To Fit the New Art:
7 years of the Curating Art After New Media Curators' Updating Course

Beryl Graham and Suzy O'Hara

with additional contributions by Tania Aedo, Victoria Bradbury, Rene Garcia Cepeda, Ben Evans James, Irini Papadimitriou, Georgia Smithson, Simeon Soden, and course participants.

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INTRODUCTION

This publication is the celebration of a work-in-progress: the professional updating short course for international curators, *Curating Art After New Media*. As the course has been based on the generosity of many curators sharing their knowledge, the intent of this publication is to further share emerging new media art practices, and to discuss how curators can best fit their practices, so that audiences can engage with this exciting art.

The one-week annual course ran in London 2014-20, and for obvious reasons, 2021 took the form of an online reprise. The course was instigated by Sarah Cook and Beryl Graham of CRUMB at the University of Sunderland, and was originally an off-campus section of the MA Curating course, also available to international curators. PhD students from the University also co-programmed the course each year. Because Sunderland is in an economically deprived area, over 300 miles from the London-centric art world, the intent of this was to give local students contact with wider networks, as well as offer flexible, low-residency updating to curators, which could lead to an MA if desired, along with accreditation of prior practical curating knowledge. The opportunity to share CRUMB practice-led research with curators seemed to be appreciated — after all, new media art did not exist when many curators were studying at university, and has only been mentioned on curating courses very recently. Since new media including social networking and open source have changed thinking on how art works in time and space, this course aimed to update professional knowledge in the field.

Course attendees have included curators and researchers from Hong Kong, Bahrain, India, the USA, Canada, Austria, the Netherlands, Greece, Ireland, France, and the UK, and have directly fed into impressive subsequent curatorial practice and projects. Curator Lucy Dusgate attended the course, and within the year was lead curator on The Lowry's first exhibition of new media art, *Right Here, Right Now*, involving several co-selectors from the course. PhD researcher Marilaura Ghidini worked at Shristi Institute in Bangalore through course participants, via curating *#exstrange*, she invited eleven guest curators from different countries including Latifa Al Khalifa, course participant from Bahrain, to select their own artworks for the online exhibition. Valentina Peri, of Galerie Charlot, Paris, met Irini Papadimitriou of the V&A and Watermans Art Centre on the course in 2015, and in

2019 curated the Data Dating exhibition for Watermans Art Centre. The organisations that we visited in London targeted a broad range of scales (Tate, Furtherfield), disciplines (Wellcome Collection, Iniva), and sectors (MachinesRoom, The Open Data Institute (ODI)). This strategy aimed to reflect the tendency of new media to cross many boundaries, where curators must also follow. This publication therefore hopes to inform further admirable practice and we hope that curators will stay in touch about their future practice!

To explain the methods of making this publication; the course was firmly based on CRUMB research including the co-authored book Rethinking Curating (Graham and Cook, 2010; Cook, Graham, Gfader and Lapp, 2010). Each year the course provides a reading list in advance, and the final session includes the creation of a shared document of knowledge written by all course participants and leaders. For the 2021 online reprise, these shared documents and Beryl Graham's notes were used to make a spreadsheet of who was visited, and a yearly spreadsheet arranged under eight recurring themes, which was then digested into a 'Discussion Document' analysing what has changed at roughly 3-year intervals. The 2021 two-day online reprise was programmed by Beryl Graham and Suzy O'Hara, and included invited presenters/discussants Irini Papadimitriou and Tania Aedo (see Appendix A1). Suzy O'Hara has been researching cross-sector new media art production at the University of Sunderland since 2012, and so day two of the event concentrated on that theme. Participants filled in a short questionnaire on how their practice had changed since attending the course, which was shared with all participants. All the participants then debated the 'Discussion Document', and notes were taken by nominated PhD researchers. The 'Discussion Document with Notes' was then put online, and participants given around three weeks to correct and add any additional comments. That document was then edited and added to by Beryl Graham and Suzy O'Hara, with additional writing commissioned from doctoral alumna Victoria Bradbury. This ongoing process is reflected in the nature of the document, i.e. this is more of a collection of notes and reflections on a currently developing field than an academic closed position. By making the publication available as a free PDF, we hope to continue to get feedback and comments, which will build upon this knowledge.

WHO WE VISITED, WHERE, AND WHEN?

Please see Appendix A2 for a full spreadsheet of course visits to talk with curators. The visits had a core of 'regulars' known to have an interest in new media art, but also changed slightly due to the evolution of the course, and the particular interests of the participants in that year. Some organisations such as the Serpentine Galleries, developed a notable interest in new media art during the seven years, due to a new member of staff with a particular interest, and so were added to the course.

Organisations that we visited every year were the Tate (education departments), V&A (education, exhibition curators and collections), the ODI (Open Data Institute) Data as Culture programme, and Furtherfield. Two of these were large organisations, and two of these very small, with just two curators each. It is notable that in the larger organisations it tended to be the education staff who accepted the invitation to meet the course, perhaps being most familiar with new media (Graham and Cook, 2010). Both the Tate and V&A showed good communications between these instigating staff and other departments who they then invited to meet the course too. Indeed, Tate mentioned they welcomed this chance to meet once a year and reflect with other staff that they might not bump into otherwise. The stability of staff in small organisations meant that they could also reflect on what had changed for them in a year.

It is notable that two of the selling galleries, Carroll/Fletcher, and Tenderpixel, ceased their activity by 2019. At the time, there did not appear to be sufficient interest from private individual collectors to sustain that economy, but that was prior to the current mainstream bubble of interest in selling AI and Non Fungible Token artworks. arebyte, however, still exists and has production (studios) as well as exhibitions distribution — they discussed the economics of the need to move further out of central London due to property prices.

The production spaces MachinesRoom, Whiteroom and [space] Art + Tech also ceased by 2020. However, at Somerset House, which includes both exhibition and production (and both public and private funding), the studios and labs have grown in size. As MachinesRoom explained, no UK Maker Spaces or FabLabs are solely commercially viable and so a mixed economy (usually with a majority of public funding) is important.

On the way
to Tate Britain

MachinesRoom
with Gareth Owen Lloyd

Carroll/Fletcher with Steve Fletcher and
Jessica Cerasi. Exhibition: *Looking at one
thing and thinking of something else*

DAY 1: EIGHT THEMES, AND IRINI PAPADIMITRIOU

Of the nine recurring themes identified from course notes, the theme of Production/Labs/Commissioning was assigned to day two, leaving eight themes to be discussed on day one.

NOTES BY BERYL GRAHAM, GEORGIA SMITHSON AND BEN EVANS JAMES

IRINI PAPADIMITRIOU PRESENTATION AND DISCUSSION

Because Irini's discussion fell into several of the eight themes, some of her points are discussed under the next headings, so these are brief notes specifically from the presentation.

Irini Papadimitriou is creative director of FutureEverything, Manchester, and has also worked for the Victoria and Albert Museum (V&A), and Watermans Art Centre in London. She presented Curating Art and Technology: Play to Process, a 43-minute presentation giving an international overview of what has changed since 2014 for museums (V&A education, production workshops, events, exhibiting, collecting), small arts centres (Watermans), and festivals (FutureEverything).

Her role at the V&A was primarily in education, but she aimed to cross-fertilise between areas, such as publishing small books about practice to help develop discourses, and using the money from short courses to commission art. Her deepest interest is in

long-term development, including at Watermans Art Centre where it is not just exhibitions-based but also residencies, work with non-art social organisations, making, and including live art.

At the V&A, the cross-department work also included collecting, which is not usual for 'education' areas in a museum: Fabio Lattanzi Antinori's 2014 *Data Flags*, for example, which was included in the Digital Futures events at the V&A, was exhibited there, and then acquired by the museum. The Rapid Response Collecting project at the V&A also met with the course frequently — collecting popular culture and media items such as the *Pussy Hat* instructions.

Often her work takes place outside of art venues, for example Naho Matsuda's 2019 *Every Thing Every Time* in Qatar National Library, where the works can be conversation points for starting discussion about data. In online venues FutureEverything have curated online-

Wellcome Collection
new library/education area

only works such as Kasia Molga's 2018-9 *By the Code of the Soil*. The V&A has always welcomed people from all over the world into the institution; now their strategy is to take the art out to those people all over the world too. At FutureEverything they are 'moving around' with their audiences: there was an international audience, now there's an international institution.

Concerning cross-sector collaboration, Irini has been involved with activities such as a makerspace at the Cisco Live! art fair in Barcelona, demonstrating the circular economy as applied to e-waste. She wrote for Helen Knowles's 2020 *Trickle Down — A New Vertical Sovereignty*, which the course visited at arebyte Gallery, which dealt with art economies and blockchain systems.
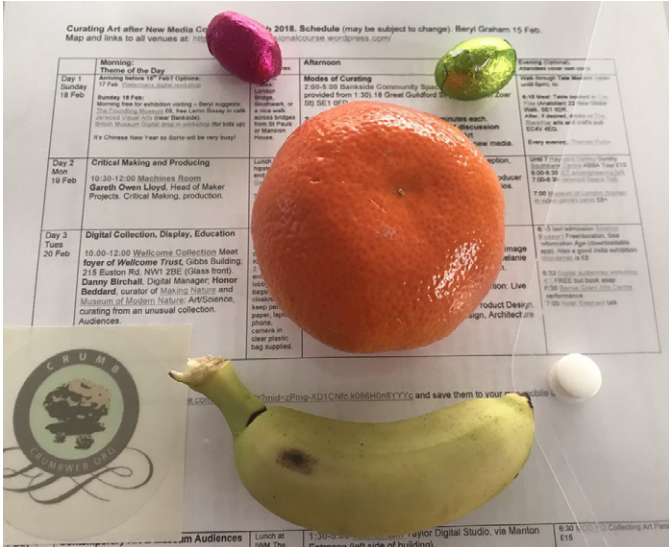
Introduction pack

DISCUSSION DOCUMENT, AND DISCUSSION

The introductory text and questions are from the 'Reprise Discussion Document' written by Beryl Graham.

08 EXHIBITION FORMS

In 2014, organisations tended not to mention online forms unless they were asked: the exceptions were non-fine art organisations and those with digital specialists who had access to the web site/systems (Wellcome, BL Labs — libraries can deal with data, Furtherfield, Mark Miller at Tate Collectives — is this a Salon Hang or a Tumblr Hang?).

By 2017, art organisations such as the Hayward had used Tumblr for display; TPG (The Photographers' Gallery) online pop culture such as GIFs, PowerPoint, Mediawall /interstitial spaces; and Iniva were reconsidering early net art gallery, through gallery spaces and back to agency and archive spaces. Carroll/Fletcher had an online video 'venue' as well as a physical gallery, and Tenderpixel used greenscreen video online to make the most of the tiny gallery space — also with a bookshop next door. Morgan Quaintance had made links between online distribution and the physical 'photocopy room'; the ODI *Data as Culture* programme was also considering the differences between paper and online 'publishing'. Furtherfield had a thoughtful consideration of using both proprietary distribution like Twitter, and developing open source online platforms such as discussion lists.

By 2020, media curators had a well-developed awareness of the "virtual site specific" constraints and joys of using proprietary platforms, such as TPG on Instagram, and *#exstrange* using eBay. Larger art organisations were still finding their web sites under the control of their marketing departments (such as Tate Collectives wanting comments and feedback online). Photography curators and the Serpentine had perhaps most success at integrating curating into all museum systems, both online and offline, including outdoor AR in the case of Serpentine. The question of exhibiting product and/or process was considered by Wellcome, TPG, the Design Museum, and Museum of London (rather than art venues) in particular. The characteristics of displaying new media art in space and time had been carefully considered by Honor Beddard and Danny Birchall at Wellcome, and Sarah Cook for Somerset House, including the use of theatrical lighting.

**Tate with Mark Miller, Convenor
of Young People's Programmes**

Open Data Institute, Data as Culture, with Julie Freeman
Artwork: *Pillars of Hercules*, by James Brooks
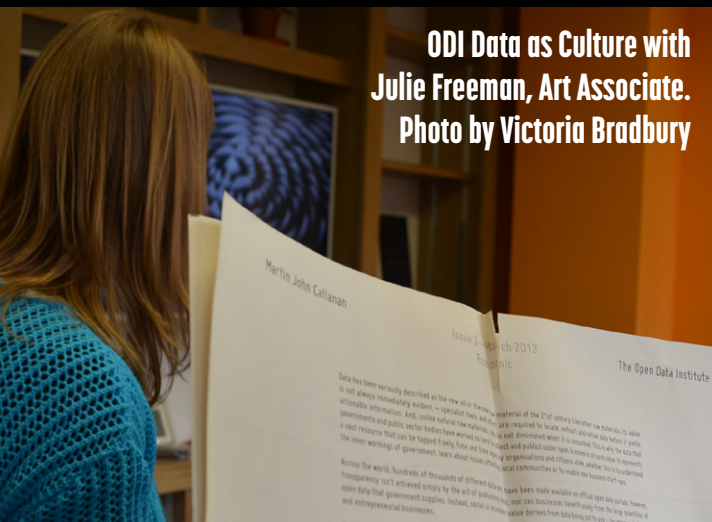Photograph by Victoria Bradbury

Exhibition Forms section

QUESTIONS

WHAT ARE THE BEST EXAMPLES OF CONSIDERING ONLINE AND OFFLINE WAYS OF EXHIBITION/DISTRIBUTION IN AN INTEGRATED WAY?

ODI Data as Culture with Julie Freeman, Art Associate. Photo by Victoria Bradbury

HOW CAN THIS HELP ART ORGANISATIONS?

Marialaura Ghidini (Independent curator in Italy and visiting researcher at the Exhibition Research Lab in UK): After years of researching curating on the web, Marialaura finds herself doing less online curating now. The pandemic has prompted new questions about the public space at a moment in time where we have lost direct and open access to public spaces. She wonders if and how the online space is public space, especially in the light of the fact we mostly experience it on mobile phones and through applications. Her use of eBay as a curatorial platform to exhibit and collect work through the #exstrange project could be problematic now, since e-commerce sites have raised even more questions about labour, sustainability, and resilience during the pandemic — there was a very quick and mass migration of physical engagement programmes to the online environment, which saturated the space meaning the original uniqueness was lost.

Loren Slater (Co-director of Signal Film and Media, UK): There is now a vast digital presence of exhibition-related content as museums, galleries and arts organisations went into 'digital panic mode' (a phrase coined by Dani Admiss who worked with Signal). This was a lucrative business for web designers, but it was felt that much of the content was very rushed and a knee-jerk reaction to the pandemic, making sure audiences were still engaged with organisations when they were physically unable to visit. Public engagement programmes originally conceived as physical events were flipped to online very quickly.

Clare Harding: Lessons have been learned from the experience, and strategies around continuing with online programmes are currently being evaluated. Could it become an offline/online hybrid? How will it work? Audience surveys are being sent to collect data on learnings from online only projects, they need to show more data than Google Analytics do however, as this tool measures figures only. 80% of online audiences have not visited MOSTYN before. One of the key challenges for institutions who perhaps don't have a legacy or history in working with digital is how to hold on to these new audiences when the physical spaces reopen. In response to 'digital panic', do we need to slow down curating? There is less charging for events, which helps access, but it is important to keep paying artists.

Emilie Reed (Game Studies Researcher, UK): ...Like OS software, artists/makers can be paid for services rather than products. Games exhibitions often present "videogames" or interactive digital work as all "the same sort of thing", and unfortunately don't seek to show the processes behind the games.

Suzy O'Hara (Curator and Research Fellow University of Sunderland, UK): For One Cell at a Time, postal engagement packs were sent to audiences. This felt like slower engagement growth, whereas a digital audience can start off rapidly and then tail off. 'Digital fatigue' is real, viewing online exhibitions, setting up virtual meeting platforms, Zoom discussions about exhibitions, online curatorial and artist talks can become exhausting. We need to get back into physical spaces, slow down and process the impact of just how much 'digital-ness' we can cope with! How do the tools and platforms we have used to engage with audiences inform and contextualise how the work was exhibited?

Irini Papadimitriou: Prior to the pandemic, most work went on behind museum and gallery walls. Projects such as the V&A's *Digital Design Weekenders* expanded the audience and parameters of the usual demographic, and locations, and collaborations with other organisations were born, and not just arts organisations. Following on from the success of taking the exhibition out of the gallery space, FutureEverything (which does not have a physical exhibition space) focused on the ideas of place, people and environment, and exhibited works on the streets and in buildings across the city of Manchester. Artworks can be exhibited in non-art domains, and on the flip side, non-artists can be taken into galleries where they can see the artist at work and use the gallery as an extension of their studio, as the experiment of public engagement in galleries by Watermans demonstrated in 2012. Irini's *You and AI* exhibition in Athens is outdoors due to the pandemic — result of a one-year conversation, and it appears with minimal descriptions of the works.

Of concern is the use (or misuse) of social media platforms promoting artists and artworks but providing misleading, unsourced information. Who is policing this? Will we encounter a future generation of misinformed art-lovers? As representatives of cultural institutions, should we be resolving this matter?

What is the role of artists and artworks in times of crisis? It appears that engaging with the arts online during lockdown was a valued form of escapism. Could this be continued to target specific, hard-to-reach audiences such as the difficult 16–25 age group? But then, are we excluding those who do not have access to services and the equipment needed?

The White Building with Rachel Falconer.
Photo by Victoria Bradbury

12 SYSTEMS/METHODS OF CURATING

In 2014 curators' enthusiasm for new media art was seen to be an important method for overcoming problems, and also networking knowledge between curators.

By 2017, curators had named various roles: the Serpentine was like a consultancy "between communications and programming" involving a think-tank; the Hayward Gallery aimed to include new media art in themed shows rather than being media-specific; Whitechapel had curated *Information Superhighway* with both museological and contemporary areas. Collaborative curating such as Furtherfield's *DIWO and The Lowry's Right Here, Right Now* were an important method.

By 2020 organisations had seen further connection between the roles/methods, such as the Wellcome's curators working front of house, being "curator as connector", the Serpentine using research and development methods, Morgan Quaintance curating with a committee of two emerging artists and two international artists, and Furtherfield's methods "no ecology without social ecology", "unlocking proprietorial systems", and "have fun and change things".

" HAVE FUN AND CHANGE THINGS "

Museum of London with Foteini Aravani, Digital Curator
Exhibitions: Foreground is *Pulse* by Tekja

Systems/Methods of Curating section

Somerset House with Leonara
Manyangadze, Programme Producer

With Ben Vickers of Serpentine Gallery
Photo by Victoria Bradbury

QUESTIONS

Systems/Methods of Curating section

WHAT ARE THE BEST EXAMPLES OF CURATORS CHANGING THEIR METHODS TO MEET THE BEHAVIOURS OF THE ART?

HAVE YOUR OWN METHODS CHANGED?

Design Museum with Oliver Winchester, Curator – Permanent Collection

Clare Gannaway (Curator: Contemporary Art, Manchester Art Gallery, UK): Has found new media processes and systems, including some democratising, gradually becoming more embedded in the museum. How processes shape and change the way the gallery works is a very slow process.

Clare Harding: At MOSTYN there's a challenge of putting creative programs into project management structures. Got an Art Fund Curatorial Fellowship to help with this.

Marie-Therese Luger (Curator and researcher, Sweden): Has found that the systems of research funding can restrict what can be realised or put into practice, especially in cross-disciplinary fields. Research can be a too-individual and even lonely system, especially when moving into the framework of artistic research that poses the subjective and the objective as interconnected, and thus becomes harder to navigate as an accepted form of research. This often results in black/white frameworks of either working as a submarine under the surface of systems or involuntarily supporting the systems that should be looked at or questioned.

Loren Slater (Co-director of Signal Film and Media, UK): Signal's young people's programme, like Tate's Collective Producers, has *paid roles* for some committed young people. Two of the ten Trustees are young people, on the Steering Group, they also act as ambassadors and 'Next Cultural Leaders for Cumbria'. Online programmes can help young people with social anxiety, but there is a lot of competition for their online time.

At The Science Gallery, London with John O'Shea, Head of Programming; Stephanie Delcroix, Spare Parts Season curator; Melanie Davies, Events and Research Coordinator. Artwork: *Listening Objects* by Tabatha Andrews

16 EDUCATION/PARTICIPATION

In 2014 the organisations we chose to visit already had named models of participation or co-production, from Furtherfield's *DIWO* co-curating using an online discussion list to Tate Collectives who are paid if they reach the point of staging events/exhibitions — both projects have levels of participation and acknowledge that only a minority of people will put in the time and effort to reach the upper levels — in *DIWO*, the discussion list has hundreds of people, but in practice about ten people were interested in co-curating. All projects need to cope with conflict, including Open Innovation Models — where each partner has a specific, identified role in the collective. Furtherfield's approach, in contrast to how art organisations typically evolve, is its dedication to independent and grass-roots culture, drawing on Situationist and Fluxus ideas and practices that critique and resist the closed, market-led domination of the art world. They connect up with contemporary forms of activism, P2P principles and the production methodologies of the Free and Open-source Software (FOSS) movement, while examining new forms of technology with its networked community and visiting public.

By 2017 most organisations had well-integrated participatory events: the ODI said "we don't call it education we just call it the programme"; the V&A networked well between curators, education and collecting, and saw *Friday Lates* bringing in new audiences, and allowing for experiments/prototyping; Wellcome aimed for online works where "participation was baked in". Organisations were aware of the details of participation, and avoided using education as merely a tool for "chocolate coating the broccoli": Tate Collectives, as co-curators, wanted comments allowed online, whereas the Tate marketing staff worried about negative comments. Tate Collectives run some decent tours, as well as an Alternative Careers Fair for long-term participation; Arts Catalyst explored Arte Útil as participatory, and discussed how to participate with complex information/data without being too didactic; Wellcome's exhibition included the audience bringing in objects about their relationship with nature; and Matthew Herbert's *Chorus* interactive commission said "I want to see the wires" i.e. that the code should be visible. Meanwhile, the Barbican had managed popular interactive works since the 1990s, including timed tickets, more hosts, and bottlenecks monitored by a customer experience team; the ODI and others used humour as a way to draw audiences into serious issues — Ellie Harrison chose comedian Josie Long to do tours. IWM found interactive and multivocal works, such as voices/experiences of WW1, can help people interact with each other.

Thus by 2020, organisations had built on experience to reach the higher rungs of Arnstein's ladder of community participation: arebyte, as a gallery, do lots of workshops including programming for children and a cryptocurrency event. Furtherfield used a hacktivist ethos — changing the software system to make it work in a different way, helping people understand the ways that systems work so that they can change it themselves. They don't set out to attract certain audiences; they set out to have conversations with people in the local community. Tate Collectives have a new research subgroup with higher levels of experience. Any front of house staff team member can apply for say 2–30 hours working with their education team. They are aiming to change the metrics of evaluation for educational events. There are "Occupy moments". Overall, the course considered the line between audience and participants is becoming blurred, and that organisations are learning from each other about participation i.e. Furtherfield (grass roots) becoming more like the Tate (traditional, institutional) and vice versa. Perhaps organisations like Wellcome and Furtherfield could have an 'audience switch'!

" CHOCOLATE COATING THE BROCCOLI "

V&A with Douglas
Dodds, Melanie Lenz,
Irini Papadimitriou,
Marie Foulston

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QUESTIONS

Education/Participation section

HOW COULD MAINSTREAM AND ALTERNATIVE ORGANISATIONS SWAP KNOWLEDGE ON PARTICIPATION OR AUDIENCES?

ODI Data as Culture with Hannah Redler Hawes. Artwork: *Mood Pinball* by Ben Neal, Edie Jo Murray and Harmeet Chagger-Khan

HOW COULD THIS BE INSTIGATED?

Clare Harding: MOSTYN provided lessons on software programming and SketchUp during the pandemic — stepping in to help schools create bilingual content. They often ask themselves how do people want to engage with the space?

Marialaura Ghidini (Independent curator in Italy and visiting researcher at the Exhibition Research Lab in UK): What is the most valuable type of engagement from visitors? In her years of working in India, for example, she didn't like organising in big galleries there — one reason for this is the very specific audiences they attract. Rather, she mostly organised exhibitions/events in unexpected places such as in an electronics shop on the wall of screens. Everyday spaces, like a park. She's interested in places where interaction occurs naturally — something that perhaps doesn't happen in a gallery.

Irini Papadimitriou: Also answered several questions concerning this. The aim is to move from the 'spectacle' of short events such as the *Digital Design Weekender* into longer-term development and ideally 'takeovers' or 'occupied' projects. The Johannesburg event was so popular that after three consecutive years of the weekend taking place, it was taken on by a local makers' group/festival and is still running to this day. Rene Cepeda asked if it was important that curators 'inhabit' the online spaces such as TikTok that young people use — Irini replied that some online platforms are co-produced with young people so that the design matches their needs.

Marc Garrett (Co-director of Furtherfield, UK): Furtherfield's slow projects "grow like compost", see his paper "Living the Proposition…". Interested in the 'decolonisation of the public realm'. Furtherfield explores 'Art Worlding' and building alternatives; art contexts which favour smaller-scale art organisations, and connect to local art and societal relations and situations, beyond readily inserted 'art genius types'. They develop post-digital contexts of working-class issues and culture as part of a wider intersectional enquiry. Promoting social change as part of the production and real life experience, not as a top-down intention but whatever that local organisation needs, is in contrast to privileged groups of people owning art culture, who tend to cherry-pick the hard work of grassroots groups and up-and-coming artists.

Marc Garrett asks who we can trust to collaborate with, to create the necessary platforms, spaces, projects and systems, which develop longevity and decentralised evolutions on our mutual behalf, where those working in cultural production are risking things beyond lip service. He proposes that it's time for more grounded art groups to take control and live the proposition, where the art is 'more real'.

Irini Papadimitriou does too for FutureEverything as they don't have their own venues — this can be slow — but slow and deep participant engagement is desirable. Research funding such as AHRC can be longer-term than ACE funding. They now describe FutureEverything as a "year-long" programme rather than an annual festival, and they can move venues to follow audiences.

Whitechapel Gallery, Electronic Superhighway exhibition, with Séamus McCormack, and Emily Butler. Artwork: *Deep Face* by Douglas Coupland

20 EVALUATION/AUDIENCES

In 2014 the course was not specifically asking curators about audience, but organisations in London were already aware of the popularity of new media art/design exhibitions and events: the V&A *Lates* got twice the audience numbers expected, and *Digital Weekend* audiences of about 26K people made it difficult to manage participation and making things — some downloadable software to make things at home was useful.

By 2017, the Whitechapel Gallery found that *Information Superhighway* had seen the most visitor numbers of any exhibition to date — it also got more press attention — which seemed to surprise the curators. Wellcome were choosing their own evaluation rather than needing to stick to ACE evaluation, and disagreed with "skinning an evaluative context with art". Used Google Analytics online — three levels of reach, duration, depth — interested in what people do, not just who they are. Social media 'takeovers' such as *BustyBeats* on Twitter do attract new audiences, but might be just short-term. On site, an evaluation company, interviews visitors: visitors spend a long time here, so interested in more depth, not just numbers. TPG found that technology such as video walls were assumed to meet the ACE "accessibility" agendas, but needed very careful curating to achieve that. Tate's *Circuit* programme targets 15–25 year olds, and 40K people used the programme. They define young audiences in four categories — least access/hard-to-reach, first timers, independents, and enthusiasts. Audience segmentation is controversial — they are researching metrics of audience evaluation.

By 2020, the pressure from funders to address 'new' audiences was obvious — as TPG pointed out, some funders see new media only as distribution — like online streaming for the English National Opera — which doesn't reach new audiences but more of the same. Physical distribution options include — in Australia, there are Museum buses — small curated museums in a bus or trailer — taken to geographically hard to reach audiences — also pop-up museums. Online space is more complex than just streaming, concerning personal social media identities as well as levels of interaction, so this needs more thought.

Tate Collective Producers — Tate understand their position, and are negotiating around issues of recruiting people to connect with art, i.e. via late nights, poetry and spoken word events. Staff role models are important — Mark Miller led Tate Collective Producers from 2006 to 2018, not a typical white arts worker. The emphasis is on training, there is transparency and understanding of open calls versus curator-led programmes, and they do end up employing people, so this is long-term development. 150 people comprise Tate Collective Producers, with a sliding scale of commitment levels. Wellcome do have a narrow Radio 3 and Radio 4 audience, but have free exhibitions, use social media well in an open way, and games reach a wider audience. Furtherfield are very good at audiences locally, but also have an international network, touring exhibitions, and collaborations with Australian artists — 70% of their web site visitors don't go to the galleries. The Museum of London found that for their video games show, 90% were first time visitors. Organisations therefore are showing careful thought on the 'levels' of audiences or participants: Matthew Gansallo discussed curators' fear of 'dumbing down' to audiences, and the idea of different 'levels' of audiences, with different levels of labelling/writing/catalogues.

Overall, having a clear ethos/focus for the organisation helps the audience, as does defining what they do on applications/evaluation, for example IWM's 'conflct', or Autograph's 'identity'. Autograph realise they have a bigger proportion of people who don't go to other galleries, so they come for the content. Audiences are becoming more participatory, and there is much current interest in 'democracy' and decolonisation, for example Josh On's *They Rule.* Perhaps audiences will have more of a role in evaluating themselves — Tate Collectives are interested in audience feedback and metrics, the Mondriaan Foundation had a vote on who should represent the Netherlands at the *Venice Biennale*, and Harris Art Gallery and Museum held a people's choice vote on which artist in an exhibition should enter the collection. It is important to challenge perceptions about imagined/actual audiences — TPG curators found that "digital natives" know a lot about how to navigate software but less about criticality and political systems. Audience segmentation evaluation controversially means slogans that typify certain types of people, for example 'the everyday man down the pub' or 'culture vulture'. Funders target groups will change — currently many 'big' institutions talk about the 15–24 age group. Maybe we can change the system by making our own kinds of evaluation methods?

Somerset House with
Leonara Manyangadze,
Programme Producer

Evaluation/Audiences section

QUESTIONS

WHAT DO YOU AS A CURATOR MOST NEED TO KNOW ABOUT YOUR AUDIENCES?

WHAT KIND OF AUDIENCE EVALUATION MIGHT TELL YOU WHAT YOU WANTED TO KNOW?

WHAT TYPE OF 'AUDIENCE SEGMENTATION'?

Clare Harding: Evaluation at MOSTYN is not so much about numbers but about depth of engagement. One key issue for publicly funded arts institutions or projects is that we can't admit that we've failed or that something didn't work else there's a possible impact on future funding opportunities. When we think about evaluation - who is asking the questions that shape the evaluation? Are organisations 'marking their own homework'? Is evaluation for funders, the public, stakeholders, or you? How do we get to the questions that actually need to be asked, to help us learn.

Loren Slater (Co-director of Signal Film and Media, UK): They bring young people in as co-producers. 16-25 year olds are hard to engage - she talks about it like a football academy.

Rene Cepeda (Curator and educator, Mexico): There are a few studies but mostly it is important to spend time in the gallery, to listen to invigilators and what they know, and to train/pay invigilators as they are so important.

Suzy O'Hara (Curator and Research Fellow University of Sunderland, UK): Also found invigilators and telling stories important for Di Mainstone's outdoor installation – audiences including toddlers

Iniva with Stephanie Moran, Library and Information Manager; Ting-Ting Cheng, Artist in Residence in Stuart Hall Library

24 CRITICISM/PRESS/MARKETING

In 2014/15 art theory tended to intersect with new media theory around sociopolitical systems such as "the commons". It was acknowledged that there was little communication between curators and marketing, and Cliff Lauson of the Hayward was intentionally working in art history contexts to improve the understanding of new media art. Ben Vickers of the Serpentine said that, "this nebulous thing called digital" sits "between Communications and Programme"

By 2017, Morgan Quaintance criticised the inability of reviewers to separate the conditioning of media and culture with the re-appropriation and criticism of it, i.e. Amalia Ulman's work on her body. He noted that there is an "internet anxiety industry" fear, which skews criticism. His work is positioned between the mainstream and edges, building bridges. At the Whitechapel, Jasia Reichart (curator of *Cybernetic Serendipity*), a former director, perhaps fostered understanding of technology — how to resolve criticality and popularity? Furtherfield stated that we need to change aesthetics to meet the ethics — white cubes do not like the 'showing the guts' aesthetics (like the Cage/Duchamp chess board connectivity), or like a working class house (Rachel Whiteread). Due to few expert critics being available, they solicit reviews of their exhibitions, and archive on their web site — many researchers have used their archive. *Sheyda* Porter: Could be an aesthetic based not on what it looks like but what is the art 'intention' of the work. Slick doesn't mean shallow (re Lawrence Lek and Cecile B. Evans). Useful 'systems aesthetics' from conceptual art, for example *Fluxus* — so why are modernist art critics so dismissive of new media art?

By 2020, many organisations acknowledged that careful marketing was needed to help understanding and avoid the binary of Utopian or dystopian technology (the V&A's Irini Papadimitriou). Curators need to get marketers fully on board — at the ODI, the comms department fully defended the spending on art, Tate Collectives talk directly to marketing, and at The Photographers' Gallery both curators and marketers use social media. For the press, many organisations noted high press interest, but Julie Freeman and Hannah Redler Hawes at the ODI noted the tech press are happier to talk about art than the art press are to talk about technology. SFMOMA tend to write two press releases, one for tech and one for art press. Be careful with technology sponsors — Google claimed *Digital Revolution* was the first time that 'dev

art' (i.e. software art) had been shown. Sarah Cook on 24/7 at Somerset House, said that new media is often claimed to be 'entertainment', 'new' or 'first', so curating to historicising through old media can be a strong critical tactic from the start — the first seven pieces in an exhibition contextualise new media within art historical movements. TPG notes that they get a lot of broadsheet press but not Frieze or Art Monthly (is photography art?). The V&A's Irini Papadimitriou notes that with newer technology such as VR, AR, AI we should encourage criticality around hype, "algorithmic bias", etc.

As with issues of education and audience, different levels of experience can be addressed by different levels of writing whether intended for handouts, catalogues, or online publication. Online is affordable, archivable, and users can pick whatever level they want. At one ODI exhibition, visitors' online activity WAS the catalogue (Paolo Cirio's 2014 *Your fingerprints on the artworks are the artwork itself*). Can we raise the criticism above dismissal of social media?

MachinesRoom
with Gareth Owen Lloyd

Criticism/Press/Marketing section

QUESTIONS

Criticism/Press/Marketing section

GIVEN A BUDGET APPROPRIATE TO YOUR CONTEXT, WHAT STRATEGIES WOULD YOU USE FOR INCREASING UNDERSTANDING OF THE ARTWORK?

Clare Gannaway (Curator: Contemporary Art, Manchester Art Gallery, UK): Works from the historical collection at the museum, as well as contemporary works.

Loren Slater (Co-director of Signal Film and Media, UK): At *24/7* at Somerset House, Sarah Cook made sure the first six works in the exhibition were paintings to ensure reviewers would take the exhibition seriously; she often employs a similar strategy of using old photographs/paintings to contextualise and pull audiences in (Turner Contemporary does this extensively).

Beryl Graham: Paul Nicholson, course attendee who works in a University gallery, was interested in the artwork of Mr Gee at the ODI because he had William Blake works in the University collection.

Craig Smith (Associate Professor at University of Florida, USA): Finds media-specific knowledge useful for criticism, for example considering TikTok as performance. In these cases, there is a differentiation between specialist knowledge and vernacular assumptions about art, design, museums, government funding sources, etc. TikTok advertising on the sidelines of Euro 2020 (21) venues would be one example that differentiates the platform from vernacular assumptions about "art" and "design" while situating the platform (and its marketing) specifically and situationally in the vernacular. One of the potential outcomes of these distinctions is that the curatorial ethos assists in defining classifications such as 'new media'. This would be in contrast to appropriating or accepting depictions of such classifications based solely on use-value and/or vernacular assumptions.

At The Photographers Gallery, looking at Mohamed Bourouissa's AR app *La Reserve*.

At Autograph with Ali Eisa, Public Programme Manager. Exhibition: *Phoebe Boswell's The Space Between Things*

28 COLLECTING/DOCUMENTATION/PRESERVATION

In 2014 at the V&A, The Print Room showcased 'Computer Art' on paper, including punch cards. A recent review stated that they were not collecting enough new objects — they collected the 3D printed gun — the museum has a licence to import guns like muskets, but mostly it has collected a large stack of legal papers. Could have imported the software, but would still need a licence to print the gun. US legal system means it is not a problem because it is a gun, but because it is free, and distributed to foreigners.

By 2017, Annet Dekker highlighted the importance of documentation models, as process, and as decision tools — tracking "not editioning but versioning". She noted that for teams of workers, it is easier to teach a coder art history than vice versa. Wellcome also mentioned the combination of documentary archive plus collection of objects, for example Erica Scourti's *Life in Adwords* (Twitter), bringing together museum and library skills. At the V&A, they can collect hardware and peripherals or software. They don't have a collection of video games at the moment — other games are in the Museum of Childhood. Concept art is more often easy to collect for museums. Twitch is useful for seeing how people use games etc. Games are classified along a spectrum from art to commercial design. Casey Reas's unique Process 18 software piece was acquired by the V&A and included a boxed and sewn-in CD, as 'a token for the thing'. The work has been on permanent display as a curatorial choice, and has also been 'on loan' in the form of distributable software.

By 2020 documentation, and the relationship between documentation archive and art collection, were still important — acquiring documentation for the archive ensures leverage towards the collection once they are there. The Museum of London have collected art video games including Laurence Lek's, and have documented social media responses. The ODI have collected some works and data including Sam Leech's *8 Hours Work*. Tate conservators said that, "conservation is always about imagining the future of the artwork". We all feel behind the times, so document the changes. In new media, where does the "frame" of the artwork end; in the network, in the cloud? One strategy is that curators may bring in elements that support the project — curate the idea not the object. Collecting objects around an art piece — for example if it's 16mm maybe bringing in the projector. This could be seen as curating cultural context. Lozano Hemmer

— keen to improve the software — keep the before and the after — and plans for recovery if it crashes. The work is 'activated' when they have everything together to show the work in the future. Transparent Documentation — admit things that weren't done quite right. How to archive emails? Should we use an editable wiki document? The V&A Rapid Response Collection continues — cultural context becomes argument for collection, for example *Pussy Hat* was collected not according to material (textiles) but according to means of distribution (digital). Anything mass-produced over an edition of 50 can be acquired without notifying the acquisitions committee. Intellectual property issues can be barriers — for example they can collect Amazon Echo but not Amazon Alexa as would require the code. They liaise with technicians carefully for online software — WeChat is on multiple servers as it is 'fragile'. See also Graham (2014).

The V&A with Melanie Lenz
Artwork: *Google Tea Towels*
by Thomson & Craighead

QUESTIONS

Collecting/Documentation/Preservation section

GOOD EXAMPLES OF COLLECTING/DOCUMENTING/PRESERVING THAT WOULD FIT YOUR CONTEXT?

IF YOU HAVE COLLECTED ANY NEW MEDIA ART YOURSELF, WHAT AND HOW?

Emily Lawhead (PhD candidate, University of Oregon, USA): It is increasingly important to address the challenges of documentation/preservation/conservation in the context of small- and mid-sized museums. Many smaller and comparatively underfunded institutions are interested in collecting and displaying new media art, but they are extremely hesitant. The models developed at the Tate, V&A, etc. are useful, but still feel unreachable for many curators and collection managers working with limited collections of new media art.


**At the V&A with
Melanie Lenz**

32 MONEY

In 2014/15 the course notes remarked that the budgets were very different, but curators shared a passion for the art, and creative approaches to going forward. At the Serpentine, Ben Vickers saw new media skills as a reason to be involved in the financial systems of the gallery — he met with some resistance! Furtherfield for example had a mixed economy with mostly local council funding and an open, maker ethic — whereas the 'creative industry' approach would "turn it into an app which nobody uses". Tate Collectives — some arts funders fund educational work only — Paul Hamlyn funded *Circuit* about young people and participation. Concerning selling and collecting, Jonathan Carroll of Carroll/Fletcher collected for his home first, for example Rafael Lozano Hemmer — the gallery actually sells more to museums than individuals. Annet Dekker discussed the editioning or versioning of artworks — paying not for the work, but the process of its development.

By 2017, for curators, there were still budgetary challenges — Furtherfield was working with larger mainstream organisations — and this had widened the range of funding sources. For audiences, Furtherfield's *Zero Dollar Laptop* project had worked with homeless people, using Open Source Linux, and had refused some government funding where they insist on propriety software. Their *Art Data Money* 3-year blockchain project, and *Artists Rethinking the Blockchain* book, concerned wider financial systems. For artists, Morgan Quaintance's *Sunday Rent-free* events offering free one-day shows for artists was in high demand, and at the V&A, the income generated from adult workshops was being used for art and design commissions. For 'mixed economies' across public and business funding, there was more pressure from funders to work in this way. ODI was shortlisted for an Art and Business award, which was a testimony to the organisation's ongoing commitment to funding the *Data as Culture* art programme. At Barbican International Enterprises, funded by City of London, their exhibitions are launched there and travel overseas — the income generated comes back to the whole programme.

By 2020, for curators in London, property costs were an increasing issue — some venues had closed, or moved further out of London. arebyte Gallery had a five year relationship with a property developer to get this venue — because empty properties cost them money, but this is usually short-term use. Wellcome have good budgets, which enable their critical games, for example, to compete with commercial games. The Science Gallery London at King's College London used an architectural firm to do design, with good production values. Curators working with smaller budgets need to be resourceful, scrappy and DIY. Value and purpose can be huge strengths beyond budgets, i.e. MachinesRoom — even when they were in a much smaller space still serving their core objective. Re the technology, know enough to be critical about prices for technology. Develop relationships with technical people, including server space suppliers, because even universities are picky about access, and won't maintain sites. Equipment grants for particular projects could be rented out in the longer term. For audiences, admission fees are an obvious issue for new media art, as they are often 'special exhibits' rather than in the collection. At the Design Museum, there is a 70/30 split, chargeable/free ratio, but their previous venue had no free shows. For mixed economies across public and business funding, the ODI said it's important to get art on the spreadsheet from the very start, so that there are no late alarms and no surprises for anyone, including the funders. Furtherfield still had a critical interest in financial systems like blockchain — don't trust tech but do discuss trust. For example a project to buy land from a farmer who was going to sell it for fracking, and use it as an eco-burial field, because cemeteries are protected — death as activism?
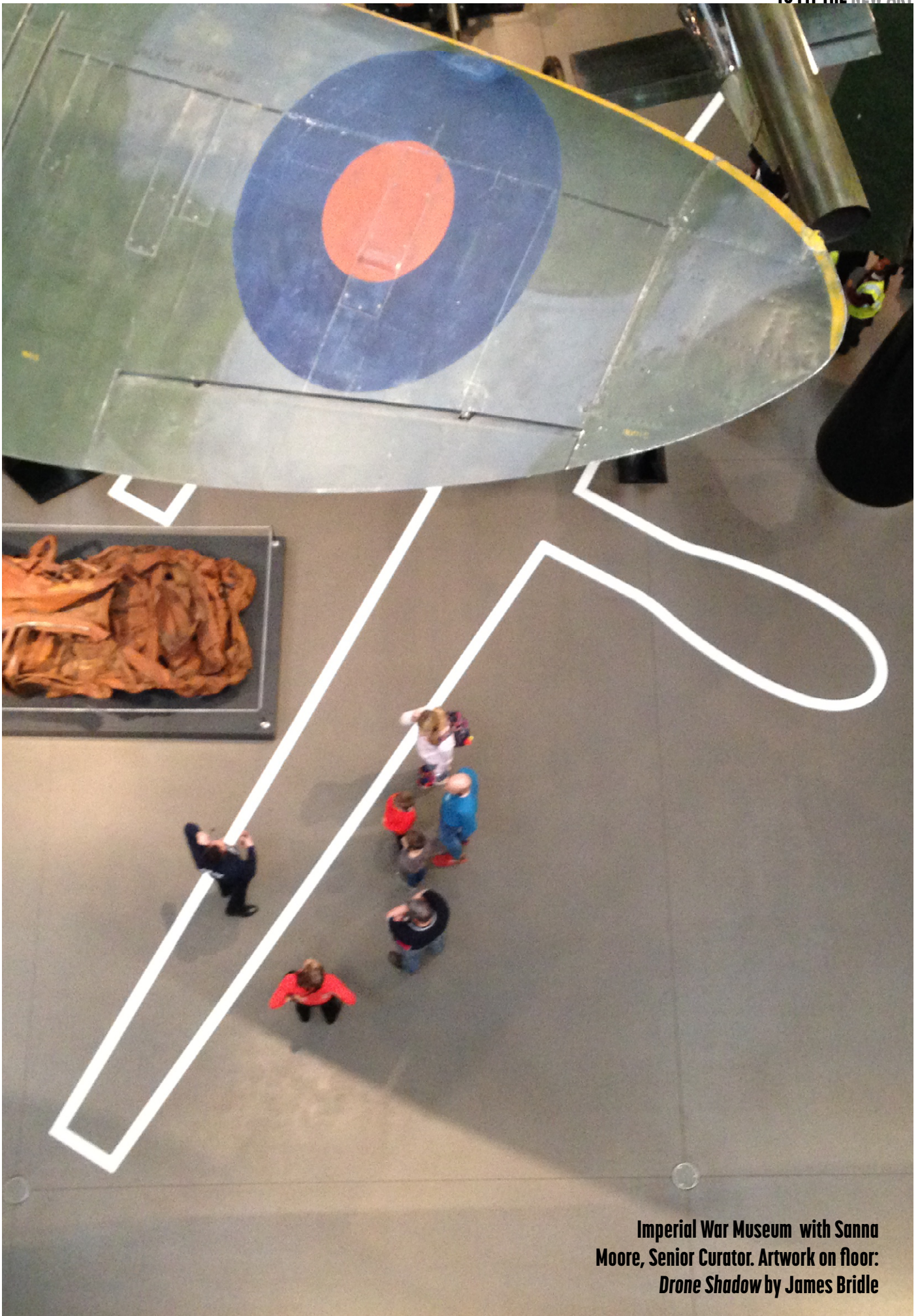
Imperial War Museum with Sanna
Moore, Senior Curator. Artwork on floor:
Drone Shadow by James Bridle

QUESTION

WHAT CREATIVE FINANCIAL MODELS MIGHT WORK IN YOUR CONTEXT?

NOTES BY BERYL GRAHAM

Several people stressed that 'public engagement' can access various new funding doors including Paul Hamlyn. Technology funders often want to know "why is art involved?" Irini Papadimitriou stressed the need for a "circular economy"

Clare Harding: Funders often want definitive proposals, when sometimes answers need to emerge later. Thinking bilingual is good for Welsh applications. Often there is the need to explain one sector or discipline to the other, and you as a curator will know more about new media systems than the funders do.

Craig Smith (Associate Professor at University of Florida, USA): Finds there is often "productive confusion" between sectors, and that this can be a way to "undo Capital".
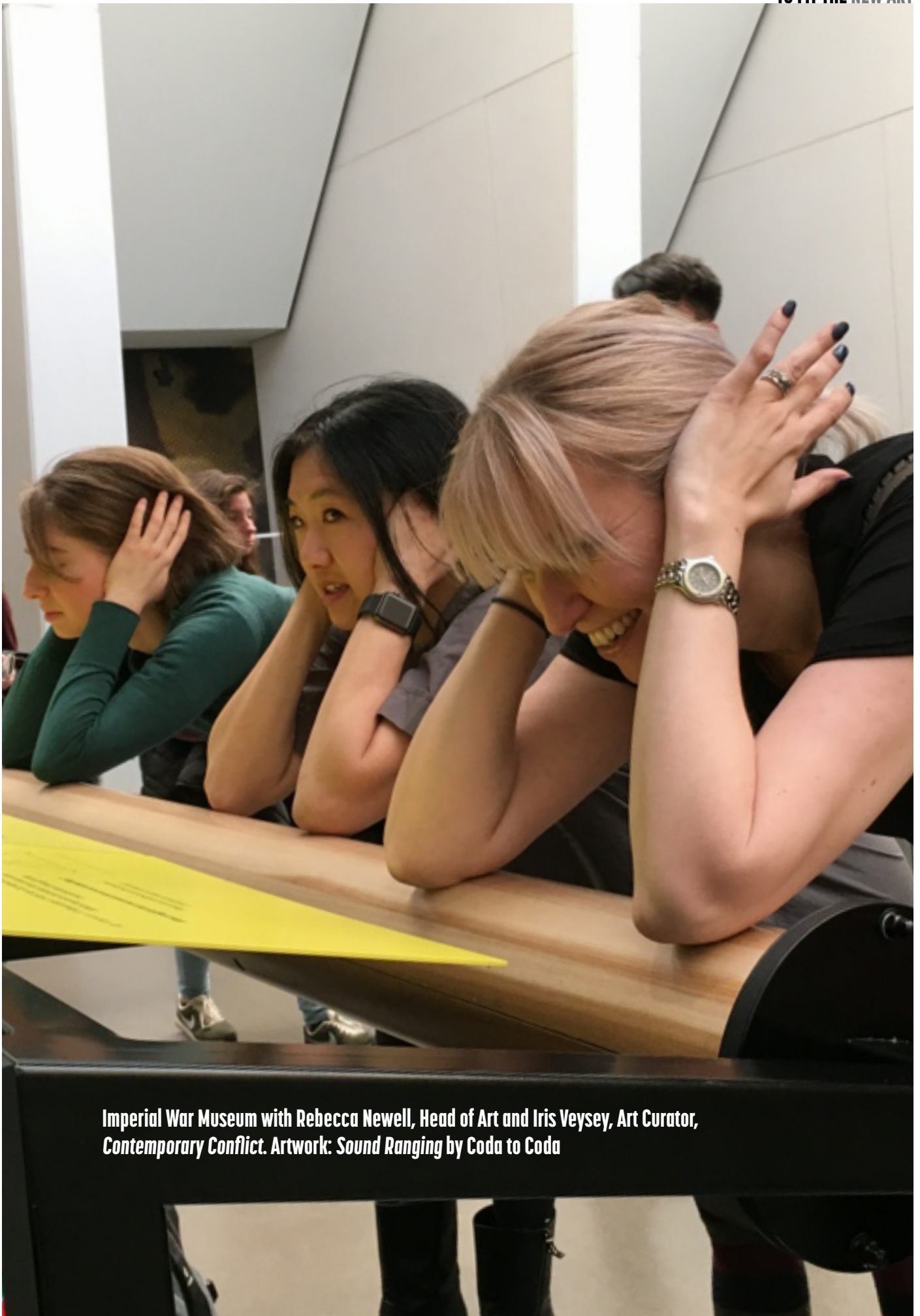
Imperial War Museum with Rebecca Newell, Head of Art and Iris Veysey, Art Curator, *Contemporary Conflict*. Artwork: *Sound Ranging* by Coda to Coda

36 CURATING ART/NOT ART

In 2014, TPG digital photography curator Katrina Sluis was frequently asked to be "the medium-specificity person" on art panels, whereas painting is not considered to be "media-specific". At the V&A, the design emphasis enabled exhibitions to include new media. In the V&A Prints & Drawing Study Room, Melanie Lenz explained how 1960s critics objected to computer art because it was using military technology; Jean-Pierre Hébert and Roman Verostko invented the term "Algorists", for artists who create art using their own algorithms; and the first editor of the Computer Arts Society's *PAGE* magazine was artist Gustav Metzger. Furtherfield's Marc Garrett said that whether he would call it community art or contemporary art depends on the context, for example, permaculture is part of Furtherfield's local experience since having a space in Finsbury Park. This has meant that part of the dialogue with others now includes learning and working with the surrounding nature as part of a more diverse ecology, rather than as pure media art technological ideations, which are clean. There's a need for a post-digital understanding, where media art is now not a singular practice but connected as an assemblage of different elements and wider culture. Curators in non-art venues such as the Science Museum, Wellcome, ODI, and BL Labs, are curating new media art into the programme, and brokering relationships in those contexts, with consideration for different audience expectations.

By 2017 Whitechapel's *Information Superhighway* show meant that curators considered net art as outside and inside the museum, not just digital painting, and considered historic material important — not just 'post-internet art'. The curators now found them considering a wider range of artists (and technology). The selling gallery Carroll/Fletcher didn't label themselves as new media art specialists — "I show this art because I love it". Tenderpixel also showed all art forms and have a bookshop selling artists books. TPG curator pointed out that Gursky photographs, whilst being complex digital composites, were commercially successful as they nonetheless deployed the language and form of analogue media. A Serpentine curator strongly disagreed with thinking of digital as "so niche when everyone has a phone in their pocket".

At Wellcome, "the culture and the science go hand in hand", and they aimed to connect science, medicine, research, and art. Sarah Cook recommended that when curating art/science, start with the artist and then find a scientist. Collaboration is vital, not only expertise on an object but appropriate ways of displaying it — wouldn't want a just aesthetic reaction to bowel cancer, so don't frame it as art. At the ODI, the curators differentiate between data visualisation and art made with or in response to data and surrounding discourses.

By 2020 TPG curator Jon Uriarte was keen to avoid the label of "fundamentalist photographer" and to include other media; he considered that the digital audience is wider than the strictly photography one. Autograph curator Ali Eisa said that although they still focus on photography and film, younger artists graduating now are willing to use any media necessary, including research, sculpture and found objects. At IWM, exhibitions were described as "media agnostic" and collecting aimed for that too.

At non-art venues, art still needs to be carefully curated — at the ODI, the CEO's inclusion of art was first described as an "aberration" by the Government Cabinet Office, a view which changed but it had to be argued for. At Wellcome, they consider programming as a form of investigation — art is not separate — allowed to "sit in the contradictions", and "artists often revel in these grey areas". For politically charged objects about colonialism and medicine's links to neo-colonialism, they use objects to reveal power structures. Objects being repatriated are replaced with interpretative texts aimed to reveal curatorial process, and they commission artists to respond to the historic collection.

At Furtherfield, producing objects and exhibitions using open systems was important — they often gave opportunities to emerging curators who then go on to the larger mainstream art institutions. At the Tate, workshops encouraged "digital makers" rather than calling people "artists". Overall, they consider that digital technology has become slightly less marginalised in the past 25 years, and was now more central to Tate.

"

I SHOW THIS ART BECAUSE I LOVE IT.

"

Curating Art/Not Art section

QUESTION

IS NEW MEDIA ART NOW INTEGRATED WITH OTHER CONTEMPORARY ART?

NOTES BY BERYL GRAHAM

Loren Slater (Co-director of Signal Film and Media, UK): Has a background in installation art and hence skills in video installation.

Clare Gannaway (Curator: Contemporary Art, Manchester Art Gallery, UK): Works in a non-media-specific museum, and has been able to integrate new media art more over the years.

Fikriyah Ibrahim (Independent curator, Brunei): Studied Fine Art and then curating, but often included photography. Brunei has fewer concerns about disciplines, as resources for any kind of art are low.

Marie-Therese Luger (Curator and researcher, Sweden): Interested in the struggle of combining or compartmentalizing disciplines within a framework of academic concepts such as interdisciplinary and cross-disciplinary. I am incredibly conflicted with my own work as a curator of science-panorama-venue, given that constant "application" of art framed to be able to "revive" culture-heritage. […] So far, I am thinking about a role that not only interacts with contexts from an interdisciplinary perspective but also ACTS in an interdisciplinary way, which thus aligns interdisciplinary methods and methodologies with "output". I am interested in the dynamics of art as research and curatorial practice as expanded practice (for example "the curatorial") in relation to what research is "allowed" and/or can be funded. Interested in the comment of Stephanie Fletcher and others, describing the potential of art as "messiness" — in relation to that interested in artistic practices that are extremely un-messy. Notions of marginalization or agency/non-agency don't disappear in inter/cross/multi/trans-disciplinary contexts. While the idea of practice as research (and thus, practice-based activity as a form of scientific inquiry) is implemented in the academic context, value systems of grading the practices in question still remain. Such understandings are however vital in order to imagine and develop new roles within institutions — and should not be ignored.

WE
ARE

Big Bang Data exhibition, at Somerset House.
Artwork: World Processor by Ingo Günther

Curating Art/Not Art section

DAY 2: PRODUCTION/LABS/COMMISSIONING, AND TANIA AEDO

NOTES BY SUZY O'HARA, RENE GARCIA CEPEDA AND SIMEON SODEN

TANIA AEDO PRESENTATION AND DISCUSSION

Arts Catalyst with Claudia Lastre. Exhibition: *Notes from the Field: Commoning Practices in Art and Science*

Tania Aedo is coordinator of Cátedra Max Aub for Transdiscipline, Art and Technology, at National Autonomous University of Mexico City. She presented *7Y: (media) art as repository of knowledges — and warnings*, a 21min video concerning working in an interdisciplinary way within a defined lab context, and how her experience of 'lab' based method evolved over seven years.

CRITICAL THRESHOLDS BETWEEN ART, SCIENCE, AND TECHNOLOGY

Tania Aedo framed the session by outlining her methods for navigating the current global 'emergency mode' we are living through today. In times of mutation and global peaks (for example earthquakes, pollution, pandemics etc.), Aedo suggests that shifting from the concept of the contemporary to the concept or phenomenon of the contingent — something that may happen or may have been different — can be useful. Recognising that we are living within historical, irreversible and contingent processes enables an identification and exploration of cross disciplinary practices operating within the 'curves' of 'critical thresholds' of new knowledge, which often emerge from crises. What can happen when several such events combine, such as those in Mexico City over the past five years? What can emerge when two or more curves converge? She called for institutions to develop protocols that handle not only the immediate event or its aftermath, but also the longer term.

Pointing to the critical knowledge that has emerged from the relationships between art, science and technology, Aedo posits new media art as a fruitful repository of 'knowledge, warnings and resources' in relation to the present contingency. Describing 'art as an epistemic transdisciplinary arena' she highlights two directions that (new media) art holds a space within and between — the first going towards entropic and extraction processes and the other direction going towards negentropic and looking for the sustenance of life. When science is reaching its limits, Heisenberg wrote in 1942 (2019) that scientists rely on intuition when jumping across critical thresholds from the old to the new paradigm, which can lead to abrupt changes. The role of intuition also resonates with cross-disciplinary practice particularly with the intensification of art and scientific and technical knowledge. Within this, we can explore how concepts of time, space, living, nature, order, observer, matter and mind have changed, and the way that science looks at this knowledge. We have to learn 'to act in the unknown'.

STRATEGIES FOR CROSS-DISCIPLINARY WORKING:

Prototipos (2021) is an interdisciplinary lab currently being led by Aedo in her role of Max Aub Extraordinary Chair, at UNAM, Mexico City. The lab explores uses of the prototype (understood as first versions and always provisional) as a transdisciplinary laboratory for the co-creation of projects that will help 'lead us to speculate about what the contingencies could be in the immediate future and what roles art could play in its intersections with the future, science, technology as well as other knowledge and disciplines.'

THE LAB ETHOS IN REFERENCE TO THE HERITAGE VENUE:

Mediating between different groups as a director, rather than a curator of LAA, Aedo considered herself to be more of a programmer or 'DJ'. While health and safety remained a big factor in her planning, Aedo brought the lab ethos into the heart of the heritage venue. She invited artists and curators to see the LAA as a space for play and experimentation and encouraged them to push the institution to its limits.

THE LAB ETHOS IN REFERENCE TO ARCHIVE AND PRESERVATION METHODS FOR MEDIA ARTWORKS AND EXHIBITIONS:

Aedo developed virtual reality artworks in the 1990s during her time at Cenart. These works included avatars and multi-user environments that no longer exist. How best do we preserve these kinds of media in the long term, particularly its assets and the obsolete parts of it? Aedo notes that at the time (1995) the preservation of this kind of work was not necessarily seen as important but as the technology has progressed, archiving media-based artworks is a growing field that is gaining more importance and interest amongst scholars. The avatars she created for her own works developed from drawings and now it's easier to access VR technologies, so she can rebuild them given the time and space. Had she kept the basic wire-frames, she would have migrated the assets from one software program to another, which would have been a more future-proof way of documenting the project (compared to screenshots/digital images).

The LAA has a hybrid documentation system for archiving new media art exhibitions, which she took and modified to work for individual works. These methods are very resilient as it combines a physical archive with a digital one.

REMOTE INTERDISCIPLINARY COLLABORATIVE WORKING:

The first phase of the *Prototipos (2021)* programme was delivered during the most recent COVID-19 national lockdown. A group of cross-disciplinary students coming from the arts and a range of sciences were asked what the next disaster/emergency/contingency will be from the perspective of their field or discipline and what would they do about it? This proved to be a very effective speculative exercise and media art is often full of warnings and strategies for these emergencies/contingencies.

Students were then invited to turn their bedrooms into labs and create prototypes with whatever materials they had to hand. By approaching the idea of prototyping in a very broad sense, students could create prototypes of 'possible futures', ranging from books to spaceships. An effective strategy to inspire cross-disciplinary working amongst the distributed student group involved engaging younger workshop hosts to 'play' with Zoom and explore how to fully exploit its tools for creative activities. This involved, for example, sending students to different breakout rooms to do different creative activities and encouraging rapid problem solving in and across diverse groups. Sessions were kept short with lots of unguided time provided to work on the project on their own.

REMOTE INTERDISCIPLINARY COLLABORATIVE WORKING:

When working across disciplines, curators can bridge conversations and ensure all disciplines see new media art as a valuable resource to engage with. Tania invited artists such as Rafael Lozano Hemmer to facilitate a workshop and asked him to mix history, theory and the artistic outcome when presenting his work. Lozano Hemmer brought an academic paper as part of his practice, which comprised technical and historical contexts, meaning the work could be understood in different ways.

DISCUSSION DOCUMENT, AND DISCUSSION

SUZY O'HARA: INTRODUCTION TO PRODUCTION/LABS/ COMMISSIONING

BERYL GRAHAM: DISCUSSION DOCUMENT ON PRODUCTION

Robots Exhibition at Science Museum

Much work has been done over the past two decades exploring and creating many collaborative environments between the arts, computer sciences and research that have supported the production of art, including: new media labs; co-working spaces; media focused gallery spaces; electronic art festivals; and the Internet itself. Less research has been done into the possibilities that exist in collaborations between the arts and other sectors and industries.

During her time as a PhD research student at CRUMB, Suzy O'Hara identified and interrogated models of collaboration emerging between arts and commercial industries, with a focus on the digital and IT sectors (2016). She explored the impact of those collaborations upon curatorial and artistic modes of practice, with a particular focus on production. She identified some of the inherent value systems, and described a range of collaborative modes of artistic production that sit along a spectrum of power balances between the arts and commercial digital industry sectors, from Brand Marketing to Artist Practice as Business. The areas of difference in roles and working practices identified through both case studies and curatorial projects include factors such as: Value and Money, Time and Capacity, Crediting and Intellectual Property, and Roles and Working Practices.

For this discussion, we explore the growing spectrum of relationships and models of practice emerging between the arts, science, technology and society. By interrogating the contexts and emerging formats of engagement between the arts and other sectors, and the power dynamics at play, we begin to identify and understand the useful synergies and productive differences that help shape cross-sector and interdisciplinary collaborations.

In 2014, the V&A described workshops and *Digital Futures* events as "Breaking, making, learning", and worked across all art form teams. Their Artists in Residence programme found that meeting and talking with artists is more important than product.

By 2017, the V&A had successful game hacks, and Wellcome's commissioning included cross-departmental online and digital works as well as contemporary commissioning around the historical collection. TPG worked with artists to build toward larger commissions, and Carroll/Fletcher aimed to facilitate the career of artists, i.e. artist development. *Made at Somerset House* was established with an emphasis on cross-disciplinary products, MachinesRoom informally exhibited prototypes and a library in the foyer, and rising rents for SPACE meant less studio/production space, and a smaller gallery. Furtherfield discussed IP: Steve Buchanan's *Facebook Union* protecting artists' data rights; Commodify.us' *Our Data Our Terms*; *The Net Bill of Rights*, Eva Pascoe.

By 2020, MachinesRoom was run like a gym membership. Their distributed furniture software could be made with any sheet material and so was "material agnostic". They warned against over-promising that "everyone can be a maker", because some skills are needed. Gareth's qualifications are Fine Art at Chelsea then Goldsmiths: Chelsea = making, Goldsmiths = content/systems. The Somerset House programme aimed to "defrag" production and distribution. Some maker organisations had closed by 2020 or moved out of Central London. arebyte have an office in the gallery space, and studios, they co-commission with FutureEverything and FACT etc. Sarah Cook at Somerset House showed very strong connections between her 24/7 exhibition, and commissioned works from Somerset House Studios.
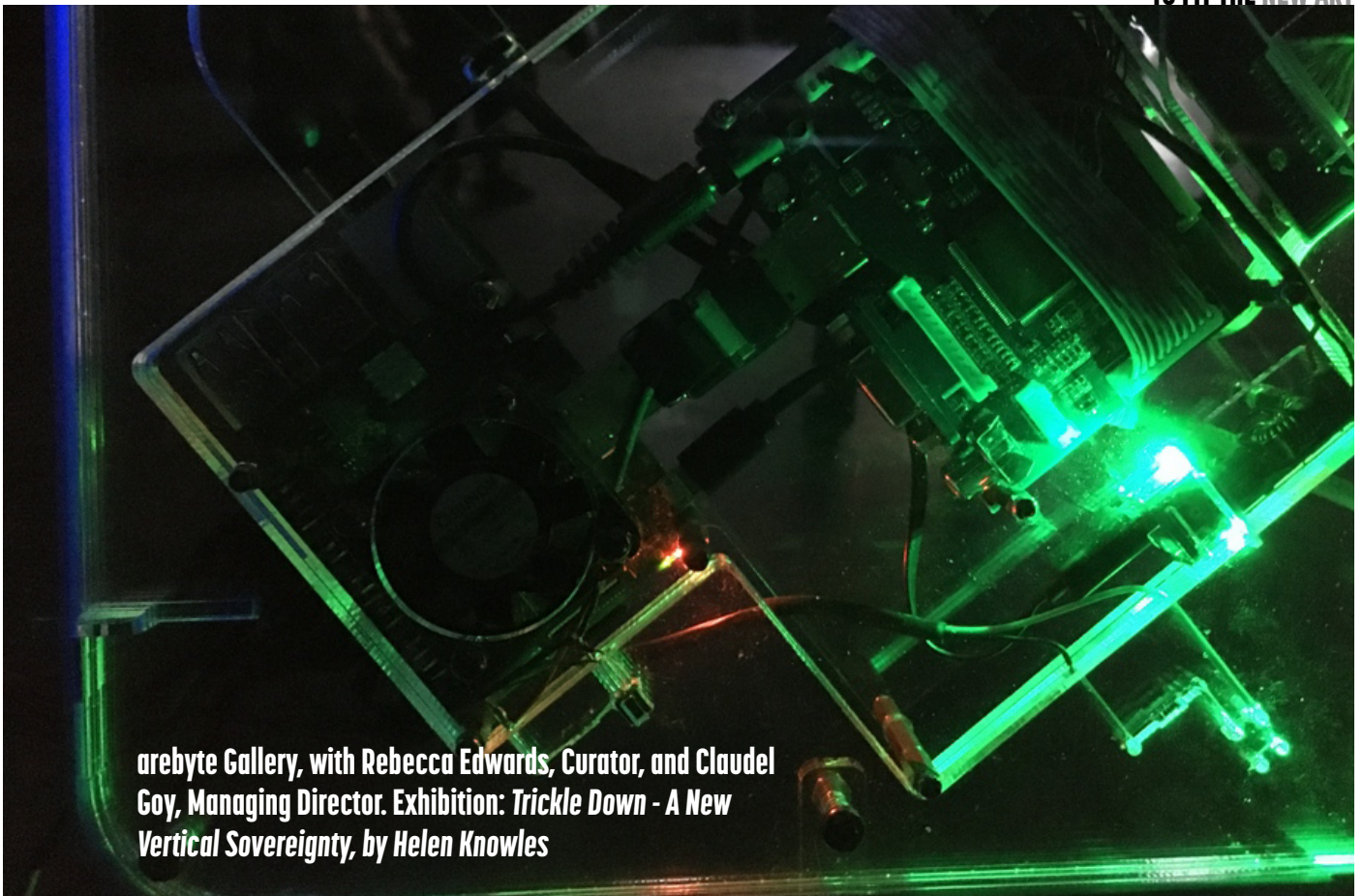
arebyte Gallery, with Rebecca Edwards, Curator, and Claudel Goy, Managing Director. Exhibition: *Trickle Down - A New Vertical Sovereignty*, by Helen Knowles

QUESTION

WHAT ARE THE BEST EXAMPLES OF EMERGING COLLABORATIVE, CROSS-SECTOR MODES OF ART PRODUCTION AND INTERDISCIPLINARY COMMISSIONING TODAY?

Wellcome Collection with Barbara Rodriguez Munoz and Danny Birchall

45 CROSS-SECTOR MODES

Loren Slater (Co-director of Signal Film and Media, UK): Has collaborated with the 'third sector', such as local councils, on a series of artist in residence projects as part of her work with Signal Film and Media. The project explored issues relating to health and wellbeing through new media practices. The residencies ranged from six weeks to six months. There is a balance to be found regarding timeframes; if it's too long, the ideas change and it can become unmanageable, but the longer (slower) residencies generally end up being deeper, yielding more interesting results.

Claire Kovacs (Curator of Collections and Exhibitions, Binghamton University Art Museum, USA): Developed a residency based on Plantbot using 'Plantbot Genetics', which explored the decline of nature and modern farming practices. The project intentionally brought together groups that don't often overlap, such as artists and the agricultural community. As discussions became more focused on Genetically Modified Organisms (GMO) than initially anticipated, Clare used 'emergent programming' to create a panel of people that brought together different perspectives to discuss issues around the concept of GMO. The project, while sometimes stressful, successfully brought people together to get into conversation that otherwise may not have been possible. Within interdisciplinary contexts, it is often the role of the artists to hold the space in which difficult questions can be asked and discussed.

Ben Evans James (Filmmaker and curator, UK/ Germany): Shared anecdotal knowledge of different creative agencies who have experienced challenges when mediating between the success of commercial activity and the desire to create artworks. United Visual Artists (UVA), for example, have developed commercially successful products (music etc.) and continued to create artworks. The studio has in the past used separate, unique studio identities for pursuing and managing arts versus more commercial projects; however, a fluidity between the commercial and artwork perhaps remains as they draw between budgets to create artworks that might never be possible within a traditional arts budget. A very different example was an experimental digital arts studio that focuses on using game engine technology to create work spanning the fields of music, art, and fashion. The studio primarily collaborates with artists, but they were recently approached by a global sports brand and invited to do their first commercial collaboration. They were initially told that they should 'be themselves' (i.e. art led), but during the process, the client's creative director began to assert control and negatively critique their creative work against commercial metrics, like he would a commercial ad agency. However, the client was paying them an 'arts fee', which, while healthy from an arts sector perspective, was a 'a fraction' of a commercial ad agency budget. Interestingly the same creative director posted on social media, saying their project was one of the best he had ever been involved with.

Simeon Soden (Electronic musician/producer, UK): There always seems to be tension between commercial and artwork within the cultural sector. It seems as soon as people start spending money on your work, they feel like they have some control of it, which can be challenging. Within the music industry, there is an interesting phenomenon of compartmentalization relating to creative outputs. A music artist might release music under a range of different names, one for commercial work and one for more 'passion' outputs. The audiences seem fine with that and each 'name' will have its own audience. This tension is mitigated through this approach to compartmentalization. Perhaps this approach of multiple different fields in order to straddle different fields could be used in a playful way to enable artists to take up commercial opportunities while also continuing their own practice?

Suzy O'Hara (Curator and Research Fellow University of Sunderland, UK): There are many benefits to working in the commercial sphere; artists can gain access to larger budgets, material and technologies, be paid as a consultant and charge commercial rates for their expertise, move outside the scope of their normal practice, and R&D new skills and techniques that can feed back into and further develop their arts practice. Commercial opportunities also offer access to global audiences on well-known platforms. However, these benefits come with a caveat of a commercially driven agenda, process and outcome. As interest in collaborations with artists continues to gain momentum within commercial sectors, do we need curators or the arts sector more generally to act as brokers between the two: a role that can support the development and implementation of a set of terms of reference on behalf of artists wanting to work in a commercial context? Perhaps issues of control and tensions between brand messaging and artist intent could be mediated through this approach.

46 HACKING AND INNOVATION MODES

**Emilie Reed (Game Studies Researcher, UK)
on 'Game Jams':** Has found that from an industry perspective, companies running game jams often own the students' prototypes (intellectual property) and use the format to access free or low paid labour. This model is unsustainable and not the right message for students in terms of best working practices. She has used the jam structure/concept with other events that have been less orientated towards "prototyping" as it can be seen as diminishing the effort by framing it as an unpolished version of an idea. Instead, she has used it as a low pressure 'in' for engaging people. The games industry doesn't necessarily fit the normal commercial/artistic binary as both of these are highly professionalised areas. Participants in her events often have some formal background in coding or games design, but also have skills they are developing on an amateur or hobbyist level. Phrases things as a jam and adjusts expectations by using proprietary tools and platforms and encouraging using open source tools. She has increased the timeframes and focused on opening space for individuals to work on individual projects rather than creating teams, while offering regular opportunities for people to come together throughout the process.

Some events that she has enjoyed as a participant include a writing jam, where the timeline is stretched out to a week. Contributions can be as small as a bulleted list and people have also written ten-thousand-word essays in response to the prompts. *Sunday Sites*, a collaborative HTML writing jam, happens over a weekend once a month.

Victoria Bradbury (Assistant Professor of New Media, UNC Asheville, USA): Has thought a lot about how important materials are to what actually gets created during hacks and labs and has often focused on using data, or physical computing or sculptural materials. Using open source software as a material to set the structure for the event will lead to what types of things get made and be made and what platforms they can be released on. Time, and the value of time, are a huge issue for hack or jam style events. How do you incentivise people to participate and make it appealing to people who are very busy with their practice, and make them want to put their time into these events?

Marialaura Ghidini (Independent curator in Italy and visiting researcher at the Exhibition Research Lab in UK): It is the form of the exhibition that allows different people to embed themselves in a system, hacking recognises we are all embedded in this capitalist system and we go with it. *#exstrange* (2017) was an online curatorial project generating a collection of artworks conceived by contemporary artists and designers to be encountered, auction-style, by the users of one the largest marketplaces on the web, eBay. The artists involved were not necessarily interested in either disrupting technology, or hacking or infiltrating systems. Because of the format, the exhibition required people to infiltrate a system. Rather they were exploring how to challenge the meaning of an object and change the system of exchange in an established proprietary platform or online marketplace such as eBay.

Loren Slater (Co-director of Signal Film and Media, UK): Has worked with Mishka Henner for over ten years, who has developed from a social realist photographer but now uses the archive of the Internet as a tool and its content to subvert large, global commercial organisations. Subverts power structures; using the Internet as an exhibition space for a durational work. A good example of an artist who is using the Internet and social media. You communicate a crisis using new digital media and why that is having more impact than more traditional art forms such as photography. He felt that photography had done a great job at documenting power whereas with new media art he can get to the nub of it and research, document, explore and expose power structures in a way that he couldn't with traditional photography.

47 ARTS-LED INNOVATION?

Art' and 'innovation' are both questionable terms, and have historically often been assumed to belong to separate economic sectors, but more recently, the debate on the importance of art in the STEAM (Science, Technology, Engineering, Arts and Maths) approach to education, and the fusion of technology and creative skills, have shifted the boundaries. The perception that 'creativity' is solely for the artist to generate artworks is no longer true. Creativity is now seen as one of the defining characteristics of developed 21st Century economies. 'Creative Economies' is a term used to describe creativity throughout a whole economy and recognises the new connections that are occurring between disciplines, skills and sectors. These connections often lead to new possibilities that can generate innovations that are applicable within industry (products, services, tools), interdisciplinary research (new knowledge, processes) and wider societal challenges (climate change, health).

However, arts-led innovations often emerge at the periphery (or thresholds) of complex knowledge ecologies, while artists, creatives and cultural producers are often acknowledged as role models who have an ability to traverse established boundaries of knowledge to create new ideas, new ways of thinking, new modes of seeing and new contexts for doing. However, little is understood about their working models, in particular, models that can critically contribute to economic, research and social challenges and also generate radical new knowledge, methods, artworks and cultural experiences. Conversely, the very proximity and engagement of 'arts-led innovations' to technology and commercial agendas has meant that their work has rarely managed to find a 'critical' home within the Arts. This leaves them in the precarious position of being overlooked in both the fields of art and innovation (Manovich, 2013).

Art Hack Practice: Critical Intersections between Art, Innovation and the Maker Movement is a co-edited volume by Victoria Bradbury and Suzy O'Hara (2019). Bridging art and innovation, this book explores novel models of art making and curatorship that are emerging within new contexts of production that run parallel to

or against the phenomenon of 'maker culture'. Each case study exemplifies interdisciplinary practices that challenge perceived distinctions between sites of artistic, social and economic production by brokering new, direct ways of working between them. The book refocuses attention from maker spaces and innovation labs as sites for commercial ventures and start-ups to the use of these spaces by artists and curators to create and disseminate art.

In order to deepen our understanding of current attitudes towards the relationship between 'art' and 'innovation', participants of the Online Reprise were invited to respond to the following question.

QUESTION

WHAT DOES ARTS-LED INNOVATION MEAN TO YOU?

Tania Aedo (Max Aub Extraordinary Chair, at UNAM, MX): Tania is collaborating with an interesting organisation in Tokyo called FabCafe, a global network of cafes that are part of Loftwork Inc. The cafes have machines for digital fabrication, such as 3D printers and laser cutters installed in a cafe space where people come together. Talking about this binary between art and commercial activity, the 'FabCafe' is not a commercial franchise. You run your cafe and pay your bills from selling coffee and food but it's separate from the creative lab aspect. There is a huge space for creativity but they don't talk about innovation although it's integrated. They are very respectful about artwork there. She feels comfortable there.

Clare Gannaway (Curator: Contemporary Art, Manchester Art Gallery, UK): On a personal level, I recoil from words like innovation. I feel what art brings is a messiness rather than the production of a slick end product. Art institutions have been very focused on end products and a treadmill of exhibitions and processes that lead to a certain point and then you are onto the next idea and the next product. I'd like to disrupt that idea of what innovation is. For me, it could be about what art is and can be in the world. In that disruptive sense, it's about bringing different ideas and people together to explore that messiness and nuance, rather than that slickness.

Loren Slater (Co-director of Signal Film and Media, UK): A lot of funders want us to talk about innovation and I don't know if what we do is innovative. It's fun and it's interesting, it broadens people's horizons, it's about bringing people together. Innovation is a tricky word.

Ben Evans James (Filmmaker and curator, UK/ Germany): The idea of innovation feels like a business word. In an arts context, perhaps one way we could think about this is harnessing the radical imagination instead. Coming back to that idea of art being a part of capitalist structures and critiquing them, we need to understand art's role within creating those structures in the first place. For example, when I think about our climate crises and the current ecological moment, I'm mindful that since the Enlightenment, art and disciplines such as photography, films, advertising and painting have helped build up this idea of a human mastery of the planet, suggesting that we are not intertwined in our environment. Art has a responsibility to reimagine that relationship and that can be done through the harnessing of the radical imagination rather than thinking about a word like innovation.

Victoria Bradbury (Assistant Professor of New Media, UNC Asheville, USA): This notion of the messiness that Clare brought up is really important and just allowing things to be messy in a way that the commercial space can't; or, that they want to emulate but they can't quite because they have to monetise something. When we are so embedded in commercialised digital spaces, how can we make people aware that it can also be a space for mess? As an educator working with young people who are so used to the slickness, I want to make sure their digital image is really well curated. How can we teach people how to break from the carefully mediated and be messy rather than slick and commercialised?

Stephanie Fletcher (Assistant Curator, University of Salford Arts Collection, UK): I never use 'innovation' in the artist-led context because it is very troublesome but, in the university, when we are increasingly commissioning and working with scientists, academics and engineers, exploring what innovation means on a surface level is a starting point for conversation. For the academics or scientists that we are working with, that's something they are quite driven by. It feels like it's a pursuit for answers, for newness and for usefulness. I'm not sure that's what we want to achieve. Is innovation trying to find answers, but artists look for more questions along the way? Funders like to hear the word innovation, but when we get our teeth into a project, something we always come back to is storytelling as a shared ground. We are all storytellers when it comes down to it. Storytelling for me gives you loops and circles rather than the slick trajectory into the future. Let's get back to the mess.

Fikriyah Ibrahim (Independent curator, Brunei): What is arts-led innovation exactly? It depends on exposure the artist has or has gone through. When I came back to Brunei after my studies I found the idea of digital/ virtual exhibition is not common so that idea could be seen as a type of innovation here, but not the UK and America.

Emilie Reed (Game Studies Researcher, UK): I find James Newman's book *Best Before* really useful as it paints a picture of how, in a historical sense, video games and all the creative labour that goes into them has been sacrificed in the pursuit of economic expediency, which is usually what's phrased as 'innovation'. For me innovation is moving now towards low tech or permaculture computing. Functionally, there is so much more that you could do on a geocities homepage than on a platform like Twitter now. I'm interested in looking at those kinds of things in a historical sense and seeing what we had then and comparing it to the mainstream media people engage with don't have now.

Simeon Soden (Electronic musician/producer, UK): From the musical context for it to be both arts led and innovative, it has to come from the bottom and not from the top down. You can never get away from the fact that it is going to be some kind of a repurposing of a commercial system, object, idea, product for a cultural purpose which takes it away from the commercial and moves it towards a cultural value. If you look back at the history of music, you will find that repurposing the obsolete as a way of making music — because it's cheap and easy to get hold of or doesn't have certain restrictions that new products might have because of the way things have moved on — can be an interesting place to start as well.

Marie-Therese Luger (Curator and researcher, Sweden): I have been working with this question mainly from an activist and critical point of view — and closely related to the different understandings of "curatorship" in museum-institutions with different fields of expertise, such as museums of natural history or of "Nordic" culture-history. Being active myself as a practice-centred researcher I have found that this makes conversations with these institutions too complex to enable discourse. The varying perception of the Arts (from something "coveted" for its creativity to something shunned for its disorganisation) is in my opinion a relevant entry point.

50 APPENDICES

A1: Bios of Participants of 2021 Online Reprise

These are very brief biographies with links, and included are some curators who had hosted course visits. For participants the bio notes the year that they first attended the course. These are just the participants who could attend the 2021 event; a list of all yearly participants can also be found on the blog at: https://curatingprofessionalcourse.wordpress.com

Organisers, Rapporteurs and Writers:

Victoria Bradbury completed her PhD research at the University of Sunderland, and is Assistant Professor of New Media at the University of North Carolina at Asheville.

Rene Garcia Cepeda completed his PhD research at the University of Sunderland, and is a curator and educator based in Mexico.

Ben Evans James is an AHRC-funded PhD researcher at the University of Sunderland, and is a filmmaker and curator at South Kiosk in London and the transmediale festival, UK/Germany.

Beryl Graham is Professor of New Media Art at the University of Sunderland, and is co-founder and co-editor of CRUMB. http://www.berylgraham.com

Suzy O'Hara is a Research Fellow at the University of Sunderland, and Project Manager/Curator at the Wellcome Sanger Institute leading a public engagement project for the global scientific research initiative, the Human Cell Atlas.

Georgia Smithson is an AHRC/NPIF-funded PhD researcher at the University of Sunderland, and works at the National Glass Centre.

Simeon Soden completed his AHRC/NPIF-funded PhD research at the University of Sunderland, and is an electronic musician/producer.

Speakers:

Tania Aedo is coordinator of Cátedra Max Aub for Transdiscipline, Art and Technology, at the National Autonomous University of Mexico City.

Irini Papadimitriou is creative director of FutureEverything, Manchester, and has also worked for the Victoria and Albert Museum, and Watermans Art Centre in London.

Participants and Hosts:

Stephanie Fletcher, 2019, Assistant Curator, University of Salford Arts Collection, UK: https://artcollection.salford.ac.uk/

Clare Gannaway, 2014, Curator, Contemporary Art, Manchester Art Gallery, UK: http://www.manchesterartgallery.org

Marc Garrett, Co-director of Furtherfield (host): https://www.furtherfield.org

Marialaura Ghidini, Italy, 2014, completed her AHRC-funded PhD research at the University of Sunderland, is an independent curator, and affiliated researcher at Exhibition Research Lab (ERL) at Liverpool John Moores University, UK: https://marialaura-ghidini.hotglue.me/about

Liam Jefferies, 2015, completed his AHRC-funded PhD research at the University of Sunderland, and teaches at the University of Leeds.

Clare Harding, 2019, Digital Curator, Fundraising & Partnerships Manager and resident PhD researcher at MOSTYN, UK.

Fikriyah H. Ibrahim, Brunei, 2015, University of Sunderland MA Curating graduate, and independent curator.

Claire Kovacs, USA, 2020, Curator of Collections and Exhibitions, Binghamton University Art Museum: https://www.clairekovacs.org/

Emily Lawhead, USA, 2020, PhD candidate in Contemporary Art History and New Media, University of Oregon: https://www.linkedin.com/in/emily-lawhead/

Melanie Lenz, Curator, Digital Art, Word and Image, Victoria and Albert Museum (host).

Marie-Therese Luger, Sweden, 2019, Curator and Researcher: https://utstallningskritik.se/2021-1/practice-centered-artistic-research-at-culture-history- museums/

Emilie Reed, UK, 2016, PhD graduate researching the history of displaying videogames in museums and other arts contexts: http://www.emreed.net

Lucie Robson, Cyprus, 2016, University of Sunderland MA Curating graduate, and writer: Lucie Robson - Writing Portfolio (clippings.me)

Loren Slater, 2016, Co-director of Signal Film and Media, UK. https://signalfilmandmedia.com/

Craig Smith, USA, 2018, Associate Professor at the University of Florida, College of the Arts: http://unaffiliate.us/ https://arts.ufl.edu/directory/profile/1327

Design Museum with Alex Newson, Senior Curator (*Designer Maker User* lead); Rebecca Dixon, Learning Producer: Further and Higher Education; David Houston, Learning Producer for Schools

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ART

PHD Co-programmer	Tate	Whitechapel Gallery	Serpentine Gallery	Hayward	Barbican Art Gallery
2014 Suzy O'Hara	Mark Miller, Convenor, Young People's Programmes	Helen Kaplinsky, guest curator			
2015 Victoria Bradbury and Suzy O'Hara	Laura Turner, Curator, Young People's Programmes		Ben Vickers, Head of Digital	Cliff Lauson, Curator, Hayward; Sarah Toplis, Southbank WebWeWant Festival	
2016 Dani Admiss	Laura Turner, Curator, Young People's Programmes; Jen Ohlson, Tate Collectives Digital Producer	Séamus McCormack, Assistant Curator, and Emily Butler, Curator			
2017 Dawn Bothwell	Leyla Tahir, Tate Collectives Producer, Tate Digital; Rachel Noel, Young People's Programmes; Rebecca Sinker, Convener Digital Learning				Neil McConnon, Head of Barbican International Enterprises
2018 Georgia Smithson and Rene Cepeda	Leyla Tahir, Tate Collectives Producer, Tate Digital; Rachel Noel, Young People's Programmes; Rebecca Sinker, Convener Digital Learning; Pip Laurenson, Head of Collection Care Research; Patricia Falcao, Conservator Time-based Media				
2019 Catrina Ure and Bruce Gilchrist	Leyla Tahir, Tate Collectives Producer, Tate Digital; Rachel Noel, Young People's Programmes; Rebecca Sinker, Convener Digital Learning; Adrian Shaw, Curator Late at Tate Britain; Patricia Falcao, Conservator Time-based Media				
2020 Ben Evans James	Tanya Boyarkina, Assistant Curator Digital Learning; Adrian Shaw, Curator Late at Tate Britain; Ana Ribeiro, Conservator Time-based Media		Ben Vickers, Chief Technology Officer; Kay Watson, Digital Curator		

Key: ▓ Visited **X** Closed

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ART CONTINUED

PHD Co-programmer	Morgan Quaintance at Cubitt	Iniva	Banner Repeater	Carroll/ Fletcher
2014 Suzy O'Hara			Ami Clarke, curator	Jonathon Carroll, Co-Director
2015 Victoria Bradbury and Suzy O'Hara				Jonathon Carroll, Co-Director
2016 Dani Admiss	Cubitt Gallery Morgan Quaintance, Cubitt Curatorial Fellow 2016			Jonathon Carroll, Co-Director
2017 Dawn Bothwell		Stephanie Moran, Library and Information Manager; Ting-Ting Cheng, Artist in Residence in Iniva Library		Steve Fletcher, Co-Director; Jessica Cerasi, Exhibitions Manager
2018 Georgia Smithson and Rene Cepeda				**X**
2019 Catrina Ure and Bruce Gilchrist				**X**
2020 Ben Evans James		Simina Neagu, Programme & Operations Coordinator, Asst. Curator; Tavian Hunter, Library and Archive Manager		**X**

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DESIGN & MEDIA

PHD Co-programmer	V&A	Design Museum	The Photographers' Gallery	Autograph
2014 Suzy O'Hara	Douglas Dodds, Senior Curator, Word and Image Department; Melanie Lenz, Patric Prince Curator of Digital Art; Louise Shannon, Digital Programmes Manager; Irini Papadimitriou	Oliver Winchester, Curator – Permanent Collection Display		
2015 Victoria Bradbury and Suzy O'Hara	Melanie Lenz, Patric Prince Curator of Digital Art; Irini Papadimitriou, Programme Manager, Digital Programmes		Katrina Sluis, Curator (Digital Programme)	
2016 Dani Admiss	Douglas Dodds, Senior Curator, Word & Image; Melanie Lenz, Patric Prince Curator of Digital Art; Irini Papadimitriou, Programme Manager, Digital; Corinna Gardner, Curator of Contemporary Product Design		Katrina Sluis, Curator (Digital Programme)	
2017 Dawn Bothwell	Douglas Dodds, Senior Curator, Word & Image; Melanie Lenz, Patric Prince Curator of Digital Art; Irini Papadimitriou, Programme Manager, Digital; Corinna Gardner, Curator of Contemporary Product Design		Katrina Sluis, Curator (Digital Programme)	
2018 Georgia Smithson and Rene Cepeda	Douglas Dodds, Senior Curator Word & Image; Anna White, maternity leave cover for Melanie Lenz; Irini Papadimitriou, Programme Manager, Digital Programmes; Corinna Gardner, Curator of Contemporary Product Design; Natalie Kane Curator of Digital Design. Design	Alex Newson, Senior Curator (Designer Maker User lead); Rebecca Dixon, Learning Producer: Further and Higher Education; David Houston, Learning Producer for Schools	Katrina Sluis, Curator (Digital Programme)	
2019 Catrina Ure and Bruce Gilchrist	Douglas Dodds, Senior Curator Word & Image; Melanie Lenz, Patric Prince Curator of Digital Arts; Corinna Gardner, Curator of Contemporary Product Design; Marie Foulston, Curator of Video Games; Marc Barto, Digital Learning Producer; Lisa Galvin, Digital Programmes Team Leader			Ali Eisa, Public Programme Manager (Education)
2020 Ben Evans James	Douglas Dodds, Senior Curator Word & Image; Melanie Lenz, Patric Prince Curator of Digital Arts; Natalie Kane Curator of Digital Design; Corinna Gardner, Curator of Contemporary Product Design; Marc Barto, Digital Learning Producer		Jon Uriate, Curator (Digital Programme); Sam Mercer, Producer of the Digital Programme including the Media Wall	

Key: ▢ Visited   **X** Closed

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NEW MEDIA ART

PHD Co-programmer	furtherfield	ODI Data as Culture	Tenderpixel	arebyte Gallery
2014 Suzy O'Hara	Marc Garrett, Co-Director	Julie Freeman, Art Associate		
2015 Victoria Bradbury and Suzy O'Hara	Marc Garrett, Co-Directo	Julie Freeman, Art Associate; Hannah Redler, ODI Commissioning		
2016 Dani Admiss	Marc Garrett, Co-Director	Julie Freeman, Art Associate; Hannah Redler, ODI Commissioning		
2017 Dawn Bothwell	Marc Garrett, Co-Director	Hannah Redler, ODI Commissioning	Borbála Soós, Director and curator; Stella Sideli	
2018 Georgia Smithson and Rene Cepeda	Marc Garrett, Co-Director	Hannah Redler, ODI Commissioning; Julie Freeman, Art Associate		
2019 Catrina Ure and Bruce Gilchrist	Marc Garrett, Co-Director	Hannah Redler, ODI Commissioning; Julie Freeman, Art Associate	**X**	
2020 Ben Evans James	Marc Garrett, Co-Director	Hannah Redler Hawes, Director of Data as Culture	**X**	Rebecca Edwards, Curator; Claudel Goy, Managing Director

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NEW MEDIA ART & DESIGN PRODUCTION

PHD Co-programmer	Somerset House	MachinesRoom	SPACE	White Building
2014 Suzy O'Hara			Paul Pieroni, Exhibitions Curator	
2015 Victoria Bradbury and Suzy O'Hara	Karishma Rafferty (Curator, Learning and Events); Shonagh Marshall (Curator, Exhibitions)			Rachel Falconer, Head of Art and Technology
2016 Dani Admiss			Josh Dale, Art and Technology Coordinator; Persilia Caton, Artist Commissions Manager	
2017 Dawn Bothwell		Nat Hunter, Director	Nathalie Boobis, Artist Commissions Coordinator	
2018 Georgia Smithson and Rene Cepeda	Marie McPartlin, Director, Somerset House Studios	Gareth Owen Lloyd, Head of Maker Projects		X
2019 Catrina Ure and Bruce Gilchrist	Leonara Manyangadze, Programme Producer, Somerset House Studios	Gareth Owen Lloyd, Head of Maker Projects		X
2020 Ben Evans James	Sarah Cook, guest co-curator of 24/7; Stella Sideli, Artist Producer	X		X

Key: ▨ Visited   **X** Closed

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ART & SCIENCE

PHD Co-programmer	Wellcome Selection	Science Museum	Science Gallery London	Arts Catalyst
2014 Suzy O'Hara	James Peto, Exhibitions Curator	Hannah Redler, Head of Media Space and Arts Programme; Iain Pate, Curator, Information Age		
2015 Victoria Bradbury and Suzy O'Hara	James Peto, Exhibitions Curator; Danny Birchall, Digital Manager			
2016 Dani Admiss	Danny Birchall, Digital Manager			Claudia Lastre, Programme Director
2017 Dawn Bothwell	Danny Birchall, Digital Manager; Bárbara Rodríguez Muñoz, Curator			
2018 Georgia Smithson and Rene Cepeda	Danny Birchall, Digital Manager; Honor Beddard, curator of Making Nature and Museum of Modern Nature			
2019 Catrina Ure and Bruce Gilchrist	Emily Sargent, Curator; Danny Birchall, Digital Manager		John O'Shea, Head of Programming; Stephanie Delcroix, Spare Parts Season curator; Melanie Davies, Events and Research Coordinator	
2020 Ben Evans James	James Peto, Head of Wellcome Collection; Danny Birchall, Digital Manager		John O'Shea, Associate Director (Creative); Jennifer Wong, Head of Programming; Alastair Frazer, Gallery and Technical Manager; Judit Agui, Production Assistant	

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PHD Co-programmer	Museum of London	Imperial War Museum (IWM)	BL Labs
2014 Suzy O'Hara			Mahendra Mahey, BL Labs project manager
2015 Victoria Bradbury and Suzy O'Hara			
2016 Dani Admiss			
2017 Dawn Bothwell			
2018 Georgia Smithson and Rene Cepeda	Foteini Aravani, Digital Curator	Sanna Moore, Senior Curator (Art)	
2019 Catrina Ure and Bruce Gilchrist		Rebecca Newell, Head of Art; Iris Veysey, Art Curator, Contemporary Conflict	
2020 Ben Evans James			

Key: ▢ Visited   X Closed

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A3: Victoria Bradbury: Commissioned Writing

This is also posted on the course blog at:
https://curatingprofessionalcourse.wordpress.com

7 years of CRUMBs: From buses, tubes and bustling pubs to discrete digital portals

In February 2014, my husband Mark spent a great deal of time in museum bathrooms. My son Xavier was 3-months-old at the time. I planned to attend the inaugural *Curating Art after New Media — Professional Development Course* in London to launch my transition from maternity leave back to writing up my CRUMB PhD on participatory new media artworks. As we, the course attendees, followed Beryl Graham like a skein of geese between a multitude of new media art venues across London, Mark, also a PhD student at the time, followed us with a collapsible pram as Xavier cooed and cried and I darted out of meetings to breastfeed him in a myriad of museum bathrooms.

Our band trotted for seven days straight from bus stops and tube stations to the Open Data Institute (ODI), Tate, Carroll/ Fletcher and countless other galleries. We not only viewed exhibitions, but also went behind the scenes to experience special collections and archives, to peer into curators' offices and to examine how education departments enacted their outreach. The ability to view each of these venues in person — to speak with the curators and to meet in pubs after to hash out how they were doing what they were doing — was truly astonishing in terms of the breadth of knowledge generously offered about curatorial practice at the intersection of art and technology. That generosity was a privilege brought about by Beryl Graham's extensive network in the field of new media, built over years of travelling to international conferences and exhibition venues, publishing, mentoring and curating in this field.

As students on the course, we knew we were benefiting from engaging with these professionals and these exhibitions at this moment. The scope and the ramifications of the networks we were building between each other, however, would only be realised over the coming years — we published and exhibited together, met again at conferences and learned more about one another's practices and we continue to rely on this network as a key point of contact for people engaged in cutting edge new media research.

Six years after that first course, in spring 2020, fellow CRUMB alumna Suzy O'Hara and I had recently published our book, *Art Hack Practice: Critical Intersections of Art, Innovation and the Maker Movement* (which included methodologies and participants we met on the course in 2014). Before the COVID-19 pandemic hit, Suzy and I, who live in the UK and US, respectively, had big plans for coming together on the same continent to conduct a series of in-person book launches. In January and February, Suzy did present panels

at the opening night of the *Vorspiel* programme in Berlin, Germany, and at London's ODI. These each featured several chapter authors from the book with Suzy moderating the discussions. I was making arrangements to travel to the UK to present several more launch events with her in summer 2020 and hoped to join part of that year's course. Like those of so many, these plans did not materialise because of COVID-19-related lockdowns. Suzy and I, in conjunction with Irini Papadimitriou from FutureEverything (who we first met on the 2014 course) worked in the early summer of 2020 to create a new direction for the launches. We drew upon our networks, including those that harkened back to 2014, to plan a series of three discussions, each including a globally dispersed panel of chapter authors and invited respondents. Our conversations began with the content from *Art Hack Practice*, applying it to the circumstances of the early COVID-19 pandemic restrictions when new media practitioners were thinking through what the pandemic would mean for art and curating, particularly of interactive and participatory artworks. Artists and curators were asking questions and beginning to test modes for moving more exhibitions online.

In the intervening 18 months, I have at times been asked, as a new media professor, whether it was fairly easy to pivot my interactive art, design and virtual reality courses online. After all, we are already working with technology; can't we just do that remotely? Sure, there were benefits to already having a strong grasp of creating web-based content and having used Zoom a handful of times before being forced to reside there, but transitioning new media practice to a solely online and geographically dispersed endeavour? What would this mean for teaching? What would this mean for exhibitions? For curators? For artists? For researchers? As we practised remote and dispersed pedagogy and attended remote panels, meetings and exhibitions, the benefits and shortcomings of this new and ever-changing reality became more evident.

As Beryl pivoted to hold the eighth Short Course online in summer 2021, it was an exciting opportunity to explore where we had come at this stage in the pandemic and what researchers in our field were thinking about after 1.5 years of participating in the field of new media under pandemic conditions. What were the benefits and the shortcomings looking like now? On the side of benefits, the cost savings and opportunity of being able to engage and invite anyone with a strong enough Internet connection to be part of a conversation is exciting and presents many opportunities, particularly for people who don't live in a major city such as London with a high concentration of art venues. Challenges are many; Suzy mentioned in the 2021 course 'Zoom fatigue', when people have spent so much time working in front of a screen, do they really want to volunteer to attend additional sessions to view exhibitions and panel presentations? Marialaura Ghidini and Dani Admiss mentioned the shift in quality of online exhibitions as venues and curators rushed

to move existing events and exhibitions to virtual spaces. Reaching audiences can be challenging when dynamic and bespoke content is presented through new platforms. Viewers must have reliable and robust Internet connections, a willingness to be playful in the browser and time to explore.

The summer 2021 course was most successful in its role as convener. CRUMB has always been centred on conversation about practice; how do you do what you do with bleeding-edge media that present technical and conceptual challenges? Convening across continents, the 2021 participants were able to hash out where we have been and where, as a field and as practitioners, we might be going. For me, it was a highlight of this course to meet Dr Rene Cepeda, a recent CRUMB PhD from Mexico also specialising in interactive media. Tania Aedo discussed her experiences of thriving through crisis after many years running Laboratorio Arte Alameda, a new media and contemporary art museum in a 17th Century church in Mexico City. Tania's broad experiences working there, from collaborating closely with maintenance staff to creating a safe and dry space to exhibit works to working through the 2017 Puebla earthquake, have created resilience in her curatorial practice. At the start of the pandemic, Tania began teaching at the National Autonomous University of Mexico where she applies her ability to thrive in challenging situations. She spoke about encouraging creativity in her students, particularly when

they are situated in discrete Zoom portals and when they have spent so much time alone during the pandemic. She shows them artworks and invites guest speakers such as Rafael Lozano Hemmer to engage with her classes. Tania has found students to sometimes be discouraged that they can't create works at the scale of Hemmer's installations. With this in mind, she strategises ways to encourage students' creativity with materials that they have on hand, even when their experience of the world is currently limited to the four walls of their bedrooms.

As I logged off the Zoom call at the end of the 2021 course, after raising a mug to the other attendees, I turned to my son Xavier, now 7, as he dashed behind me on the way to the kitchen for a snack. I considered what a short amount of time had passed since bumping his pram along London's brick streets between venues in 2014… and what a nebulous moment we are now in for our field and for our world. Where will new media artists and curating be in another 7 years? As experts of digital creativity, how will our knowledge be dispersed or diluted as everyone moves online? Will the learnings from this time and from a long history of new media curating transfer into future modalities? Or will everyone run from the digital world back into physical spaces when the pandemic peters out? I will have to report back when Xavier is 14.

**Banner Repeater, group document writing.
Photograph by Victoria Bradbury**

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