Data as Culture **2**

ODI
DATA
AS CULTURE
theodi.org/culture

Data as Culture 2

Data as Culture 2014

The Data as Culture programme raises questions about the concepts and practicalities of open data. It explores the wider implication of the culture of open data on culture itself, to challenge our understanding of what data is, and how it may affect and reflect our lives.

Running the first commission as the inaugural ODI project was a bold decision. We have been delighted with the outcomes: reaching over 100,000 people internationally, with features at TED.com, in the Wall Street Journal, the Churchill Room in Whitehall, and in dozens of presentations from Taiwan to Washington DC. Over 3,000 visitors to our UK office experienced the works directly, and the feedback has been overwhelmingly positive.

The first commission was an open call for artists which we curated with MzTEK. This year we ran an open call for curators to expand our shared vision for open data culture. Shiri Shalmy had recently curated an exhibition called "Data" for the Contemporary Art Society, and had a very strong and prescient concept for the second exhibition which centred around data ownership and access, public and private. As in the previous exhibition, the works were selected for their physical presence.

This commission explores our relationship with surveillance, privacy, and personal data, taking a critical and sometimes comedic look at the power of open data. Works include pneumatic contraptions, satellite imagery, data collection performances, and knitted data discrepancies.

Data as Culture is for everyone. We want to ensure conversations about open data expand beyond specialist communities and through to the general public. Using data as a material increases awareness of what data is, how it can be used creatively, how it can inspire, encourage play and lateral thinking, and help people share stories and experiences.

To broaden our reach we have partnered with Lighthouse, a digital culture agency and gallery in Brighton, and FutureEverything, based in Manchester, who are critically engaged in technology, and run one of the longest standing media arts festivals in the world. The works will be exhibited across these locations and in London, at the ODI itself.

The Data as Culture programme will continue to develop relationships with arts organisations to expand the programme nationally and internationally, for artists and audiences – for everyone – everywhere.

Julie Freeman, Art Associate, ODI
Gavin Starks, CEO, ODI
March 2014

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Curator's Statement

From census boycotts to Indymedia, Freedom of Information Act to Wikileaks, the question of ownership over data, personal and public, is understood as a question of authority. It is this tension between secret agents and personal agency that the exhibition attempts to explore.

Gaining access, authorised or otherwise, to the devices and networks that are used to record, measure and order the world, the artists employ a range of strategies to expose and share data, while interrogating the accessibility of the gathered information and the potential for claiming it back as public knowledge. Works in the exhibition move between the direct and the poetic, the representational to the abstract, attempting to visualise the invisible, interrogate the impenetrable, and give human scale to the monstrous volume of information.

The exhibition presents a wide range of creative approaches to the subject matter, intentionally moving away from the traditional technology-heavy, screen-based representation of networked information. Experimenting with the possibilities and limitations of manifesting data in digital and physical form, the artists often arrive at unusual and surprising solutions, including work patterns represented as textile patterns and council spending records manifested through pneumatic homemade contraptions.

The role of the artist – as witness, storyteller, or agitator – is key to this investigation as much as the role and responsibility of the viewer.

The exchange between artist, database and audience is essential to the creation and enjoyment of the work.

Indeed, the show generates some of its own data, which turns into an integral part of the project. The very format of the exhibition is being challenged by the geographical and virtual scope of the project, with work exhibited across different physical spaces and information gathered in one site carried through to the following one. While in some cases visitors are asked to simply join the dots, in others they must respond to the artist's call: give us your data!

Shiri Shalmy
March 2014

Artist's Work

Much of **James Bridle**'s work deals with secrecy surrounding drone warfare. Turning his lens back at the watchers, Bridle presents a series of prints showing military drone bases, exposing the all seeing eyes used by armies worldwide with the help of Google Earth.

In a related piece commissioned especially for Data as Culture, AQD Remembrancer, Bridle will explore the links between City finance and the industry of war, pitching two sets of data against each other to reveal hidden connections.

YoHa (Graham Harwood and Matsuko Yokokoji) are interested in military data from a different perspective. Endless War offers an unnerving reading of war diary entries made by soldiers fighting in Afghanistan and exposed by Wikileaks, as they are read by a machine. The mechanical crackle and scope of the piece, make an uneasy reading.

Another project, Invisible Airs, invites viewers to experience council spending data through a series of pneumatic contraptions, moving with every entry of over £500. Visitors' physical reactions become part of the piece as the machine perform their useless choreography.

Sam Meech's Punchcard Economy banner, referencing the 888 movement which campaigned for regulating working hours, was created on domestic knitting machines. Manifesting information submitted by self-employed creatives via virtual punchcards, Meech turns work patterns into knitting patterns and online data into a banner in the old trade-unions tradition.

Staying in the physical realm, **Thickear** ask visitors for an even greater level of engagement. Using the visual and performative language of bureaucratic exchange, this ODI commission invites the FutureEverything festival audience to fill in forms (in three copies!), file the information at the ODI office, and analyze the hard copy data at their desks at Lighthouse.

James Brooks takes the liberty to transform real official information from the practical to the fantastical in a final act of data subversion. Arranging EU embassies telephone numbers in fictional call logs that may never happen, he creates new narratives out of static data, presented as abstract modernist compositions.

The entire project is represented again through **Paolo Cirio**'s web piece which, challenging and subverting the format of a catalogue, exposes visitors' digital fingerprints as they look at the work. Coercing them into participation, it uses live generated metadata to create transmuted images of the exhibition.

Shiri Shalmy

Our Partners

Future Everything

FutureEverything has been at the forefront of the open data movement for a number of years, through its work on establishing DataGM - the Greater Manchester Datastore, the Open Data Cities programme, the pan-European CitySDK project, and the newly established Greater Manchester Data Synchronisation Programme. The organisation's recent addition to the ODI Node network has seen it recognised as an integral part of the UK's open data community.

Digital culture, art and innovation activity all contribute to FutureEverything's core values of realising a truly participatory culture and society, with art and research at the centre. Utilising groundbreaking artworks and playful experimentation as tools of engagement, Data as Culture has the opportunity to externalise and make accessible much of the thinking, behind the scenes research and activism within the open data community, and present it within an artistic context and publicly digestible format.

With the exhibition touring around the UK, initially to the ODI and Lighthouse, Data as Culture is a hugely powerful tool in communicating the importance and power of open data not just within the already engaged community, but wider society as a whole.

The FutureEverything Festival takes place on 27 March - 1 April 2014 in Manchester, with the theme 'Tools for Unknown Futures'. Further information can be found at futureeverything.org

LIGHTHOUSE

Lighthouse is a digital culture agency. Through our work with artists, filmmakers, designers, scientists and others, we help people understand and operate in a world permeated by technology. We celebrate the opportunities offered by technology, in new forms of creative expression, innovation, and advances in science and understanding. But we also take a critical stance: we question the popular narratives of progress, reveal unspoken agendas, and probe for unexploited opportunities.

Our recent programme has focused on exposing the hidden technologies that enable our networked world, such as Timo Arnall's Immaterials, which visualises otherwise invisible network infrastructure, from WiFi networks to GPS signals. We've also featured James Bridle's work Drone Shadows, which brings home the technology of modern warfare. And most recently, we've been working with practitioners on the culture of personal data, which has changed so dramatically since the Snowden revelations.

In this moment, Data As Culture is a timely intervention. An opportunity to step back and consider our relationship to data, to the systems that collect it, and to the services that it powers. How do we reconcile our desire for more data-driven services, with concerns over privacy and surveillance? What's the real contract we make when we sign up for free services that extract commercial value from the data of users? As we have the opportunity to collect and share ever more data about ourselves – what we buy, where we are, hours slept, calories consumed, steps taken – will it make us healthier or happier? Will it make our services more efficient, or our cities smarter? Who owns this data, and who's allowed to play with it?

Works and events from the ODI's Data as Culture programme will be at Lighthouse, in Brighton, in June 2014. See lighthouse.org. uk for full programme details.

Artists

James Bridle
James Brooks
Paolo Cirio
Sam Meech
Thickear
Yoha

James Bridle

James Bridle is an artist, writer, and publisher based in London, UK. His writing on literature, culture and networks has appeared in magazines and newspapers including Wired, Domus, Cabinet, the Atlantic, the New Statesman, the Observer and many others, in print and online. His artworks and installations have been commissioned and exhibited worldwide and on the internet. He lectures regularly at universities, conferences and other events. His formulation of the New Aesthetic research project has spurred debate and creative work across multiple disciplines.

His work can be found at booktwo.org

Watching the Watchers

Watching the Watchers is an ongoing series of images taken from publicly-available digital satellite maps, of unmanned aircraft around the world, at training bases in the US desert and secret installations in Afghanistan, Pakistan, and elsewhere. These military technologies, designed to operate without being seen - visually, politically, or morally – are nevertheless accessible to the gaze of contemporary, civilian networks. By rendering them visible, we render their operation and politics legible, and thus open to intervention.

## AQD Remembrancer – an ODI Commission

Named after the the US Department of Defence 'Disposition Matrix', an advanced but opaque database developed as a 'next-generation capture / kill list', AQD (A Quiet Disposition) is an open-source intelligence-gathering tool using contextual analysis, machine learning, and publicly-available information to build up a detailed database of people, companies and places connected with the development and use of military drones, matching them against data from London financial sector and stock exchange and exposing hidden connections. Referring to the intent encoded into technology and its disposition to reproduce the political aims of its creators, AQD both mirrors and interrogates the politics of systems.
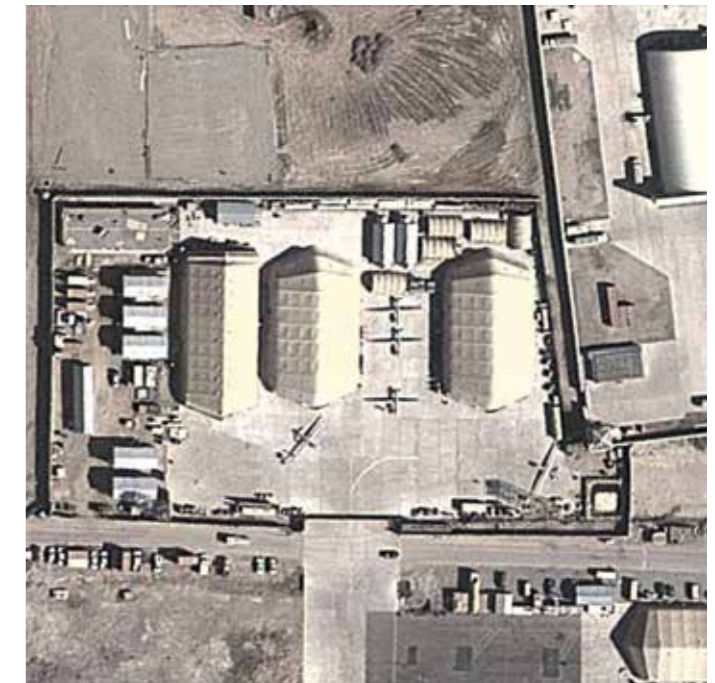

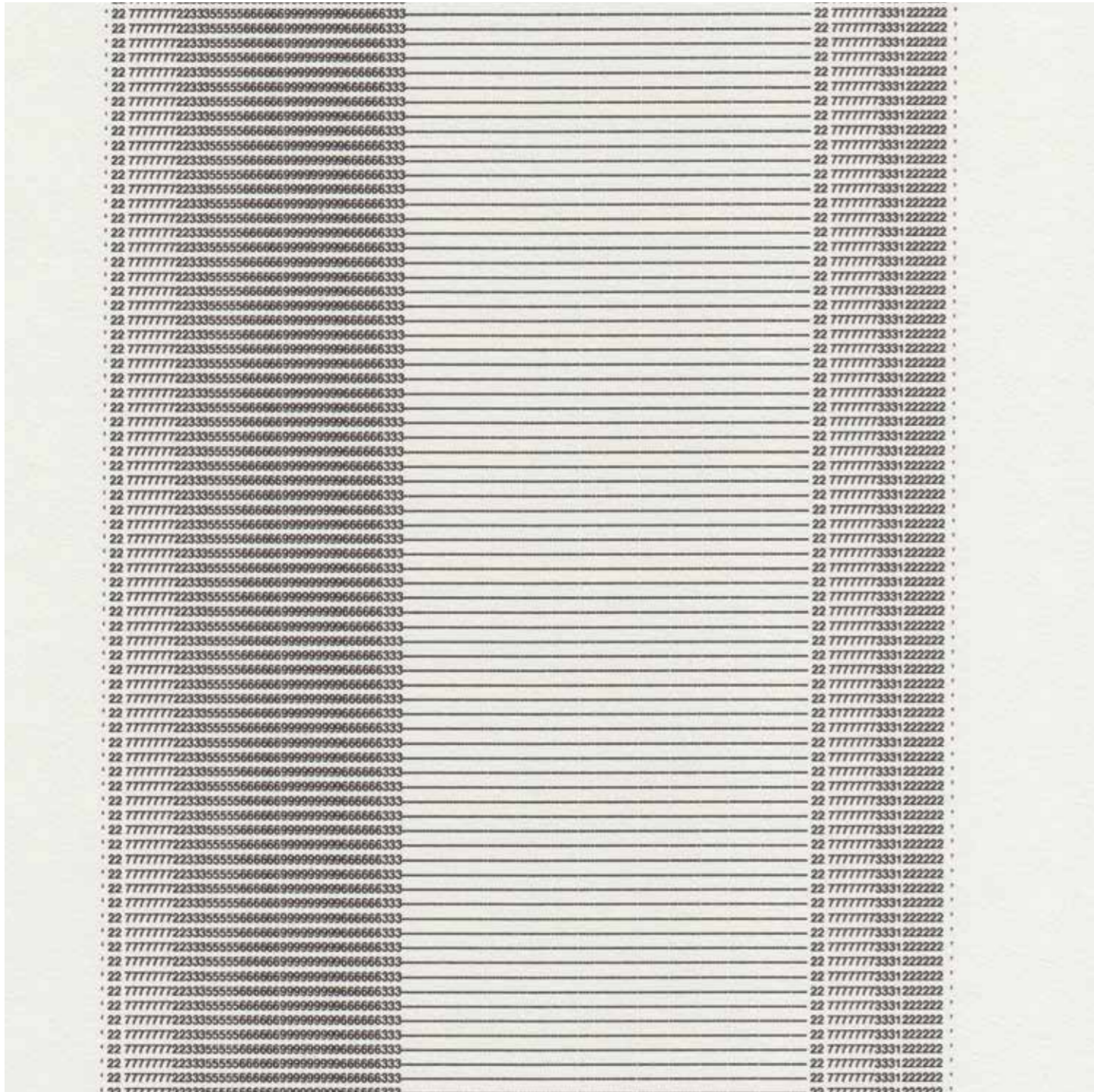Gray Butte Field, California, 30.4.2007
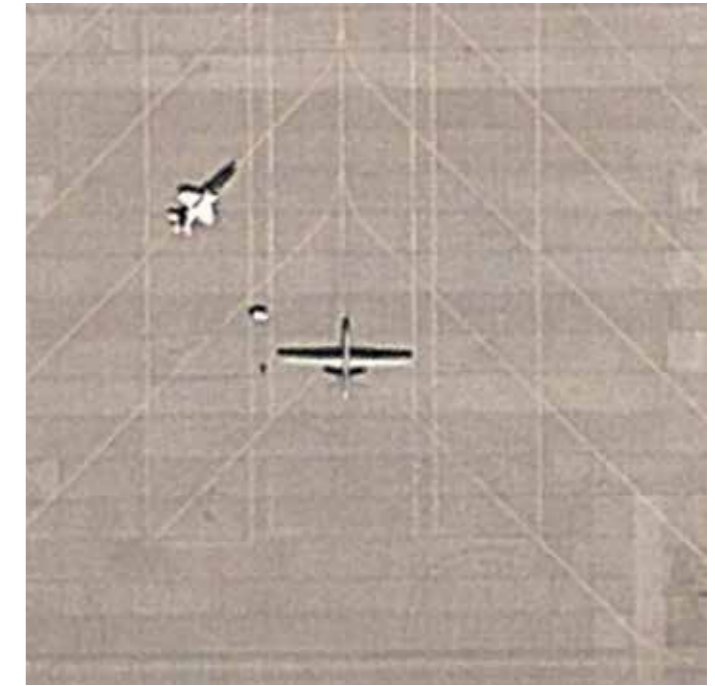
Holloman AFB, New Mexico, 18.4.2011
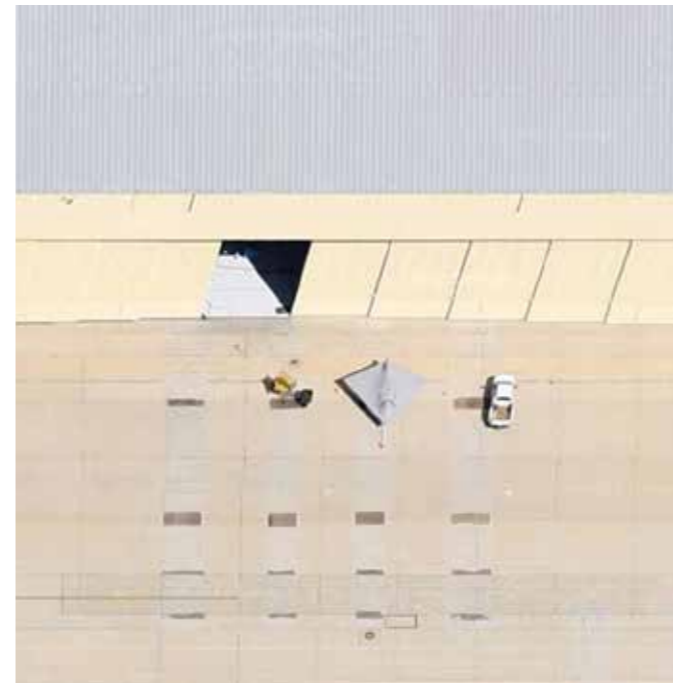
Palmdale AFB, California, 2013

Jalalabad Airfield, Afghanistan, 27.2.2011

James Brooks' practice utilises screen and paper-based media sources of varying cultural status as starting points. Implementing a variety of interventions, Brooks realises esoteric manipulations in an attempt to investigate the position and reception of imagery/ data/ information within society, appropriating Modernist aesthetics and system-based art strategies. Brooks completed his MA in Fine Art at Chelsea College of Art in 2004 and has since shown in the UK at Tate Britain, Contemporary Art Society, Domobaal, Seventeen, Man and Eve, Trinity Contemporary, Arcade, Riflemaker. He showed Internationally at Galerie Thaddaeus Ropac, Paris, Galerie Martina Detterer, Frankfurt, Trinity Contemporary, New York and Bomuldsfabriken Kunsthall, Norway. Brooks curated the exhibitions Until it Makes Sense and The Royal Republic and wrote for the publication accompanying the symposium Drawing: The Future held at The National Gallery, London. He lives and works in London.

jamesbrooksdrawing.blogspot.co.uk

Photo: Erika Wall

Pillars of Hercules

Utilising the readily available 'general enquiry' telephone numbers of European Union embassies based in London, Brooks has fictitiously constructed 10 telephone call logs as A4 printed sheets, where the various embassies have been recorded hypothetically conversing with each other. However, the original telephone numbers are further complicated via a simple, repetitive, numerical strategy - duplicating each numeral a self-referential amount of times. This repetition is intended to aesthetically encourage the reference to the modular construction of ancient architectural columns - and in turn historic notions of: administration, stability, democracy and the civic order underpinning European society.

Digital prints on archival paper, 10 x 29.7 x 21cm (framed dimensions 35 x 27cm)

Paolo Cirio

Paolo Cirio works as a media artist in various fields: net-art, public-art, video-art, software-art and experimental fiction. He has won prestigious media art awards and his subversive works have been sustained by research grants, residencies and he has exhibited in international museums and institutions worldwide. As public speaker he delivers lectures and workshops on tactics of media interventions. Cirio investigates perception and the creation of cultural, political and economic realities that are designed by information through content, distribution and modes of media.

paolocirio.net

Online Exhibition Catalogue
Your fingerprints on the artworks are the artwork itself – an ODI Commission

Paolo was invited to conceptualise and develop an online catalogue that would be informative while questioning the cyclical nature of metadata. Continually generating material, the catalogue harvests and repurposes visitors 'browser fingerprint' data to create new representations of the exhibited works.

Unlike a traditional archive, the catalogue continues to grow and evolve with each viewing, presenting an innovative opportunity for visitors to become a part of the work itself.

Your fingerprints on the artworks are the artwork itself

By Paolo Cirio

The online catalogue makes uses of sophisticated tracking technology to monitor and store so-called individual "fingerprints". Here your data are vulnerable and your privacy is at risk while you are involuntarily contributing to an experimental artwork, informed and created by your participation in it.

This is a coercive form of audience participation in an art exhibition: an innovative opportunity to become part of the work itself in an exhibition that generates its own data, through an interactive catalogue that changes and expands upon its use.

Created through visitors interactions with the online catalogue, the continuously generated metadata is exposed on the website in its raw form as logs, which, harvested and re-purposed, ultimately produces new derivatives artworks. It melts visitor fingerprints into raw materials and transmutes them.

The final derivative artworks created through this catalogue are re-distributed as open datasets available for others' uses, feeding the endless loop of recursive data creation and processing, influence and self-reflection.

Data is the raw material of a new industrial, cultural and artistic revolution. It is a powerful substance, yet when displayed as a raw stream of digital material, represented and organised for computational interpretation only, it is mostly inaccessible and incomprehensible. There isn't any meaning or value in data per se. It is human activity that gives sense to it. It can be useful, aesthetic or informative, yet it will always be subject to our perception, interpretation and use. It is the duty of the contemporary artist to explore what it really looks like and how it can be altered beyond the common conception.

Facts about aggressive tracking strategies and techniques are almost completely overlooked by the public and ignored by legislators. Little public knowledge of the tracking of individuals by marketers and authorities, as well as poorly developed technology, keep in place a condition that will change only through radical social change, reinvention of infrastructures and openly questioning ethical values.

Notes:

Paper: "Cookieless Monster: Exploring the Ecosystem of Web-based Device Fingerprinting", IEEE Symposium on Security and Privacy, 2013, U.S.

Paper: "How Unique Is Your Web Browser?", Peter Eckersley, Electronic Frontier Foundation, 2010, U.S.
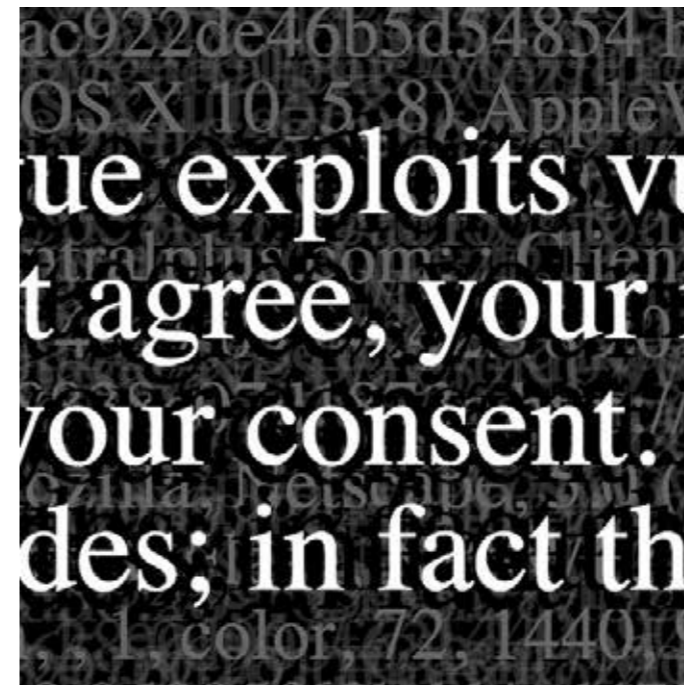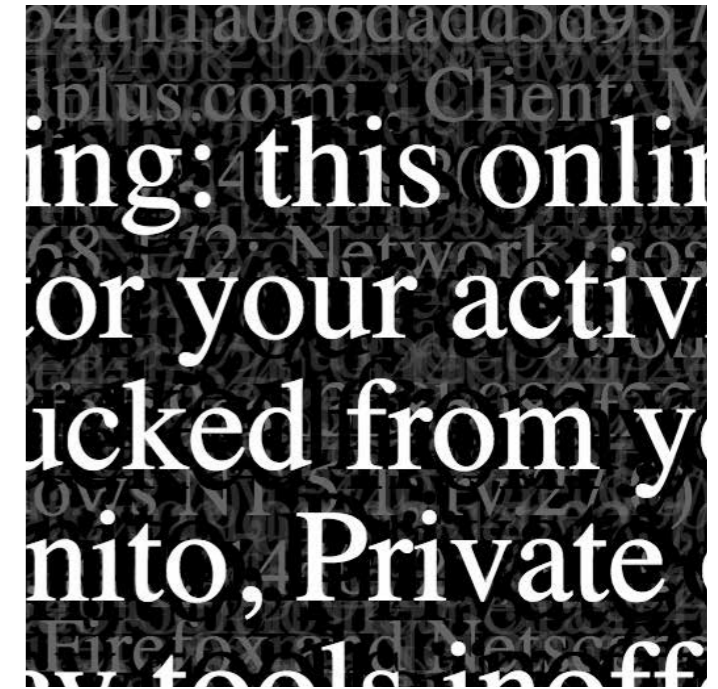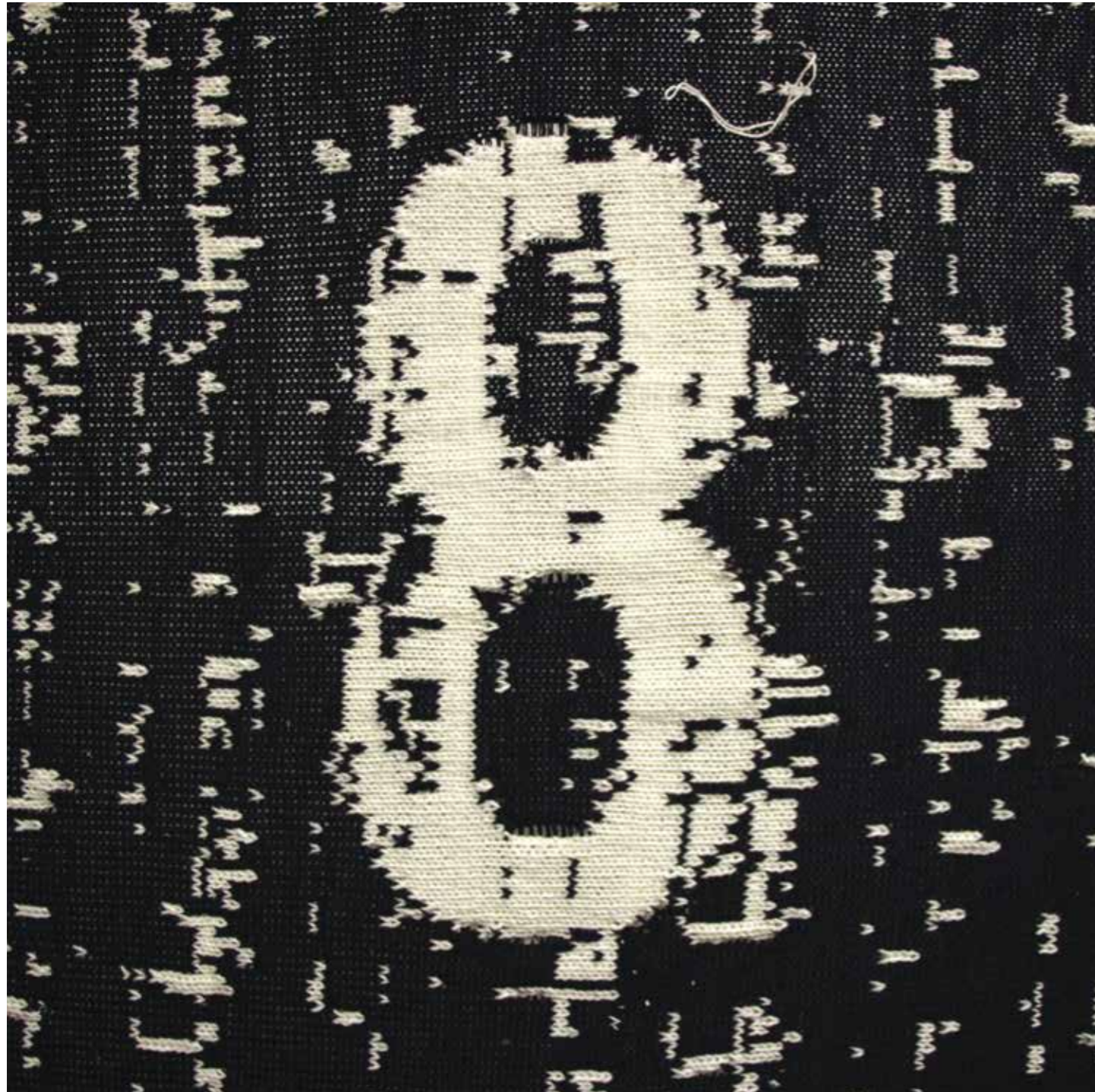
Sam Meech

Artist and Videosmith. Born in Huddersfield 1981, Meech studied at Liverpool John Moores University (BA Multimedia Arts), and lives and works in the North West. Frequently collaborating with others, Meech explores the role of analogue technologies in a digital landscape, and the potential to fuse the two in production and performance. Alongside his practice, Meech is a co-director of ReDock a non-profit arts organisation, developing projects that explore ways in which communities relate to digital media, ideas and public space. He is currently developing a project exploring the links between knitting machines and digital imaging, with support from Arts Council England. smeech.co.uk

Punchcard Economy

Exhibited across all three Data as Culture spaces, Punchcard Economy banners are large-scale knitted data visualisation, based on the Robert Owen's 8 Hour Day Movement slogan: '8 Hours Labour, 8 Hours Recreation, 8 Hours Rest'. The work incorporates contemporary data about working hours within the 'digital' economy, collected via a virtual punchcard on the project website, to map the shift from Owen's ideal. Translating work patterns into knitting patterns using the similar punchcard technology, each misplaced stitch represents an hour of work done outside of the 8 hour 'contract'. Visitors are invited to contribute to the project by using the website to track their own working hours. The work has been created using a Brother KH950i electronic domestic knitting machine (produced 1988), and uses the DaviWorks IMG2Track software (daviworks.com/knitting) and PPD cable hack to transfer digital image files from the mac to the knitting machine. Punchcard Economy has been supported by FACT Liverpool and Arts Council England. punchcardeconomy.co.uk

ODI: 3.5 x 0.5m knitted banner, FutureEverything: 5 x 3m knitted banner & knitting machines

Thickear

Thickear (Geoff Howse, Jack James, Kevin Logan, Tadeo Sendon) are an artists' collective exploring contemporary themes through a focus on context specific work. Originally working mainly with sound, their practise now features performance work, installation and meditated public encounters. Much of Thickear's recent work has concerned the ethics of data collection and exchange, including the epic dystopian performance / installation Ministry of Measurement, a major feature of the Barbican Centre's 'Hack the Barbican' season in 2013. Formed in London at the beginning of 2012, Thickear have presented work at a wide range of venues and events including the Arbeit Gallery, Music Hackspace, Music Tech Fest, the Barbican and ICT 2013. thickear.co.uk

Pink Sheet Method – an ODI Commission

Thickear's triptychal response to Data as Culture involves processes of data collection, exhibition, re-examination and degradation. Taking place over three locations, Pink Sheet Method investigates the gestural notions of exchange and trust invested in sharing information, as well as the validity and limitations of data analysis – or data fracking – over time.

Event #1 White Sheet - FutureEverything, Manchester
Pink Sheet Method commences with a series of data gathering consultancies in which participants are issued with limited edition prints created through an audit of personal data sharing.

Event #2 Pink Sheet - ODI, London
Carbonless paper copies of the original document are revealed through an office intervention at the Open Data Institute.

Event #3 Blue Sheet - Lighthouse, Brighton
During a final performance presentation at Lighthouse, thickear share newly acquired knowledge attained through Pink Sheet Method and expose the last remnants of the data.

The archived work will then return to the ODI.

YoHa

Graham Harwood and Matsuko Yokokoji (YoHa translates to English as 'aftermath') have lived and worked together since 1994. YoHa's graphic vision and technical tinkering has powered several celebrated collaborations establishing an international reputation for pioneering arts projects, including the first on-line commission from Tate Gallery London and work in the permanent collections of the Pompidou Centre, ZKM and Manifesta07. Harwood and Yokokoji's co founded the artists group Mongrel (1996-2007) and established the free-media lab MediaShed (2005-2008). In 2008 they joined Richard Wright to produce Tantalum Memorial which won the Transmediale first prize for 2009 and toured over four years to nine countries and 15 cities. In 2010 YoHa produced the celebrated Coal Fired Computers. Their latest project is Evil Media Distribution Centre (2013). Harwood works at the Centre for Cultural Studies, Goldsmiths, University of London. yoha.co.uk

Matthew Fuller's books include 'Media Ecologies, Materialist Energies in Art and Technoculture', 'Behind the Blip, Essays on the Culture of Software' and 'Elephant & Castle'. He works at the Centre for Cultural Studies, Goldsmiths, University of London. spc.org/fuller

Invisible Airs

In 2011, YoHa, assisted by Stephen Fortune, attempted to read the 20,000 comma-separated lines of the apparently open Bristol City Council expenditure database. Concluding that power revealed itself through multiple layers of boredom, they decided that the best way to reveal the relations contained within the databases to the people affected by it would be to construct four contraptions which would enable visitors to: Test their aim with the Expenditure Filled Spud Gun; Balance the books with the Open Data Book Stabber; Polish the floor with an Older People Pneumatic Brusher; and, Grab the civic reins with the Public Expenditure Riding Machine. Originally operated by linking them to computers analyzing entries in the expenditure database, any expense over £500 caused the contraptions to rise, stab, shoot and brush in a series of seemingly meaningless actions.

Presented at the ODI and Lighthouse are the Open Data Book Stabber, the Public Expenditure Riding Machine, the Expenditure Filled Spud Gun, as well as the Invisible Airs documentary by Alistair Oldham. yoha.co.uk/invisible

Endless War (with Matthew Fuller)

On 25th July 2010, WikiLeaks released the Afghan War Diary, exposing over 91,000 (15,000 withheld) reports covering the war in Afghanistan from 2004 to 2010. Written by soldiers and officers, the data includes intelligence information, descriptions of military actions, meetings and other information. The entries were analysed by software looking for repeated patterns of events, spatial information, kinds of actors, timings and other factors. While some of the data was interpreted and published by newspapers, the full data set - containing endless permutation of jargon, acronyms and cross-references - remains mostly inaccessible. Endless War is a video installation revealing the real-time processing of this data seen from a series of different analytical points of view: each individual entry, phrase matching between entries and searches for the frequency of terms. It shows how the way war is thought relates to the way it is fought.

Both are seen as, potentially endless, computational processes. The algorithmic imaginary of contemporary power meshes with the drawn out failure of imperial adventure.
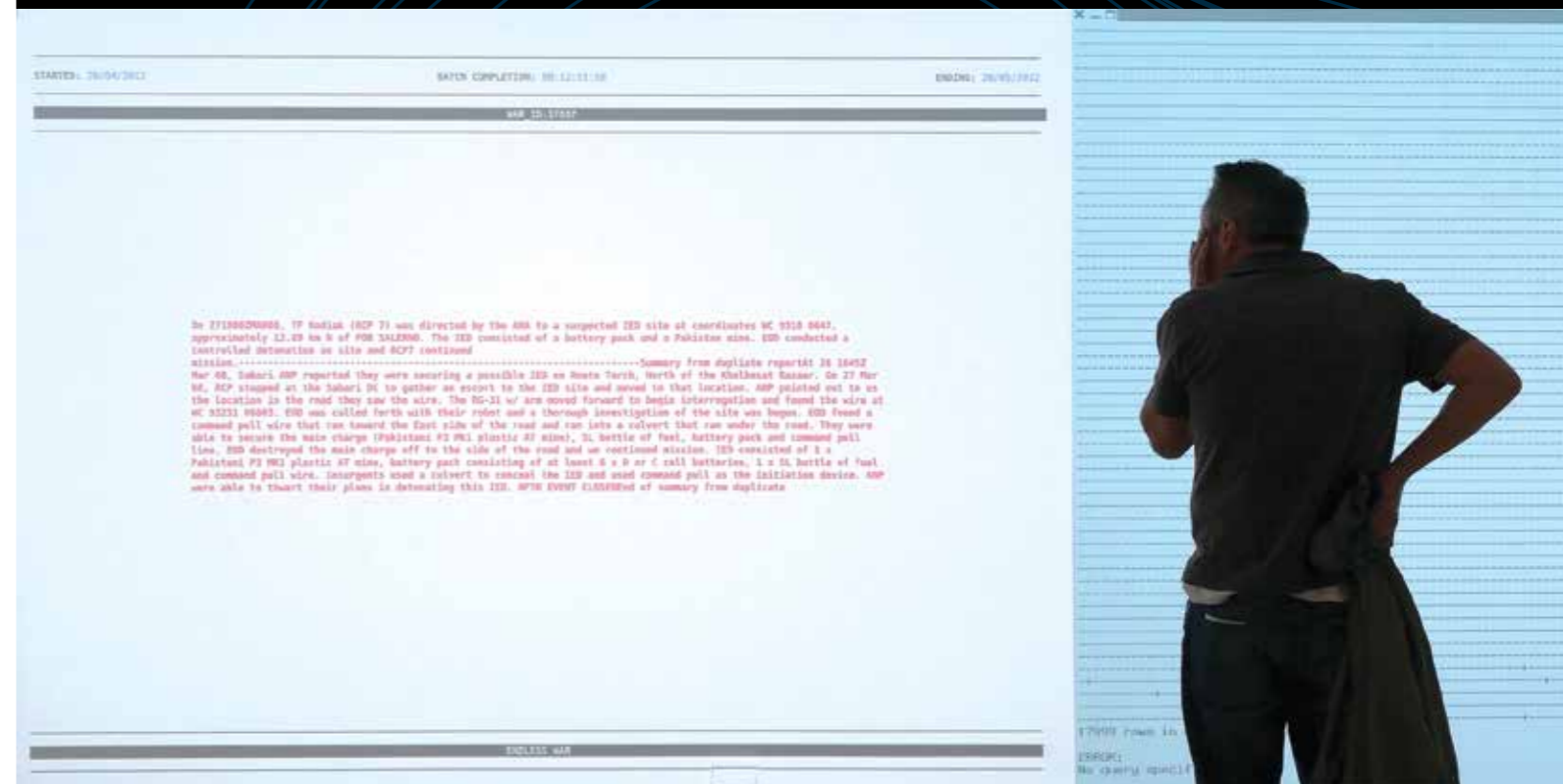
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