Engaging citizen resources as catalysts of museum innovation

Kirsten Drotner

Abstract

The key claim of the article is that the Covid pandemic has offered museums important new opportunities to foster more, and more diverse, citizen engagements; and such engagements may be key to sustainable museum innovation in the future. The claims are underpinned by first mapping the characteristics of two leading paradigms in existing museum interaction with the world: a technology paradigm and a personalisation paradigm. Second, the article provides three empirical examples on how museums may apply participatory designs to foster more inclusive and diverse citizen engagements. The examples are based on case studies conducted at a Danish R&D programme, Our Museum. By way of conclusion, it is discussed how and why citizen engagements can catalyse sustainable museum innovation.

Key words:

museum personalization; museum technology; citizen engagement

Envolver os recursos dos cidadãos como catalisadores da inovação do museu

Resumo: A proposta chave do artigo é que a pandemia Covid ofereceu aos museus novas importantes oportunidades para promover mais e mais diverso envolvimento dos cidadãos, o que poderá constituir a chave para inovação sustentável dos museus no futuro. As propostas são alicerçadas, em primeiro lugar, no mapeamento das características de dois paradigmas liderantes na interação entre o museu e o mundo: um paradigma de tecnologia e um paradigma de personalização. Em segundo lugar, o artigo fornece três exemplos empíricos de como os museus podem aplicar projetos participativos para promover envolvimento dos cidadãos mais inclusivo e diverso. Os exemplos são baseados em estudos de caso conduzidos em um programa de I&D dinamarquês, Our Museum. Como conclusão, discute-se como e porquê o envolvimento dos cidadãos pode catalisar a inovação sustentável em museus.

Palavras-chave: personalização do museu; tecnologia museológica; envolvimento cidadão

Engager les ressources citoyennes comme catalyseurs de l'innovation muséale

Résumé : La proposition clé de l'article est que la pandémie de Covid a offert aux musées de nouvelles opportunités importantes pour promouvoir un engagement citoyen de plus en plus diversifié, ce qui pourrait être la clé de l'innovation muséale durable à l'avenir. Les propositions s'appuient, dans un premier temps, sur la cartographie des caractéristiques de deux paradigmes phares dans l'interaction entre le musée et le monde : un paradigme technologique et un paradigme de personnalisation. Deuxièmement, l'article fournit trois exemples empiriques de la manière dont les musées peuvent appliquer des projets participatifs pour promouvoir un engagement citoyen plus inclusif et diversifié. Les exemples sont basés sur des études de cas menées dans le cadre d'un programme de R&D danois, Our Museum. En conclusion, nous discutons comment et pourquoi l'implication des citoyens peut catalyser l'innovation durable dans les musées.

Mots-clés : personnalisation muséale ; technologie muséale; engagement citoyen

Involucrar los recursos de los ciudadanos como catalizadores de la innovación en los museos

Resumen: La propuesta clave del documento es que la pandemia de Covid ha presentado nuevas e importantes oportunidades para que los museos promuevan una participación ciudadana cada vez más diversa, lo que podría ser clave para la innovación sostenible de los museos en el futuro. Las propuestas se basan, en primer lugar, en el mapeo de las características de dos paradigmas clave en la interacción entre el museo y el mundo: un paradigma tecnológico y un paradigma de personalización. En segundo lugar, el artículo proporciona tres ejemplos empíricos de cómo los museos pueden aplicar proyectos participativos para promover una participación ciudadana más inclusiva y diversa. Los ejemplos se basan en estudios de casos realizados como parte de un programa danés de I+D, Our Museum. En conclusión, discutimos cómo y por qué la participación ciudadana puede catalizar la innovación sostenible en los museos.

Palabras clave: personalización museística; tecnología de museos; envolvimiento ciudadano

The third muSEAum conference "Levantar ferro! Manter o rumo!" [Set sail! Stay the course] unfolded in the shadow of the Covid 19 pandemic. The conference offered a wonderful opportunity to move out of the pandemic shadow and develop professional dialogues face to face, yet these dialogues were also coloured by the deep implications of the pandemic for the museum and heritage sectors at large¹.

These implications also form the backdrop of this article. Both national and international museum organisations have documented strong negative implications, including permanent closure of an estimated 4-10 pct. of the world's museums, an alarming increase in job insecurity for professionals on fixed contracts, and widening cultural inequities within and between countries because of widely differing online content and options of access (ICOM, 2020a, 2020b, 2021; UNESCO, 2020). These negative implications are serious, long-term and need to be addressed by policymakers, professional leaders and partners.

Yet, the perspective I present below on the pandemic implications is different and rather more positive. My key claim is that the Covid pandemic has critically challenged some of the basic paradigms that many museums have come to take for granted over the past decades when it comes to interacting with the world around them - and that this challenge is a good thing. For my second claim is that the pandemic offers us some new and important opportunities to foster more, and more diverse, citizen engagements. And such engagements may be key to sustainable museum innovation in the future.

To capture and develop these opportunities, we naturally need to identify and understand what these new opportunities are. We also need to analyse the standard modes of operation for many museums when they interact with the world around them to learn more about how the new modes differ. Finally, we need to discuss how we can mobilise learning points from the pandemic so that they can catalyse future museum innovation.

I will substantiate my claims by drawing on insights from a number of national research and development programmes, I have directed, where universities, museums and heritage sites collaborate to develop new modes of interacting with the public. In particular, I will draw on results from the Our Museum programme, a research and development programme 2016-2021 which comprised 13 projects unfolding over a six-year period (Our Museum, n.d.). The Our museum projects facilitated new forms of citizen engagement by studying and developing how museums interact with the public in innovative ways.

What did the pandemic teach us in terms of audience interaction?

In Denmark, the first national pandemic lockdown started 11 March 2020, and it included all schools, cultural institutions, public facilities and most workplaces. In a

situation that had not been prepared or rehearsed, museums and the cultural sector at large sought to keep 'open' to their publics and to keep up interaction with them by going online, drawing on the professional resources that were immediately at hand.

A very mundane example of this approach is from Randers Regnskov [Randers Rain Forest] in Denmark. It is a national conservation site and popular tourist attraction in the provincial city of Randers. So, the example is not from a major national museum or art gallery with robust professional communication facilities and long-term experience of online engagements. I have selected the Randers Rain Forest precisely because it provides a typical example of the kind of low-key approach that many institutions adopted and explored during the first lockdown.

Every day at 9 a.m., except weekends, two of the institution's biologists live-streamed about a particular theme for about 20 minutes. On 19 March, the theme is 'teeth' (Randers Regnskov, 2020). The two biologists start off by making connection to their audiences before diving into the substance of the day's theme. They welcome their audiences, naming individuals by their first names as they see them log on and remarking when they recognise familiar names. They involve viewers in their technical learning points when demonstrating a new portable mike that allows them to move around; and they are very expressive when noting the rapid increase in viewer numbers. When they move on to the specific theme on teeth, they zoom in on their hands-on examples and invite audiences to write in with their questions and comments. Viewers do so, and the two hosts draw on these in later episodes.

In some sense, the two biologists' online presence draws on key insights that most museum professionals know from personal interactions with the public on site. In a situation when no one could come to the museum, the museum reached out to everybody and sought to 'draw them in' – driven by a need to stay in touch and signal openness.

The Randers Rainforest example indicates some key elements of wider relevance for museums' learning trajectories during the pandemic in terms of audience engagements:

- Interaction is substance-driven, not defined by the institution's holdings
- Communication is key to successful interaction, not technology as such. Technologies and their application are often of a rather basic kind
- Social interaction drives citizen engagements (likes, questions, comments), not individual attention or expression
- Many museums are ill-equipped to foster substance-driven communication for citizen engagement.

These insights may seem self-evident. Yet, such social engagement practices were not widely taken up by museums before, particularly when it comes to the online environment. Why is that? Why did it take pandemic lockdowns for museums

to innovate along those lines? Not merely because museums are slow, innovation-averse institutions, I would argue. Yet, before I offer my response to these questions, let us just remind ourselves why citizen engagements are important for museums in the first place.

Why is citizen engagement important?

Unlike the situation in the USA and parts of Asia, many European museums are based on public funding. This implies that broad public support is key to institutional legitimacy and survival. Also, in democratic societies, cultural heritage, including museums, is defined as a public good, not primarily a consumer good. It is, potentially at least, a resource for all citizens, and not just a choice for individuals with economic and cultural capital. Last, but not least, in order to mobilise these cultural resources social groups must be engaged with, and by, museums as citizens, not consumers. It is this logic about public funding and public good that underpins museums' need to develop and sustain citizens' engagement as social encounters.

So, to come back to my questions about why it took a global pandemic for museums on a wide scale to experiment with diverse forms of citizen engagement, we need to look beyond simple explanations about old-fashioned museums which are averse to online interaction with the public. I think we must look to more systemic explanations.

The pandemic challenged pervasive paradigms

In wider terms, the pandemic became a litmus test of the limitations found in existing paradigms of museum interactions with the world. Since the 1980s, two trends of interaction have gained ground to an extent that they may be said to be pervasive paradigms today. One is a technology paradigm and the other is a personalisation paradigm.

The tech paradigm

The British museum scholar, Ross Parry, has aptly identified a 'perceived normativity of technology' in current museum interaction (Parry, 2013: 24). This normativity frames theoretical priorities, policy discourses as well as day-to-day practices in museums. Taken together, these dimensions make up what we may call a pervasive tech paradigm. Key characteristics of the paradigm are:

- Technology is perceived as a driver of museum innovation
- Digitisation is defined in technological terms
- European and national museum policies co-evolve.

These results are based on one of the Our Museum projects (Myrczik, 2019) that surveyed and contextualised Danish museum innovation in policy and practice across a decade. Digital technology is seen as an almost magic wand, particularly if you apply the latest suite of devices: if your museum has it and uses it, your wishes come true, be it attracting more tourists, more young people, or underserved communities.

Naturally, discourses and policies are not equal to actual museum practices. Yet, when it comes to practices of museum innovation, these are costly processes. So, policy priorities fundamentally frame what museums can fund, be the funders public governments, private foundations or third-party networks. This is why the co-evolution of European and national policies are important. For here the tech paradigm materialises itself very concretely.

Perhaps the clearest evidence of this are the major European strategic research programmes. Here, one may identify a long-term gap when it comes to socio-cultural research, inc. research on museums and cultural heritage. On the one hand, preambles of these programmes often pay lip service to the importance of the cultural sector in general, and the museum sector in particular, in fostering democratic development and citizen engagement. On the other hand, in actual work programmes funding options are driven by a strong tech focus as may be seen in Horizon Europe's global challenges (its strategic stream).

For example, in the most recent Work Programme (2021-2022) for the Horizon Europe research programme (Section 5: Culture, creativity and inclusive society), museums and cultural heritage institutions are commended for demonstrating great resilience and creativity in communicating with the public. Yet when delving into the funding priorities in the actual research calls, tech-led calls still get most of the funding (Horizon Europe, 2021). Similar discourses and priorities are seen in national funding options, thus guiding museums' range of action when it comes to innovation of interaction with the public.

The personalisation paradigm

A number of the Our Museum projects have involved the development of new permanent exhibitions and even new museums. Our collaboration with external exhibition designers and architects confirms what is evident for all to see:

- Many new museums prioritise personalised devices on site (mobiles, virtual reality goggles, headphones)
- Personalised devices catalyse individual museum experiences
- Personalised devices tend to commodify museum innovation and dequalify professional expertise of interaction

This whole personalisation discourse is underpinned by a long-term tradition of studying individual museum visitors (Baecchi et al., 2019; Le Berre et al., 2013). The so-called visitor-studies tradition is concerned with understanding on-site visitors' individual experiences and their needs and motivations for going to the museum. When surveying the research, it becomes evident that rather little is made of how people interact socially and find meaning together when relating to museums. And this is despite the fact that numerous reports document that most people very much define museum visits as social events.

In particular, we often underestimate the importance of the last element. The business model of many commercial design firms optimise the use of personalised devices and services for the simple reason that this allows the firms to make more money (on virtual reality devices, on handheld tools, on personalised software – all of which are expensive to construct and costly to service).

While it may be argued that audio guides have paved the way for personalised museum experiences for many years, personalisation has been taken to new and advanced levels over the past decades through the uptake of personal digital tools. It is this kind of thinking that the two biologists at Randers Rain Forest challenged. In some sense, they took back ownership of interaction to the organisation.

Image 1
The Witch Museum, Ribe, Denmark. Photo: Kirsten Drotner
Tech-driven personalization is a guiding principle when designing new exhibitions and new museums.



What did we learn – what can we do?

So, I argue that the Covid pandemic has served to challenge some underlying paradigms in quite fundamental ways when it comes to museums' engagements with their citizens. Then, what can we do now based on these insights?

- Foster dialogue via holdings
- Focus on citizen groups, not individual consumers
- Design for social dialogue
- Document your interventions systematically in ways non-specialists understand.

I will offer a few examples on how we have worked along these lines at the Our Museum programme to illuminate how such principles can be put into practice.

The Our Museum programme has applied a rather wide definition of museums as you will see. All our collaborations started with our Danish partner museums defining a particular challenge involving museum communication that they wanted to tackle. The partner museums were involved through the entire six-year programme, and we focused on designing research-based innovation processes that could be implemented in practice. Importantly, each of our junior researchers worked part-time at one of the partner museums. So, we could follow up on our design experiments and interventions in terms of day-to-day implementation. In addition to these innovation projects, five projects analysed historical trajectories of change (Our Museum, n.d.).

#1: Art in the box

Located in the city centre, Randers Art Museum is situated at the top floor of a rather forbidding building that also houses a public library and a historical museum. The museum identified its key challenge as being its architectural 'concrete brutalism' which only dedicated visitors venture to explore. The museum wanted a more inviting presence in order to strengthen its connection to local communities.

Based on analyses of local community groups and the museum's existing communication patterns, the Our Museum innovation project used the open green space outside the building where many pass. Some of the museum paintings were moved into a glass container placed on the grass outside the main museum entrance. The paintings were selected so as to facilitate particular themes or talking points. In two one-week experiments, these themes were addressed through a number of different interventions, from joint lunches (theme: pleasure) to yoga classes (theme: the body) and conversations that were prompted by a non-museum professional, for example a parson (theme: faith).

We co-designed the interventions, made participant observation of how they played out, along with interviews and surveys. The results of our analyses were discussed with the museum staff, principles of engagement were fleshed out, and a number of these principles fed into a re-structuring of the museum's communication strategies and practices. These included increased organisational integration of audience communication and development of more holistic engagement strategies, where events are integrated with theme-based exhibitions and online communication (Særkjær, 2021).

Image 2
Art in the box, Randers Kunstmuseum, Denmark. Photo: Christiane Særkjær.
The formation of more porous museum boundaries can catalyse local citizens' engagements



#2: Designing for dialogue

Harnessing prospective and actual museum goers as resources who can challenge existing museum values and approaches is an increasing trend in museum research and practice (e.g. Simon & Moscone, 2016; Stuedahl, 2019). For some museums, this trend is at the core of their identity. Named after the military encryption machine used by Germany during World War II, Enigma is a Danish museum of communication due to open in February 2023. A key challenge for the museum staff was this: how can our mode of interacting with the public mirror that we are a museum of communication?

The Our Museum project helped in providing several responses to this challenge by engaging potential visitors in communication processes where dialogue is a defining feature.

For example, we designed a memory game about the emergence of the Internet. Knowing from the literature that different generations often have different online experiences, we invited different age groups in the local community to play the game. Individual cards had questions that prompted dialogues based on the participants' different memories about the internet. For example: when did you first communicate via the Internet? Please describe if you encountered obstacles of access? Of use?

The play experiences proved to be shared social events that highlighted both generational similarities and differences. Importantly, the playing sequences were curated by the staff who could step in to clarify rules of speech, timing and general issues of the gameplay.

In analysing the gameplay sequences, we found that the memory game trains what may be called dialogic literacy: participants listen to one other, they are supported in acknowledging difference, even when they do not accept other participants' experiences to be as valid as their own (Baggesen & Johansen, 2019). Hence, the mode of communication serves as an antidote to communication on social media where many speak and few listen and where filter bubbles support similarities of opinion, not recognition of otherness.

Reporting our results to the Enigma museum in the making, we were able to help the museum professionals clarify which modes of communication they wish to prioritise; and our interventions offered useful examples of how particular modes may be designed, implemented and evaluated.

#3: Made in space

Sometimes, an existing museum undergoes a major innovation process, for example when a new permanent exhibition is being developed. This was the case at The Planetarium, an attraction site in Copenhagen focusing on astrophysics. With very few artefacts in its holdings, it is an example of how innovation can take place at a cultural institution that escapes a traditional museum definition.

The staff defined their key challenge in terms of a paradox: With very limited public funding, the Planetarium business model is based on a sizeable throughput. At the same time, astrophysics attracts a rather limited public – primarily middle-aged men who follow all things NASA does and who often think the professionals are wrong. So, in developing its new permanent exhibition, the Planetarium wanted to design a more inclusive space, including a more even gender balance.

Our project collaboration with the Planetarium was based on interviews with focus groups comprising some of its prospective audiences. Particularly, our analyses of interviews with mothers and daughters revealed a gap between abstract interest and concrete relevance: while our respondents would often express a general admiration for the beauty of the skies, they found little connection to their own existence. Our codesign of the resulting exhibition was an attempt to overcome that gap.

The title of the flagship exhibition is 'Made in space', and the title signals the key narrative that emanated from our research with prospective audiences and came to form a guiding principle of communication: everything in you comes from outer space. This narrative proved a successful means of minimising the gap we identified between interest and relevance (Nicolaisen, 2020). Importantly, the London-based design company 59productions in charge of the exhibition overhaul, was very perceptive and incorporated a number of our insights into their designs. In 2018, the exhibition won the Mariano Gago Ecsite Award, in the sustainable success category (Ecsite is the European network of Science Centres and Museums).

Image 3
The Planetarium, Copenhagen, Denmark. Photo: Jakob Bruun Nicolaisen.
Narratives of wide social relevance help advance more inclusive and diverse citizen engagements



Insights in brief

The insights gained from the Our Museum projects I have described may be summed up as follows:

Table
Engaging citizen resources: Empirical overview

Where	What	How	Then what
Art in the box Randers Art Museum	Physical look and location	Porous boundaries Theme-based activities	Sustain local group engagements
Designing for dialogue The Enigma Museum	Mirror museum vision in interaction	Curated memory game	Support dialogic literacy Recognise 'otherness'
Made in space The Planetarium	Narrow theme	Key narrative of wide relevance	Strengthen science inclusion

Source: Author (2016-2021)

How to foster citizen engagement

In wider terms, the Our Museum insights on how to foster museum innovation through citizen engagements may be generalised in a few principles:

- Put people first, not collections or technology
- Design for social interaction, not individual experience, needs or voice
- Moderate citizen communication by professionals
- Balance institutional authority and audience engagement

Citizen engagement underpins sustainable museum innovation

So, if we follow some of these principles and develop citizen engagement, how may our work help advance sustainable museum innovation? Key points here are:

- Support long-term affinities and partnerships, not merely short-term signature events
- Collaborate across established professional boundaries, and avoid compartmentalising outreach and communication efforts from other parts of the museum organisation
- Document your (pathways to) societal impact

These points are well documented in the research literature (e.g. Bjerregaard, 2019; Achiam et al., 2021), and many museum practitioners already work along these lines. So, I am quite aware that the examples from the Our Museum programme that I have offered are neither special, nor especially innovative.

Yet, I would contend that the programme is innovative in two important respects. First, we document how we have reached our results through an entire project ecology, from identification of a challenge via design experiments and analyses on to implementation. Second, we study and document how these results may impact the lives of people we interact with.

So, by way of conclusion I would like to highlight the importance of societal impact documentation if we want to advance museum innovation. Many museums offer a wonderful range of activities that involve different groups and communities and often benefit these groups and communities in substantial ways.

Yet, few museums have developed systematic methodologies to document these actual and potential benefits. For example, museums may claim that art exhibitions may reduce depression or improve individuals' quality of life. But how do we document that this is the case? This whole issue of developing a range of tools to document how museums' interaction with the world impacts the world is, in my view, crucial for sustainable museum development in future.

Museums have a key role to play here for the entire cultural sector in developing evidence of our importance, evidence that goes beyond the simple equation that the more visitors you have the more important your institution is.

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Kirsten Drotner

Professor of media studies at the University of Southern Denmark and founding director of two national R&D programmes focusing on cultural citizenship and learning at museums and science centres

(DREAM and Our Museum). Email: drotner@sdu.dk

Orcid: 0000-0001-9840-3892

Correspondência

Kirsten Drotner University of Southern Denmark, 55 Campusvej, DK-5230 Odense M, Denmark