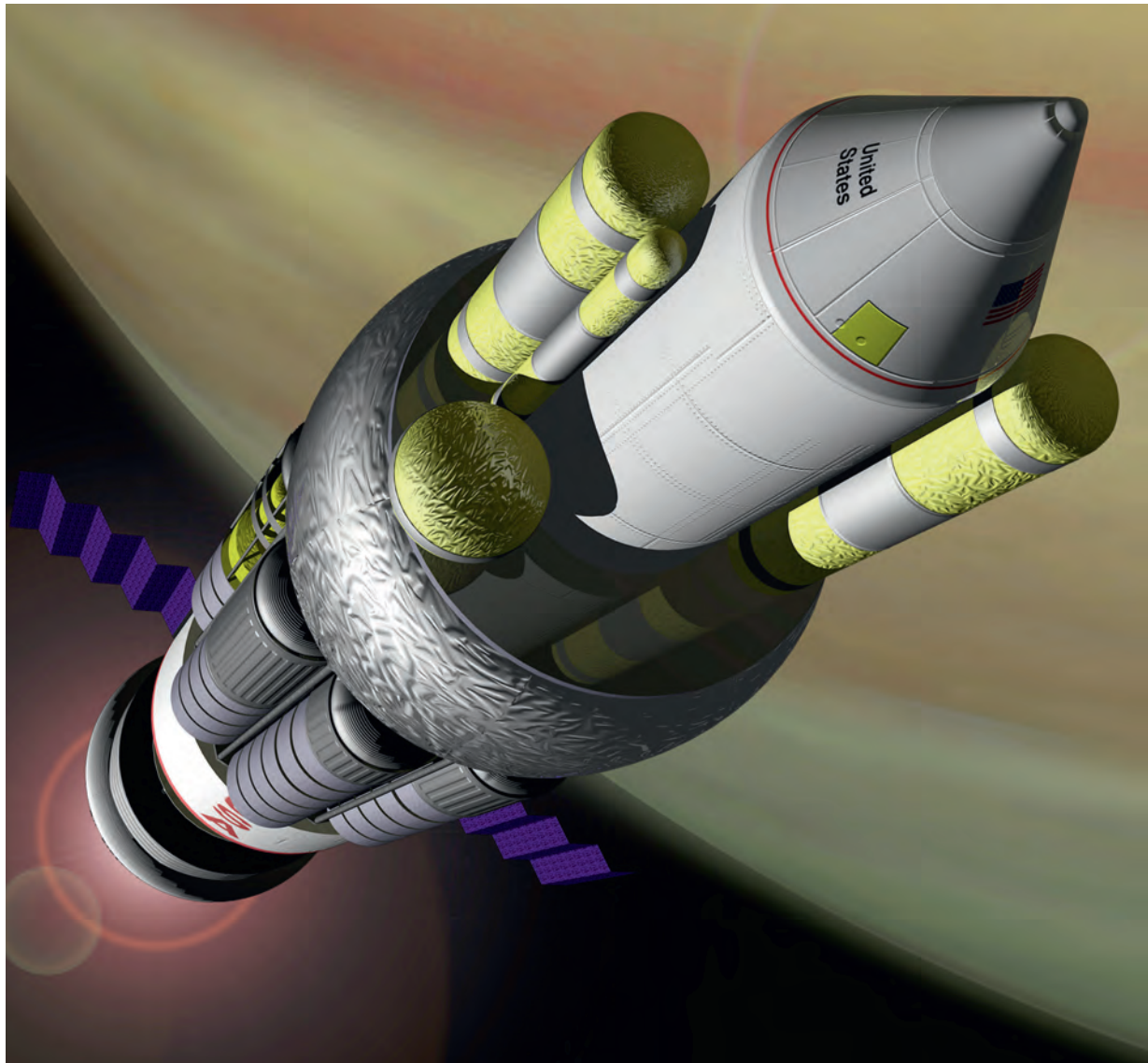
★ Turing's Cathedral

The Origins of the Digital Universe, from 2012, recalls the life of Alan Turing, and describes how numbers went from meaning things to doing things.

Dyson has held numerous TED talks and earns his living telling stories about technologies and the people who created them. He is not at all convinced that comprehensive data harvesting is a good idea. Dyson writes primarily about technological developments and their impact on our physical environment and society. In his latest book, *Turing's Cathedral*, he examines the life of Alan Turing, the visionary founder of computer science. The book focuses on a small group of geniuses that not only created the computer, but also looked deeply at the world it would create; in so doing, Dyson paints a picture of the future.

"Von Neumann, who created the computer, needed to make calculations about atomic weapons. Alan Turing had the original idea, and Jon Bigelow was the engineer. In some creation myths, life falls directly down from heaven, and the creation of the digital universe also uses these metaphors. The hardware came out of World War II's mud, and the code was created out of abstract mathematical concepts. Digital calculations require both physical hardware and a logical soul to come alive. These young people were good at repairing electronics, and Von Neumann put them together using mathematical logic and the universe of binary code."

Growing up with a father who was renowned for his work in quantum field theory, solid-state physics and atomic science, and a mother who also occupied the lofty academic ranks of an Ivy League University, he was immersed in a protected workshop, full of papers, reports, and thoughts. But Dyson says that he found it a little boring. One of his father's later projects was the theoretical Project Orion, funded by NASA, whose goal was to send nuclear-powered rockets out into



the solar system. But perhaps it was a little too much for the young Dyson to comprehend.

"They were insanely talented mathematicians – the hackers of the day. They worked all night long, wrote notes with nerdy jokes to each other, and were only in their 20s and 30s. These weird scientists were some of the best in the world, and even though they weren't much good at anything else, it is so incredible that it was these crazy abstract ideas that helped develop the computer. It was very interesting."

But George Dyson decided to withdraw.

"Even before I really understood what it was, I found the computer rather scary. I thought it was going to take

over the world. It was called MANIAC, and its dimensions comprised 32 by 32 by 40 bits. That amounts to a mere five kilobytes and is a fraction of what this Skype conversation uses every second," Dyson said.

In 1970, the 16-year-old George Dyson visited his sister in Vancouver, Canada, and fell in love with the city, in particular its kayaks. He bought a book and read about the Russian kodiak kayak, which was a little cooler than the model the Americans built, but, being Russian, wasn't popular. Despite this, he developed an intense fascination with it and built his first on his sister's veranda. He then moved deeper into British Columbia's nature, seeking solitude. Over time, he developed a larger type of kayak in-

* The book Project Orion

The True Story of the Atomic Spaceship was released in 2002 and consists of both first-person interviews and newly declassified documents about the atomic spaceship programme, whose goal was to send 100 people to Mars four years before humanity touched down on the moon. His father, Freeman Dyson, was a member of the project.



"I later realised that I grew up around the people who created the foundation for the world we live in today,"

spired by the Aleut tribe. In Russia, it was known as a Baidarka.

His first book, in 1986, was called *Baidarka: the Kayak*. In it, he explains in words and photographs how to build it while also describing the life he was living in nature. This ad hoc combination prompted an Amazon user to comment in a review, "I don't know how this book got published, it does not fit well into any one category."

Dyson was living in Belcarra Bay, outside Vancouver, where he had built his own cabin between some trees several metres above the ground, in order to get a better view. He fastened the cabin to the trees using ropes and used old television screens as windows.

"Building made me happy, and I was good at it," says Dyson, who became a Canadian citizen and lived deep in the forests until the late 1980s.

Just like his father, George Dyson wants answers, but he has taken an unconventional course. He describes his relationship to his father in the book *The Starship and the Canoe*, recounting how the famous astrophysicist Freeman Dyson dreamed of exploring the heavens in a cheaply designed spaceship, while George Dyson, living among the treetops on the British Columbia coast, designed a large sea-going kayak. Each of these contrasting characters is equally obsessed with his own vision – the sky and the Canadian northwest coast. The book describes the strange father-son duo, eccentric and focused on their own goals and methods.

Dyson is currently following the debate about widespread data surveillance carried out by intelligence agencies which began following Snowden's revelations, and is concerned about its impact on our future trust of governments. In a column for *Edge*, he writes that the ultimate goal of gathering and analysing these data is not to determine what is being said and

done, but rather to understand what people are thinking. And that is a frightening development.

Dyson has a historic interest in the NSA and surveillance, as he sees clear parallels between the current concerns over surveillance and the thoughts of the young Turing.

"During the Second World War, Alan Turing worked for GCHQ, the British equivalent of the NSA and its role model. He ended up saving the British forces by cracking the Germans' Enigma code; that demonstrated that it was an intelligence war, and their work influenced its out-

come. The USA's current so-called intelligence agencies are completely different. Intelligence agencies should have two jobs. One is to ensure that our communications are impenetrable. That is a clear job. The second is to break the enemy's communication. These are two distinct jobs. Our security services have perverted this mission by trying to intercept all possible types of communication. The internet is largely commercially controlled, and therefore requires encryption. But is it really in our interests to undermine this security? Edward Snowden says no, and I agree with him."

The surveillance of Danish internet traffic has exploded in recent years. In 2013, Danish internet traffic was registered 2.5 billion times. That's the equivalent of 72 registrations per resident per hour. More than 90 per cent of the



surveillance represents registrations of Danish internet usage, so-called session logging. The explosive growth is a result of legislation that has brought about exhaustive surveillance that actually has very little value for police investigations. It is out of proportion.

The spread of internet search engines means that the goal of controlling thoughts is within reach. They trace the connections between people's minds and the words, pictures, and ideas that increasingly characterise our thoughts. It sounds like science fiction, but why should it be? A system with absolute protection from dangerous ideas would also block original and creative thoughts. That is what Dyson thinks is the fatal flaw at the heart of the security state concept.

"When you collect everything, the goal is to stop 'dangerous' acts and people. But it is a slippery slope. Where does it stop? It could end up stopping ideas by having such a narrow filter that all sorts of ideas will be blocked because they are potentially dangerous. Even though we can listen to all the telephone calls in the world and log all the emails, we haven't found that many terrorists. It is an illusion and an irrational fear. There's a lot to be fearful of, but perhaps it's not that bad. In

★ Facts George Dyson

George Dyson is a science writer whose books cover the evolution of technology and its impact on the physical environment and society. He writes about algorithms, computer history, artificial intelligence, and, not least, kayak building. He has been featured several times at TED conferences in the USA and Canada.

In 1986 he released the book *Baidarka: The Kayak about the development of the Aleutian kayak, its development in 18th and 19th century Russia, and Dyson's own redesign from the 1970s.*

the USA we are in the process of locking ourselves behind a protected wall," Dyson said.

"This level of surveillance gives a false sense of security. And false security is worse than no security at all. It is now influencing our physical world, which we can see with the hellish airport security checks that create enormous problems in the USA when we have to fly in foreign speakers for conferences. It seems more and more like an autoimmune disease, in which we become ill because our own immune system is too sensitive and starts to attack itself."

The impact on privacy and the dangers of collecting commercial data are both chapters in their own right. But while Snowden speaks in favour of encryption and tools to secure our computer and the transmission of data over the internet, Dyson argues that surveillance should be more visible and dismantled. Most people are now furious because the NSA has spent years compromising data protection communication, simply so they can conduct better mass surveillance.

"We are beyond the original concerns about safety. Surveillance is no longer making us safer, but rather more vulnerable. It has spun out of control. It is wrong to think that we can control the world by inspecting everything in it. The NSA defends its massive data harvesting and analysis by arguing that the data and metadata are being read by computers and not actual people, so legally the data is not being read. That alone should ring alarm bells. I would personally prefer that people were monitoring my conversations, rather than have a computer simply store all my communication."

"Should we turn off all the surveillance computers? No, but we could start with ending the secrecy. We can easily collect data in the open. Citizens are capable of knowing the difference between ordinary police work and a secret police. They should have the choice to choose."

*Dyson's current project is called **Analogia**, a semi-biographical reflection on how analogue calculations will re-establish control over the digital world.*

LINKS



The Edge NSA: The Decision Problem 2013

<http://www.edge.org/conversation/nsa-the-decision-problem>



TED "The birth of the computer" 2003

http://www.ted.com/talks/george_dyson_at_the_birch_of_the_computer



WIRED Q&A George Dyson 2012

http://www.wired.com/magazine/2012/02/ff_dysonqa/all/



Wikipedia George Dyson

[http://en.wikipedia.org/wiki/George_Dyson_\(science_historian\)](http://en.wikipedia.org/wiki/George_Dyson_(science_historian))



WIRED "Why the future of computing is analog" 2013

<http://www.wired.co.uk/news/archive/2013-07/18/analog-future>



AMAZON Turing's Cathedral - George Dyson

<http://www.amazon.com/Turings-Cathedral-Origins-Digital-Universe/dp/140007599>



New Media Art Lesson

Who is better at recommending New Media Art than the **Famous New Media Artist Jeremy Bailey**

We asked Bailey to point out five artists whose work he admires or has influenced him.



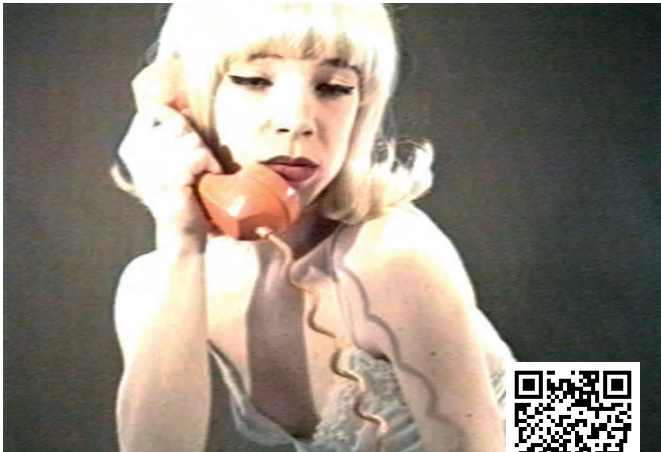




1. Sackville I'm Yours by Colin Campbell

<http://www.youtube.com/watch?v=oKEzRWgjh78>

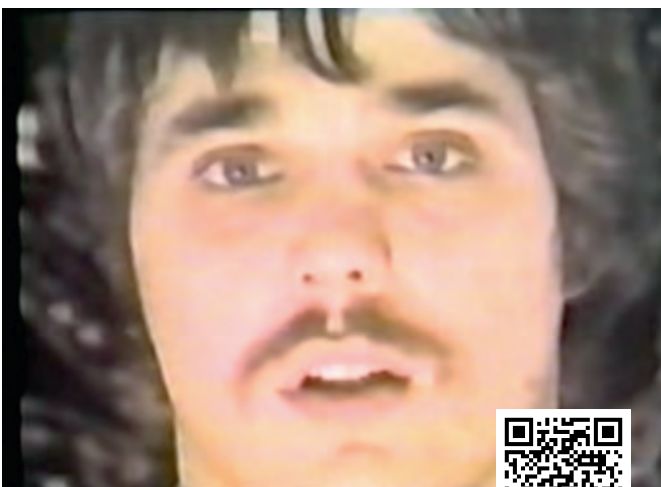
Colin was my video art teacher in my first semester at the University of Toronto. Colin literally introduced me to the concept of video art and the history of performance for the camera. He also taught me that art could be funny and self deprecating. Sackville I'm Yours is a perfect example of this and what's amazing is that it's actually his first ever video too.



2. Fall 95 by Alex Bag

http://www.ubu.com/film/bag_fall95.html

Fall 95 blew my mind when I first saw it. I was just starting out in graduate school and I loved that the content of the work was a satirical portrayal of this very same context. It helped me understand that the truth about oneself is often much funnier and more critically significant than anything you can make up.



3. Documentation of Selected Works (1971-1974) by Chris Burden

http://www.ubu.com/film/burden_selected.html

I had read about and mythologized Chris Burden's performances throughout my education as a young artist. In particular I rightly or wrongly considered his shoot performance the end-game of performance art, despite never having seen anything but a photograph and text describing the work. When I first uncovered this video on 3/4" tape in the basement of Syracuse University, I felt like Indiana Jones discovering an ancient artifact. In a very awkward opening introduction Chris Burden explained emphatically and apologetically that these works were never intended to be seen this way. Moments later when I finally saw the recording of Shoot on film it was so different from what I had imagined that it changed my entire outlook on performance documentation. From this point forward I started thinking of documentation as artwork rather than index.



(1982-1991) David Rockeby

<http://vimeo.com/8120954>

After my Chris Burden experience I started looking at a lot of videos of artist documentation, in particular artists working with computers and performance. David Rockeby's very nervous system stood out to me because it had many of the components of a performance for the camera that Colin Campbell or Alex Bag might make with none of the self reflection. In it David Rockeby demonstrates software he has written that allows him to dance to make music in thin air. I asked myself, what would this video look like if it was more about David than his software. This became the foundation for the persona I developed into Famous New Media Artist Jeremy Bailey. Fun Fact: today David and I are represented by the same gallery.



5. VVEBCAM, Petra Cortright

<http://archive.rhizome.org/artbase/53474/vvebcam.html>

VVEBCAM by Petra Cortright was the first work I ever saw that did everything I've mentioned all at once. It's funny, it's self reflective, it's documentation as artwork, and it's new media art that is more about the artist than it is about the technology being demonstrated. Furthermore it was created specifically for YouTube, with custom tags and comments by the artist. The world after I saw this video was a world where I considered the entire internet my camera it's content my performance context.



* Jeremy Bailey

is a canadian video and performance artist who inhabits the persona Famous New Media Artist Jeremy Bailey. His work is often confidently self-deprecating in offering hilarious parodies of new media vocabularies. His work has been featured in numerous exhibitions and festivals internationally. He received his MFA in Art Media

Studies from Syracuse University in 2006. His work can be viewed, rented and acquired through Vtape and Pari Nadimi Gallery in Toronto, where he also lives and works. At Click festival Jeremy Bailey will lead a workshop on the fundamentals of augmented reality and their use in online and offline performance contexts.





It is a mistake to polish new media to perfection, argues glitch artist Rosa Menkman. We should instead grasp technology's errors and attack the conventions that digital systems are built upon.

DELIBERATELY FAILING

By Ida Meisling

Reason cannot exist without madness, said the philosopher Foucault. Order cannot be without chaos, argued the art historian Ernst Gombrich. Similarly, we cannot understand function without understanding error. So argues the theoretician, curator, and 'glitch' artist Rosa Menkman in her manifesto advocating so-called 'glitch studies'. For it is upon the glitch – the error, the dysfunction, the deviation, and related forms of noise – that this Dutch artist builds her work.

Glitch is an art form that aestheticises digital and analogue errors. Technically speaking, a glitch is the unexpected result of a dysfunction. They are unpredictable bugs that occur when we surf the internet, play games, watch films or listen to music.

Convenient errors

These technological short circuits can bother and disturb us, or simply pass by unnoticed. They are becoming increasingly rare, because technological developers seek out and destroy them. But

it's a mistake to eradicate these errors, says Menkman, who sees it as her role as an artist to capture these unintended deviations.

"The artist tries somehow to demonstrably grasp something that is by nature unstable and ungraspable. Their commitment is to an unconventional utopia of randomness, chance, and idyllic disintegrations that are potentially critical," Menkman said.

It is this critical potential that drives Menkman's glitch work. By making visible technology's limitations, rules and conventions, glitches force observers to reflect on how we use and abuse technology, and how we often trust it blindly.

Creative problems

Glitch captures the technological breaches and gaps that are present in all imaginable forms of media. Menkman manipulates, bends, and breaks them until they arise in new aesthetic guises. But this manual labour is not what drives her. In her 2010 manifesto, she attempts to give glitch studies a language. She

dissolves the duality between real and virtual, and digital and analogue, and even questions the validity of glitch as an art form.

A glitch is, after all, a fleeting and vulnerable phenomenon. As soon as it is defined, manipulated, and presented, it theoretically loses the properties that are connected to its ungraspable, arbitrary, and unintended essence. So is an orchestrated accident even an accident, or is failing deliberately simply another form of success?

But Menkman argues that her work can bypass this quantum conflict – the impossibility of observing a phenomenon without fundamentally altering its inherent nature. "My research is creating creative problems and teasing out new possibilities," Menkman says. Her conviction is that the purpose of her art is to create problems and ask the right questions.

Creating meaning by deconstructing meaning

Her art is ultimately about challenging conventions. Glitches break phenomena out of their original incarnations and transpose them to another discourse, enabling us to identify the assumptions upon which we build our systems.

For example, we have become accustomed to watching films presented as rectangular images. At one point this was practical and necessary, but today it is merely another example of how we maintain a blind commitment to one of many possible realities.

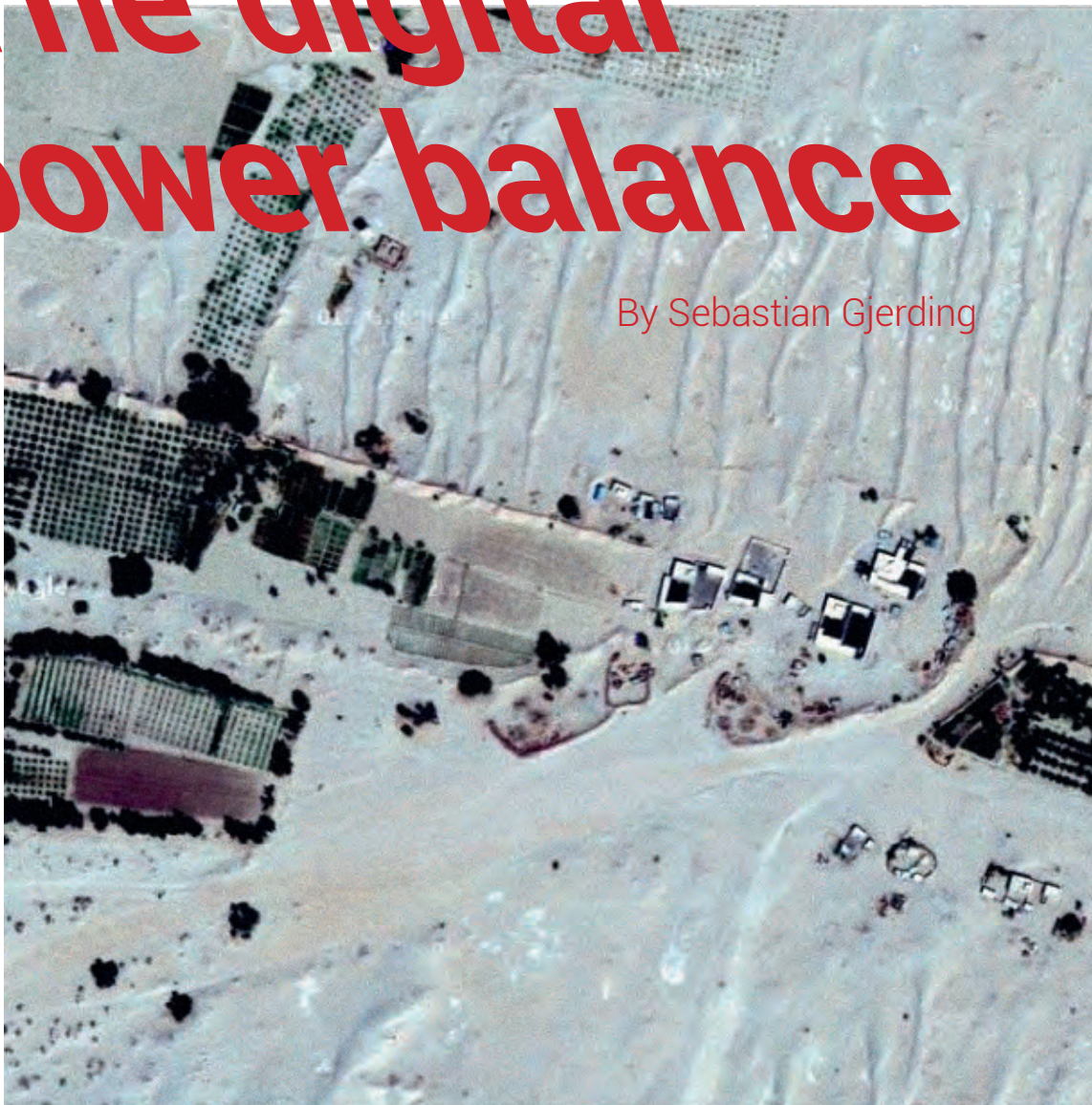
"So why are there no displays that are round or triangular? We have simply been conditioned to think about the existing resolutions as the only available options, and in this way we don't see what lies beyond the implemented options," Menkman said.

Glitch art helps us investigate why things are the way they are by challenging our basic assumptions. In so doing, we free ourselves from the arbitrary rules that we use to construct our world and allow ourselves to become open to new possibilities.

Digital technology is developing at such a high speed that art is one of the few venues in which critical reflection on its underlying dynamic and power balances can take place. The drone programme, for example, has changed the rules and methodology of modern warfare, and has dissolved the clear borders that used to define when war has been declared. Several artists are now trying to bring impressions and narratives from this hidden war to the countries where the bombs are being fired..

The digital power balance

By Sebastian Gjerding



dronestagram

3 weeks ago · Wadi Abeeda, Marib Province

March 10th 2914: Between one and four people killed in a night strike, when several missiles were fired at a vehicle or vehicles in Wadi Abeeda. Names reported to the press included local AQAP commanders Mohammed Jabir al Shabwani and Abdullah Mubarak, and local tribesman Ebad al Shabwani. #drone #drones #yemen

Follow



"December 25, 2013: At least three killed by a mid-night strike on a house in a village near Miranshah. Local tribesman reported drones circling the site after the attack."

"January 15, 2014: In the early hours of the morning, a drone fired two missiles at a person near the old city of Shibam. Several injuries reported, and one death, variously claimed as an Al-Qaeda suspect, or a passing farmer."

"March 7, 2014: 15 people killed by drones in Mahfed, a district of some 27,000 in southern Abyan, Shaker al Ghadeer, a Yemeni soldier stationed in Abyan, told the Yemen Times. Other sources stated that several more strikes had gone unreported."

Each text is accompanied by a satellite photo of the attack location – mostly of remote locations in Yemen or Somalia – and is posted on the social media app Instagram. The photos sometimes depict deserts, while others show dwellings or long roads. There are no people in the photos, just contours and shapes of buildings and trees from distant corners of the world that happen to have been hit by a bomb dropped by a flying robot.

As a viewer of the image, you are only given sparse – and often contradicting – information. Was the target an Al Qaeda operative, or a passing farmer? And if he was a terrorist, how did they know? What is the evidence, and who made the decision? But the images come with no further information, and you are left with the feeling that you're not the only one who will never get answers. The local residents won't, nor will the citizens of the US, nor will the rest of the world. These drone attacks happen so far away that there are few cameras, no western troops, and no journalists to document their impact.

"I was really interested in drones for a long time without really knowing why," said Dronestagram founder James Bridle.

"I was especially worried that it was a pubescent fascination grounded in the fact that they are flying robots – these

shiny and seductive objects."

This initial fascination led him to pursue research that ultimately resulted in his using drones as a central theme in a number of projects.

"With Dronestagram, I find photos of the location of drone strikes and post them on social media. The point is that there is a massive hole in our knowledge and experience of the drone programme, because it is not documented with photographs in newspapers. I find it really strange and a direct sign that there is something wrong," Bridle explains.

Practically invisible

Several artists have started to tackle questions that the drone programme presents. Drones fundamentally alter the nature of warfare. They permit permanent non-wars in inaccessible parts of the world, and focus their targeted attacks on enemy combatants without trial following an opaque decision-making process.

After initially gripping his attention as advanced war machines that have rewritten the rules of warfare, drones soon became a central theme in Bridle's artwork. He is interested in how technology can be both invisible – like the internet and network technology – and

also change the world around us.

"Even though these flying objects are made of metal and are a particular shape, size and weight, drones are practically invisible in other ways. They are invisible physically because they fly at such high altitudes that people can't see

"With Dronestagram, I find photos of the location of drone strikes and post them on social media. The point is that there is a massive hole in our knowledge and experience of the drone programme"

them. They are also morally and ethically invisible because they reduce the danger for pilots who don't risk coming home in body bags," he said.

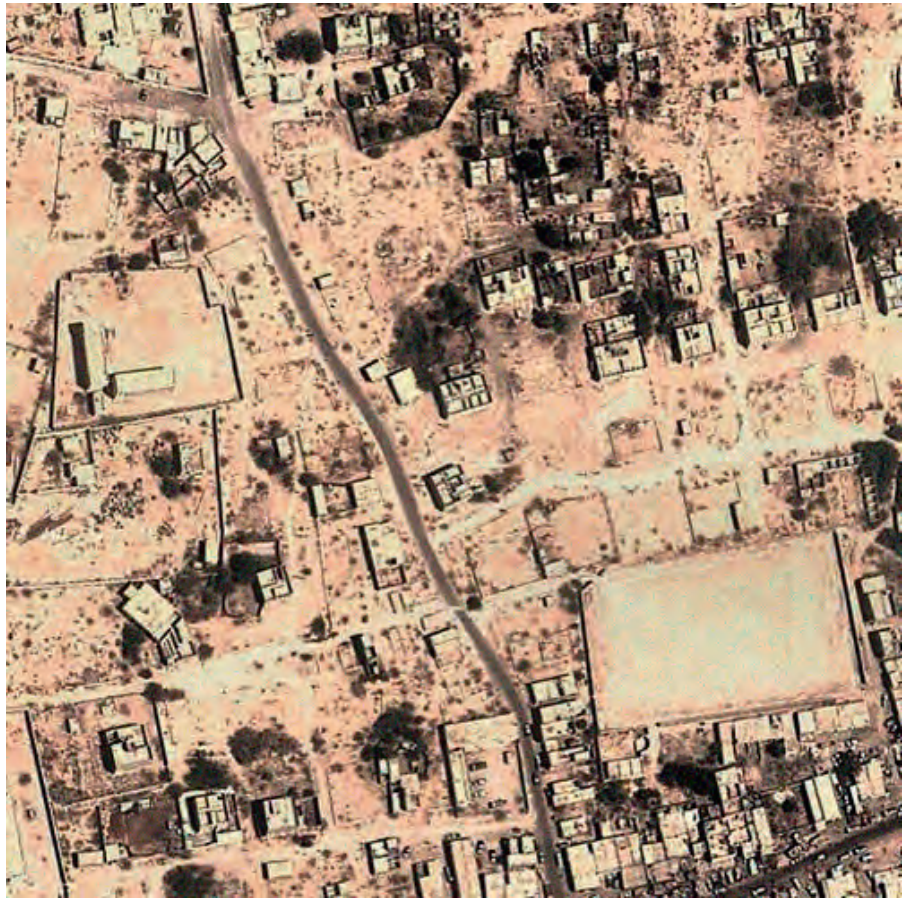
"They are also technologically invisible. Because most people never actually see them, they are unaware of how drones actually work. Most people don't have the technological insight to investigate these sorts of things and are



therefore incapable of taking a critical position. This issue applies to much of modern technology, but it is particularly significant in relation to drones, which are very powerful objects."

A central aspect of the invisibility of drones is that they are operated far outside public control. But they also make use of the same technology that made globalization possible – satellite images, network technology, aviation – and that brought the world closer together. Bridle's background in computer science explains his focus on systems, and his desire to break digital objects down into their individual components, in order to make the individual processes more visible and better understand how they contribute to the whole. He employs this approach in many of his works, including *How to see through the cloud*, in which he enables users to see where their data or website is actually stored when placed in the so-called 'cloud'. It is now cheaper to store data on the cloud than it is to hang on to it ourselves; it is also more convenient, because the data can be accessed from many different devices. But Edward Snowden's leaks revealed that using the cloud also carries security risks that intelligence agencies capitalize on to access our private data.

Bridle's work revealed the geographical location of our remote data, demonstrating that the internet is not magical, but is rather built on physical computers and servers that are connected via fibre optic cables that span oceans and continents. His work on the cloud thereby contributes critical insight into some of the ideologies and processes that underlie actual digital power relationships. His methodology is reminiscent of those employed by art groups such as the F.A.T. Lab, whose work has often focused on the conflict between intellectual property rights and the ever-replicating nature of the internet. F.A.T. Lab artists also use social networks and pop-up websites to create and spread work. Using a so-called 'Speed Test Approved' stamp of approval on their websites, they emphasise that many



of their projects can be executed at the pace of the internet: between half an hour and eight hours.

In February, Aram Bartholl posted a photoshopped image on Twitter depicting a bird's-eye view of the headquarters of the German security agency BND. The image showed the building shaped as a swastika, and was accompanied with the caption "What was the architect thinking?" The fake photograph quickly spread across the internet, sparking discussion about the impact that real and fake images have when disseminated online. But it also brought the BND's activities into the spotlight. Another F.A.T. Lab work, this time by Evan Roth, crosses the boundary between the digital and the physical.



He printed out four months' worth of internet cache and then compressed the paper in a trash compactor – a physical process that mimics the digital event that occurs when you clear your browser's cache. The physical analogy – visualized on meters and meters of printouts and displayed as a sculpture and online video – highlights the digital traces we leave when searching and clicking online.

These works demonstrate that since technological development often takes place quickly, and is often so imbued with Silicon Valley hype, that the art world is actually one of the only communities that have reflected critically on the underlying processes of our digital world.

"I have always been interested in

the interplay between what we design, what we want to design, how we code it into software and hardware, and how this technology then produces further consequences. We shape our tools, and then they shape us. But these tools are no longer coarse. They are complex machines whose consequences are not immediately clear, and whose influence on networks grows as they are put to new uses," Bridle said.

"Drones reproduce the core functions of network technology, which is the ability to act instantaneously from a distance. They therefore have a double function of providing both surveillance and communication, though the communication is inherently unequal, and demonstrate that these technologies reproduce existing forms of power. Whoever has this political, legal or social power can control power through this network, using these technologies."

Bridle's view on networks and technology is therefore more pessimistic than the message from Silicon Valley ideologues, who have promised that technology will turn existing power structures on their heads and make civil society better able to coordinate against and resist oppressive regimes. His pessimism was given further ammunition following Snowden's revelations of how governments use internet metadata to further consolidate their power. The drone programme uses mobile phone metadata to identify targets in war-zones. The position of a telephone is captured and processed by a machine, which then sends the position through the system to a robot that uses it to determine where to drop a bomb. Humans are still involved in the process, but their contribution is minimal.

"You start to realize that all these pieces of network technology are part of a much larger system," Bridle said.

"Surveillance and weaponry have always been tightly connected in aviation history. All forms of surveillance are weapons, because they embody this unequal power structure and inevitable tendency toward violence. The first planes were used for surveillance, but

seeing as they already were up there, they might as well drop bombs. This first happened during the First World War, with the birth of aviation, and it is a process the drones continue today. Originally built for surveillance, they now carry missiles and are therefore developing a function of surveillance that becomes violent."

Practicing resistance

James Bridle's drone works are not just digital Tumblr blogs or Instagram photographs. He is best-known for drawing shadows of drones on pavements, parking lots and other urban areas.

"The drone shadows indicate an object and show it one way, but they also show its invisibility. I don't actually paint the drone, just show its shadow, which highlights the fact that there is a thing flying above my head that you can't see – something that you don't know much about," Bridle explains.

The issue of the visibility and recognition of drones also arises in the discussion of legitimate resistance against them. It makes us ask which strategies are most effective for self-defence, and whether they are even feasible, in protecting ourselves from these high-tech robots. New York-based artist Adam Harvey has designed several pieces of clothing that focus on privacy, which he calls Stealth Wear. One of the items is a burka made out of metallic material, to thwart the heat-seeking camera that camera drones use to find their targets.





Dutch artist Ruben Pater has used his work Drone Survival Guide to explore the potential space for civil resistance if a drone war were to break out. Like James Bridle, he focuses on making drones visible through printed posters

Several artists have started to tackle questions that the drone programme presents. Drones fundamentally alter the nature of warfare.

of drone silhouettes that he calls 21st century bird-watching. The drones demonstrate a new natural environment in which it is important to recognize them as a danger and threat. The poster is supplied with a guide translated into many languages, containing basic tips for countering a drone attack: carry no electronic communication, move in bad

weather when drones have difficulty flying, and layer clothing to hide body heat.

"What's interesting is that even though drones are sophisticated, they can be countered using simple strategies. The Taliban use space blankets which only cost around €1 each to hide from infrared cameras at night, because they conceal body heat. The blankets were developed by NASA, so the same technology that was used to develop drones is now being used to protect against them," Pater said.

"I had the guide translated into Pashto because I hoped it could be used in the area between Pakistan and Afghanistan. There are many exhibitions about drones and artists who make them, but they often end up in English-speaking galleries, and are made for a Western audience. I wanted to make something that was accessible to lots of people."

The guide has spread via social media mostly because Jihad supporters tweeted about it.

"When something goes online you lose control of it. But the guide is not

illegal, and it is focused on non-violent resistance. I don't think the guide has any value in a war zone because it is so basal," he said.

Pater is aware of the irony of making a poster with photos of the normally-invisible drones. It is perhaps not so relevant for people in parts of the world where drones operate to see or recognize their existence. The drone always presents a danger, but they are in practice invisible because they fly so high that you can usually only hear them. The next step of his project will be tackling this aspect.

"Someone suggested expanding the project with sound. Because they often fly so high that you don't see the silhouettes, but in places like Gaza and Afghanistan you are constantly hearing them. So now I have started to collect the sounds of drones and put them online," he said.

Much more than a voice



PROFILE
Laurel
Halo

Most people are first exposed to Laurel Halo's voice on the track 'Strawberry Skies' by Games. Her luscious voice paints a scene: a cool summer night around a fire with your best friends, their faces licked by the warm glow. A scene accompanied by a fault song playing on repeat. A song like 'Strawberry Skies', a song made perfect by Halo's sultry voice.

By Andreas Eckhardt-Læssøe

That was 2011, when Halo's career had started to rise. The same year, she released her 35-minute EP *Hour Logic*, that cemented the success that followed her 2010 breakthrough EP, *King Felix*. The opening track, 'Supersymmetry', is a modern take on 1980s Kate Bush. With a danceable beat, insistent guitar and catchy pop melody, its brilliance didn't rely on the chorus, but constantly pushed itself forward. It was ambitious electronic pop music, and it was her own.

But with the release of *Hour Logic*, she had changed. The swaying pop melodies were replaced with a trippier techno sound and deeper bass. Her voice had vanished.

Despite her young age, much has changed already. She is an artist in motion, and her direction makes her interesting to follow. It is as though she radicalises her expression with each release, cutting the waste and tightening her focus.

The 2012 album *Quarantine* peeled off another layer from her music. Her voice has returned, but is mixed so bone dry and unmodified that it takes on a monstrous and frightening quality as it trembles in the soundscape. The vocals seem inspired in equal measure by Thai pop music and one of her great influences, the modern saint of composition, Steve Reich. The subtle musical breakdowns form an organically smooth surface that is surely derived from him. But Halo always mixes in a sense of discomfort and pain, which comes through on the incredibly beautiful and sad track 'Lights+Spaces' where she sings, "Words are just words / words are just words that you soon forget". These lyrics seem to foreshadow her follow-up album, *Chance of Rain*, in which her voice is once again absent, returning us to her trippy and groovy world.

Laurel Halo is also unafraid to challenge musical heavyweights. Last year, she remixed the track 'Living With

You' by the avant-garde rock legend John Cale, provocatively removing the vocals and refreshingly precocious lyrics.

When listening to music, it's easy to prioritise vocals. But where Laurel Halo is concerned, the vocals are so powerful they force you to listen again. For her voice conceals a lie. Yes, it is beautiful and seductive, but it can also be stone cold and evil. Laurel Halo deliberately cultivates a duality in her voice that she is unafraid to undermine. For example, on the *Quarantine* track 'Holoday', a pitched fragment – of something that sound like Laurel Halo's take on a Eurodisco track – constantly interrupts an otherwise ambient and sumptuous track. And yes, sometimes she sings out of tune. Deliberately, definitely deliberately, because when she sings out of tune in her choral voice, an exciting tension arises that makes you hear her voice fresh and problematised.

Halo is undoubtedly a very reflective artist whose music has many exciting layers. But instead of impeding the listening experience, these layers shape it. The tracks are good because they are thought out, but you don't need to reflect on them, and their many layers, to hear that they clearly work.

Her live performances are driven by precision and extreme control. With her long hair swaying over the mixer, it is evident that this is where she thrives. From her musically lofty heights, she gazes down upon her work, and decides whether to make her beats tight and crunchy, jazzy and playful, or minimal and heavy. Over the course of a show, you may well experience it all.



"If we are to translate industrialism to a new era, it's no longer seafaring ships we're building, it's spaceships." We sat down with Mikael Fock, head of Elsinore's Kulturværft, the home of Click Festival.

THE THIRD WAVE

Photos by Alastair Philip Wiper

"Nowhere else in Denmark, perhaps nowhere even in Northern Europe, is that much history, cultural history, and unique architecture gathered in one single location. Nowhere else is the spirit of a place so completely revealed as in the new cultural space around the old shipyard, Kronborg Castle, and the Culture Harbor. It's the perfect sounding board for storytelling and cultural innovation," says Mikael Fock.

"The Kulturværft is a postindustrial building," Fock explains, citing the area's past as a shipyard. "There's a very logical connection between the old technology that the old yard represented and the new digital technology." The old ships went out to explore the world and to draw a new map of it. Today we're drawing the new world map as we go, but we are still driven by curiosity and the search for meaning. We are finding new land, metaphorically speaking, as we meet real people who challenge our own understanding of self. "The Click Festival is a spaceship we're building to be able to sail out in the world again."

The link between the city of Elsinore

and the Click Festival is obvious to Mikael Fock: "You have to be in a place where the world opens itself up in order to see what roads one is embarking on. The digital world offers us brand new democratic possibilities, like the possibility to challenge the old power structures of centre and periphery. Click Festival is an attempt to draw a new map that isn't self-limiting."

This is also why the festival doesn't think of itself as a traditional roundup of acts that the audience will watch and then go back home. "Click has a social dimension," Mikael Fock explains. "We want to exchange knowledge, we're very curious. We do present performances, but what drives us more than anything is coming up with lively visions for the future."

Mikael Fock works with what he calls the cultural compass, something that is not only inspired by the waves in Elsinore's old harbour, but also by the ancient Greek philosopher Plato. According to Fock, Elsinore has three waves. The first wave centres on identity. Its key person is Hamlet, who (according

to Shakespeare) lived and reigned at the Cultural Yard's neighbour, Kronborg Castle. Hamlet is all about qualms and uncertainty—a human character filled with doubt. The second wave is the maritime story. Where are we going and how do we get there? In the third wave, there's an industrial narrative that translates into an innovation narrative. "What can we do together?" Mikael Fock asks. "Elsinore opens itself up to the world. The three waves put together form a fourth wave, a wave of culture, that asks what we're supposed to do with it all. Culture should ask questions about how we perceive the world and offer new meaning. In that regard, Click is not the answer, Click is the question."

Mikael Fock is very persuasive. These beautiful old industrial buildings are still relevant. But we must continue doing what sailors have been doing for hundreds of years. "Instead of isolating ourselves, we must dare to face the world. And I think that's more fun and rewarding; doing things together. That's why this year's theme is DIWO."















* Alastair Philip Wiper

is an English photographer based in Copenhagen and working worldwide. From the laboratories of CERN in Switzerland, to nuclear power stations in Sweden, to gin distilleries in England, he works with the weird and wonderful subjects of industry, science, and architecture, also capturing what goes on behind the scenes. Amazed by the things that human beings create and build, he takes an anthropological approach to the subjects of his photography, seeking out the unintentional beauty of the infrastructure. For the last six years, he has been the house photographer for designer and artist Henrik Vibskov. His work has appeared in a wide range of international publications. Follow him at

www.alastairphilipwiper.com



PROFILE

John
Perry
Barlow



John Perry Barlow, essayist, poet, and songwriter for the American rock band The Grateful Dead, is not easy to define, but is currently best known for his work as an internet activist.

In 1990, Barlow helped establish the Electronic Frontier Foundation (EFF), whose mission is to protect digital freedom by defending the right to freely express opinions and knowledge without censorship.

After establishing EFF, Barlow began publishing essays, of which the 1996 manifesto "A Declaration of the Independence of Cyberspace" is his most familiar. The essay argues that the internet – which does not reside within a single country's borders – is not, and should not be, owned by the world's governments. The internet has no elected authority, and that's how it should remain. "We [the internet] are forming our own Social Contract. This governance will arise according to the conditions of our world, not yours [the world's governments]," he wrote. He argues that state intervention impedes the free exchange of knowledge, and that the internet should therefore be a place where people can express their views without fear of reprisal.

The concern over so-called 'digital rights' is a recurring theme in Barlow's essays and talks, which he is increasingly being asked to present at IT and internet conferences. Following the revelations of the US government's vast and unchecked secret spying programmes – exposed by the whistleblowers Wikileaks and former NSA contractor Edward Snowden – Barlow expressed concern about these secret activities, since citizens have a right to know what their intelligence agencies are up to.

The same right to know applies to the activities of private companies that are increasingly reliant on harvesting information about people that is shared freely on the internet. Our rising dependence on the internet means that citizens will increasingly leave traces that can be, and are being, collected. The problem is that the companies and organisations that collect this data know more about ordinary citizens than the citizens know about them. This information imbalance risks an authoritarianism

that, Barlow argues, is fundamentally unsustainable. He calls for increased transparency so that citizens are better informed about what happens to the virtual traces that they, often unwittingly, leave behind. He also argues that citizens should be entitled to know how governments are judging them based on their online activities, and that we should be better able to protect information about ourselves that we don't want publicised or harvested.

Barlow's attitude toward the internet and surveillance underwent a transformation between the publication of his 1996 manifesto and the recent revelations about the NSA. He now argues that the vision of a free internet without surveillance is an unrealistic utopia, and that we should instead be fighting to increase transparency about the online surveillance that is currently taking place. Individuals such as Wikileaks' founder Julian Assange and Edward Snowden are therefore vital, because they expose the intentions and motivations of our authorities as well as the methods they are using to collect data about us. Barlow recently helped establish the Freedom of the Press Foundation that has offered financial support to whistleblowers like Snowden.

In contrast to Assange, Barlow places some trust in those operating the NSA spy programmes. Surveillance has come to stay, he argues. Instead of fighting it, then, we should be asking how we can better manage and influence it. Ultimately, the mere act of collecting data does not pose any inherent threat. The danger is what might happen if the information winds up in the wrong hands, to be used for personal gain or, more worryingly, to limit free expression. That is the fascism that Barlow has chosen to fight, and to that end he has reached out to intelligence agencies and argued that unless their investigations are conducted more transparently, we risk losing our free speech and digital rights.

BARLOW: WE! THE INTERNET

By Philip Martinussen



The term 'new media art' tends to elicit more questions than answers. What is media art? How new is new? Can media be art? A curator, a historian and an artist share their thoughts on the subject and guide us through the ups and downs of the business.





THE GOOD OLD NEW - OR HOW TO NAVIGATE THE LANDSCAPE OF NEW MEDIA ART

By Maria Marqvard Jensen



When people claimed that Picasso's portrait of Gertrude Stein didn't look like the author, Picasso supposedly declared, "It will." New media artists may borrow the famous quote. When asked if their digital pieces qualify as art, they can simply reply, "It will." New media art has come to stay. It's evolving rapidly and changing the art world drastically, and yet we may only be scratching the surface of what this genre actually means.

The term 'new media' was used for the first time in the early 20th century in connection with film and has undergone several stages of transformation since then. From 'multimedia art' to 'cyber art', the term 'new media art' joined our vocabulary at the end of the 20th century. But what is new media art exactly? If you create a painting using Paint or Photoshop, does that count as new media art? Of course not. New media art relies as much on the message as the medium. Christiane Paul, a professor of Media Studies at The New School, and Adjunct Curator of New Media Arts at the Whitney Museum, explains this distinction:

"One needs to distinguish between art that uses digital technologies as tools for the production of a more traditional art object – such as a photograph, print, or sculpture – and the digital-borne art that employs these technologies as tools for the creation of a less material, and more software-based form, which utilises the digital medium's inherent characteristics, such as its participatory and generative features."

Described in its most simple form, new media art uses new media technologies as both tool and medium. Paul describes it as "digital-borne, computable art that is created, stored, and distributed via digital technologies, and which uses the features of these technologies as a medium". It's a hybrid of digital mediums, platforms and genres. Its broadness and the fact that technology is constantly evolving, – makes

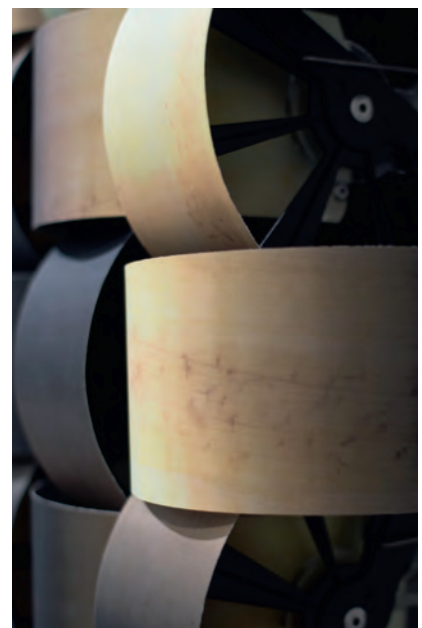
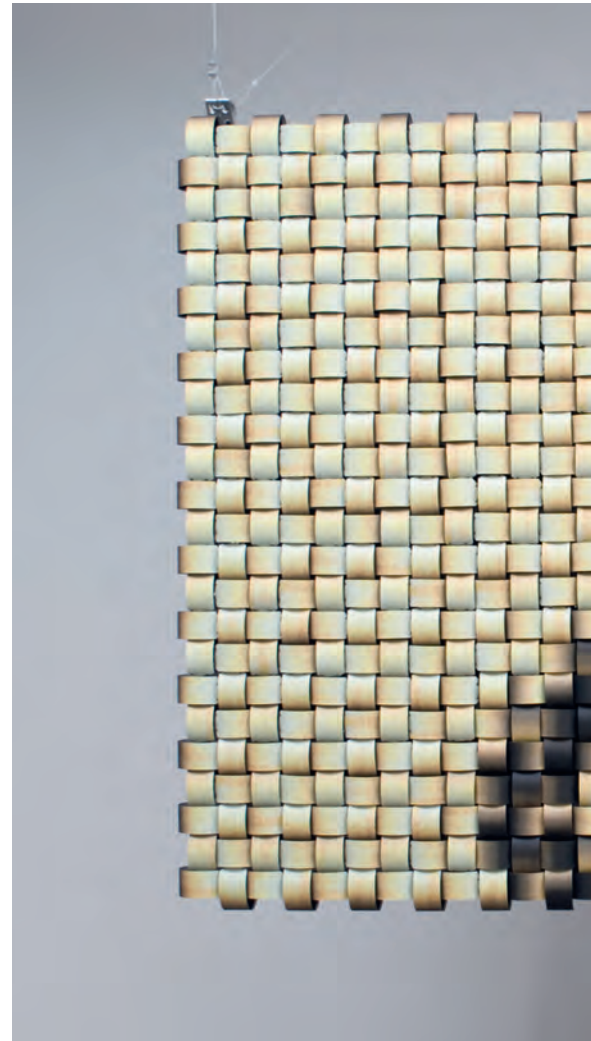
it difficult to categorise. But it is also difficult for spectators – who are only familiar with paintings or sculptures in museum and galleries – to understand. When something is dynamic or process-oriented, variable or generative – and possibly taking place in real-time – it requires a whole new way of understanding and looking at art. In fact looking no longer applies when describing the role of the spectator – they often have to engage in the art form in a way not seen before.

The new media artist

New York's East River divides Manhattan and Queens. From Daniel Rozin's artist studio in Long Island City, you can see the skyline of Upper Manhattan, home to museums like The Guggenheim and MoMa. But their masterpieces seem to be a world, and not just a river, away. In his studio, mechanical tools, wires, and electronics have replaced brushes, canvases, and paint. This is where Rozin builds the mechanical, kinetic, and digital pieces that have made him a world-renowned digital artist. With a background in industrial design, Rozin obtained the necessary programming skills from New York University's Interactive Telecommunications Program, ITP. For the last twenty years, Rozin's art has been exhibited in some of the world's most renowned galleries and museums, making him something of a pioneer in the digital art world. Rozin works in the field of digital interactive art, one of many new media art offshoots.

"I think that almost everything I do has a digital component. At least one-third of my pieces – if not more – are digital works. Some of them are purely digital, and some run on screens or projections, so they are just software. Some of my pieces are mechanical and kinetic, but in them they have controllers, electronics, and digital technology. A part of them don't appear to be very digital because they can be sculptures that don't move, but they are digital in their creation," Rozin explains.

As an artist, Rozin combines his knowledge of industrial design with





technological skill and artistic vision. His pieces are beautifully crafted and identified by their minimalistic elegance, as well as their raw components, wooden surfaces and attention to detail. He thinks it is essential to use these different skills in his art.

"I enjoy the division between doing something that is conceptual, artistic, or aesthetic, and then having to program and do electronic work. It's like shifting between the two sides of your brain," he said.

Rozin has found his niche with the interactive mirrors upon which he has built his reputation. The mirrors interact with audiences on a personal level, which other interactive art often struggles to accomplish. The term 'interactive' has become somewhat of a buzzword in the new media art field be-

cause it's something people can grasp immediately. It satisfies the audience's needs and desires, and it offers them a direct experiential connection with technology – something you can click, change, touch, and respond to.

But even though these interactive features can be fun and playful for spectators, they don't necessarily qualify as art. However, Rozin is not merely interested in the demonstration of technological opportunities. He uses technology as a tool to create unique pieces quite unlike anything we've seen before by manufacturing the simplistic from the complex. In 2013, this work earned him a Prix Ars Electronica – one of the most important prizes in the fields of electronic and interactive art, computer animation, digital culture and music.

How to navigate the new media landscape?

Although Daniel Rozin works alone, many artists working with new media collaborate. DIWO – do it with others – seems to be their slogan. It has helped foster a new collective approach to ownership as, after all, it's hard to claim ownership over a piece of software. Paul has studied the digital art scene from its early stages. She has investigated digital art's characteristics and progression, and acquired the knowledge to identify its distinctive features.

"Over the past decade, contemporary art has increasingly been shaped by concepts of participation, collaboration, social connectivity, performativity, and 'relational' aspects. One could argue that art responded to contemporary culture because it is being shaped by digital and other new technologies and the changes they have brought about."

In general, new media art is characterized by the concept of 'collectiveness', with people from different genres joining forces to create art together. An example of this is the F.A.T. organization (Free Art and Technology), comprising artists, engineers, scientists, lawyers, and musicians, who together produce artworks that reflect their shared political ideals. Collectiveness has intangible characteristics of the Internet and social networks, which is perhaps one of the reasons that navigating the new landscape of online new media art is so difficult. Paul acknowledges that curators are absolutely necessary to help communicate this new experimental and ungraspable field.

"The general criteria for evaluating the quality of new media art are no different from those used in any other medium of art – the conceptual and material sophistication in communicating an idea is always key. Then again, there are specific criteria for evaluating the sophistication and vision of expression in every respective medium. Creating a sculpture entails a different process than creating a generative piece of software art, and those differences require medium-specific criteria," Paul said.



Paul adds that evaluating art always involves subjectivity, and not everyone can agree on what makes a work good or bad. She believes quality depends upon “the specifics of the medium and on how it is being used to support a concept and vision. The latter cuts across media.” She follows artists, art, and online discussions to keep up-to-date, and she travels around the world to visit exhibitions and participate in panels.

Keeping up with the field seems to be the best way to develop a critical eye. As an artist, Rozin participates in shows all over the world, which exposes him to many of the new ideas that people are testing. But he’s unconcerned with the question of what’s art and what’s not. Rozin prefers to investigate what makes art good or bad. In his opinion, the quality of new media varies a lot, and there’s still a lot of artists who are just scratching the surface of what might become their niche. He finds that a lot of new media art is merely a demonstration of technology, instead of an application of technology in the artistic process. He also raises the question of opportunity in the field.

“If you think about who can create a piece of software, then the answer is an engineer. An engineer might not be the right person to create art, but they are the only ones who have the tools to do that. A lot of times they are the ones who are in these shows, and often it doesn’t deal with very good art,” Rozin said.

On a daily basis, we operate mobile phones and computers, and interact through various online networks. But although we use these programs and devices, there remain few people who know how to use these technologies to create art. It is essential to be media-literate if you want to be a new media artist, but too few know how to program, write code, or manipulate software tools in their own work. Rozin argues that, as a result, those with technical and technological skills therefore have an advantage, but it doesn’t mean they have artistic vision. On the contrary,

★ What is the new new

Daniel Rozin

We think that things happen very fast and erupt within a year or two. But I think that it takes about fifty years for these things to happen. We are definitely ten years into net art but we are really just scratching the surface. So it's still the next thing. It really hasn't found its place.

Georgia Krantz

I never answer this question. But one thing that's really interesting right now is biotech-art. A lot of people are really interested in surveillance and DNA and using it artistically.

Christiane Paul

The new 'new' seems to be everything 'post-': post-digital, post-Internet, post-medium practices. This results in works that are both deeply informed and shaped by digital technologies and networks, while also crossing boundaries between media in their final form.

many lack it. Another inevitable consequence is the need to collaborate. People team up with others who possess complementary skills, in order to benefit from their knowledge. Many are still just experimenting with new techniques, but it’s possible that within the next decade or so, the quality of new media will reach new heights.

The old and the new

Georgia Krantz is an adjunct professor who teaches art history at ITP, and an education manager at The Guggenheim. As an art historian, she looks at the history of new media art.

“Exhibiting new media art – having a new media art department at a museum – requires new and different kinds of expertise on the parts of curators,

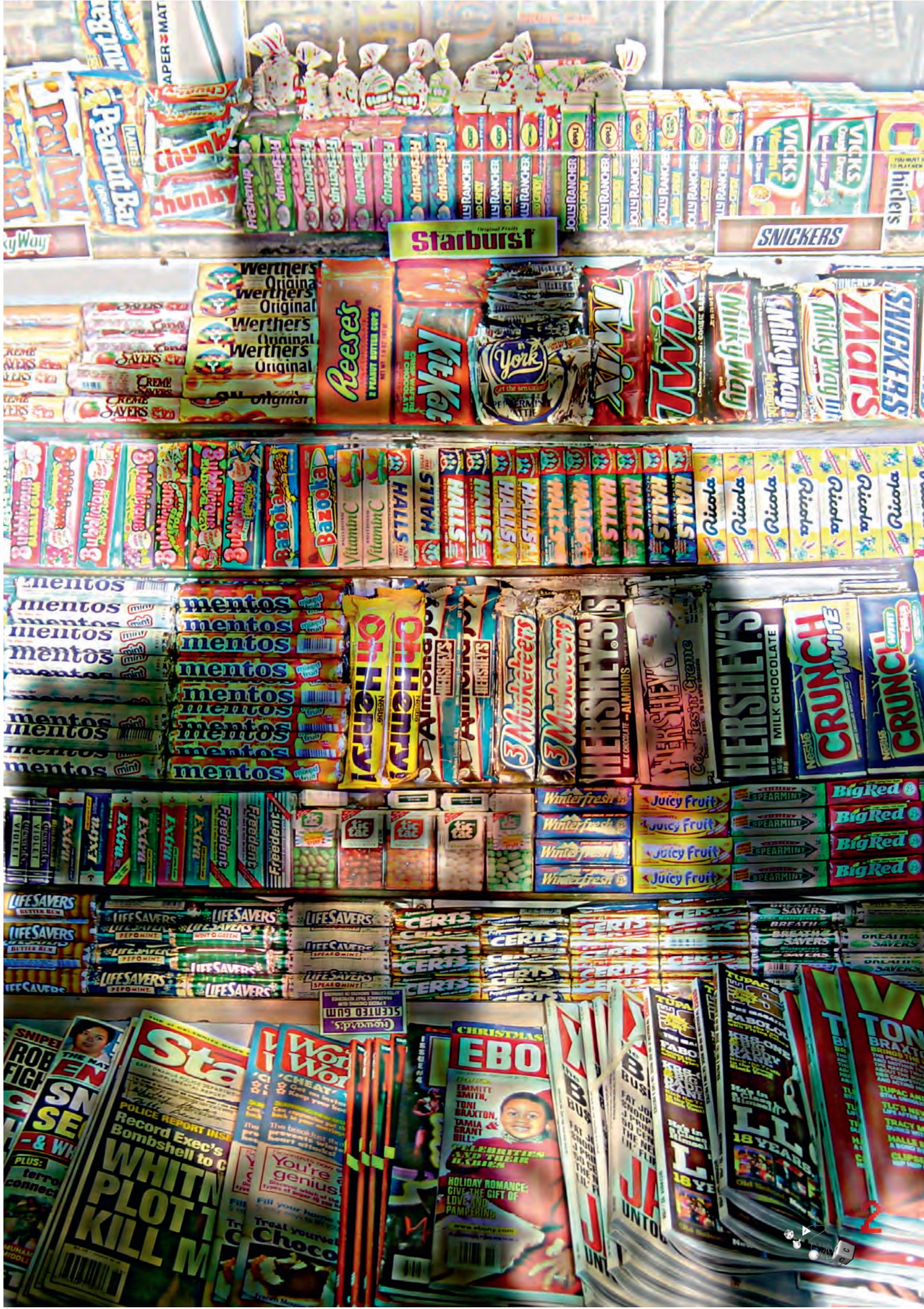
conservators and exhibition designers. New media art can be hard to exhibit, and many museums don’t know how to manage it yet.”

Given that new media art can exist on mobile phones, computers, or the Internet, and given that it can be copied, there is no original, can you still call it art? Is something that can only exist on a computer screen art? Or as a web performance, like many of the works by Swedish artist Jonas Lund? In 2013, he created the installation *Paint your Pizza*, a website that allows you to paint your own pizza and have it delivered to your door. Museums and galleries require a whole new set of rules when a pizza becomes the object.

Questions like these make museums and galleries hesitant to include new media art in their exhibitions. But they also make artists reluctant to embrace new media in their work. According to Paul, contemporary artists working in more traditional media often seem to shy away from critically engaging with the effect of digital technologies.

David Hockney is considered one of the most influential British artists in the 20th century. An important contributor to the Pop Art Movement in the 1960s, he’s not afraid to use commercial elements in his art. In 2008 he discovered the app *Brushes* for the iPhone. This led him to explore the medium and to create a series of paintings using the iPhone and iPad as a canvas. In 2011, the Danish museum Louisiana exhibited Hockney’s iPad paintings – on iPads. The museum made use of the medium in several ways. Hockney emailed new drawings throughout the exhibition period and the museum used the *Brushes* app itself to animate the creation of his drawings from start to finish. The critics had mixed reactions to Hockney’s new style. “Openness to technical innovation is one thing, art another,” said The Guardian’s art critic Adrian Searle.

Hockney’s iPad drawings don’t exactly satisfy the requirements for new media art, at least as defined by Paul. Hockney uses digital technologies as tools in the production of a more



traditional art object. Still, it is interesting when a notable artist like Hockney adopts new technology and critics say it's not art. It illustrates that there is still a long way to go before new media art is accepted as part of the contemporary art world.

To Paul, new media art is a lot more than using a new media. "New media art works are computational,

media' in the past, I point also to projects that don't necessarily use technology as such, like found objects, the concept, the body, and a whole host of other radically new ideas in art." Krantz said.

If we think about paint as a technology, as some people do, the introduction of oil paint during the Renaissance was a revolution. Oil paint at the time was 'the new'. Knowing this history, Krantz is

puters that don't exist. I remember the year I came to ITP was the year the first Internet browser came out. It was called Mosaic, and I remember seeing it for the first time and not being impressed. I was thinking, why is this even important? Now when you look back, you say 'yes, that was important'," said Rozin.

Global perspective

New media art is still finding its feet. Museums, galleries, curators, contemporary artists and spectators are opening up to the idea of art being digital and experimental. The acceptance of new media art also has a global component, which both Rozin and Paul acknowledge following their experience traveling. Some Asian countries, such as Japan, Korea, and Taiwan, seem to be more accepting of new media art, Rozin explains.

"Their lives as a whole seems to be very technological, and they accept that art can also be technological. It's not a big hurdle for them to go into a museum and see something that's projected or buttons or a screen," he said.

However, the interest in new media art in this part of the world tends to be rather specific. Paul finds that visually-oriented software art or robotics are met with a greater acceptance than conceptual, activist, or politically engaged work.

Rozin argues that Europe is more open to "weirdness," and is witnessing a greater level of experimentation with form, installation, and temporary pieces. This may have to do with the government funding that is available for new media art in Europe, which allows for both greater creative experimentation and freedom from the need to focus on what kind of art will sell. The issue of money is of course important for the future of new media art. For the art form to be truly acknowledged, it has to confront a buyer's market, with prices that reflect those attached to paintings and sculptures. But let's take it one step at a time.

The term 'new media' was used for the first time in the early 20th century in connection with film and has undergone several stages of transformation since then. From 'multimedia art' to 'cyber art', the term 'new media art' joined our vocabulary at the end of the 20th century.

process-oriented, time-based, dynamic, real time, participatory, collaborative, performative, modular, variable, generative, and customisable, among other things."

The idea of new is eternal

The fine art world has historically always been skeptical of the new. When Marcel Duchamp presented his readymades – mundane objects that Duchamp chose and presented as art – it shocked the art world of the early 20th century. Perhaps most famous was 'The Fountain', a urinal signed with the pseudonym "R. Mutt". It was rejected from an art exhibition in New York in 1917 when the jury declared it "not art". Today there are replicas of the fountain on display in museums including the San Francisco Museum of Modern Art, Philadelphia Museum of Art and Tate Modern.

"Artists have used new technologies and reinvented their practice for centuries. In this sense, 'new media' does not transcend time, but rather dialogues with eras of the past. Today 'the new' refers to the world of the digital, but Laszlo Moholy-Nagy, the artists of E.A.T. (Experiments in Art and Technology) and many others were experimenting with radically new technological approaches to art long before digital. When looking at 'new

hesitant to use the term new media art.

"I'm not married to the term new media. The term is complicated and can be confusing. As used today, it tends to suggest an opposition, rather than a continual evolution, between art being produced today and that of earlier periods."

Krantz argues that the idea of the 'the new' is eternal. Things have always been new. The term new media is a relative term, and – as Daniel Rozin puts it – is "a moving target." This presents yet another obstacle for the fine art world, the question of preservation. The fact that digital technology is evolving rapidly impacts how we deal with its preservation. Museums are often hesitant to invest in new media art due to the major difficulties inherent in digital archiving. While even the cheapest prints often have a preservation time of more than a hundred years, hard drives will only hold their electrical charge for a few decades, while the hundreds of other components that comprise modern computers are also rapidly evolving. This presents problems not only for museums, but also for digital artists.

"I have been doing stuff for almost twenty years now and I have pieces that I will never be able to see again. Software pieces that run on versions of com-

In the summer of 1971, the future cofounder of Apple computers, Steve Wozniak, was at home during a summer holiday from college. The morning before he was due to leave, he came across an article in an issue of Esquire magazine that his mother had left out for him. The article was about a technological development that she thought might interest him. She was right, and the article ended up having a major impact on Wozniak's future.

HALF-MAD TECH-SCIENTIST, HALF OUTLAW

By Kristian Malling Granov



A central character in the article was John Draper, later known as Captain Crunch, and a tight knit group of phone hackers, or 'phreakers,' who had chosen to do battle with the internet of the time, the US telephone network.

These technological enthusiasts explored this system with fascination and a spirit of adventure. The system was vulnerable, and it was possible to create chaos and dial numbers around the world for free, if you had the necessary talent. Steve Wozniak was hooked, recognising elements of his own personality in the characters described in the article – socially awkward individuals with a passion for technology and an urge to push society's boundaries.

The article described how to make free long-distance phone calls, a discovery that sparked headlines nationwide. But Draper saw this method of exploring the telephone network as only one possible tool. He became obsessed by the network's possibilities, and set off across the country in his beat-up Volkswagen that was crammed with equipment – half-mad tech-scientist, half outlaw. He wasn't known in the phreaking community by his real name, but as Captain Crunch, a name he stole from a cereal brand known for supplying a free whistle that could be used to gain access to the network. The whistle emitted a perfect 2600 MHz tone, the same tone used

by the system to indicate an available long-distance line.

The article cemented Draper's mythical reputation at the dawn of the computer age. Young enthusiasts across the country, such as Steve Wozniak and Steve Jobs, used his techniques to challenge the realities and expectations that their society imposed on them.

But while Draper still personifies this pioneering spirit, he is saddened by how the digital world has become so focussed on profit and branding.

"Almost all the programming talent used by these large companies is offshore. So there really isn't much of an opportunity like there was before, due to the greed of companies outsourcing, and moving their software divisions offshore," Draper said.

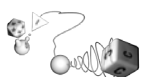
Draper and Wozniak were both far more talented at IT than Steve Jobs, who instead chose to battle the establishment by putting on a suit and joining their ranks. Jobs used his business acumen to establish his first pre-Apple enterprise with Wozniak: a device that allowed users to make free long-distance calls, inspired by the article about Draper. Draper helped them develop it, but was ultimately disappointed by Jobs's push to bring the product to the market. Jobs and Draper never really liked each other, and Jobs regarded Draper as an unruly idealist who was less interested in ex-

ploring IT's economic possibilities than Wozniak was.

"Steve Jobs has downplayed my role from the very beginning. And the only reason I was doing work at Apple during the early days was because Woz appreciated my value to the company," Draper said.

Draper was never formally employed by Apple, but worked instead as a freelancer there and at a number of other companies. He counts among his accomplishments the first text edit programme to be installed on Apple and IBM computers. His lack of interest in business has caused him to be somewhat overlooked, however, as the mainstream narrative now told about the pioneering days of the personal computer tends to focus on those who profited from it.

Draper has since been involved in everything from web TV, website programming, and rave culture to, unsurprisingly, IT security. Asked about the contemporary internet, he answers that he did not predict the commercialisation that took place in the mid-1990s. Despite this miscalculation, by the early 1980s he had already expressed concern that the internet could be used to perform widespread surveillance – a prediction that recent revelations have sadly confirmed. So perhaps it is about time that we once again listen to what Captain Crunch has to say.



Art requires that people cooperate. Technology gives art new opportunities to develop, a rare chance to pull away from commercial interests, and a unique avenue to access the public directly: sidestepping the establishment.

"NO ONE READS ADVERTS, ONLY PENSIONERS WATCH TV"

By Jacob Skyggebjerg

I said on the radio one February morning that there is now about as much prestige in having your book stamped with the name of a famous publisher as there is in wearing a cap emblazoned with the logo of your local baker. Even in cinema, artists are trying to avoid the mastodons of the establishment. The internet and social media mean that we no longer have to subjugate ourselves to unreasonable contracts. We can dare. Shout out loud. Be taken seriously. All without anyone ever meddling with your art.

"When I arrived in Copenhagen, I

didn't know a soul, but now people stop and ask me about the clothes that I roll." This is how I started the second verse of my rap 'Fremmed overtagelse' ('Foreign takeover') from 2013, and it says it all. The song was written and recorded one night in March, around a year and a half after I got off a train in Copenhagen Central Station with a black bag of clothes, a microphone, and a soundcard, and asked for the bus to Nørrebro.

The same night that I wrote 'Fremmed overtagelse', I wrote and recorded another song with two other



rappers, 'Lav den' (Make it). That's how it works – write, record, mix, distribute. No messing about. No wasting 1,200 kroner on mastering. No drum machine. No recognition. Fewer than four hours passed between the thought emerging, and the song appearing on Soundcloud. The internet's fast pace makes failing less important. It wouldn't hurt me if a song like 'Bar en bitterfisse' (Just a bitter pussy) were bad. It just wouldn't get shared. It would simply disappear from popular consciousness and lie among all the tracks that never show up when you search my name. I mixed and mastered my entire first album *Født thug, dø thug vol. 1* (Born a thug, die a thug vol.1) using effects presets in Adobe Audition that I had learned from a YouTube tutorial I found by searching for "mix master rap vocals." The same goes for the videos. No amateur filming, no action. No Opel Kadett C-Model just because it is mentioned in the rap. No HD. The errors become part of the product. The same goes for *Gladiator*, the publisher that released my debut novel *Vors Tids helt* (Modern day hero). They use the same strategy when promoting and communicating their products – have an idea, follow it through. Download some video and cut it together. Work with what you have. This way you can indulge in creating products and perfectionism. All self-promotion takes place through social media. No one reads adverts, and only pensioners watch TV. My music is its own promotion. My latest video is made using the "automatic music video" function in the editing program Pinnacle Liquid.

Art thrives when people cooperate

Since I started out, more and more people have joined in. More of my videos are shot in HD, and people dedicate hours to perfecting the products. Enthusiastic video and music aficionados work for free to bulk up their CV. It's no secret that many large companies like Zentropa survive on people's hardship and willingness to invest their spare time in the business's projects. It's an honour to be taken advantage of

by Zentropa. All I have used to create SKYGG is the 500 kroner I paid Otpei to master my second mixtape, but I spent it voluntarily. Art thrives when people cooperate. And I give back what I can. I have written songs for producers, and through my work with them, have made contact with other artists. This is how ecosystems develop. One of the video producers I work with has a team to film, a second to cut, and a third working on After Effects. So it's possible to create a brand without spending any actual money on it. The best example

On stage he used a 255-track mixtape, a collection of all the music he had put out, to keep the attention on him. The videos were of questionable quality, but they were always new and had a central element. And when you can maintain the attention, you rise up a level. If you get stuck in a rut, you slip backwards. The general public doesn't want to see the same film twice. It needs to be meta; you need to constantly bring something new to the table and be prepared to realise that things don't live forever. Projects live and die at an

Art is consumed during procrastination. It needs to constantly address the public. The western world lives online, scrolling down a touchscreen as they run while pushing their kids in a baby jogger. No one can be bothered to watch a video that's longer than 49 seconds

of this in Denmark is Cheff Records. They wrote 'Kysset med Jamel' (Kissed Jamel) after a night on the town and convinced Jamel Sundoo to make a video. The product was online the next day and their success was secured. *Gladiator* works the same way. The best talents are leaving the established publishers to create something new on the outside. We are no longer at the mercy of the establishment. Their monopolies are crumbling. They have to make an effort if artists are going to bother with them.

A colleague told me about a meeting at an established record company. They wanted to offer him a contract and put their logo on his project, but he turned it down. It was pointless. He walked through their Copenhagen offices. The studios were empty and people sat around in groups hunched over laptops and mastering using headphones.

It's not about publicity. It's about being present. It's about flooding the market – quantity over quality. Creating a flow. We saw it with Lil B when he appeared at the Click Festival last year.

ever-increasing pace, while the people behind them live on.

It's moving quickly. It's a game, and you need to stay alert, meta, and innovative. The app Spritz enables you to read 1000-page novels in ten hours. Use Youtube, Twitter, Facebook, Instagram, Soundcloud. Regardless of whether you make music or not, you need to be there. Be aware or you'll get knocked down. Knowledge is power. All of my musical adulterations can be found online. If the servers go down, there will be no evidence of it. Fuck it. Art is vain. Quickly in, quickly out. Nothing is permanent. Art is consumed during procrastination. It needs to constantly address the public. The western world lives online, scrolling down a touchscreen as they run while pushing their kids in a baby jogger. No one can be bothered to watch a video that's longer than 49 seconds.

"HACKERS HAVE BEEN GIVEN A BAD REPUTATION"

By Jakob Langkjær



"Hold on, I just need to take a look at the printer," the hacker named Christian says as he directs me toward the improvised wardrobe. I am inside the cellar premises of Labitat in Frederiksberg, Copenhagen. I look around at the leather sofas, TV, and small kitchen. The room reminds me of the after-school facilities of my childhood. I look back at Christian, who is peering at a 3D printer. After fiddling with it, I realise that it is in the process of printing... a 3D printer.

Most people regard hackers as anonymous programmers who are involved in all sorts of murky and illegal digital activity. And when hackers are mentioned in the media, it's normally in reference to activists, like the community known as Anonymous. Even the official Danish dictionary describes hackers as people who "illegally gain access to other people's electronic databases by breaking security codes." But Labitat argues that this definition is lacking. There is nothing particularly criminal about the hackers in this cellar, who sit and work and talk together in small groups. On the contrary, their doors are open every Tuesday, demonstrating an openness which is not normally considered very hacker-like.

Hacking is mostly about technological curiosity, argues René, another of Labitat's resident hackers. He joined Labitat after deciding to build a hanging garden in his apartment that would be equipped with a range of measurement devices. He quickly found someone at Labitat who was interested in the project, and who brought him into the fold.

"Hackers have been given a bad reputation," René said, taking a quick sip of his Cola Zero.

Labitat regards community and sharing as inherent aspects of the hacking community – you can't participate in the community without contributing. René points out that membership is free, though

you can choose to contribute a minimum amount every month to get a key to the rooms. You can also choose to share your knowledge with the other members, or perhaps just do the washing up in the kitchen. Labitat is governed as a 'do-ocracy', wherein those who use the facilities are given a say in how it is run. René says the system works, and that they only need one rule: don't behave in a way that makes it necessary to have more rules. The rule is called rule 0. "In reality we have created a small anarchistic community," René says, unable to hide a quiver of pride.

Our photographer wants to take a portrait of Christian and René, to put a face to the hacking culture that is too often wrongly portrayed as a collective of ghostly digital denizens. They are real people too. But it's impossible to find a square meter of white wall in Labitat's rooms to use as a background. The walls are almost completely covered with a variety of electronic components. Screens hang from the ceiling and keyboards are dotted around the room. It looks random, but it certainly isn't, and the room's jumble of electronic components are not discrete, but integrated. For example, René is currently working on an app to allow users to see whether the office's toilets are occupied, before booking a place in the queue.

It's not uncommon for Labitat to be approached to solve a problem, by everyone from installation artists to companies.

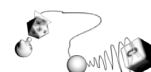
But Labitat always has the same answer: we will show you how to fix the problem, but we won't build the solution for you. This is because Labitat is ultimately interested in sharing knowledge, not profit. This ideal is shared by many outside of Labitat's offices on H.C. Ørstedesvej, and several Labitat members have made a habit of seeking out other hacker communities abroad – communities that are as diverse as their own.

"Some hacker spaces are based in garden sheds," René said smiling, warmed by the knowledge that Labitat will soon move into larger and more spacious premises that will allow their curiosity, and desire to share, to blossom even further.

Labitat was established in 2009.

The hacker community has around 400 active members on its online forum and a total membership of around 780. The youngest is aged 12, and the eldest 84. Most of Labitat's members are men, but there are some women in their ranks. Labitat can be found on Twitter, Flickr, Youtube and their website, labitat.dk. More information about hacker spaces in Denmark and around the world can be found on hackerspaces.org.

Labitat participated in last year's Click Festival with a project that invited the audience to create soundscapes using an electronic soundboard that was built for the event.



Don't Just Do It Yourself, Do It With Others!

By Ruth Catlow and Marc Garrett



In 2006 we at Furtherfield issued a challenge to the imaginative and freedom loving citizens of network culture. We said "Don't Just Do It Yourself, Do It With Others."

We originated the term DIWO in 2006, to represent and reflect a series of critical engagements to shift curatorial and thematic power away from top-down art and academic institutions into co-produced, networked artistic activities. DIWO - Do It With Others was first defined in Rosalind - Upstart New Media Art Lexicon [1]. It extended the DIY Do-It-Yourself ethos of early net art, punk & Situationism, towards a more collaborative approach, using the Internet as an experimental artistic medium and distribution system to foment grass-roots creativity.

The first DIWO Email Art project

started with an open call to the email list Netbehaviour, February 1st 2007.

The call drew on the Mail Art tradition, proposing to bypass curatorial restrictions to promote imaginative exchange between artists and audiences on their own terms.

Participants worked 'across time zones and geographic and cultural distances with digital images, audio, text, code and software. They created streams of art-data, art-surveillance, instructions and proposals in relay, producing multiple threads and mash-ups.' [3]. Co-curated using VOIP and webcams the exhibition at HTTP Gallery displayed every contribution an email inbox, alongside an installation of prints of every image, and a running copy of every video and audio file submitted.

[4] Every post to the list, until April 1st,

was considered an artwork - or part of a larger, collective artwork - for the DIWO project.

DIWO at the Dark Mountain was the second DIWO email art exhibition instigated by Furtherfield and the Dark Mountain Project in 2010. It took ecological collapse as its subject and the need for new stories, systems and infrastructures as its premise. This project generated intense controversies among participants. Again, considered part of the artwork, the details of debates were re-enacted for gallery visitors in a live performance at the opening event. In addition to the networked, live-streamed co-curation event, and the performance, this exhibition closed with a disassembly event in which gallery visitors demounted all physical works and redistributed them via snail mail to anyone they knew [5]

In recent years other individuals and groups have taken DIWO as the inspiration for their own projects. Some changed its meaning. For instance Cory Janssen's definition of DIWO for Technopedia, does away with the art, and collaboration across difference. We think that what he describes is just plain and simple Crowdsourcing. [6] Others maintain the adventurous and emancipatory spirit. For instance, in 2012 Pixelache the Helsinki-based transdisciplinary platform for experimental art, design, research and activism took DIWO as the theme for its annual festival. [7]

Why DIWO?

The most pressing questions of contemporary life are those that address the tension between the interests and freedoms of the individual and the collective in the context of economic and ecological crisis. These are a political questions within which are nested questions of equality, freedom and imagination.

We believe that in the networked age, the artist has a responsibility to push back at existing infrastructures, claim agency; create and share tools with others to reclaim, shape and hack the contexts in which culture is created.

For 17 years, working in practices that bridge arts, technology, and social change Furtherfield has been involved in many great projects, and has collaborated with and supported a variety of talented people in partnership with organisations of all shapes and sizes. We know that by connecting with each other across difference and discipline you can build ecologies and economies to bypass top-down domination.

The practice of DIWO allows space for an openness where a rich mixing of components from different sources crossover and build a hybrid experience. It challenges and renegotiates the power roles between artists, curators, technologists, participants, audiences, art-institutions and critics. It brings all actors to the fore, artists become co-curators alongside the curators, and the curators themselves can also be co-creators. The 'source' materials are open to all;

to remix, re-edit and redistribute, either within a particular event or project, or elsewhere. The process is as important as the outcome, forming relationally aware peer enactments. It is a living art, exploiting contemporary forms of digital and physical networks as a mode of open praxis, as in the Greek word for doing, and as in, doing it with others.

DIWO acts as an inclusive commons, consisting of methods and values relating to ethical and ecological processes, as part of its artistic co-creation, while

* It's DIWO if it...

Enlarges artistic freedoms

Uses the metaphors, tools, cultures and processes of digital & physical networks.

Is led by experimental artistic processes rather than utilitarian or theoretical concerns.

Disrupts traditional hierarchies and concepts of ownership working with decentralized peer 2 peer practices.

Involves diverse participants (unwitting and active collaborators), ideas and social ecologies.

Generates unruly and provocative relationships between symbolic meanings and material effects.

Co-creates a new, freer, art context for more and more diverse people.

This year's DIWO CLICK festival brings together musicians, arts workers, philosophers, techies, inventors, business leaders to ask how we, as digitally networked citizens of the world, can preserve and promote the conditions for collaboration, cultural emancipation and ultimately a planetary life worth living.

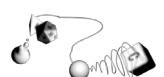
maintaining a decentralised method of peer empowerment in today's multitude. Peers connect, communicate and collaborate, creating controversies, structures and a shared grass roots culture, through both digital online networks and physical environments.

We agree with the American Anarchist Murray Bookchin that there can be no ecology without social ecology; and that the old systems of dominance have been shown to contain the seeds of their own destruction. However as the Situationist author of the Society of the Spectacle, Guy Debord, wrote "The more important something is, the more it is hidden."

And so the nature of the ecological and economic crisis is performed in real-time by exquisite visualisations of data drawing from global sense-nets of natural phenomena and interpretive algorithms. But the practices that will underpin the significant social transformations often remain out of sight.

With the rise of publically accessible digital networks since the early 90s- artists have explored and influenced the Internet's expressive range, generative qualities, sociality, the way that power moves through it but perhaps most significantly how the collaboration and openness that it supports- changes the role of Art. They have both used and created a fascinating array of tools (softwares and hardwares, protocols), infrastructures, media and metaphors and contexts to make the ethics, aesthetics and technics of the network age more legible and accessible to more people.

DIWO (Do It With Others) is a now distributed campaign for emancipatory, networked art practices. It's next challenge is to develop and deploy the practices through which we can negotiate diverse values and experiences, coordinate our resources and interests to play our part in diverse ecologies of life and consciousness.





NOTES



1 / Rosalind - Upstart New Media Art
Lexicon
<http://www.furtherfield.org/get-involved/lexicon>



2 / The original DIWO (Do It With Others)
callout here
<http://www.furtherfield.org/blog/furtherfield/do-it-others-diwo-e-mail-art-netbehaviour> >



3 / View images of the exhibition here
http://www.flickr.com/photos/http_gallery/sets/72157624491759868/



4 / See link to Do It With Others (DIWO)



5 / View the blog for DIWO at the Dark
Mountain here
<http://www.http.uk.net/diwodarkmountain/>



6 / See the Technopedia definition of
Do It With Others (DIWO) here
<http://www.technopedia.com/definition/28410/do-it-with-others-diwo>



7 / See the DIWO 2012,
Pixelache Festival here:
<http://www.pixelache.ac/blog/2012/do-it-with-others-d-i-w-o-is-the-new-d-i-y/>



DIWO ESSAYS
Do It With Others
(DIWO): contributory
media in the Further-
field Neighbourhood by
Ruth Catlow and Marc Garrett, Furth-
erfield. From Coding Cultures, 2007.
Editor: Francesca Da Rimini. Published
by d/lux, Lilyfield NSW Australia.
<http://www.dlux.org.au/codingcultures/handbook.html>



Do It With Others
(DIWO) - E-Mail Art in
Context by Ruth Catlow
and Marc Garrett, 2008.
Curediting, Vague
Terrain.
<http://vagueterrain.net/journal11/furtherfield/01>



DIWO (Do-It-With-Oth-
ers)
Artistic co-creation as
a decentralized method
of peer empowerment
in today's multitude by Marc Garrett,
2013, published by SEAD: White Papers.
<http://bit.ly/1d9EDRA>



DIWO: Do It With Others
- No Ecology without
Social Ecology, by Ruth
Catlow and Marc Gar-
rett. From Remediating
the Social, 2012. Editor: Simon Biggs
University of Edinburgh. Published by
Electronic Literature as a Model for
Creativity and Innovation in Practice,
University of Bergen, Norway.
<http://bit.ly/1fVGdbA>

Aliens, violence, sex and swastikas

By Mads Kampp Christiansen

If you've ever witnessed an Albertslund Terror Korps show, you will remember the impact of highly charged energy. They explode with a visually crazed jumble of green aliens, swastikas, blood, Mickey Mouses, royal babies, violence, and sex, and are accompanied by the thunder of thumping techno – or hardcore, or breakcore, or gabba, or whatever they call it these days. At any rate, it's insistent, massive, and all-consuming.



Albertslund Terror Korps, ATK, is comprised of the musician Hari Kishore and the artist Halfdan Pisket. Their name is probably inspired by the Dutch group Rotterdam Terror Korps who, in the early 1990s, were credited with laying the foundation of the genre gabba, a rough and tough working-class response to the pretentious and bourgeois house music of the time. ATK are pushing back against this proletarian genre, however, and have developed their own sound, which Kishore calls 'perker tech' – perker being a bigoted Danish term for dark-skinned immigrants.

Pisket and Kishore are both connected to the audio-visual community and record label Sygt Nok that releases work by both ATK and their respective projects and collaborations, including Nydansk Selvmord, Kim Young Ill, Faderhuset and DJ Hvad. Sygt Nok also acts as a collective hub for a range of other artists who share the same interest in techno music and its derivatives.

The art of confrontation

"When you go to see ATK you should expect violence, and sometimes you can be positively surprised," ATK once told the website Queer Jihad ahead of a concert. It is ultimately violence and confrontation – especially with traditions and traditionalism – that lies at the heart of Albertslund Terror Korps's work.

Their musical production is a jumble of Danish pop, pumping bass, Bollywood and other miscellany. Their tracks have names like 'Danmark spiser svin' (Denmark eats pig) and 'Fuck jer pxxxxx'

(Fuck you pxxxxx), and are accompanied by videos of bodies, alien orgies, and Queen Margrethe on a burning cross. The rhetoric and images are violent, direct, and hallucinogenic – three terms that apply to the majority of the visual production that Pisket, as DJ Cancer, supplies for Sygt Nok.

Kishore's music – both as ATK and solo as Kid Kishore – challenges fundamental concepts of identity, pitting Danes and foreigners against each other and contrasting the traditional with the contemporary. But he is not merely a moralising immigrant confronting Danish xenophobia. Listen more deeply and you'll find an ironic critique of the lifestyles of caricatured immigrants who "hustle every day."

But the aliens, violence, sex and swastikas can't be explained by a mere critique of tradition. No, perhaps ATK is mostly about letting self-perception run wild and party in the thumping techno. Expect violence and be positively surprised.

Trentemøller and the expensive computer

Their confrontational and provocative use of icons, institutions, and symbols is not limited to ATK's music and imagery. One of the first events that propelled ATK – or rather Kid Kishore – beyond a limited underground community occurred in 2007 when Kishore chose to call himself Trentemøller. The name is already associated with another artist: the internationally-recognised electronic musician Anders Trentemøller, whose

music is rather more marketable than that of Kishore and ATK.

Kishore never managed to perform as Trentemøller. He was booked to play at a rich kid's party in the wealthy Copenhagen suburb of Rungsted, but on the night of the show they realised they had booked a charlatan, and decided to call the police.

The intense underground duo were presented to the mainstream in 2008 when Albertslund Terror Korps played at Denmark's legendary Roskilde Festival. Despite this nod of approval from the orthodox establishment, their aliens, swastikas, and violence remained as prominent as ever.

ATK considers nothing holy, not even the Royal Academy of Music in Aarhus, where a number of Syg Nok artists, fronted by Goodiepal, allegedly stole an expensive musical computer in 2010. The action was an act of revenge against the academy where Goodiepal had taught before his dismissal. ATK and Syg Nok also hacked the website of the music and fashion magazine Soundvenue in retaliation for their "unradical ideas."

Both actions turned out to be fabrications that resulted only in a storm of media coverage, a couple of police reports, and a handful of trippy videos by Syg Nok, filled with symbols and visual madness.

ATK is not afraid of confrontation and provocation, as long there is also space for humour and the uncanny. The message? Well, that's probably lost somewhere in the techno's throbbing insistence.





INTER-ACTION WITH MACHINES



The evolution of electronic music can be told as a story about the intertwined fates of art and technology. While technology enabled electronic music to advance, pioneering electronic musicians also pushed the development of new technology in order to realise their ambitions.

By Rasmus Cleve

The entanglement of musical ambition and technology also describes the career of Robert Henke, a German engineer, artist, musician, who was born in 1969. He bought his first synthesiser, a Juno 6, in the 1980s, and has since contributed enormously to shaping the sound and methodology of 21st century electronic music by helping develop the ubiquitous music software Ableton Live.

He started out as a film studio technician in his hometown of Munich before relocating to the nation's new capital following the fall of the Berlin wall in 1989. Here he immersed himself in the nascent club culture that had found a habitat in abandoned industrial buildings in former East Germany. He released his first work in 1994, the 60-minute ambient piece 'Piercing Music', which was actually a recording for a multi-channel sound installation that Henke had created the year before. Spatial and sound-based performance would later form a central aspect of Henke's musical and artistic practice.

Following his first release, Henke formed the ambient minimal techno duo Monolake with fellow Berlin musician Gerhard Behle. They released a number of 12-inch singles as well as an album

on CD in 1997 called Hongkong, which was a compilation of their earlier vinyl output together with processed field recordings from Hong Kong and the nearby city of Guangzhou.

Henke and Behle created a hypnotic techno with evolving and shifting soundscapes, which was constructed using real-time interaction with machines, rather than being produced according to a preordained musical structure. They preferred improvisation and musical intuition instead of programming and composition, an approach that would prove crucial to the evolution of electronic music in the following decade.

Driven by the desire to control and manipulate musical elements in real time, Behle established the software company Ableton in 1999. Henke subsequently joined him and helped develop the company's flagship program, Ableton Live, which was released in 2001.

The impact and influence that Live had on electronic music cannot be overstated. It was immediately popular with laptop musicians, and has dominated the realm of computer-driven sound production. With the added possibility of working with systems built on the modular programming language MAX/MSP,

Live adds endless applications to the sphere of software-controlled media art.

Following the success of Ableton, Henke took on Monolake as a solo project with Torsten Pröfrock, also known as T++, joining him in ad hoc collaborations. He continues to produce under several aliases, including Monolake, and remains involved in the development of Ableton's software. He also continues to pass on his knowledge as professor and lecturer at the Sound Studies program at Universität der Künste Berlin, as well as at the Center for Computer Research in Music and Acoustics at Stanford University.

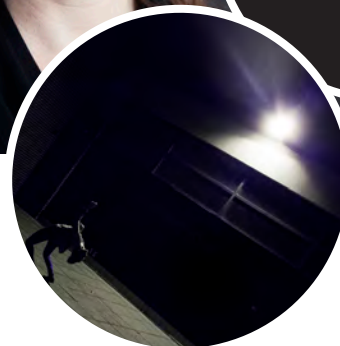
Over the years, Henke created a number of sound-based installations that often incorporate visual elements that are synced to the sound via software. These vast shows, which often include light and video elements, explore the immersive and spatial effects of dense sound ambience.

In keeping with his earliest achievements, Henke's live shows continue to explore computer improvisation and, by incorporating surround and 3D sound, to break down the boundaries between the established club setting and the immersive field of artistic experience.

The scenography calls to mind a post-apocalyptic world, the stillness of a room following a nuclear catastrophe, the planet at rock bottom. The bass menaces and occupies the room with increasing strength. The dancers move wildly and insistently.

MORTAL MACHINERY

By Sara Hornum Inanloo



The scenography calls to mind a post-apocalyptic world, the stillness of a room following a nuclear catastrophe, the planet at rock bottom. The bass menaces and occupies the room with increasing strength. The dancers move wildly and insistently.

The acclaimed and nearly sold-out performance ON/VOLT, which premiered in Dansehallerne on March 1, is a celebration of the body as an accelerating and explosive machine. The show moved like a freight train, a weighty and storming force. This could also be said of its choreographer, Tina Tarpgaard, whom the Danish Agency for Culture called "the most prominent name in Danish modern dance" when they handed her a three-year working grant in 2010.

She emerged as an independent choreographer in 2003 and was awarded Reumert prizes, for the performances Frost (2010) and Living Room (2012), along with Recoil Performance Group, an experimental dance company with a focus on what Tarpgaard calls motion-responsive video scenography.

In ON/VOLT, Tarpgaard set aside this interactive scenography in exchange for a rawer and more tangible setting. The performance presents a simple universe where the black-clad dancers move around the middle of a dark room, evoking a post-nuclear landscape. They

are energised like an electrical field, accompanied by shifting lights and sound that echo the way the dancers' energy is strengthened as it passes between them, without ever dissipating.

The audience – seated around the unbounded stage and fed by the dancer's electrical discharge – is fully immersed in this experientially saturated performance, both seeing and feeling the onstage energy.

ON/VOLT's human factor is captured like a persistent ringing tone. The dancers have nothing to cling to, but show how people can force themselves forward in an eternal repetition of motion in and between each other. Like caged animals, they cannot escape captivity, and are thus locked in a towering inferno of repetition. The sound rises and rises until it is deafening. Then it is swallowed by the all-consuming silence that follows a nuclear explosion (or an act of intercourse) and which leaves the dancers lying on the floor, gasping for breath. The mind's throbbing replaces that of the bass and the dancers remain prone as they recharge for their next round.

ON/VOLT is still being performed, but Tina Tarpgaard is already preparing a new project that will be just as immersive for the audience.

"Forcing the audience to regard the stage as a screen can be problematic. That is why with ON/VOLT, I experiment-

ed with placing them around the stage. The same goes for my coming project, STEREO, in which I let people stand inside the actual installation," Tarpgaard said.

After moving away from digital elements in ON/VOLT, Tarpgaard has decided to bring them back with STEREO – an installation that allows visitors to participate over a period of four hours. The audience will be equipped with classic 3D glasses that will allow them experience light bubbles and black lines floating between the dancers. "The entire content of STEREO is based around the exploration of illusion, which 3D ultimately is."

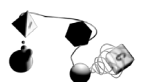
STEREO's unique and unexplored combination of scenography and stereography has presented Tarpgaard with a range of technical challenges, however. "We have had to deal with a number of unknowns in the development of the piece, because we are creating new connections between established technologies. It's why I've given myself a long time to develop the piece. We started already at CLICK festival 13 and will continue to develop it, probably through 2016."





THE NEW FRENCH HACKER-ARTIST UNDERGROUND

By Jon Lackman
Illustrations by



The six interlopers combed the building for hours, encountering no one, until they found what they were looking for at the bottom of a desk drawer—maps of the ministry's citywide network of tunnels. They took one copy of each map, then returned the keys to the security office. Heaving the ministry's grand front door ajar, they peeked outside; no police, no passersby, no problem.

Thirty years ago, in the dead of night, a group of six Parisian teenagers pulled off what would prove to be a fateful theft. They met up at a small café near the Eiffel Tower to review their plans—again—before heading out into the dark. Lifting a grate from the street, they descended a ladder to a tunnel, an unlit concrete passageway carrying a cable off into the void. They followed the cable to its source: the basement of the ministry of telecommunications. Horizontal bars blocked their way, but the skinny teens all managed to wedge themselves through and ascend to the building's ground floor. There they found three key rings in the security office and a logbook indicating that the guards were on their rounds.

But the guards were nowhere to be seen. The six interlopers combed the building for hours, encountering no one, until they found what they were looking for at the bottom of a desk drawer—maps of the ministry's citywide network of tunnels. They took one copy of each map, then returned the keys to the security office. Heaving the ministry's grand front door ajar, they peeked outside; no police, no passersby, no problem. They exited onto the empty Avenue de Ségur and walked home as the sun rose. The mission had been so easy that one of the youths, Natacha, seriously asked herself if she had dreamed it. No, she concluded: «In a dream, it would have been more complicated.»

This stealthy undertaking was not an act of robbery or espionage but rather a crucial operation in what would become an association called UX, for

“Urban eXperiment.” UX is sort of like an artist's collective, but far from being avant-garde—confronting audiences by pushing the boundaries of the new—its only audience is itself. More surprising still, its work is often radically conservative, intemperate in its devotion to the old. Through meticulous infiltration, UX members have carried out shocking acts of cultural preservation and repair, with an ethos of «restoring those invisible parts of our patrimony that the government has abandoned or doesn't have the means to maintain.» The group claims to have conducted 15 such covert restorations, often in centuries-old spaces, all over Paris.

What has made much of this work possible is UX's mastery, established 30 years ago and refined since, of the city's network of underground passageways—hundreds of miles of interconnected telecom, electricity, and water tunnels, sewers, catacombs, subways, and centuries-old quarries. Like computer hackers who crack digital networks and surreptitiously take control of key machines, members of UX carry out clandestine missions throughout Paris' supposedly secure underground tunnels and rooms. The group routinely uses the tunnels to access restoration sites and stage film festivals, for example, in the disused basements of government buildings.

UX's most sensational caper (to be revealed so far, at least) was completed in 2006. A cadre spent months infiltrating the Pantheon, the grand structure in Paris that houses the remains of France's most cherished citizens. Eight restorers built their own secret work-

shop in a storeroom, which they wired for electricity and Internet access and outfitted with armchairs, tools, a fridge, and a hot plate. During the course of a year, they painstakingly restored the Pantheon's 19th-century clock, which had not chimed since the 1960s. Those in the neighborhood must have been shocked to hear the clock sound for the first time in decades: the hour, the half hour, the quarter hour.

Eight years ago, the French government didn't know UX existed. When their exploits first trickled out into the press, the group's members were deemed by some to be dangerous outlaws, thieves, even potential inspiration for terrorists. Still, a few officials can't conceal their admiration. Mention UX to Sylvie Gautron of the Paris police—her specialty is monitoring the city's old quarries—and she breaks into a wide smile. In an era when ubiquitous GPS and micro-precise mapping threaten to squeeze all the mystery from our great world cities, UX seems to know, and indeed to own, a

room of a student café, downing espressos and discussing the spectacular theft in May 2010 of 100 million euros' worth of paintings from the Museum of Modern Art of the City of Paris. He disputes the contention of a police spokesperson that this was a sophisticated operation. According to an article published in *Le Monde*, a solitary individual unscrewed a window frame at 3:50 am, cut a padlock from a gate, and strode through the galleries lifting one work each by Léger, Braque, Matisse, Modigliani, and Picasso. «The thief was perfectly informed,» the officer told the newspaper. If he hadn't known the window had a vibration detector, he would've just broken it. If he hadn't known the alarm and part of the security system were broken, he wouldn't have wandered throughout the museum. If he hadn't known the schedule of night rounds, he wouldn't have arrived in the middle of the longest quiet period.

Impressive, right? No, Kunstmann says. «He ascertained that nothing was

Through meticulous infiltration, UX members have carried out shocking acts of cultural preservation and repair, with an ethos of »restoring those invisible parts of our patrimony that the government has abandoned or doesn't have the means to maintain.« The group claims to have conducted 15 such covert restorations, often in centuries-old spaces, all over Paris



whole other, deeper, hidden layer of Paris. It claims the entire city, above- and belowground, as its canvas; its members say they can access every last government building, every narrow telecom tunnel. Does Gautron believe this? «It's possible,» she says. «Everything they do is very intense.»

It is not at all hard to steal a Picasso, Lazar Kunstmann tells me. One of UX's early members and the group's unofficial spokesman, Kunstmann—the name is almost certainly a pseudonym, given its superhero-like German meaning, “Art-man”—is fortyish, bald, black-clad, warm, and witty. We're sitting in the back

working,» Kunstmann sighs, knowing full well the shoddy security of the museum in question. «The exterior is full of graffiti artists, the homeless, and crack smokers,» he goes on. This would have made it easy for the thief to blend in and surreptitiously watch the windows all night, observing how the guards circulated.

A serious thief, Kunstmann says, would have taken an entirely different approach. In the same building, a sprawling and grand old structure called the Palais de Tokyo, is a restaurant that stays open until midnight. An intelligent thief would order a coffee there and then wander off through the building. «Lots of



things have alarms,» Kunstmann goes on. «But you try to set them off and they don't sound! Why? Because they don't get turned on until 2 am.» (The museum claims that the alarms work 24 hours a day.) Moreover, there are whole stretches of wall where all that separates the museum from the rest of the building is a flimsy drywall partition. «You just—» Kunstmann makes a punching motion with his hand. «If the guy had been at all professional, that's what he would have done.»

UX has made a study of museum security, in keeping with its concern for Paris' vulnerable treasures—a concern not always shared by the city's major cultural institutions. Once, after a UX member discovered appalling security lapses in a major museum, she wrote a memo detailing them—and left it, in the middle of the night, on the desk of the security director. Rather than fix the problems, the director went to the police, demanding they press charges against the perpetrators. (The police declined, though they did tell UX to cool it.) Kunstmann feels sure that nothing has changed since the break-in at the Museum of Modern Art; the security remains just as subpar as ever, he says.

Kunstmann has a gloomy view of contemporary civilization, and in his eyes this affair illustrates many of its worst faults—its fatalism, complacency, ignorance, parochialism, and negligence. French officials, he says, bother to protect and restore only the patrimony adored by millions—the Louvre, for example. Lesser-known sites are neglected, and if they happen to be out of public view—underground, say—they disintegrate totally, even when all that's needed is a hundred-dollar leak repair. UX tends the black sheep: the odd, the unloved, the forgotten artifacts of French civilization.

It's difficult, though, to give an accounting of just how extensive those labors of love have been: The group cherishes its secrecy, and its known



Eight restorers built their own secret workshop in a storeroom, which they wired for electricity and Internet access and outfitted with armchairs, tools, a fridge, and a hot plate. During the course of a year, they painstakingly restored the Pantheon's 19th-century clock, which had not chimed since the 1960s.

successes have been revealed only inadvertently. The public learned of the group's underground cinema after a member's bitter ex-girlfriend told the police. Reporters caught wind of the Pantheon operation because UX members erred in supposing they could safely invite the building's director to maintain his newly fixed clock (more on that later). In general, UX sees communicating with outsiders as perilous and unrewarding. Kunstmann does tell me a story from a recent job, but even that is shrouded in misdirection. Some members had just infiltrated a public building when they noticed kids horsing around on the scaffolding at a construction site across the street, climbing through open windows, and doing dangerous stunts on the roof. Pretending to be a neighbor, one member phoned the foreman to warn him but was chagrined at the response: «Instead of saying, 'Thanks, I guess I'll close the windows,' the guy says, 'What the fuck do I care?'»

An outsider might wonder whether the teens who founded UX were really so different from those thrill seekers across the street today. Would they rat out their former selves? But when UX members risk arrest, they do so with a rigorous, almost scientific attitude toward the various crafts they aim to preserve and extend. Their approach is to explore and experiment all through the city. Based on members' interests, UX has developed a cellular structure, with subgroups specializing in cartography, infiltration, tunneling, masonry, internal communications, archiving, restoration, and cultural programming. Its 100-odd members are free to change roles and are given access to all tools at the group's disposal. There is no manifes-

to, no charter, no bylaws—save that all members preserve its secrecy. Membership is by invitation only; when the group notices people already engaged in UX-like activities, it initiates a discussion about joining forces. While there is no membership fee, members contribute what they can to projects.

I can't help but ask: Did UX steal the paintings from the Museum of Modern Art? Wouldn't that be the perfect way to alert the French to the appalling job their government does protecting national treasures? Kunstmann denies it with a convincing curtness. «That,» he says, «is not our style.»

The first experiment by UX, in September 1981, was an accidental one. A Parisian middle schooler named Andrei was trying to impress a couple of older classmates, boasting that he and his friend Peter often snuck into places and were about to hit the Pantheon, an enormous former church that towers over the fifth arrondissement. Andrei got in so deep with his boast that to save face he had to follow through—with his new friends in tow. Like Claudia and Jamie in that famous children's book *From the Mixed-Up Files of Mrs. Basil E. Frankweiler*, they hid out inside the building until it closed. Their nocturnal occupation turned out to be shockingly easy—they encountered no guards or alarms—and the experience electrified them. They thought: What else could we do?

Kunstmann, a classmate of Andrei and Peter's, joined the group early on. They quickly branched out from mere infiltration. Obtaining the tunnel maps from the ministry of telecommunications and other sources greatly expanded their access. Many Parisian buildings

connect to these passages through their basements, which are as badly secured as the tunnels themselves. Most officials, Kunstmann says, act as if they believe in this absurd principle: Tunnel access is forbidden, thus people don't go there. This, he adds sardonically, is «a flawless conclusion—and what's more, a very practical one, because if people don't go there, then it's unnecessary to do more than lock the entrances.»

An outsider might wonder whether the teens who founded UX were really so different from those thrill seekers across the street today. Would they rat out their former selves? But when UX members risk arrest, they do so with a rigorous, almost scientific attitude toward the various crafts they aim to preserve and extend. Their approach is to explore and experiment all through the city. Based on members' interests, UX has developed a cellular structure, with subgroups specializing in cartography, infiltration, tunneling, masonry, internal communications, archiving, restoration, and cultural programming. Its 100-odd members are free to change roles and are given access to all tools at the group's disposal. There is no manifesto, no charter, no bylaws—save that all members preserve its secrecy. Membership is by invitation only; when the group notices people already engaged in UX-like activities, it initiates a discussion about joining forces. While there is no membership fee, members contribute what they can to projects.

It wasn't until I went down into the tunnels myself—which is illegal and punishable by a fine of up to 60 euros, though explorers rarely get caught—that I understood why French officials are so complacent. Finding an unlocked entrance, without UX's know-how, required a 45-minute walk from the nearest subway. UX has access to dry and spacious tunnel networks, but the more easily entered ones that I traveled that day were often tiny and half-flooded. By the time I'd retraced my steps, I was exhausted, filthy, and bleeding all over from scrapes.

In some places, UX has been able





to create covert connections between networks, using (among other tricks) an invention they call the rolling basin. This is a passage in the bottom of a tunnel that appears to be a grate with water under it; in fact, both grate and water are part of a movable tray on rollers. Voilà—a trapdoor to another tunnel in a different network. The tray itself is made of concrete, so even if someone raps it with a stick, it sounds solid. Kunstmann says UX has a certain weakness for such contrivances but will never possess enough time and cash to build them as extensively as he'd like. «If tomorrow everyone in UX became billionaires, we'd set dues at a billion euros,» he jokes. (But, he adds, «we'll never be billionaires, because we're working as little as possible so we can spend as much time as possible on UX.»)

So what does the group do with all this access? Among other things, it has mounted numerous clandestine theater productions and film festivals. On a typical festival evening, they screen at least two films that they feel share a nonobvious yet provocative connection. They don't explain the connection, leaving it up to the audience to try to discover it. One summer, the group mounted a film

a dining room, a series of salons, and a small screening room that accommodated 20 viewers, and they held festivals there every summer for years. «Every neighborhood cinema should look like that,» Kunstmann says.

The restoration of the Pantheon clock was carried out by a UX subgroup called Untergunther, whose members are devoted specifically to restoration. The Pantheon was a particularly resonant choice of site, since it's where UX began, and the group had surreptitiously screened films, exhibited art, and mounted plays there. During one such event in 2005, UX cofounder Jean-Baptiste Viot (one of the few members who uses his real name) took a close look at the building's defunct Wagner clock—an engineering marvel from the 19th century that replaced an earlier timepiece. (Records indicate the building had a clock as far back as 1790.)

Viot had admired the Wagner ever since he first visited the building. He had meanwhile become a professional horologist working for the elite firm Breguet. That September, Viot persuaded seven other UX members to join him in repairing the clock. They'd been contemplating the project for years, but now it

The group cherishes its secrecy, and its known successes have been revealed only inadvertently. The public learned of the group's underground cinema after a member's bitter ex-girlfriend told the police.

festival devoted to the theme of “urban deserts”—the forgotten and underutilized spaces in a city. They naturally decided the ideal venue for such a festival would be in just such an abandoned site. They chose a room beneath the Palais de Chaillot they'd long known of and enjoyed unlimited access to. The building was then home to Paris' famous Cinémathèque Française, making it doubly appropriate. They set up a bar,

seemed urgent: Oxidation had so crippled the works that they would soon become impossible to fix without re-creating, rather than restoring, almost every part. «That wouldn't be a restored clock, but a facsimile,» Kunstmann says. As the project began, it took on an almost mystical significance for the team. Paris, as they saw it, was the center of France and was once the center of Western civilization; the Latin Quarter was Paris' historic

Kunstmann has a gloomy view of contemporary civilization, and in his eyes this affair illustrates many of its worst faults—its fatalism, complacency, ignorance, parochialism, and negligence.

intellectual center; the Pantheon stands in the Latin Quarter and is dedicated to the great men of French history, many of whose remains are housed within; and in its interior lay a clock, beating like a heart, until it suddenly was silenced. Untergunther wanted to restart the heart of the world. The eight shifted all their free time to the project.

They first established a workshop high up in the building, just below its dome, on a floor where no one (including guards) ever went anymore—“a sort of floating space,” as Kunstmann describes the room, punctuated by narrow slits for windows. “It looked down on all of Paris from a height of 15 stories. From the outside it resembled a kind of flying saucer; from the inside, a bunker.” The workshop was outfitted with eight overstuffed armchairs, a table, bookshelves, a minibar, and red velvet drapes to moderate the ambient temperature. “Every element had been conceived to fold up into wooden crates, like the ones visible throughout the monument,” Kunstmann says. In the dead of night, they climbed endless stairs, hauling up the lumber, drills, saws, clock repair equipment, and everything else required. They updated the workshop’s outdated electrical wiring. They spent 4,000 euros on materials, in all, out of their own pockets. On the terrace outside they set up a vegetable garden.

Like at the Museum of Modern Art, where a thief made off with millions in precious art with shocking ease, security at the Pantheon was slipshod. “No one, neither police nor passersby, worried over people entering and leaving the Pantheon by the front door,” Kunstmann says. Nevertheless, the eight equipped themselves with official-looking fake badges. Each had a photograph, a microchip, a hologram of the monument, and

a barcode that was “totally useless but impressive,” Kunstmann says. Only very rarely did passing policemen ask questions. At most, it went something like this:

“You’re working at night? Can we see your badges?”

“Here.”

“OK, thanks.”

Once the workshop was complete and thoroughly cleaned, the eight got to work. The first step was to understand how the clock had gotten so degraded—“a sort of autopsy,” Kunstmann says. What they discovered looked like sabotage. It appeared that someone, presumably a Pantheon employee tired of winding the clock once a week, had bludgeoned the escape wheel with an iron bar.

They brought the clock’s mechanism up to the workshop. Viot trained the group in clock repair. First, they cleaned it with what’s called the clockmaker’s bath. This started with 3 liters of water carried up from the public bathrooms on the ground floor. To that was added 500 grams of soft, highly soluble soap, 25 centiliters of ammonia, and 1 tablespoon of oxalic acid—all mixed at a

toothed wheel that manages the clock’s rotation) and missing parts like the pendulum bob.

As soon as it was done, in late summer 2006, UX told the Pantheon about the successful operation. They figured the administration would happily take credit for the restoration itself and that the staff would take over the job of maintaining the clock. They notified the director, Bernard Jeannot, by phone, then offered to elaborate in person. Four of them came—two men and two women, including Kunstmann and the restoration group’s leader, a woman in her forties who works as a photographer—and were startled when Jeannot refused to believe their story. They were even more shocked when, after they showed him their workshop (“I think I need to sit down,” he murmured), the administration later decided to sue UX, at one point seeking up to a year of jail time and 48,300 euros in damages. Jeannot’s then-deputy, Pascal Monnet, is now the Pantheon’s director, and he has gone so far as to hire a clockmaker to restore the clock to its previous condition by resabotaging it. But the clockmaker refused to do more than disengage a part—the escape wheel, the very part that had been sabotaged the first time. UX slipped in shortly thereafter to take the wheel into its own possession, for safekeeping, in the hope that someday a more enlightened administration will welcome its return.

When their exploits first trickled out into the press, the group’s members were deemed by some to be dangerous outlaws, thieves, even potential inspiration for terrorists.

temperature of more than 280 degrees Fahrenheit. With this solution, the group scrubbed and polished every surface. Then they repaired the mechanism’s glass cabinet, replaced broken pulleys and cables, and re-created from scratch the sabotaged escape wheel (a

Meanwhile, the government lost its lawsuit. It filed another, which it also lost. There is no law in France, it turns out, against the improvement of clocks. In court, one prosecutor characterized her own government’s charges against Untergunther as “stupid.” But the clock



is still immobile today, its hands frozen at 10:51.

The members of UX are not rebels, subversives, guerrillas, or freedom fighters, let alone terrorists. They didn't repair the clock to embarrass the state, nor do they entertain dreams of overthrowing it. Everything they do is intended for their own consumption; indeed, if they can be accused of anything, it's narcissism. The group is partly responsible for the fact that it is misunderstood. Its members acknowledge that most of its external communications are intended as misdirection—a way to discourage public officials or others from meddling in its operations. They try to hide themselves within the larger mass of Parisians who venture into the city's recesses simply as partiers or tourists.

Why do they care about these places? Kunstmann answers this question with questions of his own. «Do you have plants in your home?» he asks impatiently. «Do you water them every day? Why do you water them? Because,» he goes on, «otherwise they're ratty little dead things.» That's why these forgotten cultural icons are important—«because we have access to them, we see them.» Their goal, he says, isn't necessarily to make all these things function once again. «If we restore a bomb shelter, we're certainly not hoping for new bombardments so people can go use it again. If we restore an early 20th-century subway station, we don't imagine Electricité de France will ask us to transform 200,000 volts to 20,000. No, we just want to get as close as possible to a functioning state.»

UX has a simple reason for keeping the sites a secret even after it has finished restoring them: The same anonymity that originally deprived them of caretakers «is paradoxically what's going to protect them afterward» from looters and graffiti, Kunstmann says. They know they'll never get to the vast majority of interesting sites that need restoration. Yet, «despite all that, the satisfaction of knowing that some, maybe a tiny fraction, won't disappear

because we'll have been able to restore them is an extremely great satisfaction.»

I ask him to elaborate on their choice of projects. «We can say very little,» he replies, «because to describe the sites even a bit can give away their location.» That said, one site is «below-ground, in the south of Paris, not very far from here. It was discovered relatively recently but elicited very strong interest. It totally contradicts the history of the building above it. In examining what's belowground, one notices that it doesn't correspond to the information one can obtain about the history of the site. It's history in reverse, in a way; the site was dedicated to an activity, structures were placed there, but in fact the site had been dedicated to this activity for quite a long time.»

Walking across the Latin Quarter alone on a balmy evening, I try to guess what site Kunstmann is describing, and the city transforms before my eyes, below my feet. Did counterfeiters once operate out of the basement of the Paris Mint? Was the Saint-Sulpice church founded on the site of an underground pagan temple? Suddenly, all of Paris seems ripe with possibility: Every keyhole a peephole, every tunnel a passageway, every darkened building a theater.

But it's also clear that UX retains its love affair with its first and best canvas, the Pantheon. While this story was closing, a colleague needed to reach Kunstmann about a fact-checking question. Kunstmann had told her to call «any time,» so even though it was 1 am in Paris, she rang. When he picked up the phone, he was panting—from moving a couch, he said. She asked her question: When the clock had stopped chiming after the repair, what time remained frozen on its face? As it happened, Kunstmann was in the Pantheon at that very moment. «Hold on,» he said. «I'll look.»



On a distant planet in a far-off galaxy, nerds, geniuses and wizards live together in perfect harmony. Their only connection to our world is through the internet, a gateway that opens only through an advanced and coded language that earthlings don't understand.

A Peer Among Millions

By Asbjørn Riis-Søndergaard

They are the internet's inner circle, visionary idealists who swear allegiance to the open-source ideology. Non-digital denizens imagine them as embodiments of their cliché, as teenagers addicted to chips, coke and computer screens. But they see themselves as the freedom fighters of their online universe.

The deceased IT wunderkind Aaron Schwartz was one of them. In spite of his 26 short years, he left a palpable impact on the world – a world that he regarded as corrupted by the established powers.

Mr Peer

As an activist and IT developer, he was sharp, energetic, and driven by the same civil courage as fellow whistleblowers Julian Assange, Bradley Manning, and Edward Snowden. Unlike other IT geniuses from the hacker community, he was acutely aware of the internet's political dimensions from the age of 14.

Schwartz saw himself as a mere peer among millions. He belonged to a generation that saw the internet as a ne

and radical reality that could be used to make the world a fairer place to live in. But most saw him as an unsociable, eccentric nerd who drifted between social circles – a ghostly apparition whose simple needs consisted of only a room, a chair, and a laptop connected to wifi.

IT genius

Aaron Schwartz was an IT genius and one of the most influential developers of the contemporary internet. He studied

at Stanford University, but dropped out to start the software company InfoGami before moving on to work at other IT companies.

Highly curious and with a flair for coding and programming, he paved the way for the open-source technology that would facilitate the free sharing of knowledge and information. He was also involved in developing both RSS and Reddit, which has become the go-to forum for internet users.

Battling a Goliath

Like other prominent hackers and activists, Schwartz became a political hostage. He stood up to the American system that regarded open-source activism as not just a threat to national security but also equivalent to terrorism and treason. After arousing the interest of the FBI, he was arrested on January 6, 2011, and charged with illegally gaining access to MIT's servers and downloading over 20 million copyright-protected academic articles from jstor.org. He intended to share this valuable archive freely with the rest of the internet, an idea that he had outlined in his Guerilla Open Access Manifesto. "We need to take information, wherever it is stored, make our copies, and share them with the world," he wrote.

According to his friends, Schwartz believed that the American justice system – which has since been challenged by the media following the NSA surveillance revelations – wanted to make an

example of him to frighten the hacktivist community. But the greatest impact of his incarceration was ultimately made on Schwartz himself.

The economic and personal consequences of prosecution, psychological stress inflicted by the US authorities, and an increasingly idealistic resolve that was becoming ever more detached from sense and reason were all contributing factors to his suicide on January 11, 2013.

The shocking event elicited an online storm. Thousands rallied to demand a complete overhaul of the internet based on the open source ideology for which they believed Schwartz was martyred.

Schwartz's undoing brought to the surface a contemporary conflict – are hackers and whistleblowers freedom fighters, or destructive terrorists? On a distant planet in a far-off galaxy, the answer is clear. "One day they will celebrate those of us who fought to make the world's scientific and cultural heritage freely available to everyone – the founders of the open world."

MORE INFORMATION:

Rolling Stones portrait

The brilliant life and tragic death of Aaron Schwartz, by David Amsden

Documentary

The Internet's Own Boy
by Brian Knappenberger

Aaron Schwartz, IT genius, committed suicide on January 26, 2013, aged 26.





Click festival / 15-17 May 2014

New Media & Contemporary Culture

EXHIBITION + CONCERTS + TALKS + PERFORMANCES + WORKSHOPS

CONCERTS 2014

Robert Henke^(DE), Actress^(UK), Tirzah & Micachu^(UK), Chris & Cosey^(UK), Rashad Becker^(DE), Ryoji Ikeda^(JP), Laurel Halo^(US), Ben Frost^(AU), Dopplereffekt^(US), NHK'Koyxen & Sensational^(JP/US), Ekoplekz^(UK), Somatic Responses^(UK), The DJ Producer^(UK), Daniel Löwenbrück^(DE), JFK^(UK), Homies^(US/DK), Kasper Marott^(DK), Selvhenter^(DK), Reverie^(DK), Tee Vee Pop^(DK), Assembler^(DK) and To\To^(DK), Albertslund Terror Korps^(DK), KUBE^(DK)

TALKS & WORKSHOPS

Jackson Palmer^(US), Mark Coniglio^(US), Tuomo Tammenpää^(FI), Pixelache^(FI), Magnus Eriksson^(SE), Kyle McDonald^(US), Jeremy Bailey^(CA), Furtherfield^(UK), Billy Cowie^(UK), Yen Chou^(TW), Superflex^(DK), Tina Tarpgaard^(DK), Sebastian Gjerring & Henrik Moltke^(DK), Ole Kristensen & Billy Cowie^(DK/UK), Henrik Chulu^(DK), Copenhagen Game Collective^(DK), Illutron^(DK) and CryptoParty^(DK)

PERFORMANCES

Recoil Performance Group^(DK), Graense-loes^(DK), Johan Bircel, Ole Kristensen & Deborah Vlaymans^(DK)

EXHIBITION

Rosa Menkman^(NL), Aram Bartholl^(DE), locose^(IT), Jonas Lund^(SE), Rutherford Chang^(US), James Bridle^(UK), Ruben Pater^(NL), Tobias Leingruber^(DE), Memoblast^(DK/SE/ES), Mogens Jacobsen^(DK), Carl Emil Carlsen & Andreas Busk^(DK), Geraldine Juarez^(MX)



KULTUR
VERFTET
THE CULTURE
YARD



Region
Hovedstaden

STATENS KUNSTFOND

ROSA



WIIBROE



carhartt

furtherfield



edition-S



genset

kulturvaerftet.dk

clickfestival.dk

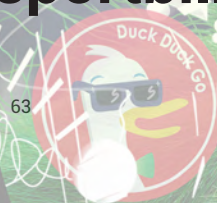
facebook.com/clickfestival

**Kom hurtigt og billigt
til Click med bus, tog
og metro for kun
36 kr. om dagen.**



**Billetten gælder i alle zoner og kan
købes på www.clickfestival.dk**

**Bemærk, at der skal købes transportbilletter
til minimum to dage.**





LEVERANDØR TIL DET KGL. DANSKE HOF

WIIBROE



HELE NORDSJÆLLANDS ØL