

# A strategic approach for museums to the post-COVID-19 world

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*Drawing from the experience of The Palace Museum and other museums in China during the lockdown, Ye Yipei explores the future of culture in the digital realm such as the possibility of and opportunities offered by a unified national portal for disparate digitised cultural collections, and potential income streams. Her essay also shares her thoughts on the need for physical museums to evolve and adapt to the post-COVID-19 future.*

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The moment came when cities were on lockdown and people were forced into self-isolation at home to avoid crowds. The epidemic caused by the coronavirus had brought about a significant deviation from the norms of everyday life. A variety of epidemic control measures such as self-quarantine, self-isolation and above all, social distancing, are currently in practice and will probably last for an unpredictable period. Given that this is probably “the worst global recession since Great Depression” (Gopinath 2020), it is hard to forecast precisely what negative consequences it may have on domestic politics, international relations, and the ideology and personal dispositions of everyone affected. Hence, the museum as a public space should take a strategic approach to address the potential deviation from established pre-pandemic norms.

Museums, galleries, and cultural heritage institutions provide an important cultural service as they preserve and interpret information grounded on material evidence including immovable and moveable cultural relics. The space and tangible collections are crucial in constructing an immersive experience for

visitors, especially for museums of archaeological excavation sites. Dr John H. Falk, a leading researcher on museums and human-environment interaction, posited that museum-going is first and foremost a leisure experience (Falk and Dierking 2013, 39–41). When the pandemic disrupted leisure activities, we should consider what kind of cultural services museums can provide beyond in-person leisure experiences.

Just as the pandemic accelerated the race by businesses to adopt e-commerce, it catalysed an unprecedented expansion into digital space by museums in China after the shutdown. Social media and external-facing portions of museums’ websites took centre place during the closure period. The Palace Museum’s website saw a 114.9 per cent year-over-year growth on page views in the first season. The accumulation of digital assets by museums over the years finally came into use. The museums released more collection information online and hosted panoramic and virtual exhibitions on their websites and apps.

Take The Palace Museum as an example. We released panoramic virtual galleries and previous exhibitions on The Palace Museum Exhibition app (Figure 1), and 229 items in 3D models on our website (Figure 2). During the closure, The Palace Museum conducted its first live streaming on over 20 live streaming platforms on 5 and 6 April (Figure 3). Audiences enjoyed a quiet virtual Forbidden City bathed in spring light, accompanied by curators’ talks. Cross-platform video views amounted to around 190 billion as of 6 April, 1730 hours.



**Figure 1.** Panoramic virtual exhibition (VR mode) of the Fortune and Longevity of Sumeru on the museum's app. Image courtesy of The Palace Museum.



**Figure 2.** A 3D model of a painted enamel jar with longevity designs produced during the reign of Emperor Yongzheng (1723-1735), displayed on The Palace Museum's website. Image courtesy of The Palace Museum.



Figure 3. Poster for The Palace Museum’s first live streaming. Image courtesy of The Palace Museum.

The content online became a vital means for museums to connect with audiences. Technological innovations made it possible for museums without concrete form to remain active online. In China, this gave rise to the collective term, “Museum in the Cloud” (云博物馆), for the various efforts of museums to go online, the word “cloud” a reference to the technological infrastructure enabling the hosting and accessibility of such large sets of data. The term makes reference to both museums having their data stored offsite, backed up to public-cloud-based servers besides local backup; and museums making attempts to replicate online as close as possible the experience of visiting in person. For instance, many museums including The Palace Museum offer panoramic exhibitions and virtual-reality exhibitions. An iPhone (VR-capable) and a handmade cardboard VR headset are an audience’s full gears to enjoy an immersive museum-visiting experience. During this period, museums also see the significance of the behind-the-scenes data

that supports these initiatives mentioned above, because data can be repurposed and presented in ways to help the public see museums and their collections without having to visit in person. These efforts made it possible for the populace to enrich their inner and cultural lives in an unprecedented way during the pandemic.

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## Taking the idea of “Museum in the Cloud” further

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Over decades, museums have been dedicated to collection digitalisation in various ways including digital scans, photographic identification, creating 3D models for historical and archaeological sites etc. mainly for academic research and data

preservation purposes. To make their collections available to everyone in the world, some museums have launched online collection catalogues with high-resolution images and metadata based on their internal collection management system. The collections then become accessible to any individuals or groups.

Considering digital infrastructure as one of the most significant capacities of a modern nation, China launched a plan for systematic construction of big data capabilities in the cultural sector in May 2020. The national project aims to propel China's deeper integration culturally and technologically. Data from museums plays an indispensable role in the plan. By reviewing existing data fields and considering the addition of more fields, the nation has plans to establish core data standards ready to link to any database. It is a practical approach to facilitate the integration, mediation and interchange of heterogeneous information from museums and cultural institutions, therefore transforming disparate, localised information sources into a coherent national and even global resource on the internet. Moreover, the approach will make it possible to massively describe iconographic elements depicted on works of art, create tags, enhance semantic richness of the collection, and facilitate collaborative knowledge creation and management with the power of crowdsourcing. It is an efficient way of advancing a culturally and socially sustainable development for museums.

The idea of "Museum in the Cloud" is so much more than presenting virtual reality exhibitions online. With the national project as described, the current state of multiple disparate websites and virtual efforts will eventually be replaced with a unified cultural portal. With data standards and structured data, this unified portal is ready to offer integrated access to various museums and institutions' databases in spite of physical

segmentation, providing comprehensive information with the help of semantic search. Historians and digital humanity researchers are welcomed to conduct research based on museums' collection and put forward different views, integrate collections' metadata from different museums and construct databases for cross-discipline research and application. For instance, researchers are able to fetch data from various museums' online collection management systems via integrated application programming interfaces, exploring quantitative visual and statistical approaches to a specific hypothesis by data abstraction, manual and automatic modelling, exploratory analysis and finally representation (El-Assady et al. 2016). As for the amateur enthusiasts and audiences whose interest may extend beyond a single institution's collection or a specific category, a unified portal will allow them to access the cultural resources and databases of diverse museums.

Nonetheless, despite all the advantages, such extensive digitalisation efforts are considered controversial by some conservatives over concerns regarding the museums' income. If audiences can enjoy all cultural services that a museum can possibly provide online, why should they visit in person? Decline in visitorship will result in a drastic loss of income for museums, as was shown during the coronavirus outbreak. Furthermore, providing open access to museums' images will put an end to benefiting from licensing quality images. Yet, if an image is a rendering of an artefact accessible in the public domain, produced by scanning as faithfully as possible, it is questionable if a licensing fee should be charged since it is merely a visual reproduction.

It is time that museums explore other means to generate revenue seeing that the trend in open digital access to museum collections is inevitable. A trend that museums may study for precedence



is user willingness to pay for digital access. For example, digital extended play records (EPs) on online music platforms in mainland China are making a profit, and video website iQiyi posted 52 per cent revenue growth in 2018, reaching 10 billion yuan in membership income. More and more examples of profitable businesses based on digital content show that people are willing to pay for quality content and knowledge. This potentially harks well for museums.

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## The irreplaceability of physical museums

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As for the physical museums, the question remains: what is a physical museum's core attractiveness? What is it that tempts visitors to walk through the gate of a museum repeatedly and be willing to pay for admission? What is that which is irreplaceable by online cultural services?

Firstly, an original piece of art or artefact will never lose its appeal. As Jennifer Hansen-Glucklich wrote in her book *Holocaust Memory Reframed: Museums and the Challenges of Representation*:

Artifacts possess an aura of authenticity as traces of a lost time and place. Because they appear to be unmediated remnants of an authentic past, they possess an almost mystical power to bridge time and space and to act as witnesses (Hansen-Glucklich 2014, 81).

For youngsters, the museum is the best complement to aesthetic education, as it fosters their sensorial abilities and provides an approach to art appreciation. A place like the museum with a combination of architecture, artefacts, and art, could not be a better place for this purpose.

Considering that visiting museums is an inevitable educational investment, people will find museums' collections always appealing and they will be willing to pay for admission. Any digitised or animated works by the museum may enhance the experience but can never replace the in-person visit.

Secondly, facilities such as the museum café, shop, guided tours etc. are leisure attachments to the museum visiting experience. A distinct as well as sensory service in a culture-laden environment could amplify the pleasures, such as cafes designed to complementarily integrate with visitors' unified aesthetic desire in a museum or gallery experience (McIntyre 2011). According to Leaf Van Boven, Assistant Professor of Psychology at University of Colorado Boulder, experiences are shown to create more happiness than material goods because they provide positive personal reinterpretations over time (*Science Daily* 2004). People are also shown to be willing to spend money on experiences rather than material purchases, as "the memory of an experience persists over a long period of time, whereas the perceived value of a possession can weaken" (*Inquirer.Net* 2020).

Thirdly, museums can be actively engaged in addressing social concerns and be a central and visible player in civic life. The museum is an active community centre for discussing ideas and exchanging opinions. Nowadays, museums are playing an increasingly active role in holding activities for local citizens, such as art workshops, book signings, lectures on art and history, and courses for various groups of audiences. By being actively involved in urban culture, museums are viewed as a link between culture and local development. They can encourage local economic development by supporting creative activities and benefitting local enterprises and entrepreneurs.

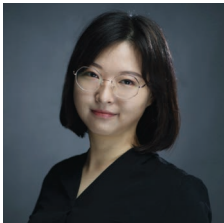
For museums that are mainly funded by central or local government funds, it is essential that they show their importance to local economic and social development. During the pandemic, we have seen some museums in China closing down due to financial troubles. When there are so many businesses and companies appealing for government financial assistance, museums and the cultural sector appear to be ranked relatively lower. It is therefore critical that museums show their contribution to local development, such as in

job creation, tourism and social inclusion, so as to earn their eligibility for financial support.

During the coronavirus outbreak, the world underwent many unprecedented changes. Some of these changes may revert to pre-pandemic status, while other changes will be irreversible, such as the trend in digitalisation. The pandemic is a painful reminder of the phrase “survival of the fittest”. The question is, do museums have the courage and preparation to go forward with time? □

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### About the Author



Ye Yipei is Data Manager at The Palace Museum. Her experience includes building digital galleries, curating digital exhibitions, and creating online content and mini digital exhibitions for smartphone apps. She is in charge of the museum’s project to build a semantic network for ancient Chinese artefacts, which potentially can facilitate the development of computer-based lexicons, particularly within the field of artificial intelligence.

### Bibliography

El-Assady, Mennatallah, Valentin Gold, Markus John, Thomas Ertl, and Daniel Keim. 2016. “Visual Text Analytics in Context of Digital Humanities.” In *IEEE Information Visualization Conference: Workshop on Visualization for the Digital Humanities*. Konstanz: Universität Konstanz. <https://scibib.dbvis.de/uploadedFiles/visualtextanalytics.pdf>.

Falk, John H., and Lynn D. Dierking. 2013. *The Museum Experience Revisited*. New York: Routledge.

Gopinath, Gita. 2020. “The Great Lockdown: Worst Economic Downturn Since the Great Depression.” *IMF Blog*, April 14, 2020. <https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn-since-the-great-depression/>.

Hansen-Glucklich, Jennifer. 2014. *Holocaust Memory Reframed: Museums and the Challenges of Representation*. New Brunswick: Rutgers University Press.

*Inquirer.Net*. 2020. “Spending Money on Experiences Rather Than Possessions Could Bring More Happiness, Says Study,” March 12, 2020. <https://technology.inquirer.net/97227/spending-money-on-experiences-rather-than-possessions-could-bring-more-happiness>.

McIntyre, Charles. 2011. “Food Service in Museums and Galleries: Dreamscape Spaces for Extended Contemplation of the Beautiful and the Sublime.” In *Culinary Arts and Sciences VII: Global, National and Local Perspectives*, edited by Heather H. Hartwell, Peter Lugosi, and John S. A. Edwards. United Kingdom: International Centre for Tourism and Hospitality Research. [http://eprints.bournemouth.ac.uk/18128/3/ICCAS\\_museums\\_and\\_galleries.pdf](http://eprints.bournemouth.ac.uk/18128/3/ICCAS_museums_and_galleries.pdf).

*Science Daily*. 2004. “Experiences Make People Happier Than Material Goods, Says University of Colorado Prof,” 2004. <https://www.sciencedaily.com/releases/2004/12/041219182811.htm#:~:text=Experiences Make People Happier Than Material Goods%2C Says University Of Colorado Prof,-Date%3A December 28&text=In a follow-up laboratory,after pondering a material purchase.>