

06 Tomorrow Zone

August 2024

Yasmin Khan 00:20

Welcome to the Museum of Truth & Lies, curated by me, Yasmin Khan. Joining me in the Tomorrow Zone is digital culture expert, Dr Oonaugh Murphy.

Computerised Voice 00:38

Search result for Dr Oonaugh Murphy from Goldsmiths University of London. Oonaugh is a Senior Lecturer in Digital Culture and Society.

Yasmin Khan 00:49

She'll share her visionary insights on how artificial intelligence is shaping the future of storytelling in museums.

So, Oonaugh, tell me what personally drives your interest in AI?

Oonaugh Murphy 01:03

So, my research is always focused on the role of museums in service of society. I'm quite interested in the contemporary relevance of museums as knowledge institutions, but also places where culture is made not just displayed. And so, I'm interested in that intersection between museums and emerging digital cultures and practices, and for about the last five years, I focused primarily on the rise of artificial intelligence in terms of museums thinking about how they manage their collections, how they engage with their visitors, but also how they influence contemporary culture and how publics understand what digital technologies are.

Yasmin Khan 01:46

And so, tell me about the toolkit that you made and the impact it's had on the sector.

Oonaugh Murphy 01:51

And the aim of that project, when we started out, was to develop a code of ethics, or a code of practice that would really facilitate a shared language around how museums might use these technologies. But what we found through the project was that for most people existing codes of practice, whether that's a Museum Association Code of Practice or codes of practice that exist within computing disciplines, were not documents that were used readily. So as a result, we decided not to develop another code of practice that wouldn't be used. And instead, we developed a toolkit and that was really developed collaboratively through partners. So, the toolkit includes use cases that are designed to be read by the

museum director through to front of house staff. It was published open access, creative commons license. And one of the things that we were quite surprised about was as soon as it was published, we were contacted by professionals working in different countries who really wanted to look at how they could use it in their region. We were approached originally to translate the document but I come from Northern Ireland and I really hate when the idea that England does it best is brought over. You know, if a Museum in London is doing it, we should do it too. So, for each translation, I insisted that we have country specific case studies so it's now been published in German, Spanish and Italian and we're currently working on a Chinese translation. Because for me, technology is a social product. It's not simply hardware. So, if we're looking at how you develop projects in different regions, it's really important that we embed local knowledge into those development processes. One area we're looking to develop is potentially a new framework around developing commercial relationships with vendors. So commercial providers to the museums and heritage sector are currently promising a lot in terms of what they can deliver when it comes to AI. And so, our framework very much focused on thinking about data in house and thinking about what capacity you have to maybe use off the shelf tools. But there seems to be an emerging space around, not quite off the shelf, so working with a commercial vendor who's building you something, they will be using some component of off the shelf technology, but actually the reality of what they deliver versus what they promise, I think is probably the challenge that museums and heritage sector will face over the coming years.

Yasmin Khan 04:35

You mentioned some case studies in the toolkit. Are there any new ones on your horizon that you would put in for the next iteration?

Oonaugh Murphy 04:42

So I think when it comes to case studies, when we first developed the project in 2019 we mapped a 100 examples of museums using AI. So, AI has been used in museums. There are lots and lots of different case studies out there. For me, I'm quite interested in categorising the different types of case studies. So, for example, there's a block of work in terms of AI adoption in museums that focuses on visitor operations and marketing and selling tickets, getting people through the door. There's a block of case studies that focus on collections management, and then there's a block of case studies, which is growing, and I think is a particularly interesting area around what I defined as critical technology discourse. And that's museums that are commissioning and collecting artists that are engaging with the social challenges that these technologies have and encouraging their publics to develop more critical lens. So, I wouldn't say there's a specific case study, but I think starting to categorise the work allows us to view it through different prisms. And so, if we're thinking about, you know, sales orientated approaches to visitor operations, that feels like a different ethical framework. Are we collecting data? Are we processing data for commercial gain? How does that align with our mission as a public service institution, versus commissioning an artist or collecting new work that's maybe critical of some of the

big tech companies. So I wouldn't say there's a specific case study, but I'd say we're starting to develop better taxonomies in understanding the applications of how these technologies are being used in museums.

Yasmin Khan 06:33

Do you feel comfortable to sort of say which institutions are doing it well and which could do better?

Oonaugh Murphy 06:38

Yeah, so it's really interesting. 2019-2020, we were starting to see the likes of the big nationals so, the National Gallery, the Science Museum, Tate, the Metropolitan Museum of Art New York, playing in house. And that kind of follows the same pattern as we've seen with other emerging technologies. So if we look at, for example, apps. There's first museums to have apps were the first museums to be playing with AI. Covid really stopped this, because suddenly, for the first time digital became core business. So, any ability to be experimental went because suddenly your digital staff for your front house team because of covid, your museum was closed therefore all digital resource went into this very front focused emergency response. And so, we really had like a two or three year window where, I would say, very little happened in museums when it came to AI as a result of capacity. Meanwhile, the wider world AI was becoming ever faster and more present. I'd say that's changing. In the last year to 18 months, we're starting to see organisations engage in these technologies more frequently. Inevitably, it is the bigger institutions that have more in house resource but for smaller institutions there's the benefit that the bigger nationals will try stuff out and get it wrong and so by the time it reaches institutions with less resource, they should have the skills and knowledge to be able to apply stuff in a more efficient way.

Yasmin Khan 08:19

That's interesting, because I was thinking maybe there's a risk where elitism sort of creeps in, if the nationals have the advantage, because they have the resource and the infrastructure, but what you're saying is that they can kind of show proof of principle, and then the smaller ones can do more agile, experimental stuff. Maybe, do you think?

Oonaugh Murphy 08:38

Yeah, I think exactly and I think also a lot of it comes down to funding. So if we look at the models of museum funding in the UK, increasingly moving towards that almost American model, where digital products and services are developed on a project basis and are funded on a project basis. So, they're quite short term in view. In a kind of utopian future, museums would be well funded, and they would spend a lot of time and resource in that kind of essential back end work of thinking about collections management, by thinking about data, about building their data. And ultimately, museums are the original data set, so they have a lot to teach the world. But data sets don't get money from funders. So

there's a drive towards that front end, that novel that visible AI. And I think that's kind of where we're at the minute, is this push towards visible AI. Ultimately, the organisations that invest in the back end will survive this shift better in the long term.

Yasmin Khan 09:43

On the matter of funding. Do you think there are possibly any conflicts of interest for corporate sponsorship, particularly with corporations that might be sort of having a more technological, predetermined outlook? Could you say a bit more on how museums could reconcile their public due. With actually funding their innovative practice?

Oonaugh Murphy 10:03

Yeah. So, I think there are challenges, and in many ways, I would say some of the challenges around oil and climate change focused investment are likely to be the same concerns people have when it comes to museums partnering with big tech companies. So again, it's about looking at our histories and learning. What do we learn from the controversies around BP, and how can we use that to build better strategies going forward, more resilient, strategies that are less responsive to public outcry, like we can guess, we can see already. You know, what tech companies the public have issues with. So, I think it's about developing funding strategies that learn from what you've done before. That's one aspect and that's in terms of like direct giving of money, which is very rare. Very few big tech companies give money out in the way traditional businesses do and very few big tech companies are corporate partners. What the biggest, I guess, area of engagement is more support in kind so it's, you know, we'll let you have access to this technology before it's launched in public. That means that the tech company gets access to world's leading collections, to innovative artists, to new stories, to creative content, and it does give museums access to emerging technologies. But the balance in that power relationship is really important, and it's really important that museums aren't responsive to requests, but instead they have developed a more strategic response, because tech companies aren't going away. So actually sitting down and going, well what relationships have we had in the past that were good? What relationships have we had in the past that were bad? How can we use those learnings to develop a more forward-thinking strategic approach that recognises the value that cultural organisations bring to understanding this new form of data processing essentially?

Yasmin Khan 12:00

What are the benefits of museums experimenting with AI?

Oonaugh Murphy 12:03

I think for me, museums are the original data set, again, thinking historically they can teach us a lot about what AI systems are and how they work. So, you know, if we look at rich white men going around the world and collecting lots of things and bringing it back, and you know, suddenly it became a mass

of objects, kind of where we're at with generative AI. It's really easy to acquire stuff at the minute. You can type in a prompt and get an image. So, what do you do with this new massive visual culture? Well, you need to create taxonomies. You need to create hierarchies of knowledge and power so that we have a language and a framework that says that's a good image from AI. That image should be in the V&A and, oh that's a rubbish image that somebody's dad created in the pub on his phone to show as me, it's how AI works. That's no different than where museums were in the 1850s early 1900s really, because we just had a load of stuff. So, what we did was we started to create taxonomies, started to create systems that said, what is good, what is bad and that process became more and more refined, crucially, much like generative AI, museums were extremely racist, extremely sexist, they didn't acknowledge the worker, craftsmanship of product. All of these arguments around early museums are arguments that we're having today about open AI, you know, if we're looking at this idea of stealing people's work, of creating, you know, new sources of power and knowledge, that's what museums did. You know, people went around the world, they stole objects, they came back and they became great British men because they'd stolen so many things, and they told new stories with what they'd stolen. So I think if we look back at this idea of the history of museums, many of the systems of taxonomies are what's used in creating generative AI, if we think about, you know, data coding, a lot of that comes from museums, libraries and archives. Also, I think, as well, what we can see with this long history of museums is the idea of social cultural data. So, our understanding of objects, material culture, visual culture, changes over time. And so how we label data today will be different than how we label data tomorrow. And so suddenly, stopping the tech bros in their tracks, who are telling this is all new, we can't understand this, and saying, Well, no, actually, if we look at museums, we've been having these conversations for 150-200 years. Here's some things we learned along the way. And so, giving people a language or vocabulary or story that helps them to understand these technologies is a really good way of breaking the magic myth that this is kind of all knowing power, that you know us mere mortals couldn't possibly understand. You have to be a white man from California to understand how this works actually say; oh, well, actually, if you look at what this museum did, it's just the same thing. It breaks the magic. And I think when you break the magic, you start to become more critically engaged and empowered to say; oh, this technology is super interesting. I want to use this for my homework. Or, you know, I really support somebody using this for medical research, if it gives me better outcomes, but just telling us it's too complicated for us to understand is not good enough. If you can't explain it, you shouldn't be using it.

Yasmin Khan 15:32

I like the idea of positive disruption, and I like your framing of museums as data sets. Could you perhaps unpack that a bit more and say what you mean by that?

Oonaugh Murphy 15:43

Yeah, so when we think of data sets; data sets, you know, sound fancy. They're not. It's just a collection of objects or numbers or words. And when you kind of introduce this concept of a data set, sounds very complicated. But actually, you know, toddlers have data sets. You know, one of my friends' kids has a data set. It's about 100 dinosaurs. And every time I go to his house, I have to get shown his entire data set. And suddenly, you know, if we read an article from one of, you know, one of the AI pioneers, these philosophical gods, they're talking about data sets as this great, you know, this great, complex system. But suddenly, if you start to think, Oh, well, a data set might just be 100 kid's dinosaurs, then you suddenly start to go; Oh, right. Okay. So then, if we think about the dinosaurs, they're just some plastic toys, but they're not, because they're a toddler. They can tell you which ones fly, which ones swim, which ones breathe fire. Which ones do you know? I don't know, run the fastest, and each of them becomes a taxonomy, a category. And so suddenly we went from, you wouldn't understand, the data set, to, oh, data sets are things that we build from when we're a toddler. We all build different data sets in our lives. And museums have that great difference in that because they're historical data set, we can see how they've changed over time, so we can see how they reflect shifting social norms. So that gives us this long view, rather than the fast paced, immediate view that AI pushes us to think, well, you know, you need to understand this today. This is, you know, this is happening day. It changes so quickly you'll never understand that museums or your friends, toddlers, dinosaur collection is a really nice pause. It's a chance to go, oh, okay, so a data set is just a collection of things, and an algorithm is just a way of asking questions of that collection of things, and suddenly we start to have this really logical framework for understanding what AI is.

Yasmin Khan 17:55

Let's talk about some of the risks and how AI might dent operations in museums, particularly around intellectual property rights and the livelihoods of people who work in the sector. What do you think those risks are and what could be done to mitigate some of those risks?

Oonaugh Murphy 18:06

With any technology, with any shift in practice, there's always risks. If we have considered conversations about technologies before we adopt them, then we instantly mitigate a lot of the risks when it comes to thinking about museums. One of the biggest risks for me is the challenge to the idea that museums are trusted. So, whilst there's lots of issues around colonialism and a push towards decolonial practices, for many people, museums are trusted institutions. They're places of facts of knowledge, if they start using AI systems in ways that are not rigorous or robust, and they start creating content or distributing stories that may have inaccuracies in AI terms, might be defined as hallucinations in a human rights context or humanitarian context might be more misinformation, disinformation or hate speech that creates problems. So, I think the tone in which content is created is really important. Museums can experiment and they can tell their audiences, we're playing with this. We're learning with this. This is how it was created. So again, explaining their process, rather than

simply putting stuff out there, as with the watermark of the museum. A lot of that comes back to human augmentation, and that simply checks and measures, you know, some things AI is great at. You know, the Met for a long time now, has been using computer vision, MoMA as well, to help create new metadata tags for their collection objects. That essentially means that you can search their collection more easily, because when their collection was digitised the data that was digitised alongside those objects was primarily fancy, academic curatorial speak. So, you know, you could have a painting of a picture of a dog in the middle and nowhere in the metadata is the word 'dog' because there's a big fancy curatorial statement about it and the artist, and when it was created and the whatever, you know, technique was used. But, the visual command as a lay person that we see is completely missing. Another great example from industrial museums what we would call 'train', they call an 'engine' so when stuffs been digitised you can search for train and find nothing, because you need to use the word 'engine'. So, there's processes like that where AI can be really good in terms of creating new tags and generating new things. But, it also has historical biases so for example you may have a painting of a women who's in her mid-30s, late 30's; AI can tag that as an old woman, elderly woman. And so that becomes problematic. And that becomes more problematic when you start looking at issues of race and miscategorisations. That is all fine as long as you have a human at the end of it approving it. Or disproving it. It's much quicker to go, yes, yes, yes agree than it is for somebody to sit down and think about all the possible words you'd associate with something or something you might search for. I think that's a good example of human augmentation, essentially checks and measures, common sense. There are some concerns around thinking about, you know for example, with generative AI be used to write image labels or curatorial panels. Potentially yes - but in a world that's increasingly populated with synthetic data my feeling is that people will turn to museums as places of authenticity. So, I actually think that the hand-crafted curatorial label will be something that drives people to museums in a world that's saturated with generative AI, BS content. But potentially, really useful in terms of thinking about accessibility, for example if you have a curatorial essay if you have object label that's been written by a curator, could generative AI help to rewrite it in a way that'll more accessible to someone with maybe autism? Could generative AI be used as a way to generate narratives around images that aren't documented for somebody who is visually impaired? So again, AI is not the answer but it's also not the problem. I think instead it's about having those considered professional conversations that we have around curatorial practice around these technologies.

Yasmin Khan 22:49

It sounds like curator bots aren't going to be a thing just yet. It does sound like the nature of curating may shift in some way, so could you say how curators could be more agile to accommodate AI in their practice in a truthful way?

Oonaugh Murphy 23:04

Some of the things that'll help curators will not be dissimilar to other operational practices that we see in everyday business, for example using AI to note take. You know, if a curator is meeting with an artist and they're taking notes in their pen and paper and they normally go back and manually transcribe it. Using AI to transcribe that meeting will create a record and an archive that will free up the curator in the moment but will also provide greater documentation for future researchers. Sometimes what I call boring AI is actually where we should be focusing. Boring AI being the every day. If you know, most big organisations use Microsoft, Microsoft has now inbuilt Copilot and Copilot is essentially ChatGPT but you're allowed to use it because it's Microsoft so your company, most companies, my university we already have access to Copilot. Most people don't know it exists. Most people are off using ChatGPT. But actually, boring AI will probably be the biggest growth area. There is an argument that this kind of dystopian narrative of AI is a really good way to distract us from the AI creep that we're seeing in our everyday lives. So, if you think about when you're writing an email and auto completed your sentences. If you think about when you're travelling somewhere and your journey reroutes based on live satellites on what's happening. If you're thinking about you know approaches to grading in schools. If you're thinking about facial recognition at events. These are all kind of boring AI and for me they're where we should be concerned because they impact our children's education, they impact our healthcare, they impact our education more widely, they impact criminal justice. And when we're busy focusing on dystopian futures, we're letting this stuff creep in without question. And so for me, I think that's where I'm most interested and most concerned about because once these systems are adopted, it's very difficult to remove them, but if we can critique them, yes utilise them but in a critically engaged way, we can ensure that their adoption is done within a kind of responsible manner. And I think that's probably where our concern should be over the next two to five years.

Yasmin Khan 25:39

It sounds like you have quite a balanced, pragmatic outlook. I'd like to dig into what gets you out of bed in the morning, but equally, what's keeping you up awake at night?

Oonaugh Murphy 25:49

What gets me out of bed in the morning? I've always been interested in audience development and access. I come from a working-class background where, you know, visual arts were not a thing. I can still remember going to the my first ever contemporary art museum with my parents. My dad still talks about it. It was ridiculous. It had conceptual art but I always just loved art. I always thought it was so fascinating and interesting. And I believe that we pay for museums through taxpayer money. So, I'm quite happy to pop into museum to use a toilet. I love using a free locker when I'm on my holidays, I'm quite happy to go in and use Wi Fi, and my friends are always like; oh, we can't go into the museum. Well, you've paid for it. You pay tax. Like it's a public institution. So ,my work has always been driven by this idea that museums are public institutions and they should be at service to their publics. If we look back at historical tropes of, you know, enlightenment, I think that there's a really interesting role around

critical technology discourse and digital literacy that museums can play, whether that's thinking about being critical infrastructure, places where you can go and access free Wi Fi, where you can go and do a video call if you can't afford the internet at home, or places where you can go and learn how these technologies work. In terms of what keeps me up at night, I would say the policy landscape that is shaped by tech companies is problematic, and the inability of civil society to really make traction in terms of influencing government policy in this area is really problematic. I understand why this is the case, because in many ways, we just have to look at Fujitsu and the Post Office. There was a call for Fujitsu to be banned from taking on any other UK contracts, and the government simply can't do it because they're embedded in so many critical digital infrastructure projects that the country would fall over if they weren't in existence. So, these tech companies are embedded in how government works. Now there's these interesting conversations around what sovereign AI might look like, but we're very much not there. Government is run on third party big tech suppliers, and so they have a big seat at the table in determining how we everyday citizens, will experience everything from, yeah, the welfare state right through to criminal justice. And I think that's problematic, but I also have no solutions of how we change that.

Yasmin Khan 28:24

You're off to a meeting with the Arts Council, and we should let you go. But could you just summarise what that piece of work is and what the potential of it is?

Oonaugh Murphy 28:31

Yeah, so I've just been funded by BRAID, which is Arts and Humanities Research Council initiative run in partnership with Edinburgh University, and it's an 18 month project to embed responsible AI, policies and practice into Arts Council England. So it's kind of like an embedded researcher role. Some of the project is looking at how the organisation itself uses AI, so that kind of boring AI, every day, operational AI. Another body of work is around how Arts Council engages with AI as an art form, as a technology that artists use and also as a mechanism the organisations they fund use to engage with audiences. So, it's really creating this benchmark, this kind of responsible AI benchmark, for developing their thought leadership position, but also developing their approach to funding policies and practices that impacts the wider subsidised arts sector in England.

Yasmin Khan 29:31

Do you have any advice for me on my quest? Is there anything you'd like to ask me?

Oonaugh Murphy 29:35

I have a question for you that I think that you will only be able to answer once you've finished this series, which is, I want to know, what do people not tell you?



Yasmin Khan 29:47

That is a great question. Well, how am I going to know? On that note, I'm haunted forever. That was awesome.

Thanks for visiting the Museum of Truth and Lies. Join me on the next gallery tour of this limited edition series from wherever you get your podcasts, you can find out about the making of this museum in the online [Muse-Zine](#); an artist illustrated magazine packed with playful tools and games lovingly co created with Sold Out publishing. Tell us your thoughts and share your museum photos using the **#museumtruthlies**.