INTRODUCTION

*Digitalising The Museum* ([https://nmilic66.wixsite.com/digitalmuseums](https://nmilic66.wixsite.com/digitalmuseums)) is an online repository created as a digital substitute for physical visits to London’s museums and galleries that were meant to be undertaken by Exhibition Studies undergraduates from the Design School at London College of Communication (LCC). In an attempt to provide an alternative version of the exhibition experience whilst arts venues were in lockdown, the author here began exploring the digital presence of arts organisations online and started featuring it in a blog entitled *Corona Defiance Art Gallery* ([https://coronadefiancegallery.myblog.arts.ac.uk](https://coronadefiancegallery.myblog.arts.ac.uk)). This became the groundwork for *Digitalising The Museum* project.

The *Corona Defiance Art Gallery* blog also contains records of creative practice under lockdown from communities around the world in the form of humorous videos, exercise advice, opportunities for artistic production and talks by academics from museum and exhibition studies, education, technology and care. The blog forefronts distance learning that underpins both projects – *Corona Defiance Art Gallery* and *Digitalising The Museum* - as its intention was to initially serve LCC students, though now it is accessed by and educates global audiences.

Museums and Memory working group of Memory Studies Association ([https://www.memorystudiesassociation.org](https://www.memorystudiesassociation.org)) has found the lockdown a fertile time for research and they lamented over the future of the museum beyond pandemic. Their work provided an important frame for these projects as the group considered adjustments to the role of a nation’s storyteller which the museums traditionally played in societies and they wondered how digital technology influences that change. The group concluded that many museums have discovered the potential of digital only due to their physical closure. This research aimed to find out why it was so difficult for them to embrace it before they were forced to and how can that change benefit them?

During the pandemic, rapid response to audience feedback by many publicly funded museums encouraged quick inauguration or extension of their online programmes. *Digitalising the Museum* became an addition to the *Corona Defiance Arts Gallery* blog, so it could map and keep up with newly sprung virtual exhibitions and tours in the midst of lockdown. The project engaged four Alumni students (Veronica Amon, Jennifer Nibbs, Katerina Demetriou-Jones and Emma Sproat) to support this supplementary, ad-hoc initiative generously funded by the LCC Research Office and led by the author of this chapter.

The team accepted that our present is digital and concluded that museums must engage with it if they want to serve and survive in the future. As Cameron (2015: 345) claims in *The Liquid Museums*:

“The modern museum model that is based on hierarchies; nature/culture dualisms; modern precepts of certainty, objectivity, truth, and expertise; linear forms
of communication; and the production of social and scientific facts results in an institution that is largely seen as separate and operating above society…"

This bleak picture of the old museum demands immediate update if this and other cultural institutions are to reflect on the contemporary moment. So, in our project we wanted to celebrate those who surfaced as relevant, those best at managing to involve and respond to their audiences in this unprecedented time.

We mostly worked remotely, conducting research into a range of organisations that we thought would have significant digital displays, from local, independent or commercial galleries to large arts centres, cultural archives, collections and heritage sites. We had to curb our enthusiasm for research into the global cultural scene and settle for the UK to narrow our long list of museal cyberplaces. Moreover, the final choice of eight such places is London-centric as the case studies we covered were intended to replace the exhibitions LCC students were supposed to have visited since the start of the pandemic. The project features organisations that were prepared or flexible enough to adjust to the new normal\(^1\) and so, transferred to an online operating mode whilst premises were closed with more or less success.

Although we did not feature many arts organisations that had poor virtual tours or digital exhibitions, they did produce important toolkits and adopted activist roles in the work conducted via their mailing lists like ICA (https://www.ica.art), Arts Admin (https://www.artsadmin.co.uk) or LADA (https://www.thisisliveart.co.uk). Some institutions also created innovative opportunities for online audiences that were released into public domain upon the end of our project. Moreover, as the virus is still at large and the work of various companies and artists continues in the province of the digital, our list is becoming less accurate and might eventually be redundant in light of new pages and features that are constantly emerging on the websites we originally investigated.

This chapter objective is to capture the project’s digital ethnography and to articulate the issues, controversies and problems that arouse during this venture by comparing its findings with the literature in the field. The aim was to map museums engagement with digital advances by evaluating their good and bad practices, but also address the challenges they faced in the process as well as provide suggestions for overcoming them.

**VIRTUAL GROUNDING: AR, VR and MR**

Many museums, heritage and other cultural institutions have been digitalising their collections for several years with an interest to promote them and offer open access to online visitors. Those virtual audiences use this facility in a variety of ways – for arts and crafts, academic research, commercial advertising and so forth. However, the move from museum to website is an unevenly successful process because precious artifacts can lose their exceptionality, context and knowledge potency secured by museum specialists and their connection to our world. Museum curators situate artifacts in history and culture, referring to us, the public, so as to provoke our curiosity about the relationship between us and our surroundings.
The urge to develop strong screen aesthetic can often distract from the physical collection by continuing restrictive audience interaction through keeping old or inserting new legal and cultural barriers such as copyright, subscription, data protection and so on.

Exhibitions are designed to immerse visitors and enhance their viewing experience of the artworks and the museum at large. This is achieved by evoking emotions, sparking imagination, inspiring ideas and encouraging the audiences to feel present by walking through and viewing works of art or illustrated archival material, encouraging exploration of historical places etc. Nowadays, those artworks can be digital creations, virtual reconstructions and cyber spaces that can host whole worlds.

Augmented (AR), Mixed (MR) and Virtual Reality (VR) show a great ability for the exhibition as they place things, events, and people within historical, geographical and social context. AR, MR and VR have the capacity to accomplish a more holistic form of storytelling than curators can do with objects, because they bridge new media, professionals and audiences by providing an entertaining, informative and enjoyable immersive experience. (Dragicevic & Bagarić, 2019) This playful and educational approach is often richer in virtuality than in a physical museum and you can even have it in the comfort of your home.

Multi-faceted VR technology exploits lower-level computational affordances, such as programming, 3D graphics, robotics, computer science and the like. One needs a personal computer, tablet, smartphone or VR headset and not necessarily even an Internet connection if the VR media is self-contained within a headset or stored within a drive – DVD, console, hard disc and so on. Through the combination of a mental immersion and a two-way interaction between person and place, a sense of presence emerges and reinforces the belief of actually being in a virtual space. (Carozzino, Bergamasco, 2010)

VR creates audience experience completely artificially – there is no other world, but digital, propped up by sensory stimuli, mostly conceived in sight and sound. In 1947, Andre Malraux introduced the idea of the virtual as an imaginary museum (le musée imaginaire), a concept that corresponds with our current VR encounters. Like his open museum without walls, location and spatial limitations, VR allows the visitor to be present and untied from epistemological and ontological aspects of culture and society. It is however not freely accessible as constantly evolving VR technology is costly because it requires unsustainable hardware and software.

Augmented Reality is the more affordable technology which has been implemented by museums in its simpler forms - for example, audio-visual technology to add empirical dimensions to museum artifacts on display. Museums use AR as a technique that enriches the existing environment by overlaying new information on top of it. This integration of digital information with the visitors’ physical space in real time advances their experience of the collections and allows for cross-referencing of different modes of information – text with audio, photographs or maps. For example, one can experience modifications to a place from the past to now, using the technology as an X-ray scan to expose the influences that moulded that place, showing them as on a palimpsest, layered over each other.
Mixed Reality (MR), provides interaction with both physical and virtual environments, utilising next-generation sensing and imaging technologies. MR allows audiences to see and immerse themselves in their surrounding whilst interacting with a virtual environment using their own hands and without removing their headset. It provides the ability to partially be in both - the real and in an imaginary world. Once we are back to normal after the pandemic is over, this technology might be the expected addition to the museums’ engagement devices as we became used to it at home.

If museums continue embracing AR, MR and VR, it will help their business to survive as such technologies are improving their market position, sustainability, visitors’ attendance, satisfaction and interests. Scholars already noted a variety of benefits of these technologies to audiences: high levels of interactivity, exposure to an extensive virtual inventory tailored to their needs, high-quality support, better integration between web- and building-based cultural experiences (Berman and Pollack, 2021). Furthermore, given the omni-present use of smartphones in museum spaces, digital engagement strategies complement visitors’ use of mobile devices.

Museums could also benefit from public feedback and guidance as many individuals and organisations are interested to support cultural institutions with achieving digital transformation, from old structures into the new digital realm. Digitalising The Museum project makers have also expressed this desire to help museums upscale when they proposed that the use of digital technologies could be a great way of engaging people that don’t normally visit museums. (Demetriou-Jones, 2020) Furthermore, they call for museums to take on that responsibility by drawing on Kahn (2020), concluding that many people are struggling to make sense of the world and museums are perfectly placed to help us with it and so they should.

One such group is young people whose lives were especially affected by the appearance of COVID-19. Their mostly outdoor lifestyles, congregations in groups and sharing practices were disrupted by lockdowns, isolation and immobility. Partially because of that, but also due to their familiarity with digital machinery, this group is the most open to ideas around it and would be delighted to see more of it in the museum setting.

Their reactions to the museums closure have been captured in the research by Tranta, Alexandri and Kyprianos (2021). They reveal that the contact with artefacts is precious as well as the space of the building itself, so being in the physical museum is an experience young people remember fondly, but the queuing for tickets, the cost and time for transport present a great disadvantage to their visits. Moreover, in digital state, one can see the objects one wants to, whenever one wants to, whilst avoiding crowds in front of particular exhibits.

Young people’s ease with the use of digital technology comes from an understanding that digital means can be relational tools. They can make some contacts more comfortable and more productive considering the sense of co-creation that emerges with interactions (Ramaswamy and Ozcan, 2018). Co-creation theory positions museums as a framework that interrelates different elements: artifacts, persons, processes and interfaces in designing cultural experience. Those consist of ‘physical and digitalized things’ as well as human beings because interaction is a relational
process between them. The framework further suggests that interaction is multi-layered and so, consists of the nodes, the connections and the relationships. We can also identify the type, the system, the flow and the method of interaction, encompassing the contents, museums' identity, architecture, spaces, collections etc.

Ramaswamy and Ozcan (2018) address many aspects of these numerous qualities through recent literature and reflect on the complexity of such matrxiational structure, which largely depends on the content generated in the museum collections. This content is supported by digital technology in different ways, which determine the level, the scale and the intensity of interactions. For example, some contents would not be visible without the support of digital interfaces. The ones that are lost to us depend on digital reproduction of their once physical reality. Non-accessible contents that cannot be directly experienced or clearly understood by visitors, can become more accessible in digital translations. (Ramaswamy and Ozcan, 2018) Last in this model of interaction are personal contents generated by the visitors and they are perhaps the most potent in digital domain.

People enrich museums' stories about the history of the world by inserting their personal objects and family experiences, making themselves relevant in the museums' grand narratives. However, museums also want to have a sustained dialogue with people who do not or never did visit them. They want to be relevant beyond their architectural borders, expand in time and space and reach audiences wherever they are. As co-creation framework (CCF) asserts, digital interfaces can put forward a cultural experience in one’s home, activating a plethora of social relationships off and on site and long after the connection has been made. In that sense, digital technologies are relational media as they ‘foster museums toward humanization and personification processes’ (Ramaswamy and Ozcan, 2018: 16).

THE PANDEMIC MUSEUM: DIGITAL COMMERCIALISATION

Museums started using digital technology to attract visitors and to enrich their cultural experience, which demanded that they vary its context. Keeping an eye on contemporary trends and looking to the future became an important task of these organisations that are now expected to lead innovation in and of the entire cultural industry (Ramaswamy and Ozcan, 2018). This means recognising, acknowledging and using digital methods to communicate with their audience via digitally-inspired objects and performances. Those methods also offer museums a possibility of being smart and assuring quality drivers in both physical and digital realm.

Communities can in turn, use the Internet to enter into discussions around exhibitions, to reposition artifacts within collections and galleries, to experience, engage and impact the arts and to trouble the notion or validity of the museum itself. Thanks to the speed afforded by digital technology today, those audiences make their impact faster than museums can create their provision. In their online interjections, communities can influence curatorial decisions, acquisition and upkeep of the objects and sites, marketing strategies, public and staff demographics, installation of the artworks and the rest. This exchange between museums and their visitors is very important since audience participation and satisfaction permeate through many aspects of museum work as visitors’ taxes, tickets and shop purchases pay for the funds that largely support these institutions.
One might ask why we bother looking through arts museum websites when the Google Arts & Culture project (https://about.artsandculture.google.com) features content from over 2,000 leading museums and archives and it is increasing daily as numerous cultural organisations find it imperative to join. In 2011, museums began partnering with the Google Cultural Institute to make an online arts and cultural platform Google Art Project for digitally viewing high-resolution images and videos of the world's treasures. It has been going strong ever since. This mega digital exhibition space is a non-profit initiative with a mission to preserve and display arts and culture to global audiences.

Google’s virtual gallery tours admit digital visitors who can virtually ‘walk’ through partner museums in cyberspace, navigating themselves through the types of controls found on Google Street View or via the gallery’s floor plan. Like an indoor-version of Google Street View, the gallery view is created by the Art Camera, a 360-degree camera that captures images using multiple specialised wide-angle lenses. These cameras take high resolution panoramic images of the artworks and gallery space, and the final effect is not dissimilar to entering a virtual computer game.

Online Google Arts and Culture project is not without its challenges that are largely transferred to it from the physical world. It has issues like digital colonialism (Kizhner et al. 2020) found in the omnipresence of US and European arts organisations on the site, dominance of big data systems that lead and direct the whole cultural ecosystem (Pesce, D, 2019) and representation of art via scientific means, (Zhang, 2020) which limits human visual experience to the camera lens used in the project.

Regardless of these shortfalls and because of the aspirations of museums to engage an extraordinary number of visitors nowadays, they permit virtual access to their collections in the hope that it will entice new audiences into visiting their physical space too. They are prepared to give up their curatorial expertise for the jumble sale that is Google Arts and Culture. The utilising of this giant marketing platform pays off in attracting the public, drawing in sponsorship and supporting other commercial ventures a museum might have – a shop, a café, an arts course, a publishing company or even property development.

Museums have, like any other business, become an enterprise driven by revenue, their grandiose narratives now serve as unique selling points (USPs) to implement their branding strategy, stand out from competitors and increase profit. The introduction of digital technologies in the museum setting has heightened this connection with commerce and now makes the arts industry impossible without it.

However, COVID-19 put everyone in danger and we were forced to reassess who we are as people, a community and a society beyond our economic prospects. This reflective process, prompted by our staying at home and the clear politicisation of the pandemic in the media, opened old wounds that people felt the need and courage to address. New found solidarity for each other gave birth to demands for public spaces and institutions to represent us better. Statues of historic figures whose actions and ethics do not inspire pride in all of us - here and now - were contested, removed or defaced, exploding iconoclasm as a popular as well as an academic discourse that encompasses the toppling of sculptures, monuments and memorials.
The museum is at the centre of this debate too as it houses many of those erections. Its colonial legacies currently lie in front of us unearthed, bare and divorced from other narratives that curators had carved around and on top of them, suppressing them in the ground over and over again until the audience could not see their roots anymore. Now visible, those museum foundations, which are focused on the past, are rocked and expose themselves as philosophically and ontologically ill-equipped to face the turbulent world today. (Cameron, 2015) Furthermore, the calls for repatriation of artifacts (Kendall Adams, 2020) threaten to empty them of content. In that uneasy predicament, museums’ digital space could serve redemption and be used both as a safety net and a platform for instigating the social change needed within them.

Being a product of an instance in time within which it has been conceived, our Digitalising The Museum project will need an update a few months from now, but as an archival record, it holds value for whoever decides to research the provision of arts museums during the corona virus crisis further. The researcher in future will be able to understand that too many well-known arts and cultural organisations did not find a way to cater for their audiences online or they had not done so very well nor in a good time. The pandemic condition therefore challenges the very reason of their existence – public service. No wonder then that during this same period museums were under attack and held publicly accountable alongside the police by the global resurgence of the Black Lives Matter movement. Their sole raison d’être was promoted to us as the protection of all of us and ours, so if they are not reaching out to and engaging a diverse public, that public wants them to be different.

This evolution should be happening within museums themselves, so the audience can bank on museums’ expertise rather than distancing their specialists due to their old approach to acquiring knowledge. As other people, museum staff lost a great deal during the pandemic. They were and are still working from home. Many of museum employees already had temporary and freelance contracts and a number found themselves unemployed or furloughed, which prompted mental health issues and concerns about the future of their career and museums themselves. That is justified as UNESCO 2020 and International Council of Museums (2020) stated in the pandemic report that one in eight museums could permanently close because of the enormous financial loss endured during the crisis caused by COVID-19. At that same time, those institutions and their staff took responsibility for well-being of their audiences by organising games, colouring and quizzes, offering escapism from the fears for life.

In addition, the pressure by the audience that museums have to create online content is immense, however their resources and experiences are. The benefit of this activity is obvious in terms of getting to new audiences and unlocking new income streams, but the capacity of the museums is uneven. The staff experiences lack of training, sufficient pay, development and the existence of the centre point for information about what is already on the net like professional webinars and resources. (Wafer Hadley, 2020) Still, we expect them to be as good as the best broadcasters and production companies we got used to consuming at home as museums position themselves as guardians of our heritage.

DIGITAL TROUBLE: THE URGENCY OF SOCIAL CHANGE
Museums are places of the past. They guard our mnemonic aids, predominantly captured in physical objects. Those material things, their creation, use and circulation are subject to museum knowledge production in which curators consider the cultural, social and economic dimensions of objects’ histories. Museum artifacts deposit textures, scales, techniques and spaces that provide valuable and sometimes more accessible information for understanding fields, communities, subjects and geographies (Pantalony, 2020) than we could obtain elsewhere.

As vessels that carry our connections from the past to the present and the future, those objects generate meaning and value, which is framed through the museum environment. Professional practices, which operate in that surrounding, position the objects in particular ways and in that process, museums become contested institutions as they largely represent specific narratives. Their selective approach fails to encompass many communities and histories that were or are related to accumulated stories or artifacts on display. Furthermore, a constructed discursive, moral and social point from which the communities are invited to perceive the world, establishes museums as pedagogical actors (Trofanenko & Segall, 2014) responsible for our current state of affairs.

It is no wonder then that museums, amidst other organisations in charge of knowledge production went under scrutiny when pandemic struck. As we were losing many people, and in particular the elderly, the questions about the kind of legacy we are leaving to the younger generations arouse. The unproportionate effect corona virus has had on black and Asian people in the UK and wider exacerbated dissatisfaction with living conditions of the poor who suffered greater spread and impact of the virus because of that. (Wall, 2020) The communities who were frustrated by this predicament found digital realm and especially social media to be a powerful mobilising tool in the struggle against backward traditions, which maintain a division between rich and poor.

As beacons of traditions that contribute to such divide, museums had trouble to participate in this call for communal renovation that was utilized by digital instruments. Digital platforms made the urgency for social change visible and with it, begun facilitating its progress. Museums responded by issuing statements of support to this cause, but they mostly kept the work around digital in the pandemic within their commercial interests. Our project captured this tension between communal desire for social change and museums will to be part of it, even though it compromises the premise of their existence, their history and sometimes, even calls for their dismantling.

This complexity of our everyday can be observed in the basic museum form – the object. In the digital realm, objects are files, dependent on the provision of hardware as painting is reliant on the canvas, but their creation, preservation, movement and storage practices are different. One can present the artifact on a mobile phone, from its process of production to its display and dissemination. Curators can now multiply, classify, cultivate and mobilize their collections digitally, without ever having seen their objects in real life (IRL). Audiences can do the same and more with digital objects; once made publicly available, the public can preserve cultural heritage online via their own networks and even reappropriate the object as it becomes an increasingly accessible and appealing practice to do so.
The hybrid employment of real (material culture) and virtual (digital representations) ontologies allows for new understandings of data analysis, sharing, contextualisation and cultural transmission that happens around museum objects. (Bagaric & Dragicevic, 2019) This contribution to knowledge is timely as the Enlightenment origins of the European museum that championed scientific endeavour and individualism, accompanied by the use of new technologies in the 18th Century are similar to the historical conditions we are in today. The technological inventions of the telescope, thermometer, microscope, air pump and so on is like the contemporary pursuit of digital advancements we have now in relation to body, space and image. Museums want to preserve the instruments used for those accomplishments and capture the results of such achievements in order to illustrate, articulate and interpret the relationship between their objects, sites, events and wider cultural processes.

The use of emerging technologies, such as VR, AR, MR and Web3D seem to have, at least in part, democratized museums and gained them new audiences who were not necessarily looking for museum staff’s specialist guidance. Furthermore, old visitors discovered novel experiences in the form of virtual exhibitions, the Internet and interactive output for the use of consoles, headsets and booths, following new media artists who began creating artworks specifically for those screen stages. Although museums have aimed to provide infrastructure for these innovative, hi-tech installations, their old-fashioned, clunky systems often failed and so new media artists started building settings for their own shows. As they did so on the more flexible and interactive World Wide Web, they found new audiences as well as durable solutions for their work and began exhibiting outside of technophobic and stale cultural institutions.

The artworld eventually caught up with these artists by creating job positions, projects and departments within museums dedicated to this new discipline and some arts organisations were even set up or became exclusively committed to new media art. “Once openly referred to as a community of practice, a set of operations and behaviors, it [new media art] has been discursively contained in an historic period (net.art), instrumentalized as a tool, or at best left as a passive subject to be operated upon by art history’s methodologies”. (Rinehart, 2016: 488)

Museums were never at ease with exhibiting, commissioning or supporting arts on the Net. When the Internet became the only stage for arts in the pandemic, this failure to embrace the new form operating in an ambiguous cyberspace outside of their concrete walls, cost them dearly. The audience moved online to the unusual, but extensive, productive, accessible and often free spaces. From Twitter and Zoom to Instagram and TikTok, online platforms offered exciting possibilities for public engagement, the sharing of health and well-being resources, community support, professional development and the like.

However, the Internet does not have everything. Historical artifacts still remain inside the museum in the form of archives, specimens and objects that tell tales of our relationships with material culture and only a fraction of them is ever exhibited. (Pantalony, 2020) The collections we do not see are much richer than what ends up on the gallery floor. It is this hidden world that stays collecting dust on the shelves, in
bags and drawers that should be opened for public knowledge. These collections are valuable, untapped and critical resources for teaching and research.

They are also most compelling when their value is articulated by the museum staff. The pandemic pushed those experts away from the object which is the core of their story-telling. Even when the visitors were able to physically be in the museum building, social distance was observed, so the audience was deprived from an important reason of their visit to the museum - to have a closer look and interact with others. This is also an area that can be successfully tackled by digital medium.

Numerous computer programmes are created for visual, historical and spatial analysis of different objects that would be otherwise inaccessible for a variety of reasons – cost, security, repair, travel etc. And social media suggests being there precisely for networking, sharing and exchange between people.

The digital museum can enable learning and provide opportunities for arts and science communication, detached from the binds of the *flesh* carried by material artifacts. It can host lessons online, make them more interactive and track the way audiences use virtual resources. Indeed, some of this is already happening in physical museum spaces as staff or consultants strategize around, curate and map the visitors’ gallery journey. Just as the stopping points, the use of aids and the length of time they spend in exhibitions is trailed and curators use that data to profile visitors and improve audience experience, so can this be done digitally. This process is nonetheless challenging as the curation can move from play to entertainment as much as it can shift from knowledge to education, so the curator must sensitively balance the data with aesthetic, didactic, budgetary and other business constraints.

To preserve itself as rigorous, formal and to keep the reign of traditional artforms, the museum is reluctant to venture outside of its own field of expertise. Digital artifacts trouble that sphere as they are an outcome of a computational process conducted in a virtual network. They create new contexts, grounds and knowledge that can be integral for utilising physical collections, rather than being their supplement, opposition or even enemy. They can support audience engagement with contemporary subjects such as climate change, racism, capitalism, inequality and instead of perpetuating these issues, the museum could be a hub for generating and steering social change.

**INSTITUTIONAL PEDAGOGY: PRACTICE REVIEW**

Like other successful digital initiatives, our Wix website developed a variety of useful strands – from best digital exhibitions and evaluations of commissioned artworks to institutional critique. It allowed Alumni to take part in research by navigating the disciplinary challenges in museum studies, extending our pedagogic relationship beyond the taught units and actively engaging with global digital audiences. Their action research approach demanded high performance competency in switching roles from audience members to academic researchers, allowing for consideration of self as an individual learner as well as a member of multiple communities – young, female, alumni, designer, museum visitor, writer etc. (Trofanenko & Segall, 2014)

Alumni expressed how they felt about many things as art school graduates and debutants in London’s cultural industry. For example, Veronica held the tutors responsible for her university experience. Her new challenge came after the degree,
when she met unemployment because the first months after the graduation quickly stripped the graduates of peer and tutor support and they were brought back to their previous social milieus. That cultural positioning, they know so much about now can hurt their sharpened, critical, acquired selves even more as our team have discussed in and outside of the classroom.

The author learnt that if they have jobs, those are occasional and if they have internships, those come without pay, so some of them have to claim state benefits. They aspire to join the art world, they would eagerly embrace any opportunity, from administration assistant and artistic practitioner to collaborations and curatorial developments - should they be given the chance. As jobs are scarce, the Alumni are disheartened about their professional future, but if the future is even more digital than our present, young artists, curators and designers indeed have a place in it and it is where their skills have beneficial value.

Digital environment can hide the colour of one’s skin if one chooses not to disclose it, and is able to conceal or reveal other qualities a person might have. In that regard, digital space may be seen as more egalitarian as we have some control over how we navigate it and in accordance with our own preferences, opposed to the space of the museum building. Even though it is dependent on corporate power and commercial interests that must be taken with harsh criticism, digital technology can be an ally to both young arts professionals and arts organisations if that power is configured differently than now. This should be done willingly and proactively by the museums themselves rather than seeing the current crisis as reactively forcing them to act more inclusively. However, if the emergency situation is used for prototyping this change, the museums must overcome it and re-appear resilient, flexible and pertinent.

Furthermore, thanks to new configurations of time and space online visitors have a chance to decide when and where they engage with digital artifacts. This accessibility of the museum repository allows for a greater public interaction and can be extended further by making linked content and using multi-media from the start of planning an acquisition, commission or exhibition, rather than treating the digital sphere as an afterthought. (Kahn, 2020) Digital technologies should be a medium for museums to rethink their relationship with visitors and to nurture a sense of duty towards them. On the other hand, interaction through digital equipment provides the audiences with agency and permits them to become actors and intermediaries in the museums’ story-telling machine.

Identified as actors in Ramaswamy and Ozcans’ co-creation framework (CCF) those visitors or non-visitors define their personal experience, activate, select or generate contents. People who actively contribute, facilitate or enrich the experience of others are intermediaries and they can be museum’s staff, friends, relatives, tutors, etc. They navigate content through interfaces which can be particular technical and software development tools such as mobile and virtual reality apps, Alexa, Siri or Cortana skill, GitHub etc. They differ according to the need and can be specific relative to the context, visitor, collection and budget. (Ramaswamy and Ozcan, 2018)

However, this classification further articulates interfaces into categories of narrator, guide, collector as offered by the CCF (2018), re-enacting the conventions of the
museum rather than challenging them by digital instruments. The framework develops established roles within the museum and cannot inspire thinking beyond them or even without them like they are a firm point of reference. This shows the strength of the centuries long roots cultivated by the idea of museum itself within which there is a master – an expert that owns, has and gives voice (narrator), points to the right direction (guide) and gathers what is considered valuable (collector).

This inability to imagine other than the powerful world the museums created until now is why the enthusiasm with digital prospects often runs in circles, opening possibilities on one hand, but then disappointingly bringing them back to what we know. Digital interfaces mediate museum experiences and that can be to the better only if we all use them in socially conscious way. Otherwise, they reinforce already recognised inequalities and can actually serve them. CCF acknowledges such challenge and suggests that the merger of artifacts, contents and interface form the center of social processes because the mix of these elements encourages people to interact and exchange knowledge with each other.

Young people recognize the advantages of this approach as they know the Internet having grown up with it. It is also a more permanent staple in their life than the material culture of the museum, so they could lead this process from the digital end. But besides having the Net as a generational insignia, they continue to ask profound questions behind the lack of it too – for example, Alumni wondered what does digitalisation mean for communities who may not want digital recordings of sacred objects and remains? (Amon, 2020)

The Alumni in this project understood the need for museums to identify and adopt a narrative the public can support. Whatever that story is, it is inevitable that some communities will stay unrepresented within it. Their absence on one hand and the aesthetic of the communities present on the other is also effective in teaching us how to feel towards them. In developing such an affective pedagogy - a theory of the politics of art as method – we are reminded that learning is a political act encompassing our socio-economic and physical bodies, teaching spaces and the emotional lives of students and their teachers. (Hickey-Moody, 2013) For this reason, Digitalising the Museum project also sought to contribute toward the decolonisation of museums, but also of our university. (Bhambra et al. 2018)

Working across those two arenas – museums and universities means being emotionally invested. Art communicates affectively and arts organisations count on it for engaging responses from museum-goers who might feel changed by exposure to the exhibit. Feminist writer Sara Ahmed (2004) explains that forming an impression could involve acts of perception and cognition as well as an emotion; it is contingent on how objects impress upon us. An impression is a consequence of being pressed and we “associate the experience of having an emotion with the very affect of one surface upon another which leaves its mark or trace”. (Ahmed, 2004: 6) We are therefore truly touched by the objects we see.

If museums function as repositories of cultural memory and we are not connecting with their artifacts, we can feel like we do not have a shared, collective, national understanding. When we do not fit the represented community whose past is constructed by the ideals of citizenship, identity, and belonging, we are excluded.
This hierarchical process bounds knowledge to the sense of community that seems more important than ever. As Londoners from a variety of backgrounds, who have experienced the impact of this museum strategy, our Alumni look to the work of young White Pube (https://www.thewhitepube.co.uk) curators for a conceptual and ethical frame to analyse this project’s case studies. They divulge generational impressions of how traditional museums can make them feel: they give out bad vibes. We are clearly shaped by our contact with objects who in turn, shape us. (Ahmed, 2004)

The young creators of Digitalising the Museum project made their research content openly available on the Internet. It is still breath-taking how easily they exposed themselves to the world online, but it is equally impressive how they care for it. They took the current crisis into account more than the author here did when they wrote that they forgive these arts organisations for not stepping up to connect with their audiences as they might have staff furloughed. (Nibbs, 2020) They were open to any kind of suggestion, worked well over their contracted hours, used their own equipment, materials and skills and still, they felt honoured to just be involved in the arts. Instead of being chased by the museums to engage with them, considering these young people might one day be in positions of power from where they decide whether to give money to the museum or not, they worked for the museums for free and without them even knowing about it.

Nevertheless, we have taken this labour on as a bonding exercise, pedagogic practice and an act of cultural activism. Staying together as arts professionals in these difficult times was a consoling process within which we permitted each other to chronicle and measure history, after all the pandemic is our first event on this scale. Recording and evaluating a response of the arts organisations to it, taught us something about the cultural industry in the UK. Its prevalent connection with the media, where young people unite to catalyse collective action, opened a space where Alumni could see themselves in and be more comfortable than in the museum’s neo-classical or mushrooming starchitecture buildings.

In this project, we have embraced learning from each other. We relied on affective solidarity to organize our experiences and influence our subjectivities. By encouraging each other to know, we made meanings as a group and so, we were all teaching one another. This process has demonstrated the aptness of this group of authors to fulfil curatorial roles. If curators curate “out of a desire to teach, to tell, to relate something to some body” (McWilliam and Taylor, 1996: vii), these young women should be headhunted by the museums as soon as they exit the classroom, not be grateful to be given an opportunity to engage in a project that still connects them to their arts school. If this does not happen, we risk losing them to other fields that might provide more security, but less contribution to our social progress they evidently have the potential to influence with generosity, responsibility and care, which would radically change the museums and with it hopefully, the world we live in today.

CONCLUSION
The International Council of Museums (ICOM), a global umbrella organisation for museums defines them as spaces which are: democratising, inclusive, polyphonic, participatory and transparent, working “…in active partnership with and for diverse
communities to collect, preserve, research, interpret, exhibit, and enhance understandings of the world, aiming to contribute to human dignity and social justice, global equality and planetary wellbeing”. (ICOM, 2019) This is quite a broad scope of the museum’s responsibility for social wealth, which then encompasses reckoning with history including its own. As our world is a product of colonialism and its continued universal reverberation is felt in contemporary times, the museum ought to be the place where we learn about it.

That story of slavery, empires, immigration and trade must not come with assumptions about the other, but with a reflection on elite Western European interests. Their view of the world as a space of opportunity and a place to conquer must not fold the distance between the West and the rest into difference between the self and the other. The production of such separationenthuses the construction of exotica and it has been present in the museum from its origins.

Interestingly, the Internet is very similar to the first, original museums, seen as upper-class ‘cultural banks’ (Hooper Greenhill, 1992) and known as Wunderkammer, or ‘cabinet of curiosities’, where special climate-controlled structures house bones, tools, textile, paper, specimens etc. In the digital realm, we also find all sorts of things that are linked sets of data in algorithmic networks, travelling via a semantic web into connecting databases serving the purpose of generating multimedia collections that focus on those created records as much as on the objects themselves. In this way, the digital is designating a virtual equivalent of an object existing in the physical world.

However, museums should leverage new technologies to move beyond ‘physical’ and ‘virtual’ dichotomy. By using transmedia enabled by digital technologies, audiences can be in control and reconfigure their visits to cultural institutions (Bradburne, 2008). They could be given the chance to choose their way of experiencing the artifacts, independent of their rendering through the prism of an expert. This is not the best method of acquiring the knowledge, but its liberation from the ties of history provides an opportunity for a new reading of objects and their past. Ideally, museums should be distributing the educational experience of the physical museum across different digital platforms, enabling the acquisition of both knowledges – their own and their audiences’.

This distributed museum or network (Bautista & Balsamo, 2013; Rodley, 2019) would then be mobile, open and connected platform with the digital counterparts to the physical spaces and experiences. Working transmedially, the museums would spread their information around the artifacts, events and developments to several media, creating an interactive web between the exhibitions, artefacts, websites etc. This would allow remediation of the ‘old’ and emergence of heightened, unfolded and expanded stories.

Embracement of VR or AR applications and platforms like Facebook or Twitter nowadays represents the norm in many organisations as the internet, smartphones, and digital apps have become mass-produced and are often free to immediately download. Those portable places of experience can be quite unique in their ability to offer massive transmission and form social and technological bonds through which the culture can be shared. Instead of the monologue provided by the museum
specialists, there could be a dialogue with their audiences. Redesigning communication would bring knowledge back to the museum too via ‘the wisdom of the crowd’. (Proctor, 2017)

The museum would then, co-create and collaborate with their visitors, becoming more open, welcoming and accessible. This would address criticisms around the museums’ lack of engagement with people who are ‘outside’ as their stories could be stored in the archives, inscribed in audio guides or published on museum websites. We could move on from contributions to open forums and comments sections and provide the community with the chance to participate in the form of an online fan club, an influencer or a collector. COVID-19 pandemic inspired great examples of such good response by the museums when many asked their visitors to provide their stories, video and audio records of coping with the crisis and used them as flagship features on their websites.

This exchange between museum and their audiences produces further prospects for distributing museum collections via placemaking in games that sometimes have ‘museum modes’ (Assassin’s Creed Origins) where players can go on a virtual tour. Such provision requires collaboration with technology industry partners and multidisciplinary approach to production. Historians, developers, designers and museologists could work together to launch contests and create artefacts, hashtags, trends, livestreams and tours. Future research into museums would then have to be interdisciplinary and enriched by that diversity of approaches, it would offer a variety of possibilities of what a museum can be, from a park to a space station!

Cloud infrastructures from big multimedia technology companies like Apple, Google, Amazon and Microsoft have given museums the capability to release their collections online for reduced costs whilst interacting with digital assets such as high-resolution media files, downloadable datasets and open-source APIs. Metadata can be combined with media and analyzed using artificial intelligence and machine learning to gain novel insights about the collections. (Sundwall, 2020) The storage and sharing of these findings would be limited by the scope of the web browser, devices used, and the method of adapting the artifacts into a digital online space (Taher, 2020).

At best, museums treat the web as a platform for business and a fast, low-cost and user-friendly tool for informing the public about their work. However, digital has a greater potential for engaging audiences in discussions about our world today. In that transition from being a notice-board for information exchange to the agent of transformation, digital consumes us more than we are willing to admit. It is embodied, situated, affective, material, political and requires tacit knowledge to navigate it. (Shah & Indira Ganesh, 2020) Consequently, the digital is also an environment with responsibility for our social well-being. It carries our memories, heritage and culture and so it is accountable for them just like museums are. Both are not simple storages, but providers of space, visibility, knowledge and care that are embodied experiences.

Policy makers should support museums in the journey of restructuring how they conduct their business as they are largely funded from the government purse. Emphasis on ‘hands on’, tactile engagement with museum objects has to be put
aside as well as the use of monitors for purely information purposes. Instead, both parties – governments and museums ought to focus on creating exclusive digital contents aimed at their online audiences who can tweet, personalise or like their experiences and keep them in their phone. In this sense, organisations that cater for the public have to be proactive in adjusting to digital settings in order to adequately respond to the needs of the society which takes their issues and voices online.

ACKNOWLEDGMENT:
This research was supported by the Research Grant of the London College of Communication, University of the Arts, London.

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ADDITIONAL READING:


**Definitions:**
Digitalisation – the process of creating a world around the objects, not the mere digitising of them
Virtual Exhibition – an exhibition that uses web technology to be seen
Pandemic – ongoing global pandemic caused by the COVID-19 corona virus