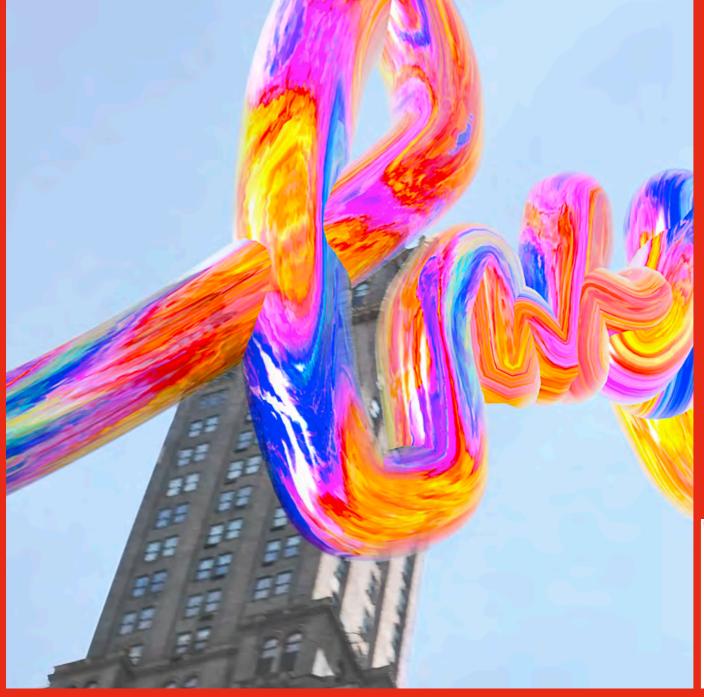
# 

# MUSEUMS BREAK LOOSE

Wonderwall's founder on revolutionizing retail 3D printing takes affordable housing mainstream How to reinvigorate tired trade fairs Power to the people: next-gen Mexican design Gentle Monster shoots the shopping mall to Mars









MUSEUMS Instead of quietly mouldering away in the 21<sup>st</sup> century, museums are innovating to become critical voices in the wider societal conversation. How? By engaging with the major issues of today through platforms that are borderless, revitalizing and inclusive.

# how the museum is moving

# from conservation to activation

Museums have gone through a renaissance in the past few decades. With the dawn of the digital age, many expected these once august institutions to lose their relevance, but what we've in fact seen is record attendance across age groups and demographics. The modern museum is far more than a mausoleum to the past: it's a conversation about the present and a crucible for the future, too.

Many of the world's most famous cultural institutions have roots in the great European nation-building endeavours of the 18<sup>th</sup> century, such as the British Museum (1759) and the Louvre (1793), designed as marble edifices to the hard power of the state, enshrining the spoils of colonialism and war. The modern museum wields a much softer but no less potent form of power, rebranding cities, regenerating neighbourhoods, brokering diplomacy, fostering civil society . . . the list of political, social and cultural functions goes on.

The ability of museums to transform the global reputation of cities is so well documented that it even has its own moniker: the Bilbao Effect. Named for the impact Frank Gehry's design for the Guggenheim Bilbao appeared to have on the fortunes of the city – where visitor numbers increased by 500 per cent soon after opening and 4 million came in the first three years – it drove a spate of copycat commissions and fuelled the era of the so-called Starchitect. Yet there has been long-standing criticism of this model of development (Gehry himself famously described the Bilbao Effect as 'bullshit' in a national newspaper) and today, major new commissions have to straddle the headline-grabbing with the locally sensitive: just one of many balancing acts the modern institution has to pull off.

**Words Jonathan Openshaw** 

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# POLITICAL POWER-HOUSES

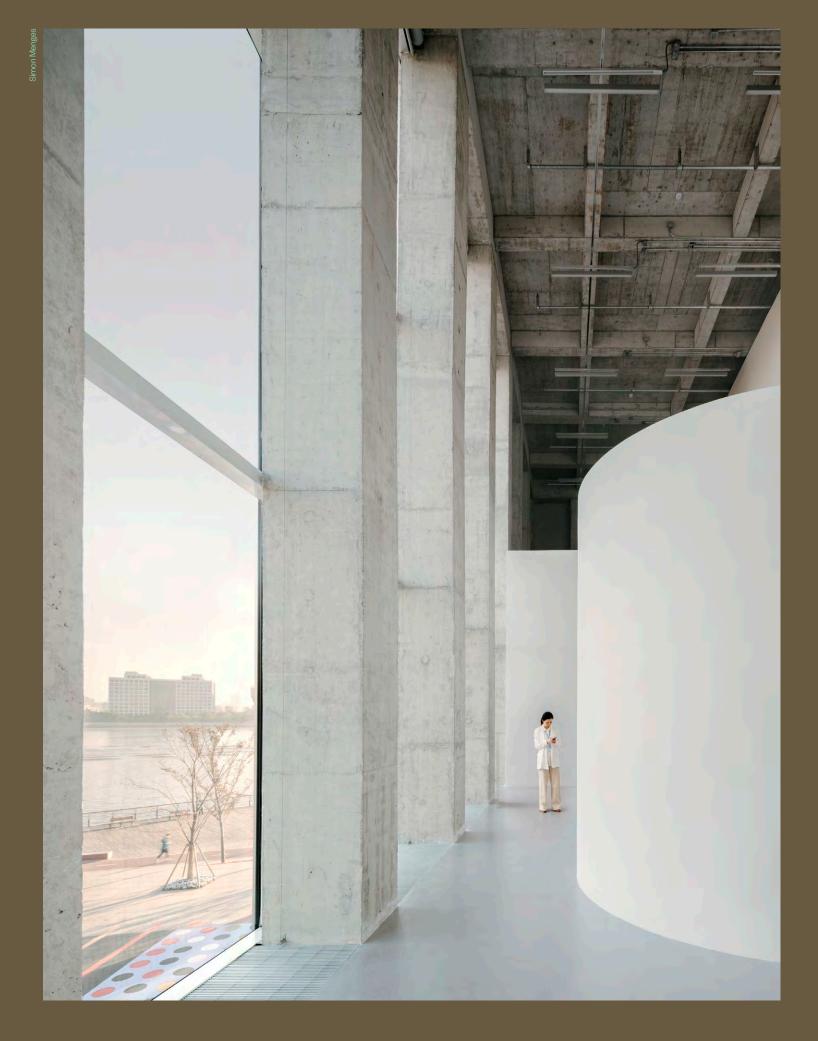
When the Pompidou opened its David Chipperfield-designed Shanghai outpost in November 2019, it had all the hallmarks of a major political event, with President Emmanuel Macron in attendance and *The New York Times* running an extensive editorial on the rise of so-called museum diplomacy. The idea of 'soft power' has gained momentum in the 21<sup>st</sup> century, looking at the ways in which countries can forge bonds or compete through cultural projects. Museums have become key players in this shadowy world, with each new project encoding complex geopolitical relations.

'It's increasingly important to be showing what the UK is good at overseas,' said the V&A's deputy director Tim Reeve at the opening of the museum's Shenzhen outpost back in 2017, while the museum's director Tristram Hunt explicitly equated cultural projects with Britain's survival outside the EU, describing it as 'the mix of ingenuity, vision and spirit of collaboration which post-Brexit Britain will need to display on the world stage'. The V&A has been credited with forging better cultural ties within the UK, too, opening a Dundee outpost in Scotland in 2018 and with a major new project in V&A East set to open in 2023. Both projects are bringing major infrastructural investments into traditionally marginalized areas.

Mirroring their nation-building colonial past, museums, it seems, have found a new role as conduits of modern soft power. Shanghai's Centre Pompidou × West Bund Museum Project and the V&A Shenzhen are just two examples of this trend in action, with Jean Nouvel's Louvre Abu Dhabi and Frank Gehry's long-delayed Guggenheim UAE being other high-profile cultural outposts.

China has been particularly assiduous in exploring the potential of soft power in recent years, with work underway on a 440-hectare, €2.5 billion cultural city 100 km from Beijing called Valley XL. But with so much interest in the political, economic and social power of institutions, is there a risk that they are becoming compromised? Many European museums have been forced to adapt their curation for Middle Eastern and Chinese governments, bringing accusations of censorship from the cultural community. It was a criticism that the French magazine *Le Point* put to Pompidou president Serge Lasvignes last year, to which he replied: 'For me the question is: are the rules that are being applied really changing the nature of a project? If not, we go on. If yes, we will stop.' But can that intention always hold up under political and economic pressure?

Over the next five years, the Centre Pompidou will show a number of exhibitions in Shanghai's West Bund Museum (pictured) as part of a contractual cultural partnership between France and China.



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# INTO THE WILD

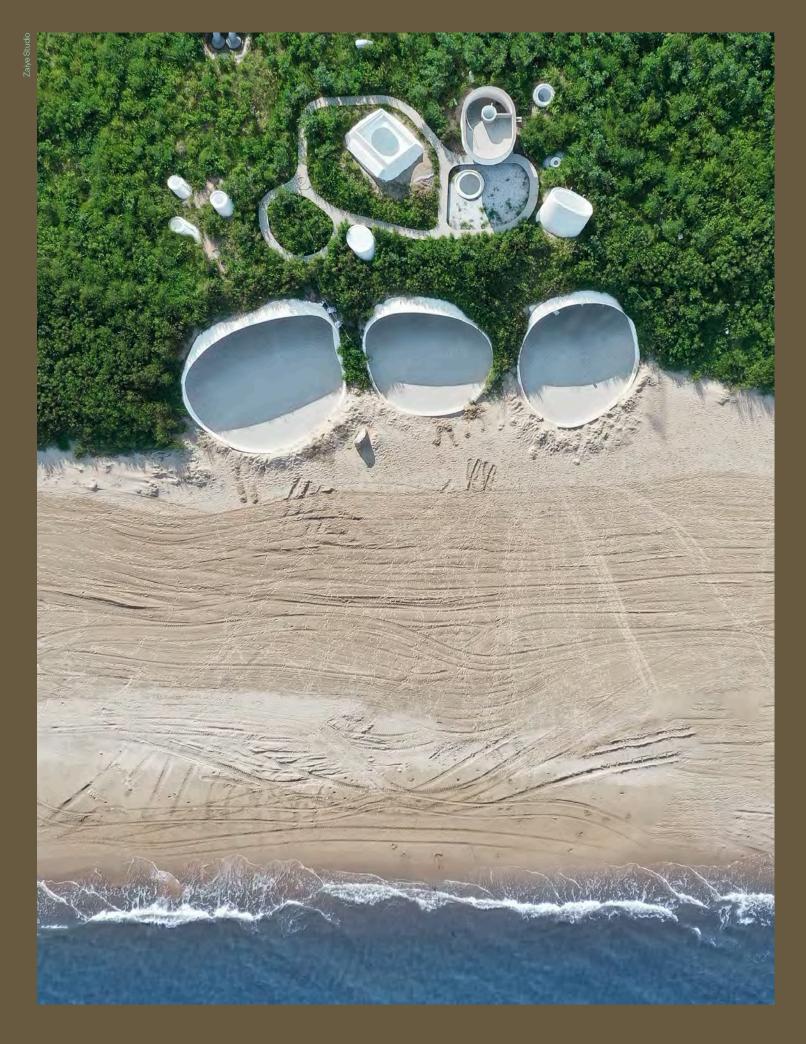
The trend for museums in remote locations that require a pilgrimage of sorts is well established – from the Naoshima Art Islands of Japan to Zaha Hadid's Messner Mountain Museum, culture and nature make happy bedfellows. This firmly fits into the so-called experience economy: the consumer trend that posits that younger generations are putting a premium on experience over acquisition and access over ownership. According to the World Economic Forum, 78 per cent of millennials choose to spend money on a desirable experience over something material, making destination museums perfectly placed to appeal (and it doesn't hurt that they're Instagram-friendly, either).

Sustainability is also a core concern for the next generation of museum-goers and institutions that are in synergy with nature are a powerful draw. The Harvard Public Opinion project recently found that 70 per cent of Gen Z feel climate change is a problem, while 66 per cent agreed that it is a 'crisis that demands urgent action'. With cultural flashpoints from Greta Thunberg to the Australian wildfires keeping the environment high on the agenda, it's something that institutions need to start taking seriously.

The recently opened UCCA Dune Art Museum in Qinhuangdao, China does just that. Located in a region of rapid urbanization, the ancient sand dune in which the museum is now housed was due to be flattened to make way for development. Beijing-based Open Architecture stepped in with a design that integrated the natural feature, creating an interlocking warren of ten galleries beneath the sand. 'If we hadn't built a museum inside the dune, the dune would be gone today. Wiped out like everywhere else, because why have a dune if it's blocking the view? If there is an integrated museum, then the dune is saved,' says studio cofounder Li Hu. Inspired by the undulating natural shapes of caves, with a subtle nod to the cave art of early human ancestors, the building also relies on the sand to help regulate its temperature throughout the year alongside a ground-source heat system.

Looking to the future, an ambitious Daniel Libeskind project is currently being funded to create a major destination museum in the wilds of Kenya's Rift Valley. Called Ngaren Museum of Mankind, it boasts an angular shape inspired by the earliest tools created by *hominins*, and the location will be on the site where Turkana Boy was discovered – the most complete skeleton of our bipedal ancestors. If funded, this museum will break ground in 2022 and perhaps become one of the most ambitious remote museum sites in the world.

The UCCA Dune Art Museum in Dinhuangdao, China, ntegrates a oncethreatened ancient sand dune.





### GOING PHYGITAL

Although the communal experience of walking through a physical museum is becoming only more alluring in our digitally dominated age, that isn't to say that curators haven't embraced the opportunities opened up by technology. Instead of seeing the digital and physical as competing mediums that somehow exist in opposition to each another, the modern institution can be a powerful example of the phygital melting pot in action, providing cues for designers in other consumer industries such as retail.

The Mori Building Digital Art Museum: teamLab Borderless in Tokyo exemplifies this seamless interplay between the virtual and tactile, filling 10,000 m² with approximately 60 interactive displays, 520 computers and 470 high-tech projectors. The developers worked with renowned international art collective teamLab on the project, which follows five zones housing digital waterfalls, swarming fish and iridescent birds. The project broke attendance records when it opened in 2018 and has already led to another teamLab Borderless museum opening in Shanghai at the end of 2019. What's more, at the time of writing, teamLab SuperNature Macao – what the collective calls



a 'permanent "body immersive" museum' – was set to open at The Venetian in Macao this month.

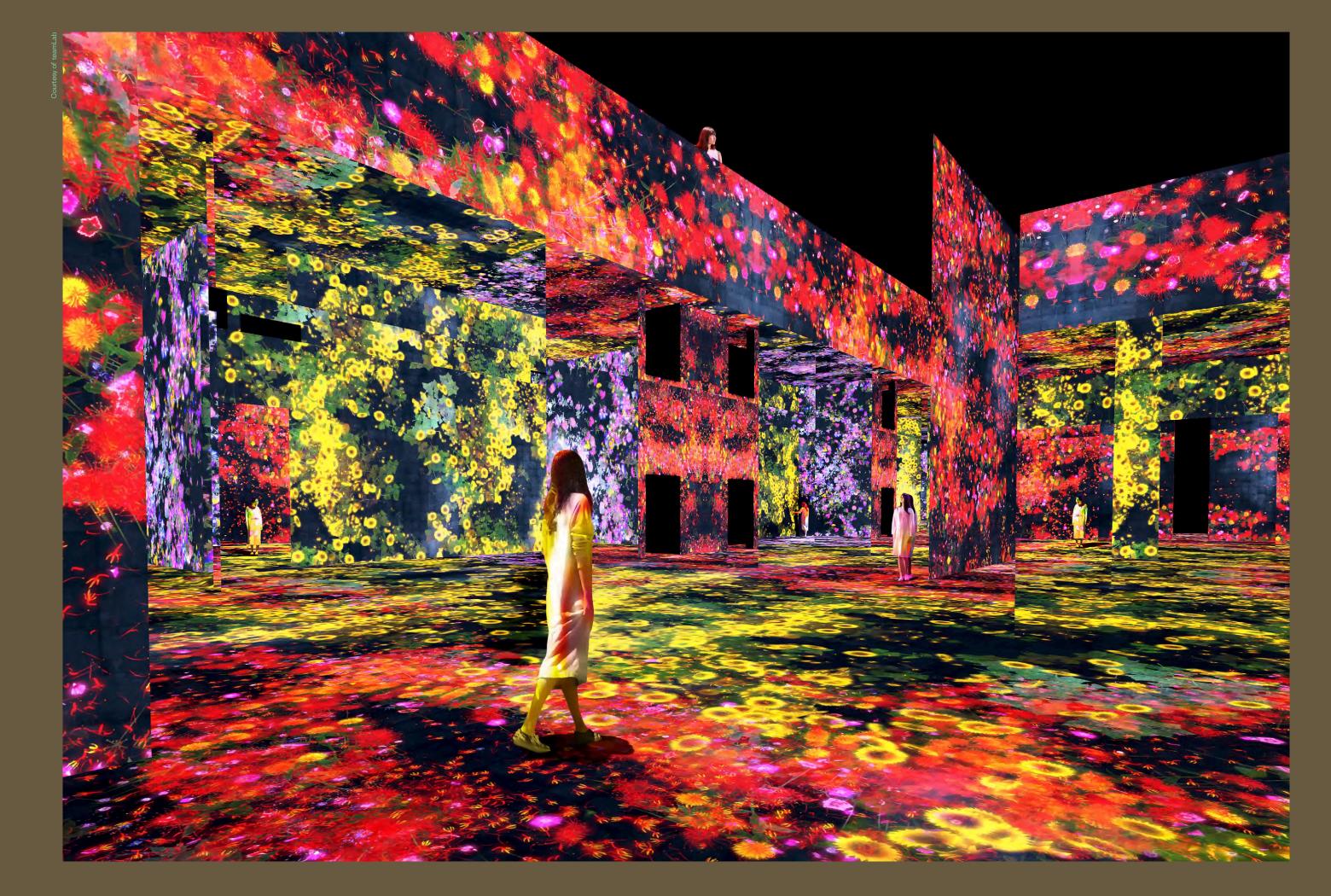
This digital augmentation of the physical is even allowing museums to break out of the gallery space altogether, as shown by last year's collaboration between Apple and New York's New Museum, where AR was used to make off-site, city-specific experiences called [AR]T Walks. Major international names such as Nick Cave, Carsten Höller and Nathalie Djurberg were commissioned to create digital AR works (almost all for the first time) which could then be unlocked – Pokémon Go style – through a dedicated app.

Apple isn't the only tech giant getting wise to the power of collaboration with museums – Google Arts & Culture has been making waves in recent years for its ambitious projects with institutions from the V&A to the Met, and most recently with The National Museums of Kenya (NMK), where it helped put the material culture of 28 different communities from across the country online. 'With the Museums of Kenya having over 10 million specimens, this is the best way for us to showcase our wide range of samples,' NMK director-general Dr Mzalendo Kibunja says of the power of digital collaboration.

Even the most traditional institutions are getting in on the digital game, with visitors to Tate Britain now able to use their iPhones as portals through which to see iconic paintings in a new light. Working with London-based Spark AR, the Tate has created an augmented reality overlay for eight of the best-loved paintings in the permanent collection: lanterns undulate in John Singer Sargent's *Carnation*, *Lily*, *Lily*, *Rose* while Edward Francis Burney's *Amateurs of Tye-Wig Music* runs amok with rogue parrots. 'By tapping into a wealth of relevant data alongside AI and computer vision algorithms, we can help people learn and connect to the world around them in meaningful ways,' says Matthew Roberts of Spark AR.

Digital augmentation of the physical is allowing museums to break out of the gallery space altogether

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PAGE 144 [AR]T Walks, a collaboration between Apple and New York's New Museum, saw major names such as Nick Cave create offsite, city-specific digital AR works.

RIGHT teamLab's interactive digital installation Mountain of Flowers and People: Lost, Immersed and Reborn (2020) includes audio by Hideaki Takahashi.



Extensions
have become
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reinvent a space's
remit by fostering
new connections
and interactions



TOP LEFT Studio Gang's forthcoming addition to the American Natural History Museum in New York will create approximately 30 new

LEFT OMA's in-progres extension to the SANAA-designed New Museum in New York will radically open up the institution to its

# MAJOR MAKE-OVERS

Many great institutions were designed to be austere and imposing, which can feel out of step with today's emphasis on egalitarian and engaging design. In recent years, extensions have become opportunities to not just expand the square footage of a space, but to reinvent its remit by fostering new connections and interactions.

A prime example of bridging a hallowed past and an innovative future comes from Studio Gang's planned addition to the American Natural History Museum on New York's Upper West Side. The undulating extension will sit at the heart of the tenbuilding campus, creating approximately 30 new connections between the existing buildings as well as a vast new series of modern galleries, breathing new life into a sprawling complex. 'Through a network of new connections, people will be able to follow their own curiosity to discover treasures of natural history,' said studio founder Jeanne Gang at the ground-breaking ceremony last summer, explaining how this collection of once distinct buildings will be unified into a singular, fluid experience.

Bridging the past, present and future is also at the heart of the forthcoming Foster + Partners extension to the Bilbao Fine Arts Museum. 'Our design will restore the existing mid-20<sup>th</sup>-century building and setting to its original glory, create a new publicly accessible atrium space and add major new galleries for contemporary art in a floating pavilion,' explains Sir Norman Foster of the project, which takes the 1940s design as a 'primary protagonist' but explicitly aims to 'write a new chapter in the life of the institution'.

It's not only traditional institutions that are benefiting from a new design philosophy of open access and fluid connections, however. The SANAA-designed New Museum in New York only dates back to 2007, but the extension currently underway by OMA will represent a radical opening up of the design to the neighbourhood. 'We wanted to create a highly public face – starting from the exterior plaza and atrium stair to the terraced multipurpose rooms at the top – that will be a conduit of art and activities providing an openness to engage with Bowery and the city beyond,' says OMA partner Shohei Shigematsu.

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# ACCESS FOR ALL

Public cultural spaces play a crucial role in the body-politic of liberal democracies, and yet for decades they have often excluded those with disabilities. Two decades into the 21<sup>st</sup> century and there is still regular outcry over access, with high-profile exhibitions such as the Tate Modern's Olafur Eliasson retrospective and the Barbican's *AI: More than Human* drawing heavy criticism for poorly thought-out displays in 2019.

There is a growing appetite for change, however, and when the MoMA closed for a major refurbishment last summer, the entire staff was sent on training days hosted by those with diverse impairments. When it reopened, induction hearing loops that amplify the sounds of multimedia works were available for all guests wearing hearing aids. In London, the Wellcome Collection won plaudits for its new permanent gallery *Being Human*, which explores the many diverse identities that make up 21<sup>st</sup>-century human experience, and showcases numerous works by artists with disabilities such as Yinka Shonibare. The curators also worked with several charities in designing the exhibit, leading to wheelchair-optimized displays and autism-sensitive environments.

There's a delicate balance to strike between facilitating the artistic vision of an exhibition and ensuring that it's accessible to as wide a range of the population as possible. The aforementioned criticism of the Olafur Eliasson show came from the fact that one immersive piece called *Your Spiral View* involved a narrow mirrored walkway accessible only by steps and therefore excluding wheelchair users – a setup that the Tate defended as a 'curatorial decision'.

Where there's an irresolvable conflict between the creativity of a work and access to it, technology can again be a powerful tool. When the Hirshhorn Museum and Sculpture Gardens in Washington, DC hosted one of Yayoi Kusama's ever popular *Infinity Mirror Rooms*, it also developed a virtual reality version for wheelchair users who were excluded by the design. In New York last summer, the New Museum created an immersive video to accompany the psychedelic labyrinth of a Marta Minijín installation, while working with the group Adapt Community Network to create a special accessible tour that used emergency exits instead of the traditional pathfinding. By taking as diverse voices as possible into account while embracing technological innovation, museums are finding new ways to open up.•

The New Museum developed an immersive video to accompany the labyrinth of Marta Minujín: Menesunda Reloaded (2019), while working with the group Adapt Community Network to create a special accessible tour.



# what will we see in the museum of tomorrow?

In the lead-up to each issue, we challenge emerging designers to respond to the Frame Lab theme with a forward-looking concept. Museums are beginning to make their mark far beyond the bounds of their buildings, but what experiences are still to come? Three creatives consider the prospect.

**Words Tracey Ingram** 

# **Aram Lee**'s bespoke trolleys take art on tour



An idea she explored through Inside oating a mus

### know it will cease to exist...

AL: I see the future museum not as one massive solid building, but as something that exists minimally and liminally. Imagine if collections were showcased in fragments on mobile trolleys. This decentralized approach would allow the museum to disperse through-

### How would this work

city. Well, actually they'd be pushed around on bespoke trolleys by the public. The trolleys collection, but also the stories and knowledge contained within the objects – and within the museum itself.

exchange its static nature for something more socially, politically and culturally engaged; unpredictability makes it possible for this reactivation to take place. In this sense, the formed as they become learners, participants and unintended (sometimes unwilling) actors that co-interpret its historical reminiscences.

> 'Bespoke trolleys', you say. What would inform their design?

Each trolley will reference aspects of the

**You believe the museum as we** object it carries: its shape, material, colour, stories. It's an idea I've explored already with *Inside Out*, a projected I initiated in 2017 together with Anaïs Borie and Ottonie von Roeder. We designed a trolley for specific objects from the Zuiderzeemuseum in the could travel around the country. One such object was a pipe made of porcelain from the Zuiderzee region, which we took on a journey and proto-architectural format that unpicks becomes an alternative to the usual museum

### What sparked the idea?

When you dissect museums, you find a similar pattern regardless of their location. The museum collects objects, bringing them together in a single spot to form a collection. The collections of many design and applied arts museums comprise thousands of things amassed from a myriad of different timelines. My analysis was that when something enters the museum we can say that it's 'dead' in that its life as a functioning object is over. Yet museums are immortal places – within their depots are millions of items, hidden

out from these dark depots, the museum will exist transparently and encourage dialogue, revealing new stories and - potentially - new

### Museums and archives also help to protect precious objects. How does your design deal with safety and security?

fluid treatment of the objects it contains. and movement are what allow for these new layers of historical meaning to develop. These destabilized conditions resituate the precious object so its immediate environment is safe but its meaning is not. The precarious state of the thing is what challenges the act of archiving in the first place.

Artist Aram Lee focuses on reinterpreting and repurposing matter found within institutions. Through the likes of performative events and film installations, she attempts to reshape the complex trajectories of objects and images by shifting the struc-

152 Frame Lab The Challenge 153

# Lara Chapman puts art – and emojis – in a new light



A critical design-research project, Through the Emoji Looking Glass sees museum-goers scan items in an institution's collection with their smartphones to reveal themed

# Your proposal for 'The Challenge' is a continuation of your graduation project from DAE...

LC: Yes. Through the Emoji Looking Glass developed from the realization that although emoji and museum collections seem to exist in different worlds, they're actually very similar in some ways. Think about who gets to decide what is included and excluded, for instance, and how these decisions shape our broader culture. I decided to develop an augmented tour that merges classical art and objects with the contemporary symbolism of emojis – imagine it as an extension of a traditional audio tour, but instead of an audio guide you use your smartphone to obtain an audio-visual reading of the work. Bringing these seemingly disparate things into conversation highlights hidden or unacknowledged narratives, and reveals how visual symbols and collections can define the time we live in. Emojis become a playful way to examine the museum and interpret its collection while, in turn, the museum's collection sheds light on the politics surrounding emojis.

# The project examines the collection of Amsterdam's Rijksmuseum. Why did you choose this location?

The Rijksmuseum faces many of the challenges confronting museums today, such as addressing and overcoming colonial and patriarchal roots. That said, the proposal can be applied to any other museum or collection. In each institution, the comparison between its collection and emojis can generate new research and insights.

### How does it work?

Users download the Artivive app on their smart device and are given a map of the works within a museum that they can activate. When



the device is held in front of an object, the app plays the object's associated augmented layer with sound. The works of art can also be reprinted and disseminated beyond the museum to be activated in other ways.

## What has the project taught you to date - and what's next?

Interestingly, although the work functions within the Rijksmuseum, I did not ask for the institution's permission to create it. The project therefore also looks at how much agency the public has to intervene in collections, confronting issues of hierarchy and authority in the interpretation of cultural artefacts.

After also presenting the concept at Dutch Design Week, I observed that the

project invites a younger and more diverse audience to relate to works of art in a way that is relevant to them.

I'm currently collaborating with the V&A in London to activate and interpret its painting collection through emojis.

# Why do you think your concept represents the museum of tomorrow?

As worldviews shift over time, collections and their content face cultural dilemmas. The augmented tour raises such questions as: Can a collection transcend its origins in colonialism or other structures of inequality? How should collections deal with violent objects such as weapons or hateful imagery? What

role does appropriation play? These dilemmas traverse the contexts of all collections, from the institutional to the digital, and must be acknowledged and interrogated by a diverse audience.

lara-chapman.com

Initially trained as a product designer, Lara Chapman holds a Master's degree in Design Curating and Writing from DAE. Her recent work has involved examining the power of collections and guerrilla interventions in museums.

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# Mélissa Ferrara's virtual visits expand a museum's reach

# What were your first thoughts when pondering this challenge?

MF: I'm convinced that humans are essentially driven by their feelings and intuition, which is why it seems obvious to me that the museum of the future should offer spectators intense immersive and emotional experiences. Each visit to an exhibition must provoke deep questioning, doubt and reflection.

## Why did you decide to focus on virtual reality?

After using it in one of my projects, I realized the potential of this technology – and I don't think it's been exploited enough. The impression of VR today is connected to coldness and distance, not to emotions. But when immersed in VR, the brain can read surfaces and volumes as if they really existed. VR is therefore a very interesting tool for architectural experimentation, because it allows us to visualize and feel volumes without having to build them. It can also transport us elsewhere and arouse our senses.

Imagine visiting a Picasso from your own sofa, or experiencing a work through the eyes of the narrator. Picture finding yourself projected into the world of cubism, where nothing seems logical but everything feels real. I see my project, Emotional Immateriality, as a series of experiments: works in their

own right created by the likes of scenographers, architects and graphic designers. Users would be able to choose what they want to discover, according to their interests.

You mention visiting a Picasso from your own sofa. Do you envisage Emotional Immateriality operating only from people's homes, or do you see potential in designing specific physical spaces for its users?

I don't see the concept being fixed to one confined location, but the freedom of having unlimited access to museums from home would allow us to approach art, design and architecture in a new light. Discovering art in a more private and privileged setting adds a layer of intimacy between the user and the work. Thanks to the innovation of VR, we can discover these spaces or engage in experiences without having to make long and often expensive journeys. This technology could allow us, for example, to see and feel exhibitions taking place in the US from Europe, or from anywhere else in the world.

# How does your concept differ from what museums are currently trying to do with VR?

My aim is to allow *everyone* to have access from their own homes, and to experience

contemplative way. The art world is already changing: it's becoming more accessible and far-reaching. Moreover, today's society is moving towards an ever more technological and connected habitat, so museums must also adapt. Being immersed in a museum from your own living room is a clear expression of how such institutions could evolve towards new artistic communication models.

# If VR technology is used more and more often, how can we keep museums from becoming VR arcades?

In my opinion, museums are absolutely irreplaceable. The circulation in a specific space, the natural light, the people sharing the same experience around us: it's all a work of art in itself that can never be replicated. VR would instead complement what already exists in traditional museums. It could reach new audiences that might not find traditional museums interesting.

After studying visual arts, Mélissa Ferrara turned to interior architecture, which she is currently studying at HEAD Genève. While working towards her Bachelor's degree, she's experimenting with different techniques such as virtual reality.



Through Emotional Immateriality, Ferrara illustrates the potential of museum-goers travelling only as far as their living rooms to don a VR headset.



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toolkit for the modern museum

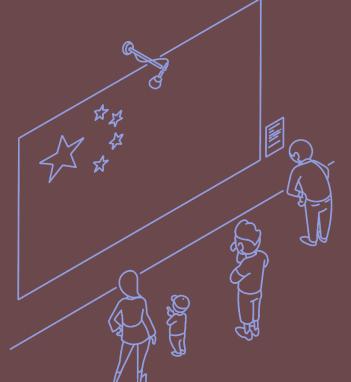
Illustrations Simon Flöter

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### **CONNECT TO THE ELEMENTS**

Institutions that are in synergy with nature are a powerful draw. With cultural flashpoints from Greta Thunberg to the Australian wildfires keeping the environment high on the agenda, it's something that institutions need to start taking seriously.





02

### THINK CROSS-CULTURALLY

The idea of 'soft power' has gained momentum in the 21<sup>st</sup> century, looking at the ways in which countries can forge bonds or compete through cultural projects. Museums have become key players in this world, with each new project encoding complex geopolitical relations.



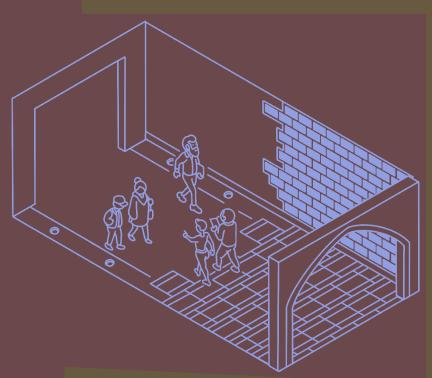
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PRIORITIZE INCLUSIVITY There's a delicate balance to strike between facilitating the artistic vision of an exhibition and ensuring that it's accessible to as wide a range of the population as possible. Where there's an irresolvable conflict between the creativity of a work and access to it, technology can be a powerful tool.

04

### **BRIDGE PAST, PRESENT AND**

FUTURE Museum extensions have become opportunities to foster new connections and interactions. Think open access and fluid connections – both between the institution's own buildings and with the neighbourhood beyond it.



05

### PHYGITIZE THE EXPERIENCE

Instead of seeing the digital and physical as competing mediums that somehow exist in opposition to each another, the modern institution can be a powerful example of the phygital melting pot in action.

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