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**Title:** Exploring *The outlands*: A case-study on the conservation installation and artist interview of David Haines' and Joyce Hinterding's Time-Based Art Installation

# **Co-authors:**

**Asti Sherring** [Corresponding Author] [First Author] University of Canberra Faculty of Arts and Design, Sydney, NSW, Australia

Mar Cruz Australian Centre for the Moving Image, Melbourne, Victoria, Australia

**Dr Nicole Tse** Grimwade Centre for Cultural Materials Conservation, University of Melbourne, Victoria, Australia

Corresponding author: Asti Sherring

Postal address: Apt 412/20 Hudson St, Lewisham, NSW, Australia, 2049

Email address: <u>a.sherring@me.com</u>

Mobile: +61401827168

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# Abstract

The artwork by David Haines and Joyce Hinterding, *The outlands*, 2011 is a time-based art installation composed of sculptural, software and gaming technology exhibited in a gallery space. The work was acquired by the Art Gallery of New South Wales after being awarded the 2011 Anne Landa Award *Unguided Tours* exhibition prize but has not been installed since. As such, any future iterations will be challenging due to its condition, functionality and machine dependency. This paper explores the value of installing Haines' and Hinterding's time-based art installation to chart the conservation assessment processes of documentation, functionality testing and the install itself. It discusses how *in-situ* artist interview affords artistic agency and contributes knowledge on the materials, conceptual and technical elements of the work, functional limitations have allowed for a deeper understanding of conservation as a reiterative process as issues of software and hardware dependencies, and the situated and spatial relationships between various elements became more salient. This has assisted conservators in preparing for object obsolescence and aims to support future reactivations of *The outlands*, 2011.

# Key Words

Time-based Art, Contemporary art, David Haines, Joyce Hinterding, Iteration Report, Installation, Software-based art, Artist interview, Gaming technologies.

### Introduction

The practice of modern cultural heritage conservation is largely rooted in historical and scientific knowledge domains grounded in materiality and the concepts of originality and authenticity. Extending the lifetime of a material object, such as a painting or work on paper,

has meant that developing methods to document, stabilise and preserve objects within a specific snapshot of time was - and still is - the focus of much of the field. Conversely, the recent emergence of time-based artworks, which often includes media, technology or audience interaction, places emphasis on 'the conceptual integrity of an installation that must be preserved despite changes in its material manifestation' (Scholte & Wharton 2011, p.15). As such, many conservation methodologies of "museumification" are not as applicable to the preservation of their time-based counterparts. For instance, with David Haines' and Joyce Hinterding's 2011 artwork *The outlands*, the physical fabric and arrangement of circuitry is not the artwork itself, but what the digital, immaterial environments that the circuitry enables is. Similarly, this is explained by Gere where,

...the fusion of software and hardware, bound by the dimension of time and guided by conceptual underpinnings, not only sets apart time-based artworks from its predecessors but also creates documentation challenges (2008, p.13).

The subject of this paper, *The outlands*, incorporates a duration-based digital projection, immersive sound, a custom-built computer-generated program and interactive joysticks in an installed gallery space (Figure 1). Such use of sound, sight and physical interaction to unfold its digital elements over time distinguishes it as a time-based artwork according to the Guggenheim's (2015) definition. While the artwork's connection to the site, place and interactions with the audience, categorizes it as an installation artwork. As a time-based artwork and installation, Scholte and Wharton (2011, p.17) asserts that 'installation art requires rethinking of many of the terms applicable to traditional art conservation, and sometimes calls for radical solutions'. As such, documenting and preserving *The outlands* necessitated an examination of processes and methods that focus on the variable, interactive and technological nature of the artwork.



Figure 1: Image of *The outlands*, 2011 Anne Landa Award, interactive software program, projected, colour, sound, customised joysticks with twigs, table, dimensions variable © David Haines and Joyce Hinterding

New practices and frameworks have been developed by institutions specialising in time-based installation artworks (Laurenson 2004, 2005, 2006; Phillips 2010, Holling 2016, Sherring, Murphy & Catt 2018). These have focused on the creation of larger ecosystems of documentation that covers an artwork's concept, creation and realisation from a technical, conceptual and experiential standpoint (Dekker 2013, p. 167). In particular, identifying an artwork's defining properties and dimensions of time as termed by Laurenson (2004, 2005, 2006), that if damaged or lost, would make recreating the work impossible in the future (Holling 2016). This has particular relevance to The outlands where issues of media deterioration, storage media fragility, machine dependency, technological obsolescence and the spatial dynamics may arise. Within such frameworks, Irvin (2005), Wharton (2015), Murphy & Treacy (2019) and Phillips (2010) have argued for the inclusion of the artist's agency in preservation processes such as interviews during documentation and their involvement in artwork re-installations, to develop artist-centred conservation approaches. While Cotte, Tse & Inglis (2016), Mancusi-Ungaro & Paul (2008) and Beerkens & Abraham (2012) have provided perspectives on the practical and reflexive processes associated with qualitative artists interviews in conservation.

While the work's gaming technology and software elements, a relatively new and complex medium to the conservation field, means that limited research has been conducted on software-based artworks. As explained by Matthews et al,

Software is inherently complex, normally composed of a very large number of highly interdependent components and often forbiddingly opaque for people especially those who were not directly involved in its development (2009, p.132).

Thus, investigations around best practice for the analysis, storage, documentation and intervention of such works is ongoing. There are some methodologies ranging from Engel and Wharton's (2014) source code documentation to the use of third-party version control tools suggested by Barok et al (2019) and Rechert et al (2016) examination of the software emulation and migration risks. Falcao (2019) however explains that, while consensus on these practices is slowly coalescing, the fact that the medium is inextricably bound to technology means new questions and processes will always be the norm. These sources grounded the project and provided insights into *The outlands* preservation strategies, in particular concepts of the artist intent and acceptable change, to focus on the test installation (or re-iteration) of *The outlands* and an artists' interview in August 2017.

# **Overview of The outlands Conservation Project**

In 2017, a conservation project explored the development of an ecosystem of documentation that categorised *The outlands* concept, creation and technical, conceptual and experiential frameworks in four linked phases. As part of a Masters minor thesis project<sup>1</sup>, it firstly involved defining the work according to Art Gallery of New South Wales (AGNSW) established catalogue standards for characterising the significance of all object components (Sherring, Murphy & Catt 2018). Secondly, condition and treatment reports were conducted on the artwork's physical, variable and technological components. Thirdly a conservation

<sup>&</sup>lt;sup>1</sup> The minor thesis was undertaken by University of Melbourne Masters of Cultural Materials Conservation student, Mar Cruz, under the supervision of AGNSW Senior Time-based Art Conservator, Asti Sherring and Nicole Tse, Senior Lecturer, The Grimwade Centre for Cultural Materials Conservation, University of Melbourne.

intervention was performed where the work was re-installed for the purposes of conservation. Lastly, the artists expressed an interest in each step of the project – committing to visiting the AGNSW during the conservation intervention and participating in a semi-formal interview with the authors and AGNSW Assistant Curator of International Art, Lisa Catt, on 9 August 2017. This culminated in discussions of obsolescence and more, which presented multiple possibilities for the evolution and longevity of *The outlands*.

#### **Description of the artwork**

The outlands is a time-based art installation consisting of 'sublime technological encounters' that straddles both the digital and the organic (Frost 2011). It was acquired by the AGNSW in 2011 following the Anne Landa Award Unguided Tours exhibition curated by Justin Paton. The artwork primarily features a series of computer-generated areas populated with natural and artificial 'dream architecture' in the form of mountains, waterfalls and floating digital structures, reminiscent of the open worlds crafted for video games (AGNSW 2011). This connection with video games is not just visual, as the artwork is built on a video game creation engine known as the Unreal Development Kit (UDK) (Haines 2017, pers. Comm., 13 June). The UDK provides the software framework from which both the visual aspects and the programming of the artwork can function and be built (Nandy & Chandra 2016, pp. 1-2, 13-14). However, unlike 'the structured, reactive and violent zones of video games' (Breenspace 2012) the work actively encourages peaceful exploration and discovery. This sense of exploration is embodied by two joysticks (Figure 2), modified with wooden twigs, that sit on a table in the middle of the installation space. Audience interaction with these joysticks is encouraged by the presence of an instruction panel for the joysticks on the table. Manipulating the left joystick allows for forward and backward movement, whilst the right pivots the camera and allows the user to inspect the environment as well as control the direction of movement. While an initial response could be to 'walk' on the ground of the space, the use of the two joysticks allows movement in all directions and allows the user to 'fly'. Additionally, not all of the structures are solid, and passing through them opens up new environments.



Figure 2: One of the two modified joysticks & its components, schematic diagram by Mar Cruz 2017.

There are three distinct environments and one intermediary area open for exploration, which are projected on a large wall using a single projector (Haines 2017, pers. comm., 9 August). The first environment that loads up when the artwork is opened depicts a chain of islands upon which sit large blue fractal structures. Floating through a structure teleports the visitor to three other locations; one is a maze of glowing and pulsing yellow triangles. Navigating this maze eventually leads to invisible portals that teleport to another area. The third environment is a tree-filled swamp, set at night, tinged with blue and surrounded by rock formations. As with the maze, invisible gateways in this area lead to other sections. The intermediary area is a relatively simple, rectangular room lined with the pulsing triangles, a reference to an anechoic chamber. Three large orbs float within the space that leads to the previously mentioned three environments.

#### Test installation as a conservation intervention

Installing an artwork, especially if done purely for documentation or conservation-related purposes, can be difficult to justify in a busy museum environment. However, as Wijers (2013, p. 235) states, the unique requirements of time-based art installations often mean that, 'the only accurate way to test if we have understood, documented and transferred the constituent's parts of a work of art and the work itself is by re-installing the work'. Without understanding the conceptual nature of an artwork and having established collection management activities and methods of documentation in place within an institution, timebased art installations are often installed with some degree of undocumented improvisation (Philipps 2015, pp. 169-170). Formally recording these real-world decisions can aid in understanding how best to recreate the work in the future (Dekker 2013, p. 163; Real 2001, p. 209; Laurenson 2006, p. 29). Even if the artists deem certain elements are variable or changeable, documenting these iterative differences is still necessary (Wain & Sherring 2020). A conservation intervention such as test installation gives the conservator time and opportunity to engage with the activated artwork and comprehensively document the work, outside of a time-sensitive exhibition install. Conservation test installations also have the additional benefit of adding to the artwork's 'stratigraphy' (Holling 2016, p. 18) by adding more iterations of the artwork, versions that could in turn be used as a basis for future installations. This is especially salient if the artwork has not been re-activated for some time, as in the case of *The outlands* (Heydenreich 2012, p. 159).

#### 2011 and 2017 iterations of The outlands

Due to a lack of previous documentation related to the work and the time spent inactive in storage, there was general concern regarding equipment obsolescence and the unknown state of the work's functionality, especially in relation to the software and joystick components. Expertise was assembled, comprising representatives from curatorial, conservation and registration as well as information technology and audio-visual specialists. It was determined that installing the work in a gallery space, similar to the layout of the 2011 iteration as shown in Figure 3, was necessary to accurately understand and document all aspects of the work – including how an audience may interact with the artwork. Installation

instructions and placement of the parts were compiled from the Operating Manual provided by the artists when the artwork was acquired as well as from historic emails, photographic documentation and discussions with staff who were present in 2011 for the first iteration of the work.

Despite best attempts to imitate the 2011 iteration's display parameters as closely as possible, the only gallery space available to the authors was designed for another AGNSW collection work that had recently been de-installed. Conservation staff were permitted to use the space for four days, before construction was scheduled to begin for an upcoming exhibition. Consequently, the 2017 conservation installation (Figure 4 & 5) cannot be considered a true iteration due to the fact that the space was not designed to the artists' specifications (Real 2001, p. 213).

The audio-visual setup for the 2017 Conservation Installation presented the largest difference from its 2011 counterpart, born from the need to easily access the artwork equipment and the physical differences of the space (Figure 4). For instance, the projector showing the artwork was placed on a trolley set roughly at eye level. In contrast with the 2011 iteration, the ceiling mounted projector was largely hidden from view. The 2011 iteration also featured 5.1 surround via multiple speakers, whereas stereo sound via two speakers was employed in the 2017 conservation installation. The need to troubleshoot and document how The outlands program ran meant that the computer and monitor running the artwork had to be easily accessed in the 2017 conservation installation. These components were placed on a plinth behind the table holding the artwork's joysticks, whereas the same components were hidden away in a separate room in the 2011 iteration. Since The outlands was exhibited alongside other works in the 2011 Anne Landa Award exhibition, sound baffling was installed throughout the space. This was not present in the 2017 conservation installation. Lastly, a change to the entry point altered the screen experience of *The outlands*. In the 2011 iteration, the entrance to the space ensured that the visitor first saw the projection itself. In the 2017 conservation installation, a visitor would have to walk past the projection and turn around to see it. Despite these caveats, the conservation team strove to keep the artwork's visual and auditory atmosphere as true to the 2011 iteration as possible. Conservators communicated the purposes of the project and the limitation of the iteration to the artists, who were happy with the result (Haines 2017, pers. comm., 9 August).



Figure 3: The outlands' installation layout from its original 2011 installation. Image by Mar Cruz 2017.



Figure 4: 2017 conservation installation. Image by Mar Cruz 2017.



Figure 5: *The outlands'* 2017 conservation installation with artist David Haines, image by Asti Sherring 2017. © David Haines and Joyce Hinterding

# New knowledge from the 2017 conservation installation of The outlands

Many time-based art installations rely on an interplay of multiple parts, physical, computational and spatial, where the installation of those parts not only help conservators record their true condition, but also understand the interactions between them (Laurenson 2004, p. 4). The process of undertaking a conservation test installation of this work, while all components were still functional and the artists were available to engage with the process, was highly advantageous for re-activation of the artwork.

While it could be argued that the test installation could have been simply performed in a conservation laboratory, it was agreed that doing so would deny a major intent of *The outlands* and its interactivity, sense of scale and spatial dynamics. Similarly, displaying the

artwork's visual output on a small lab monitor – while practical – was considered inadequate in this case, as it fails to mimic the immersive, large-scale projection that defined the first installation and is an essential component of both the artists' intent for the work and the audience experience of engaging with it. Moreover, without multiple participants engaging with a software program over an extended period of time through the manipulation of the joysticks, the artwork's stability could not be fully tested. Lastly, a conservation intervention specific to *The outlands*, gave the artists an opportunity to engage with their past artwork and reflect on its impact on their overall body of work (Haines 2017, pers. comm., 9 August).

### Documenting the artwork's defining properties

Due to the compositional complexity of this artwork, installing the work in a test environment provided conservators with first-hand knowledge of how each object part connected and interacted to produce the desired output. On a foundational level and as noted, the test installation of the artwork assisted in identifying the artwork's defining properties and what physical, spatial and experiential elements are important for future activations. Defining these properties provided the conservator with knowledge of the conceptual and physical integrity of the work, including what components can undergo variation or change over time. Using a system created by AGNSW, these properties were categorised into four groups, each with different qualities relating to the redisplay of the artwork: integral, variable, dedicated and stock components (Sherring, Murphy & Catt 2018). Conservators were then able to establish the hierarchies of significance for each component and set priorities for elements most at risk of damage.

In addition to sculptural components, such as the table and real-time software projection, 5.1 surround sound was determined as an integral element in the work, due to the immersive requirement of the sound. Perhaps most critical to the artists' concept of the artwork is its interactivity. However, the physical elements that enabled this interactivity are not. For instance, during the artist interview Haines noted that the wooden birch twigs were selected for aesthetic reasons from the artist's garden but the original twigs themselves are not integral (Haines 2017, pers. comm., 9 August). Similarly, the joystick mechanism was not considered to be integral and could be replaced assuming the same level of interactivity was

maintained (Hinterding 2017, pers. comm., 9 August). As such, a decision was made by AGNSW staff to change the categorisation of the birch twigs to 'dedicated components' within AGNSW database, while still actively maintaining a commitment to preserving the 2011 artist supplied birch twigs for as long as possible. Lastly, the projector and speaker setup were defined as stock components, as despite the requirements for specific display resolutions and 5.1 surround sound, the equipment needed to run these digital elements was not considered essential provided the technical requirements were maintained.

### Experiencing the interactive nature of the work

The outlands requires the audience to step up to the table, gently place their hands on the 'joystick twigs' and steer their way through pixelated worlds. Due to the essential interactivity of this artwork, it was necessary to simulate its participatory nature to accurately document the work. The test installation of the artwork was open to all AGNSW staff to interact with the artwork from 6 to 9 August 2017. Initially, this decision was made for primarily technical reasons; the authors wanted to test the capability of the hardware to function in a gallery environment and record the number of crashes and technical issues encountered. An unexpected, but welcome, outcome of this conservation intervention was the enthusiastic staff response to the artwork. Whilst staff working in the gallery generally have more experience in interacting with artworks than the average museum audience, based on the unsolicited feedback received, such as, 'I officially entered the teleported world of golden light and found my way out!' (Sherring 2017, pers. comm., 9 August) there was a level of enthusiasm surrounding this conservation intervention not usually seen on a day-to-day basis. Interestingly it was observed by the authors in the test installation, that the reaction of some AGNSW staff resembled the artists' experiences in the 2011 display where, 'people were cheering as other people navigated through a work' (Hinterding 2017, pers. comm., 9 August). This conservation intervention not only aided in better documentation, assessment, and treatment, but also provided wider awareness to the specialisation of time-based conservation at AGNSW. As one staff member noted, 'that was fabulous!!!! [It] reinforces why we need to have a [Time-based art] lab' (Sherring 2017, pers. comm., 9 August).

# Conservation Documentation of the 2017 conservation installation

Dedicating time to the conservation of *The outlands* created new information about the artwork and clarified existing memories and assumptions of the work. Condition and treatment reports were created for the physical elements of the work. Diagrams were made to better inform how the different elements of the joysticks were assembled and positioned on the table as well as the expected behaviours of their functionality. As several programmes are required to run the work, additional documentation was created to chart the software, visual and audio elements and how they connect and perform in unison (Figure 6). The freedom of movement that the artwork provides to the user made accurate documentation of the software difficult. However, because there are four distinct explorable 'worlds', visual and written documentation was created for each world, which included instructions on how to enter or exit each world. Lastly, the 2017 conservation installation itself was also documented and guidelines for future installations updated. To facilitate this, two distinct iteration reports were created for the 2011 and 2017 installations. Augmenting this report were two visual room layouts, one that collated all known installation information about the 2011 iteration and the recorded information from the 2017 conservation installation (see Figures 3 and 4).



Figure 6: The programs required to run The outlands, image by Mar Cruz 2017

### The artist interview for conservation purposes

### Artists interview 9 August 2017

For *The outlands*, at the time of acquisition in 2011 the artists provided an operating manual, which directly communicated how they viewed their work in terms of the software and technical specifications but not the installation specifications and the required changeability of the work overtime (Wain and Sherring 2020). However, as Stigter observes this is not uncommon as,

while the conservator has a preservation-oriented approach based on a direct relation between idea, time and material appearance of the artwork, the artist may have entirely different considerations for the future of his work (2012, p.102).

The intention of this conservation interview conducted on the 9 August 2017 was to establish an understanding of the preservation-oriented knowledge gaps so that conservators could 'recognise the many signs of and possibilities for change during the life of the artwork' (Stigter 2012, p.109) and recommend decisions that align with the artist intention of the work.

In assembling expertise, assistant curator Lisa Catt made contact with artists David Haines and Joyce Hinterding to provide an overview of the project and the timeline for the conservation test installation, and to introduce Asti Sherring, senior conservator of timebased art and Mar Cruz, student conservator. As the artists expressed an interest in visiting the gallery to view the work, a semi-formal interview was organized to take place during the test installation.

The decision to conduct the interview in the test installation space with the functioning artwork was intentional. The aim was to elicit memories of *The outlands* creation and 2011 iteration and to facilitate testing of the software by the artists in the presence of conservation staff. The interview was audio recorded in the installation space. The recordings were then transcribed and emailed back to the artists for approval and minor follow up questions. The audio file and transcribed artist interview were uploaded onto AGNSW collection database, conservation module as part of the documentation process.

### New knowledge following the Artists interview

### Spatial parameters

The question of preferred spatial environment was posed to the artists with reference to the operating manual they provided in 2011. The artists noted that these specifications were not included in the manual as 'when we installed the work here, the installation crew pretty much decided that for us' (Hinterding 2017, pers. comm., 9 August). Although the spatial parameters for the artwork in 2011 were dictated by the installation crew and schedule of the Anne Landa Award, the artists are happy to draw from the 2011 iteration to inform future room dimensions and layout. Haines notes,

I think the eight-by-eight-meter space was what we had described as ideal. But then I would prefer the work to be seen so, if it had to go into a bit smaller space--we would be totally open to that. (Haines 2017, pers. comm., 9 August).

Another integral component that impacts on the spatial qualities of the work is the soundtrack. As previously noted, the preferred artist audio specifications were to use 5.1 surround, which 'helps in proper localisation and brings in equability from all audio sources' (Technopedia 2021) thus providing more realistic and greater depth to the overall sound for an audience. This important immersive quality could not be re-created in 2017 conservation installation, as there was no available audio visual stock at the time and so the use of left and right speaker stereo sound was employed. While the artists did not specifically comment on this different audio output used in the test setting, during the interview Haines observes 'how melancholy this soundtrack is' and that without the soundtrack, the whole experience of the work changes. Understanding the experiential differences between these two types of audio technologies, conservators documented a requirement for 5.1 surround hardware to be used in the future.

### Upgrading the software platform

The outlands is ultimately a software-based artwork, with lines of code rendering both its digital world via the UDK and creating the functionality of the joysticks (Engel & Wharton

2014, p. 404). Due to this interplay of various software suites, software obsolescence is one of the biggest issues the artwork faces. Given the complexities inherent to preserving code, and the software needed to run code, much effort is given to either maintaining legacy software – a snapshot of time similar to the goals of a conservator needing to maintain a painting or sculpture (Association of Research Libraries, 2019). Similarly, emulation, which maintains old software through new code, or migration, which upgrades the work to contemporary standards has been a suggested solution, yet both are considered resource-intensive and often require specialist skills found in the information technology or engineering sectors (Kramer 2019). The artists' expressed a desire to address some of the bugs, errors and faults by upgrading the original software. Haines explains,

when [AGNSW] began this project, I was thinking, I'd love to just port it over to Unreal Engine 4 and take out all the tricky hardware stuff that's in the frame... [as it exists now] you may never write all those little bits of sub software and now we have a really robust platform for that (Haines 2017, pers. comm., 9 August).

This is an example of where a preservation-oriented approach may come into conflict with the artists' long-term interests for the artwork (Stigter 2012, p.102). While correcting any software errors, smoothing over aesthetic issues, porting the artwork over to a more recent version of the Unreal Engine or creating higher-resolution assets may create a more stable playable environment, the original qualities of the artwork may be compromised. Moreover, the artists have not fully reconciled with what it will mean to change the technology. As Haines explains at another point in the interview,

I can see all kinds of things in the image... The work the way it is, is representing a technology of a certain time. And in 30 years' time, it will be really interesting again, because we look back on video games of the 80's and they have a particular aesthetic. So, it is good to preserve that (Haines 2017, pers. comm., 9 August).

This issue also challenges conservators who need to consider the long-term accessibility and display of the artwork in relation to professional ethical standards, such as reversibility and minimal intervention; acknowledging that in this instance, 'minimal intervention cannot be truly minimal if the entire process is to have any consequential effect on the work' (Muñoz Viñas 2005, p.189).

#### Equipment Obsolescence

Unlike some other forms of risk, the likelihood of equipment obsolescence rises over time because of the pace of technological advances (Falcao 2010). Haines and Hinterding were aware of the difficulties of preserving many of the technological components of the work. As Haines noted 'we put in time and we put a lot of effort into thinking about how the work would exist in the collection' (Haines 2017, pers. comm., 9 August). As a result, the artists supplied hard drives containing a disk image of the supplied CPU, executable files and associated project files to the AGNSW at the time of acquisition. While the custom-built, dedicated computer processing unit (CPU) provided to the AGNSW, may sit in storage and function indefinitely provided the power system does not change. In fact, Haines and Hinterding felt they were handing over 'something as robust as we could make it...you never really know. Once it is put away into storage, it is in a black box' (Haines 2017, pers. comm., 9 August). The artists also supplied useful information for the preservation of a key component of the work, the joysticks. While two backups were supplied at the time of accession, the artists noted that these can be replaced with similar devices in the future, assuming the essential functionality is still achieved (Hinterding 2017, pers. comm., 9 August).

#### Changes to Display technologies

Befitting the evolving nature of a time-based artwork, the visuals themselves may change. This not only affects software elements, but hardware as well. One challenge that was presented during the conservation test installation was the decision whether to use a standard definition (SD) projector, as per the original 2011 technical specifications of the artwork or to upgrade the projector to more readily available hardware, such as high definition (HD) or 4K. Interviewers posed the question of upgrading from the initial SD projector to the artists—for Haines, the answer was dependent on whether the software and hardware platforms were being updated and if the system can handle this resolution upgrade. Haines explains,

The outlands is happening in real time and so it will need to scale in resolution. The decision is dependent on whether we're testing the units to that particular hardware platform. With another artwork, "*Geology*", we built a whole new computer and so everything had been through an iteration of change, naturally... We've got a lot of video that we made in standard definition, and then we remade some of the work into higher definition. And then now we're seeing 4K. And suddenly you can't buy a HD monitor anymore. And we've just been through this thing of having a HD work that we were perfectly happy with and the projection going to that monitor and then suddenly it's on a 4K screen, and it conjures up all these additional issues. I think artists in general are probably chasing those things, or they're buying something that's dedicated and staying with it (2017, pers. comm., 9 August).

For Hinterding, the significance of the work fits more within the original software environment. She notes,

This is a real-time digital work; it generates back out to software. It's not a video. It's not a recorded work and so there is a possibility not to change it, so much, but to keep it up to date and to keep it stable (2017, pers. comm., 9 August).

Additionally, conservators had previously concluded that the resolutions outlined in the operating manual and programmed into the work itself, 1920 x 1080 and 1280 x 1040, were integral to the work. However, during the interview the artists explained they were still deciding between upscaling the software to a higher resolution or leaving it as it was at the time of creation, which would provide a snapshot of video game technology at the time. Until this decision is made, conservators were instructed to use best judgement based on what resolution made the chosen space feel more immersive.

#### Audience Experience

As identified during the conservation test installation, audience interaction with the artwork is integral to experiencing the performative nature of the work. The audience experience of the work was also identified as an important factor during the artist interview, with the artists describing their memories of opening night and the way in which the work brought people together. As Hinterding explains,

It was insane...Everyone had had their drinks, but we were so nervous we didn't drink anything. We stood against the back wall just watching and there were these two little boys in their little red hoodies. One had one stick and the other had the other stick and they were working together, and everyone would cheer as they jumped...it was incredible. I've never been at an opening where people cheered as other people navigated through a work (2017, pers. comm., 9 August).

This engagement with audiences is conceptually of interest to the artists, who also expressed interest in evolving a future iteration of this artwork into a networked experience across multiple communication channels (Haines 2017, pers. comm., 9 August).

Additionally, the artists described how long people interacted with the work and the care they took when using the joystick twigs, which aided conservators' knowledge for future displays of the work. Haines noted,

It's amazing how it's easy to sort of underestimate people's fair sense of play, the time that they spent and how gentle they were with the sticks. We thought that the sticks would be destroyed very quickly, but people were really respectful of the work (2017, pers. comm., 9 August).

With any participatory artwork there is always the risk that the audience element may be overly controlled or removed entirely due to artwork or audience risk, exhibition budgetary restrictions around invigilation or additional security. Due to the established integral nature of the audience interaction, it is essential that conservators advocate for the continued audience use of experiential components of this artwork in future iterations.

### **Reflections on the artist interview process**

In the case of time-based art installations, where change is actively embraced and the choice to include, exclude or rearrange an artwork's parts can dramatically alter how it is perceived, artists' engagement and interviews on the theoretical and practical foundations of artworks

is customarily documented by the collecting institution (Laurenson 2014, pp. 87-88). Without this foundational understanding, an artwork may become untethered from its defining properties at risk to a loss of authenticity for future installations (Laurenson 2006, p. 31).

The interview revealed important information around what constituted The outlands and assisted conservators to document its work defining properties. For instance, given the significance of interactivity to the work, the joystick mechanisms may have been considered as integral by conservators and curators, had not the artist interview revealed that this was an incorrect assumption. Similarly, the interview clarified installation parameters and what was intentionally decided on by the artists or what was the result of decisions by the installers at the time of the first iteration. While it is generally acknowledged that obtaining information from the artists at the time of acquisition is preferred, the time gap between the first 2011 installation and the 2017 conservation installation meant that questions of higher resolution outputs and equipment moved from a theoretical consideration to a practical reality. Inversely, this gap also allowed for past reflections, where Haines and Hinterding reflected on the implications of not upgrading the resolution or graphics. The interview also considered the future of the work, with the artists expressing an interest in fixing identified bugs, future upgrades and changing software elements and even the possibility of creating new worlds within The outlands for audiences to explore. Through the interview process, it was concluded that even at the time of creation *The outlands* did not have one fixed form and was intended to change and evolve over time in collaboration with the artists and as new technologies arose. As Haines explains,

We do lots of things in our practice, but these works are special. We've bred this thing so it's our baby, we look after it. And we're always open to that (2017, pers. comm., 9 August).

Further conversations are needed with the artists to reach a consensus decision that is acceptable to all stakeholders and can ensure authentic engagement that considers both the functional technology-based aspects of the artwork and its sensory and participatory qualities.

### Conclusion

The six-year gap between initial creation and installation of *The outlands* in 2011 to the reactivation of the work in 2017, has meant that any related documentation had to be recalled from long-forgotten conversations or emails, as well as retrieving curatorial files and program catalogues from the archives. This scenario reflects issues that many collecting institutions face, where conservators are tasked with preparing an artwork for exhibition or loan and need to address the physical, spatial and digital elements of artwork with often little-known information, limited institutional support and time. Coupled with the inherent challenges of technological mediums which dictate that change must be embraced in order to allow for a functional existence, addressing complex time-based art installation works can be a daunting task. Obtaining clear and detailed documentation from an artist at the time of acquisition supports the future display of the work, by ensuring that an institution has the prerequisite knowledge and can review the information at each proposed intervention or iteration.

In this case, performing a conservation installation and artist interview addressed many of the knowledge gaps and allowed for detailed visual, written, and audible documentation to be created and compiled. However, it is important to reiterate that *The outlands* conservation installation only occurred because of an availability of exhibition space, coupled with conservation research and the commitment of the AGNSW staff and artists to take the time to focus on the work. Yet, the benefits of the conservation intervention produced a better understanding of the artwork and provided engagement with the artists. An unplanned outcome was the advocacy for time-based art conservation that occurred gallery-wide, due to the conservation team providing a glimpse into the unique issues of time-based art conservation. To continue to achieve these outcomes for the time-based art installation works held in the collection, a separate space that allows for the installation of these works - without the pressures of looming exhibition installations - is a desirable investment.

Most significantly, this project also re-started a conversation with the artists that began in 2011. The importance of the interactivity of the work and the process-like nature of the artwork is now understood by AGNSW curatorial and conservation staff. While the outcomes of the artist interview did not provide a complete 'fixed' solution to the necessary future technological changes required to keep *The outlands* functional, the possibilities surrounding

the creation of new content and the artists' openness to upgrading the work, means that conservators will be able to employ interventive approaches. This may include migration or emulation of the work in view of the artists' wishes to future activate their work. Change is a hallmark of a time-based artwork, traits which must also apply to their conservation. The varied needs of each artwork necessitate a mix of flexibility, structure and revisitation that - while it may be considered a compromise to traditional conservation ethical standards - creates a dynamic that has been largely successful for the future display and preservation of *The outlands*.

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#### **Authors Biography**

**Asti Sherring** is a Paper, Photographs and Time-Based Art Conservator. She has completed a Bachelor of Media Arts from Sydney University and a Masters of Materials Conservation at Melbourne University. Asti held the position of Senior Time-Based Art Conservator at The Art Gallery of New South Wales between 2015 - 2020. She has also worked at institutions including The University of Newcastle, Los Angeles County Museum of Art, USA, The 20th and 21st Biennale of Sydney, The National Archives of Australia and Museum of Contemporary Art, Sydney. Asti is currently undertaking postgraduate research at the University of Canberra, which explores contemporary conservation theories and practices surrounding the preservation of works that are virtual, ephemeral, immersive, participatory, and technology based.

**Mar Cruz** is a conservator and graphic designer with experience in art conservation, advertising and design. He holds a Bachelors of Science in Graphic Design, John Brown University and a Masters of Cultural Materials Conservation, University of Melbourne. Mar currently works as a Digital Preservation Technician at the Australian Centre for the Moving Image and has worked for a variety of institutions, including the Centre for Cultural Materials Conservation: Conservation Services and International Conservation Services in Melbourne and the Heritage Conservation Centre in Singapore. Prior to conservation, Mar was an art director in various Singaporean advertising agencies and has a decade of design and advertising experience.

**Dr Nicole Tse** is part of the teaching and research team at Grimwade Centre for Cultural Materials Conservation, University of Melbourne. She has a long-standing interest in cultural materials conservation in tropical climates in the Asia Pacific region with PhD and Post Doctorate work in this area as well as PhD and Masters supervisions. She is the Editor of *The AICCM Bulletin* and founding member of APTCCARN (Asia Pacific Tropical Climate Art Research Network).

### References

The Art Gallery of New South Wales (AGNSW) 2011, *David Haines & Joyce Hinterding, Unguided tours - Artists, David Haines & Joyce Hinterding on their work 'The outlands',* video, YouTube, viewed 10 June 2016, <https://www.youtube.com/watch?v=YdstMcTGijE>.

Association of Research Libraries 2019, *Code of Best Practices in Fair Use for Software Preservation*, Association of Research Libraries, Washington DC, viewed 26 April 2021, <https://www.arl.org/wp-content/uploads/2018/09/2019.2.28-software-preservationcode-revised.pdf>.

Barok, D, Boschat Thorez, J, Dekker, A, Gauthier, D & Roeck, C 2019, 'Archiving complex digital artworks', *Journal of the Institute of Conservation*, vol. 42, no. 2, pp.94-113.

Breenspace 2012, 'David Haines and Joyce Hinterding's, 'The outlands', has won the Anne Landa Award for video and new media arts', viewed 19 September 2017, <https://www.breenspace.com/news/david-haines-and-joyce-hinterding-s-the-outlandshas-won-the-anne-landa-award-for-video-and-new-media-arts>.

Cotte, S, Tse, N & Inglis, A 2016, 'Artists' interviews and their use in conservation: reflections on issues and practices', *AICCM Bulletin*, vol. 37, no. 2, pp. 107–118.

Beerkens, L & Abraham, L 2012, *The Artist Interview: For Conservation and Presentation of Contemporary Art, Guidelines and Practice,* Stichting Behoud Moderne Kunst, Rijksdienst voor het Cultureel Erfgoed & Universiteit van Amsterdam, Netherlands.

Dekker, A 2013, 'Enjoying The Gap: Comparing Contemporary Documentation Strategies', in J Noordegraaf, C Saba, B Le Maitre, & V Hediger (eds), *Preserving and Exhibiting Media Art*, Amsterdam University Press, Amsterdam.

Engel, D & Wharton, G 2014, 'Reading between the lines: Source code documentation as a conservation strategy for software-based art', *Studies in Conservation*, vol. 59, no. 6, pp. 404-415.

Falcao, P 2010, 'Developing a Risk Assessment Tool for the conservation of software-based artworks', MA Thesis, Hochschule der Kunste, BERN (HKB).

Falcão, P 2019, 'Preservation of Software-based Art at Tate', in O Grau, J Hoth & E Wandl-Vogt (eds), *Digital Art through the Looking Glass: New strategies for archiving, collecting and preserving in Digital Humanities*, Edition Donau-Universitä, Austria, pp.285-286.

Frost, A 2011, 'A Real Pickle', *The Art Life*, viewed 27 August 2017, <a href="http://theartlife.com.au/2011/a-real-pickle/">http://theartlife.com.au/2011/a-real-pickle/</a>.

Gere, C 2008, 'New Media Art and the Gallery in the Digital Age', in *New Media in the White Cube and Beyond*, University of California Press, Los Angeles, CA, pp. 13 - 25.

Guggenheim 2015, 'Guggenheim: Time-Based Media', Guggenheim, New York, viewed 31 May 31 2017, <https://www.guggenheim.org/conservation/time-based-media>.

Holling, H 2016, 'The aesthetics of change: on the relative durations of the impermanent and critical thinking in conservation', in E Hermens & F Robertson (eds), *Authenticity in Transition: Changing Practices in Contemporary Art Making and Conservation*, Archetype Publishing, London, pp. 13-22.

Haines, D & Hinterding, J 2011, 'The outlands Operating Manual', viewed 2 June 2017, <a href="http://haineshinterding.net/Pubs/outlands\_manual/files/assets/common/downloads/OutlandsManpagesPrint.pdf">http://haineshinterding.net/Pubs/outlands\_manual/files/assets/common/downloads/OutlandsManpagesPrint.pdf</a>

Heydenreich, G 2012, 'Documentation of Change - Change of Documentation', in G Wharton & T Scholte (eds), *Inside Installations: Theory and Practice in the Care of Complex Artworks,* Amsterdam University Press, Amsterdam, pp.155-171

Irvin, S 2005, 'The Artist's Sanction in Contemporary Art', *The Journal of Aesthetics and Art Criticism*, vol. 63, no.4, pp. 315-326.

Kramer, D 2019, 'Preservation of virtual reality artworks Diagnosis to determine viable conservation strategies' Master's Thesis, University of Amsterdam, Netherlands.

Laurenson, P 2004, 'Developing Strategies for the Conservation of Installations Incorporating Time-Based Media with Reference to Gary Hill's Between Cinema and a Hard Place', *Tate Papers*, no. 1, pp. 1–37, <<u>http://www.tate.org.uk/research/publications/tate-papers/01/developing-strategies-for-the-conservation-of-installations-incorporating-time-based-media-gary-hills-between-cinema-and-a-hard-place</u>>.

Laurenson, P 2005, 'The management of Display equipment in Time-based media installations', *Tate Papers*, no. 3, viewed 3 May 2021, <<u>https://www.tate.org.uk/research/publications/tate-papers/03/the-management-of-</u> display-equipment-in-time-based-media-installations>.

Laurenson, P.2006, 'Authenticity, Change and Loss in the Conservation of Time Based Media Installations', *Tate Papers*, no. 6, viewed 9 June 2017, <http://www.tate.org.uk/research/publications/tatepapers/06/authenticitychangeandlossc onservationoftimebasedmediainstallations>.

Laurenson, P 2014, 'Old Media, New Media? Significant Difference and the Conservation of Software Based Artworks', in B Graham (ed.) *New Collecting: Exhibiting and Audiences After New Media Art*, Taylor & Francis, Oxford, pp. 73 - 97.

Mancusi-Ungaro, C & Paul, C 2008, 'The variable media network interview of Super Mario Clouds', viewed 22 September 2011, <a href="http://variablemediaquestionnaire.net/demo/#a=20">http://variablemediaquestionnaire.net/demo/#a=20</a>>.

Matthews, N., Shaon, A., Bicarregui, J., Jones, C., Woodcock, J. and Conway, E., 2009. Towards a Methodology for Software Preservation. In: *iPRES 2009: the Sixth International Conference on Preservation of Digital Objects*. San Francisco: California Digital Library, p.132 Murphy, C & Treacy, A 2019, 'Drawings You Can Walk on – Mike Parr and the 20th Biennale of Sydney 2016' *AICCM Bulletin*, vol. 39, no. 2, pp. 76–85.

Muñoz Viñas, S 2005, *Contemporary theory of conservation*, Elsevier Butterworth-Heinemann, Oxford, UK.

Nandy, A & Chanda, B 2016, *Beginning Platino Game Engine*, Apress, United States.

Phillips, J 2010, Shifting equipment significance in Time-based media art', *Electronic Media Group Session, AIC 36th Annual Meeting May 11–14, 2010, Milwaukee, WI*, viewed 28 July 2021, <<u>http://resources.culturalheritage.org/wp-content/uploads/sites/15/2016/07/Vol-1 2010 Ch-6 Phillips.pdf</u>>.

Real, WA 2001, 'Toward Guidelines for Practice in the Preservation and Documentation of Technology-Based Installation Art', *Journal of the American Institute for Conservation*, vol. 40, no. 3, pp. 211 - 231.

Rechert, T, Klaus, E & Falcão, P 2016, 'Introduction to an emulation-based preservation strategy for software-based artworks', viewed 2 August 2021, <https://www.tate.org.uk/about-us/projects/pericles/emulation-based-preservationstrategy-for-software-based-artworks>

Scholte, T & Wharton, G 2011, *Inside Installations: Preservation and Presentation of Installation Art*, Amsterdam, Amsterdam University Press.

Sherring, A, Murphy, C & Catt, L 2018, 'What is the object? Identifying and describing timebased artworks', *AICCM Bulletin*, vol. 39, no. 2, pp. 86-95.

Stigter, S 2012, 'Reflections on the artist interview and the conservator's point of view by example of Ger van Elk', in L Beerkens, P' t Hoen, I Hummelen, V Van Saaze, T Scholte, S Stigter (eds), *The Artist Interview. For conservation and presentation of contemporary art. Guidelines and practice*, Jap Sam Books, Heijningen, pp.102 – 109.

Technopedia 2021 '5.1 Surround Sound' viewed 28 July 2021, <https://www.techopedia.com/definition/214/51-surround-sound>

Wain, A & Sherring, A 2020, 'Changeability, Variability, and Malleability: Sharing Perspectives on the Role of Change in Time-based Art and Utilitarian Machinery Conservation', *Studies in Conservation*, DOI: 10.1080/00393630.2020.1860672.

Wharton, G 2015, 'Artist intention and the conservation of contemporary art', AIC Objects Specialty Group Postprints, vol.22, pp.1-12, <a href="http://resources.culturalheritage.org/osg-postprints/wp-content/uploads/sites/8/2015/05/osg022-01.pdf">http://resources.culturalheritage.org/osg-postprints/wp-content/uploads/sites/8/2015/05/osg022-01.pdf</a>

Wijers, G 2013, 'Obsolete Equipment: Ethics and Practices of Media Art Conservation' in J Noordegraaf, C Saba, B Le Maitre, & V Hediger (eds), *Preserving and Exhibiting Media Art*, Amsterdam University Press, Amsterdam, p.235 – 244.