December 2019

Arts & Culture Research Newsletter

Dear friends in the arts and research communities,

This month's newsletter highlights the use of **digital technology in the arts**, including arts companies and unique projects in this area, as well as articles on **digital engagement in the arts**.

If you have suggestions of topics for future newsletters, or if you would like us to help you get the word out for events you are organising pertaining to arts and culture research, please reach out to NAC's Research team at Geneve_Yeo@nac.gov.sg.

Season's greetings and wishing you a wonderful start to 2020!

Best wishes,

Dr Sharon Chang, Chief Research Officer
NAC Research Team (Wendy Tan, Geneve Yeo)

Companies bringing arts and technology together

teamLab

A collective known for melding digital technology with artistic concepts, primarily focussed on the relationship between humans and nature. They comprise a collaborative team of artists, programmers, engineers, CG animators, mathematicians and architects.

teamLab Borderless

This digital art museum in Tokyo, Japan, presents immersive artworks that use audiences' bodies as a canvas.

Audio visual technology is used to project its interactive artworks onto a three-dimensional plane alongside the use of sensing technologies.

Elevenplay

A dance company based in Japan that incorporates advanced technologies into their works. This has included mechanical learning technologies such as drones, robot arms and projection mapping to expand and diversify their expression of modern dance and choreography.

discrete figures

This performance was produced in collaboration with art and technology company Rhizomatiks Research and American media artist Kyle McDonald.

Conceptualised around the interrelationship between the performing arts and mathematics, it combines the choreography for five dancers with artificial intelligence and machine learning technology, performed on a stage designed for interactivity between the performers, drones, virtual dancers and other objects.

59 Productions

A design studio and production company known for generating creative and technical ideas to realise artistic projects. They comprise designers, writers, directors, architects, animators, visual artists and technologists who collaborate to produce art works in a range of disciplines.

City of Glass

A theatrical production by 59 Productions based on the first novel of *The New York Trilogy* by Paul Auster that utilises video projection, multimedia effects and animation technology.

The production has an accompanying virtual reality (VR) experience titled *My Name is Peter Stillman* which can be viewed, before or after the live production, to enhance the experience.

Arts and technology projects

The Nutcracker
Royal Opera House (UK)

The Royal Opera House collaborated with VR company Jaunt to document their production of *The Nutcracker*, a ballet performance, in VR. It features a 360-degree virtual experience of morning class, rehearsals and *The Nutcracker* performed on stage that can be viewed by audiences on a desktop or using a VR headset.

This is an example of how classical arts organisations like the Royal Opera House are delving into new technologies to enhance the audience's understanding and experience, enabling the latter to appreciate such performances from multiple perspectives that are normally inaccessible.

The Manchester Plinth
AR Project (UK)

An Augmented Reality (AR) project designed to turn the All Saints Park in Manchester into a space that connects real and virtual space. The project involves the presentation of an art collection by Malcolm Garrett through an app called *Buzzin*, where users view pieces from the collection suspended around the park and on the Manchester Plinth with an AR overlay through their device camera

The Tempest
Royal Shakespeare Company (UK)

This stage production of Shakespeare's *The Tempest* was created in collaboration with Intel and in association with performance capture studio, The Imaginarium Studios, and performed at the Royal Shakespeare Theatre at Stratford-upon-Avon, England.

It involved the use of sensor technology, live data rendering and video projection technology to create a cinematic environment to bring one of the characters, Ariel, to life as a CGI avatar.

Beyond the Eye
Noitom (China)

Beijing-based VR company Noitom is working on a three-year project to digitalise the distinctive elements of Peking Opera, such as costumes, props, instruments and performers, to allow audiences to observe these performers in new detail. So far, they have worked with two Peking Opera actors Hu Xiaomao and Li Jichun to digitise the classic work, *San Cha Kou* (The Crossway).

Actors' facial expressions were scanned and synthesized into digital images through motion capture technology. The resultant work was presented to audiences, which included many young people, at a live event.

Impact of Live-to-Digital content in the arts

MTM London, *Live-to-Digital in the Arts*, May 2018, United Kingdom.

Objectives

This research report examines the impact of live-to-digital on audiences and arts and culture organisations, covering opera, music, dance, multi-disciplinary forms, visual arts and literary arts. Live-to-digital refers to a live performance, event or experience that is captured and distributed digitally, such as through television, cinema or online, whereby the content is recorded but not necessarily distributed live.

In the UK, Live-to-digital production has been more developed in the performing arts as performances lend themselves more naturally to video or audio capture. Over a quarter of arts organisations say that live-to-digital is a core part of output, with online distribution being the most common means of dissemination. Live-to-digital content is produced to reach larger and more diverse audiences, to boost public profile and to build branding, rather than as a means of revenue generation. Arts organisations view live-to-digital content as complementary to live performances, rather than cannibalising live offerings which are irreplaceable.

Convenience and affordable access to the arts were cited as motivations to consume live-to-digital content, especially among young people aged 16 to 34. Even though live-to-digital consumption is projected to increase, live performances were largely preferred over live-to-digital content. Audiences are also concerned about live-to-digital experiences causing social isolation despite potentially providing more immersive experiences.

Methodology

A multi-method research approach was used to arrive at the findings. Data was collected from interviews with key organisations with live-to-digital practices, online surveys of 211 arts and culture organisations (excluding theatre), four audience focus group discussions and two audience surveys administered to a nationally representative sample and with existing arts audiences.

Deepening arts experiences through technology

Ben Walmsley, 'From arts marketing to audience enrichment: How digital engagement can deepen and democratize artistic exchange with audiences', *Poetics*, Vol. 58, 2016, pp. 66-78.

Objectives

Through a new online platform created to facilitate audience engagement with contemporary dance, this article investigates the potential of digital engagement in the arts for audience development. The online platform, *Respond* (also the name of the study), aimed to facilitate understanding of the context of arts presentations, encourage audience anticipation and foster constructive critical enquiry within the arts community.

Responsive digital platforms can empower audiences to be more reflective about the arts and shift perceptions of unfamiliar artforms. Sustained digital engagement facilitated deeper appreciation of the arts, evidenced through kinaesthetic and emotional engagement during live events. However, it was challenging to maintain engagement among audiences who solely consumed the arts online, suggesting that online and offline arts engagement dichotomies still stand.

Methodology

Respond was a large scale mixed-method study conducted in 2014 comprising participant and audience surveys, discussion groups, in-depth interviews, netnography and content analysis from a responsive online platform. This study sought to put into practice theories of co-creation and audience engagement, exploring if *Respond* as a new interactive online platform could successfully deepen audience engagement with contemporary dance by facilitating participation.

Two new dance projects were commissioned specifically for this project, selected from an international vote of artists' submissions. In creating the work, the artists used *Respond* to dialogue with audiences daily from up to two weeks before the live performance. Audiences were also interviewed before the live performance and attended a focus group.

A total of 87 audience members were recruited from artists and frequent dance attenders, infrequent dance attenders, as well as non-attenders, to engage with *Respond*, an online platform that would allow artists and audiences to interact and exchange ideas, with the belief that peers and audiences can guide artists to develop their work in non-instructive ways. Through a structured discursive process, audiences were guided to share neutral questions and opinions.

Connecting digital practices in the arts with social purpose

Culture24, *Let's Get Real 6: Connecting digital practice with social purpose*, December 2018, United Kingdom

Objectives

This research report by arts and culture advisory organisation Culture24 examines how digital activity can be connected with social purposes that matter to audiences as well as arts and heritage organisations, evaluating the social impact of existing digital practices in the arts in the process. Insights on how digital practice can connect with social purpose are articulated through best practices and case studies.

Methodology

A total of 18 participating cultural organisations including museums, galleries and arts centres participated in this project to unpack the relationship between digital practices and social purpose. Two representatives from each participating organisation went through four workshops before carrying out experiments to test out their own thinking and ideas over four research periods.

Project experiments tended to fall within four categories of addressing social issues, democratising organisational processes, promoting learning activities and engaging young people, as well as providing a platform for expression. Throughout the research process, remote mentoring with research partners and online discussions with other project participants were available as support.