New Collecting Models for Time-Based Media Art: Developing a Collections Management Tool

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A thesis submitted in partial fulfilment of the requirements of the University of Sunderland for the degree of Doctor of Philosophy

This research programme was carried out in collaboration with Northern Gallery for Contemporary Art

October 2024

Abstract

Collecting new media art is a relatively new activity for many institutions and organisations. The characteristics of the varied forms that new media artworks can take are not fixed; they can mutate and become unstable while some artworks may even be ephemeral. Furthermore, the creation of new media artworks can be interdisciplinary, networked, or collaborative. The documentation and cataloguing of new media artworks constitute a critical factor in enabling their preservation and future presentation. Traditional collections management systems are not suitable for recording the many and varied instructions, intentions, and iterations that are essential to ensuring that new media artworks retain their integrity.

Through my practical work with the Northern Gallery for Contemporary Art, based in Sunderland, UK, my research evolved to focus on time-based media works. To enable the future presentation and accessibility of time-based media artworks, the artist and the collecting organisation have an obligation to contextualise the work, provide clear guidance on its installation and maintenance, while adhering to the artist's intentions. Concentrating on the care of time-based media artworks allowed for the creation of an effective guide to address the following research questions:

- 1) What are the key practical problems of collecting time-based media artworks?
- 2) How can small contemporary art organisations use new accessible and economic models for collecting and documenting time-based media artworks?

To answer these questions, research was conducted within the fields of curatorial and collections-based studies by exploring established curatorial guidance from organisations such as the Collections Trust, The Guggenheim Museum, and the Smithsonian Institution. The results of this research informed the design of a procedural database for collecting and cataloguing time-based media artworks. The Time-Based Media Art Curatorial Guide and Database captures the necessary documentation to maintain and contextualise artworks while categorising each curatorial activity. Additionally, artist questionnaires and data analysis using time-based media artworks from the Northern Gallery for Contemporary Art collection also influenced the design of the Database. Analysis of feedback from gallery staff on the content and ease of use informed the step-by-step design process and tested the efficacy of the Database. Rationalising established institutional procedures, the aim of the Database and related guidance is to futureproof the lifecycle of artworks while catering to the requirements of small art organisations with capacity poor resources.

Acknowledgements

Firstly, I am indebted to Julia Stephenson, Head of Art at National Glass Centre, for encouraging me to start my journey into collections management. Thank you to Prof. Beryl Graham for believing in me, affording me the opportunity to undertake this research project and supporting me through my travels. A special thanks to Prof. Alexandra Moschovi, my director of studies and supervisor for her invaluable feedback, wonderful calmness, and expert guidance, and to Dr. Suzy O'Hara for her infectious positivity, vast knowledge in this field of expertise and seeing me through the final two years.

With thanks to Alistair Robinson, Jon Weston, and Dean Turnbull at Northern Gallery for Contemporary Art for supporting my practical work and allowing me access to the artworks and archive. I would like to acknowledge Jon and Dean for taking the time to provide valuable feedback on the Time-Based Media Art Curatorial Guide and Database.

Thank you to artists Cory Arcangel and Graham Dolphin for sharing their time and knowledge in completing the artist questionnaire. A special thanks goes to Rute Ventura at the Arcangel Studio and Mike Jones and Steven Bode at Film and Video Umbrella for all their support in curating the Cory Arcangel show at the Collection Space of the Northern Gallery for Contemporary Art.

I must acknowledge my gratitude to the Northern Bridge Consortium and the Arts and Humanities Research Council for their generous funding for my trips to London, Austria, and South Korea and for the opportunity to undertake the Media Art Preservation Institute course.

And last, but not least, thank you to my husband, Dan, and my children, Oliver, Charlie, and Louis for their patience and support, and to Keith Corns for his patient proof-reading.

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Chapter 1: Introduction

1.1 Starting point of research

Video in the late twentieth century realised the dream of painters from the Renaissance to the late nineteenth century: to embody motion. Not only could artists now capture the cresting wave of the moment, but also, they could observe themselves in the midst of it from a point of view outside their bodies. Bill Viola (2010).

From the 1960s artists and practitioners have experimented using computers and innovative technology, and the art-form ascribed as 'new media art' has evolved into multiple strands of production, presentation, and distribution. But, as artists and collaborators continue to produce work, are we facing an uncertain future concerning the integration of new media art into institutional cultural organisations? Recently, concerns have been raised by curators such as Steve Dietz and Christiane Paul regarding the importance of learning how to collect new media art if there is to be any hope of preserving its past. With an array of collections management advice specifically created for new media artworks, it would appear that some institutions are uncertain on just where to start with acquisitioning new media artworks. Concerns must be addressed prior to acquisition or commissioning so that collecting institutions can be better prepared to care for artworks for future generations to appreciate. As the function of art is to exist and to be seen, methods of making artworks accessible is covered in this research, although the emphasis lies in the creation of a user- friendly collections management tool.

My research has shown that new media artists and curators at individual institutions have recently taken steps to tackle curatorial and collections management activities concerning the often unpredictable and unstable behaviours of new media artworks through collaboration and experimentation. These resulting findings purport that by the sharing of knowledge and resources, these concerns may be conquered to preserve and make new media art accessible for future generations to enjoy and not to lament over its disappearance. Work undertaken prior to embarking on my PhD studies within collections management provided me with an understanding of the current Arts Council England (ACE) accredited Spectrum 5.0 collections management standard. (ACE, 2023) While my experience with traditional Collections Management Systems (CMS) designed for documenting 'static' artworks and objects has been useful to establish which sections should be included in a newly created procedural database, it was obvious that they were not suitable for the complexities of cataloguing time-based media. Due to my previous work undertaking the cataloguing and condition checking of the Northern Gallery for Contemporary Art (NGCA) artworks in 2016, I already understood what documentation was missing and that a database to store all reports, contextualising information, instructions, images, guidance from the artist, and preservation strategies did not exist. The documentation of key curatorial activities of the whole collection was either non-existent, disparate, with important data missing or spread across various hard drives, memory sticks, and in the minds of former and current staff. The decision to incorporate a curatorial guide for gallery staff into the database was made to keep everything in one place to avoid multiple platforms and systems having to be employed.

Collecting and distributing new media art is a relatively new activity for many institutions and organisations who have accepted the relevance, not just now, but historically, of this diverse and constantly evolving field of art and creativity. Emily Gosling puts it simply "The problem with a relative newness of media like video, digital and internet art is that unlike a canvas or sculpture, people can struggle with the ideas of how to show, sell and 'own' them." (Gosling 2016) Artists are inclined to understand their audience and the often free, accessible digital channels available to connect the public with their work bypass the traditional challenges and costs of exhibiting 'in real life'. This has become especially pertinent since early 2020 when life as we knew it changed dramatically due to the COVID-19 pandemic and lockdown prevented physical visits to cultural institutions the across the world.

Northern Gallery for Contemporary Art (NGCA), my partner organisation, commissions new work and collects works from the commissioned artists (either by donation or purchase). The gallery owns a volume of photographic prints as well as time-based media works by Graham Dolphin, Dan Holdsworth, and Simon Martin. The specific collecting remit reflects the gallery's commitment to exhibiting and collecting innovative, experimental art and includes more than one hundred artworks. There are currently nine new media works in the collection. An established gallery of nearly fifty years (under private, civic, and now university ownership) and with two core staff and a marginal budget for exhibitions, commissions, and acquisitions, NGCA was a suitable case study for my research and experimentation as it has been collecting new media art, specifically time-based media, since 2005. As well as managing NGCA, Sunderland Culture operates National Glass Centre, Sunderland Museum & Winter Gardens, Sunderland Stages, Sunderland Cultural Partnership, Arts Centre Washington, and The Fire Station. This brings the investment of the three main funders of arts provision in the city; the Sunderland City Council, the University of Sunderland, and Music, Arts & Culture Trust (MAC) into a single, independent, and resilient delivery model and promotes the city's creative potential. In 2018, Sunderland Culture became an Arts Council England National Portfolio Organisation, which led to several exhibitions at NGCA with works loaned from ACE. The free tickets for Anthony Gormley's terracotta installation Field for the British Isles in 2021 were almost fully booked every day, which encouraged a new visitor demographic into the Centre, and the photographic, paintings, and print exhibition Island in 2022 exhibited works by David Hockney, Tacita Dean, and Martin Parr.

An eligibility requirement by the funders of this research project, the Arts and Humanities Research Council (AHRC) and the Northern Productivity Investment Fund (NPIF), was to work alongside a partner organisation (NGCA), a collaboration which would bring benefits to both parties. As outlined in the original research proposal, the benefits for the gallery involved enhancing the productivity and economic growth of the organisation by improving the accessibility to artworks within the collection. As a doctoral researcher, my project benefited by having access to the NGCA staff, its collection of artworks and documentation held, while being given the opportunity to work with artists and plan and stage an exhibition. The NPIF scheme states the research outcome should benefit productivity- as such, a primary aim of the Time-Based Media Art Curatorial Guide and Database will save precious time and stretched financial resources for NGCA.

As part of the UK Government's Industrial Strategy of funding for Research and Innovation, three key principles that I have applied, adhere to the AHRC framework and are as below:

-that there should be an integration of practice and research.

-use of reflective practice, by critically examining my own processes and decision making.

-clear definition of research questions and objectives.

Following all three AHRC requirements listed above shaped the outcomes presented as part of this research project; the theoretical chapters of the thesis, the production of the Database, and the implementation of the Database into the operations of NGCA.

Although the proximity of NGCA in Sunderland afforded me relatively easy access to engage with the collection and staff, the two national lockdowns caused by the COVID-19 pandemic between March to July 2020 and November 2020 to May 2021 prevented my planned practical work during the midterm of my studies. As such, the majority of the practical work was carried out in a condensed time period toward the end of the research and not at the planned times throughout 2020 and 2021. Online work was undertaken during this time which was mostly research- based and participatory including the Media Arts Preservation Institute, Danube University, (December 2020 to March 2021), Documenting Coloured Sculpture Workshop, LIMA/ Tate (June 2020), Documenting Net Art Workshop, LIMA (June 2020), LIMA Transformation Digital Arts Symposium (March 2021) and Audience Documentation Symposium, Photographer's Gallery/ LIMA, online discussion (July 2021). Using the time during lockdown to engage with industry professionals and learn from their practical experience allowed me to adjust my planned timetable without feeling like I had missed out on practical work. The Research Journey chart below illustrates the timeline of specific work that was undertaken:

Research Journey	2017	2018	2019	2020	2021	2022	2023
Contextual review							
Background research of current collecting practices, visits to galleries, conferences, seminars, UofS PGR programme							
Case studies/ assimilation of collections management related data							
Analysis of data							
Practice-based work planning with partner organisation							
Submission of calls for papers for research conferences. Delivery of research							
Evaluation of practice-based work							
Creation of artist interview and procedural database							
Interviews of artists, NGCA staff							
Thesis writing, reflection							
Interuption due to Pandemic (online work undertaken, no practical work possible)							

Figure 1. Research Journey chart illustrating the timeline of specific work that was undertaken and interruptions due to gallery lockdown.

1.2 Research context

Collecting institutions are mostly limited to collecting what is stipulated within the confines of focused Collections Development Policies while all the time artists working in new media are pushing the boundaries of creativity using ever-evolving new technology and accessibility channels. As Beryl Graham validates, "Most museums do, of course, have a highly structured acquisitions procedure, which proceeds cautiously over time with keen consideration of artistic provenance, quality, and historicization." (Graham, 2012)

Steve Dietz voices concerns regarding a potential crisis at hand, "We are in danger of losing thirty years of new media art history. It is important to learn now how to collect new media art, if there is to be any hope of preserving its recent past." (Dietz, 2005, p. 94) While Sarah Cook acknowledges that "The normally separate activities of production and distribution of work — so clearly defined in traditional museums used to exhibiting static, finished, and singly authored works — blur dramatically in a networked environment." (Cook, 2006, p. 43) This blurring between the borders of the traditional and the new has been examined through the course of my research, concluding that conventional curatorial activities require reimagining to preserve works and therefore make them more accessible.

The pioneering venture of the Victoria and Albert Museum (V&A) into collecting and exhibiting 'computer art', with the staging of the 1968 *Cybernetic Serendipity* exhibition was

a showcase for the use of technology in the arts and incorporated both computer-aided and computer-inspired art. Following its success, the Computer Arts Society (CAS) was formed. This led to artists working and experimenting with computer programmers towards the end of the 1960s and the genre becoming more accessible. This form of art has grown exponentially and has become problematic for some institutions to categorise, document, exhibit, and collect. The Computer Art Collection at the V&A until recently sat under the Prints, Drawings and Paintings Collection (now the Word and Image Department Collection) suggesting that the curators were not entirely sure where to place the category in the 1960s when they ventured into collecting. According to data provided by the art collector report Larry's List, in 2015, globally, video, and new media art works are presented in 10% of private global art collections. (Vogel, 2015) This is still considerably small compared to paintings, which are present in 83% of global art collections. Still, this number marks the growing popularity of this genre. Interestingly, nine out of the top ten video and new media collectors are women with six based in Central Europe. According to the Editor of Spike Art Quarterly, Rita Vitorelli "We are in an interregnum, an in-between state where the old world is dying and the new struggles to be born." (Vitorelli, 2018, p. 5) This statement corroborates with Steve Dietz's concern over how to preserve an artwork's past to present it in the future. Undoubtedly, artists do face struggles concerning the complexities of working in this field, but with guidance on the five identified curatorial activities of documentation, preservation, collection, presentation, and distribution, this art form can continue to grow and proliferate.

A challenging factor is the institutions and collectors who appear apprehensive to acquire digital, new media or time-based media artworks. In the context of private collecting, it is considered problematic to display new media artworks in the home while collecting remits, such as the often-outdated Collections Development Policies of some institutions, add to the challenges of caring for the works. Natalie Kane, Curator of Digital Design, the V&A, London, confirmed this statement recently by commenting "Institutions are by nature ill equipped to understand the nature of digital work." (Kane, 2018, p. 121) Curator, and researcher, Sarah Cook, admits "I don't think I have ever curated an exhibition in a venue that later collected the work...I have worked with a lot of local authorities and city council galleries, and more temporary exhibition spaces." (Cook, 2013) On a positive note, Cook does admit that commercial galleries are attempting to establish individual frameworks and guidelines for collecting new media art. Although traditional institutions seem to struggle with collecting new media art, artists, researchers, and curators have been working collaboratively to establish innovative and experimental ways of collecting, documenting, and distributing work, such as Matters in Media Art (2015), DOCAM (2014) and LIMA (2019). Practitioners are best placed to understand who their audiences are, and by the use of free online platforms and digital means, they are able to connect the public with their work and bypass the traditional means of viewing 'IRL', or in real life.

From early 2020, life as we knew it changed dramatically due to the rapid spread of the novel, invisible and deadly threat of COVID-19. Globally, the effect of the pandemic on 'locking down' and protecting the public from the pandemic led to governments enforcing quarantine or social distancing rules. This led to the closure of 'limited spaces' where the public gather and along with many other social venues, the museum, gallery, and heritage sector closed its physical doors to mitigate contagion of the virus. Institutions took the threat of temporary (or even permanent) closure very seriously and updated emergency plans on an unprecedented

scale. When we consider the term 'limited space' within a traditional museum context, it conjures up images of tangible barriers of display and access to artworks, such as room dimensions, costly technical display equipment, and health and safety parameters. Since the millennium and the advent of accessible, networked personal devices, institutions have employed creative and innovative approaches to sharing the artworks and objects within their collections to ensure essential audience engagement. According to collections management standards, most have disaster recovery and continuity plans to follow in the event of a natural disaster or fire but have had to adapt to the unusual circumstances by finding more innovative ways of ensuring audience engagement during closure. The physical doors may have been locked, but access to artworks and objects due to the creative use of accessible digital means have proven invaluable to maintain public engagement with collections. Caution may have prevented visits to venues within limited spaces, but as the museum sector has proven, this was not a barrier to audience engagement, learning and participation, which are fundamental principles for a museum's existence. Audiences require context to the artworks they are viewing- having comprehensive data stored on an accessible database can tell the story to public viewers and can provide in depth information to researchers.

1.3 Research questions

As the creation and presentation of time-based media artworks become more prevalent, it is of great importance that the artworks, their components, and their histories are preserved for future display. The overarching aim of the project is to provide a solution to the care of and documentation of time-based media artworks, and as such two research questions became apparent:

- 1) What are the practical problems of collecting time-based media artworks?
- 2) How can small contemporary art organisations use new accessible, economic models for collecting time-based media artworks?

The questions were examined from the artist's, curator's, collections officer's, and technician's viewpoints as many factors contribute to the 'collectionability' and accessibility of artworks within this genre. The aim of this project was to create a procedural database to enable core and casual staff to carry out cataloguing and collections care work. I was also motivated to create a curatorial guide for the collection of time-based media artworks not only to safeguard the longevity of the works but, just as importantly, the histories of the artworks, thus making it accessible for future presentation and contextualisation.

The definition of time-based media in this study follows Tate's description of "art that is dependent on technology and has a durational dimension." (Tate, 2021)

The primary aim of this research is to:

• Create a procedural database to aid the Northern Gallery of Contemporary Art and other small contemporary art organisations in the documentation practices of new and existing time-based media artworks belonging to the collection.

The key objectives are outlined below:

- Investigate the practices of larger institutional curatorial practices and rationalise the data covering documentation procedures, preservation strategies, collecting policies, presentation methods and access to artworks to suit the nature of the works within the collection.
- Focus on time-based media works and how they can be presented, which will provide a more niche and effective guide than covering all mediums making it more suitable to smaller collecting institutions.
- Determine which guidance and resources that are currently implemented by larger collecting institutions will inform the decisions on which instructions to include or exclude tailored to the nature of the collections at the NGCA and other small contemporary art organisations.
- Measure the efficacy of the structure, content, and operational value of the Database. Reflection on feedback and interviews from the two members of staff of NGCA will inform the final design of the Database.

1.4 Methodology

As I am neither artist nor curator but motivated by the need to have a collections management infrastructure installed at NGCA, I called on Marialaura Ghidini's PhD project 'Curating Web-Base Art Exhibitions: Mapping Online and Offline Formats of Display' (2015) as I could see a similarity in the themes of our research. Ghidini's investigation into how the web is utilised as a medium of production, display, accessibility, and critique of online artworks draws a comparison to my own research in that the Database will store data on curatorial practices, both online and offline. Ghidini attributes her research methodology to action research 'inquiry cycles'. The methodological approach of Sarah Cook by theorising her own practice while researching a 'Third way of curating new media art', enabled her to identify recurring problems also following a cyclical approach: "I approached my field of research as a curator, not an artist, nor as an observing art historian; my own practice was a part of my research approach." (Cook, 2004, p. 26)

Considered to be "one of the most creative and controversial figures in the history of psychology", (VandenBos, 1997, p. v) Kurt Lewin (1890-1947), is credited as the originator of action research in 1934. Lewin's belief that "no action without research; no research without action" (Marrow, 1969, p. 163) describes how this methodology fits with the rationale of my working processes. The process in which to gain an overall objective of the task in hand starts with a first period of planning, as Lewin attests to "Exactly how to circumscribe this objective, and how to reach it, is frequently not too clear." (Lewin 1948, p. 143). Following this first planning period or 'fact-finding mission', an 'overall plan' will emerge or a decision on how to modify the original idea.

The fact-finding element has four functions:

- 1. To evaluate the action, has it been successful, or should it be reconsidered?
- 2. It gives the researchers an opportunity to learn.
- 3. The fact-finding should serve as an opportunity to plan the next step correctly.
- 4. It gives researchers the chance to modify the overall plan.

The second period executes the steps of the newly emerged overall plan. If the results are found to be incomplete or not matching the original objective, the process starts from the fact-finding stage again, but using an alternative plan.

For Lewin, action research gives credence to the development of powers of reflective thought, discussion, decision, and action. According to academics, Alan Bryman and Emma Bell, action research is "an approach in which the action researcher and a client collaborate in the diagnosis of the problem and in the development of a solution based on the diagnosis". (Bryman and Bell, 2011, p. 589) This meets with my primary objectives of working with NGCA to address the problem of the skills gap of collections management knowledge whereas the current staff have technical and curatorial expertise. I aligned myself more closely with Donald Schön's notion of 'reflection in action', whereby reflection takes place during the event or research, and one "becomes a researcher in the practice context." (Schön, 1983, p.68) I used experience from my own practice to identify, analyse and reflect upon the particular issues faced by NGCA in their attempts to retrospectively document the time-based media artworks held in their collection. Kirsteen Macdonald's 2020 practice-based PhD 'Becoming curatorial: Emergent infrastructures for curatorial practice and work' capitalises on her own professional experience and case study approach to her research to understand the agency of 'the curatorial' (as a form of philosophy, radical politics, critical thought, or a gift) and its influence on practice, institutional models and working conditions within the contemporary art field. Macdonald's choice of an action research methodology and position as independent curator examining curatorial studies and institutional models is parallel to my own work in that she is the professional with an understanding of a problem that needs to be addressed. By working alongside a client, using a participatory approach establishes what needs to be rectified, from a 'user' point of view and contributes to the solution.

After reviewing practice-based research within the fields of curatorial and collections-based studies, I began to acknowledge that my action research methodological approach differs from other researchers working in my field of specialism. I identified this specific methodology by undertaking case studies, interviews, analysis, practical work within the gallery and reflection on established curatorial models of larger institutions such as Tate Modern, the Guggenheim Museum, and the Smithsonian Institution. In comparison to NGCA, the larger collecting institutions have more financial and time resources, and staff expertise to conduct research on an artist and an artwork, to commission, collect, and facilitate collections management activities than a 'capacity poor' regional organisation. By reflecting on my own experience of where knowledge on artworks is stored, as well as on the artworks' conservation, the need for a documentation system and guide became a necessity.

The Action Research Spiral introduced by Stephen Kemmis and Robin McTaggart in their 2005 paper 'Participatory Action Research' proposes the stages of research evolve into spirals of self- reflective cycles of:

-Planning a change
-Acting and observing the processes and consequences of the change
-Reflecting on the processes and consequences
-Replanning
-Acting and observing again
-Reflecting again, and so on... (Kemmis and McTaggart, 2005, p. 563)

Based upon Kemmis and McTaggart's Action Research Spiral (Koshy, 2005, p. 4) or 'self-reflective spiral' the diagram in figure 2 illustrates the steps in which the practical aspects of my research informed the structure and content of my practical project:

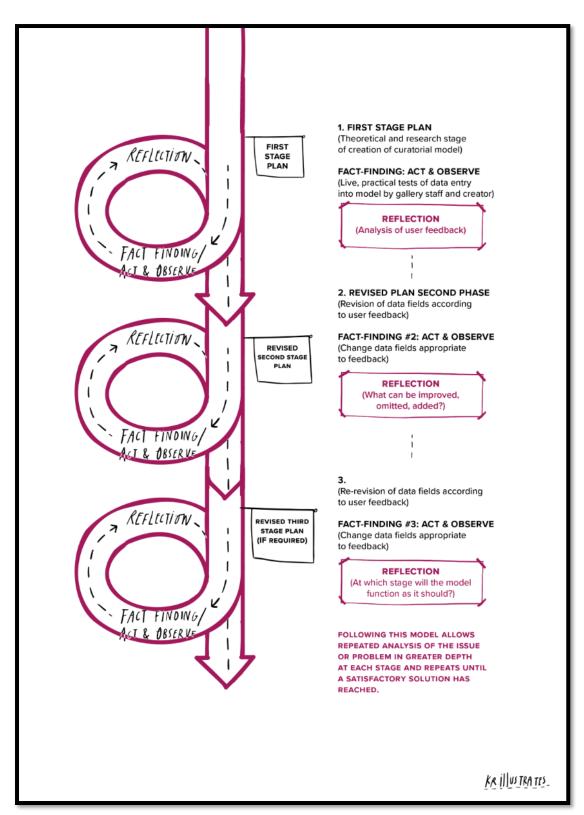


Figure 2. Reflective Action Research Cycle by Georgia Smithson. Diagram by Kathryn Robertson (2023).

Planning (with research)

-What are the curatorial issues faced by NGCA? -Research into collecting institutions and their approach to modes of distribution, documentation procedures, preservation strategies, collecting practices and presentation.

-What are issues that are universally accepted by researcher, academics, and professionals?

Acting and Observing (practical tests)

-Work with two NGCA gallery staff and the testing of the Database by asking them to feed back their findings on content, structure, and guidance sections. -Gather feedback from staff and assimilate to gain an understanding of their level of knowledge of terminologies, data fields and use of the chosen model software.

Reflection (editing model)

-What alterations and edits are required? -Analysing feedback led to the second phase of practice (Revised Plan) and a more insightful approach to designing the model so it is user-friendly and captures any fields I may have omitted.

This methodology is further detailed in the practical chapters of this thesis and informs the decisions that were taken to conclude the design of the Database.

1.5 Scope

The aim of this project was to create a complete procedural database to enable staff at NGCA to catalogue and care for time-based media artworks in the future and to catalogue the existing works comprehensively and retrospectively. The procedural sections guide the user on the five curatorial activities I have identified as fundamental to understanding the nature and needs of a time-based media artwork: documentation, preservation, collecting, presentation, and accessibility. The database sections catalogue the data specific to each new artwork either newly acquired by NGCA or where it has been identified that the artwork should be catalogued retrospectively. My research scope focused on how to achieve both objectives in real life by including the core staff in the design of the content, structure, and guidance sections of the database. The resulting procedural database is titled The Time-Based Media Art Curatorial Guide and Database (or 'the Database' for the purpose of this thesis).

1.6 Structure of thesis

Chapter 1 serves as an introduction to the background of the research and why the findings and resulting Database are critical to the future presentation of artworks belonging to the gallery and of benefit to staff. An introduction to the five curatorial activities of distribution, documentation, preservation, collecting, and presentation are provided. This chapter also draws on my own personal experience of working in collections management within the cultural sector. The methodology section provides an insight into how I chose the action research methodology, how I formulated my research project plan and the groundwork of how my project was carried out from both a theory and practice-based undertaking.

Chapter 2 starts with a contextual review on collecting and curatorial practices, as well as how artworks are made accessible by institutions, organisations, artists, and galleries. This chapter discusses the common issues and concerns of collecting time-based media art. The chapter also reviews the various institutions, venues, and platforms where artworks are exhibited, collected, and sold to illustrate the diversity of the practices.

Chapter 3 consists of case studies of two methods of distribution, one historical and one contemporary, and an analysis of two types of organisations and institutions that collect timebased media art and their collecting models which formulated the content and context of a newly created, time-based media specific artist questionnaire template. The template can be adapted for institutional use for artists and their specific artworks.

Chapter 4 explains the history and collecting practices of NGCA and where this small gallery fits into the world of collecting time-based media artworks, regionally and nationally, and revisits the artworks held in the collection. An example of how the data captured from artist questionnaires is transferred to the Database as analysis of how NGCA gallery staff handled the data while using it. A curatorial case study of the presentation and documentation of an artwork is logged in this chapter.

Chapter 5 details the rationale behind the decisions of which subject fields were chosen for inclusion into the Database and instructions for use. This chapter is also a reflection on the practical work undertaken during a curatorial and cataloguing placement with NGCA from February to July 2023. Analysis of the responses of artists to the questionnaire and how it assists with curatorial practice are examined here. The practice of reflection and acting and observing are documented in response to the artist's feedback on how the questionnaire also benefits and works for them. The aim for the Database is the future implementation into the curatorial operation of NGCA.

Chapter 6 concludes the research undertaken, analyses the key findings, offering insights into how creating the Database will promote the collection of time-based media art, enable staff to have the confidence in dealing with the five identified curatorial activities, and encourage visitor engagement through the future proofing and presentation of the artworks. The contribution to knowledge in this field of research and specifically the significance of documenting and cataloguing artworks to be able to continue displaying and researching them are discussed here. Through my research, two other areas for future research were established, which are also considered in Chapter 6.

Chapter 2: Contextual review: On distribution, documentation, preservation, collecting, and presentation of time-based art works

2.1 Introduction

This contextual review serves as a report into key curatorial conversations and activities, by answering the first research question. By evaluating historical and current practices and strategies from collecting institutions of varying sizes, artists, and online resources, I have used a practice-based research methodology to inform the way in which I have answered my research questions. The data collected in this review to establish the practical problems encountered by institutions and organisations when collecting time-based media artworks has been assimilated from scholarly articles and papers, symposiums, conferences, online workshops and lectures, and interviews with gallery staff.

2.1.1 Definitions

The glossary of terms below provides the terminology required relating to time-based media artworks:

Accessibility: The way in which an artwork can be viewed or distributed.

Artist questionnaire: A fundamental resource for understanding how to present, store, preserve and contextualise the artwork while remaining true to the artist's original intentions. The artist questionnaire can be documented to ensure no conflicts occur between artist and gallery or collecting institution.

Cataloguing: The act of creating a complete list of items related to an object, artwork, or collection. In relation to an artwork this would be any information that can help contextualise the work and explain the concept behind it.

Collections management: "How museums manage and care for their collections to meet standards and legislation relating to museums and collections. This includes safeguarding the preservation of the collections through appropriate conservation, handling, storage, and display methods". (Natural History Museum, 2021)

Conservation: Deals with the planning of existing damage to an artwork through examination, documentation, treatment, and preventative conservation

Display: The presentation of an artwork, this may be 'In Real Life', through digital means or through a distributed method.

Distribution: The way in which an artwork is made accessible from a collection, either by an organisation, an agency, a gallery, or the artist. (Somers Miles and Wijers, 2023, p. 11)

Document: A way of creating a record by physical means, intended to last to provide information for future use. The record can take the physical form of writing, drawing, a recording, photography, or video.

Emulation: "Emulation is the process of recreating a digital artwork to ensure it continues to work as technology changes". (Tate, 2021)

Obsolescence: The process of becoming no longer useful or needed. In the case of timebased media artwork components, devices for playback or the platform it is displayed on can become unusable, especially if it has been subject to excessive play or in storage for a long time.

Pre-acquisition: The period of time spent by the gallery deciding on whether to acquire a work or prior to a work being added to a collection. This could be at the point of commissioning a work or at the first point of dialogue with the artist.

Presentation: The way in which the artwork is presented, either IRL or by digital means.

Preservation: The attempt to prevent future damage or deterioration of an artwork.

Repository: A system, platform, or place to store archived digital artworks where their records can be accessible to the public or by request.

Time-based media: "Refers to art that is dependent on technology and has a durational dimension. Usually time-based media are video, slide, film, audio, or computer based". (Tate, 2021)

2.1.2 Distribution

The purpose of this section is to examine some of the methods employed to make video artworks and exhibitions of time-based media accessible using differing methods of distribution, while, at times, documenting the artwork in the process by giving them an accessible digital presence. Concerns that may arise prior to accepting artworks into a collection is also examined.

Prior to further discussion, a distinction must be drawn between cinema, artist's film, and video art. In an article in the film and culture review, Edge, Veronica Williamson (2016) characterises and separates the traditional definitions:

Cinema is seen as something that is more story and actor focused and is expected to reach a wider audience for commercial profit, artists' films favour aesthetic or artistic vision or experimental methods over commercial profit, and video art is concerned solely with discovering and manipulating the medium of moving images themselves. (Williamson, 2016)

An important observation on Williamson's part is that not only do the definitions dictate how critics and audiences view these works, and what value they will realise, but this structure dictates to the artist or film maker their creative boundaries. She argues that breaking from the defined constraints could provide the audience with a more fulfilling experience without

narrowing the scope of current distribution models. Due to video art offering the potential of inexpensive distribution methods, artists explored redefining their means of making and began to make a mark on the pre-defined art system. New media curator, Barbara London, who experienced the birth of video art first hand, explains that:

Experimental film largely belonged to cinema studies, an academic discipline that deals with theoretical, historical, and critical approaches to film. 'Expanded cinema' became the term to describe radical experimentation with the moving image, be it film, video, multimedia performance, or even in an immersive environment. (London, 2020, p. 12)

London's description of 'expanded cinema' encompasses the variations of the genre with the exception of digital formats of presentation and distribution that are so prevalent today. Artworks were presented in cinema, galleries, at happenings or specific sites for installations, which opened the viewing possibilities to a new demographic of art lovers. Sadly, many of the experimental early films were taped over to keep production costs low or were stored in buildings with no thought of how the environment may destroy the tapes. Preservation was not high on the list of priorities of early video artists.

The aim of the Amsterdam-based research platform for new media art, LIMA, project, 'Putting Distribution on the Map' (2018) is to illustrate the vital work that distributers undertake, and the contribution distribution offers as an economic model to the artworld as well as to showcase their own position as one of the foremost distributers of digital and video art. The platform serves as a catalogue and international network to display and distribute the LIMA collection. Works are distributed globally by LIMA forging links with galleries, institutions, and film festivals by the rental or curation of works to, for example, Tate, MoMA, and the European Media Art Festival for a nominal cost:

Rates for a single screening of a single-channel video work (prices correct as of March 2023) are listed below:

- < 15min € 60
- < 30min € 85
- < 60min € 120
- > 60min € 150
- Additional screening € 25/€ 75per title
- For rush orders add 50% to the total price

Although most of the factors listed by LIMA are relevant to NGCA, the gallery is limited to what activities it can employ due to having limited financial resources allocated to each exhibition. As part of my practical work, the presentation of '^(C) (2019) by Cory Arcangel in the NGCA Collection Space in 2023 was loaned from Arcangel's studio free of charge due to the relationship NGCA had previously built and maintained with the artist.

When the COVID-19 pandemic disrupted our everyday lives in so many ways, cultural institutions quickly adapted to online engagement strategies. It felt at the time like there was a noticeable adjustment from working IRL (in real life) to working online and phrases such as

'I'll Zoom you' and 'You're on mute' became part of everyday life, but the wheels were already in motion pre-pandemic. Scholar of American studies, David Silver acknowledges that virtual exhibitions actually pre-dated the Internet. In his 1997 essay 'The Perils and Potentials of Virtual Exhibitions' Silver states that electronic versions of physical collections are not a new phenomenon, they have been used by institutions such as the Louvre and the Smithsonian for decades. Filmed walkabouts, CD-ROMS and online exhibitions allowed access to the collections to visitors through the use of remote technology. (Silver, 1997)

Silver's essay defines early virtual exhibitions as having four main characteristics:

1. Virtual exhibitions are online and exist as part of and within the global computer network called the Internet.

2. They are web-based, which means that they are designed, mounted, presented, and viewed on the World Wide Web.

3. Virtual exhibitions are hyper-textual, an aspect which collects and connects various hyperlinked texts and can produce elements of non-linearity, de-centredness, and intertextuality.

4. They are dynamic, a feature which renders them more perpetual works in progress than static collections.

Silver also identifies three differences of virtual exhibitions:

-A virtual exhibition is an online replica of a show in a physical location.

-The second type of virtual exhibition or the 'missing wing' is more than a replica of a physical exhibition. It is an extended version, providing additional material and exhibits that enhance the scope of the real-life exhibition.

-Hyper-real sites have no physical original and only exist online. (Silver, 1997)

The examples above illustrate the use of technology in enabling the distribution of artworks and collections to visitors by remote means.

When Instagram was only four years old, curators Karen Archey and Robin Peckham, identified the importance of a digital presence in the context of distribution and documentation in their accompanying essay/ catalogue to their 2014 exhibition *Art Post-Internet*. They identified that advancements in technology have affected 'the artwork' as the work is not only documented at the time of its display but can also provide a network for the artist's practice. (Archey and Peckham, 2014)

While it is important to understand contemporary methods and models of distribution using digital and virtual means, attention must also be paid to traditional IRL approaches where artworks are physically loaned or gifted to galleries or institutions. A very generous gift was made in 2022 by Greek collector Dimitris Daskalopoulos of over 350 contemporary artworks

by 142 artists to four art museums, including Tate, The Guggenheim Museum, and The Greek National Museum of Contemporary Art. The collector had never considered himself the owner of the artworks, maintaining that artworks must be seen and not kept in boxes. Daskalopoulos believes that "The natural ending of this is that I'm gifting these artworks to where they will have the possibility to be seen by a lot of people and will be better preserved and keep dialogue with people in the future. It's public museums, nothing else." (Grynsztejn, 2022) Several of the works are film or video art including works by Bruce Nauman and Steve McQueen. It is of interest to note that, to avoid duplications, institutions were given time to check their records and archives and could refuse works that they did not have the technical expertise or resources to care for. Daskalopoulos recognised that this may be a cause for concern as he noted that some large-scale installations are "even hard for a large, wellequipped museum to handle." (Grynsztejn, 2022) This statement acknowledges the acceptance that the gifting of a collection or even one artwork can become problematic for the staff at an institution that is regarded as having the capacity to be able to deal with complex works, and for research to be carried out prior to acquisition to establish the suitability of an artwork to an institution's collecting remit.

2.1.3 The importance of the documentation and cataloguing process

Revisit your institution's collection policies. Don't assume because your institution already collects video that you've got new media covered. What needs to change? Change it. Interview artists whenever you commission or collect a work of new media. (Reinhardt and Ippolito, 2014, p. 222)

This advice from Richard Rinehart and Jon Ippolito should be observed, but how do you document the forgotten or unobtainable? When dealing with static artworks, the artwork is the primary evidence, everything said (books, articles, interviews etc.) about the artwork is considered secondary evidence, and tertiary evidence is gathered from secondary evidence. Taking into consideration the complex, variable, and often ephemeral characteristics of new media art, it is imperative that at the acquisition or commissioning stage all available information must be shared between artist and institution and documented carefully.

Curator and conservationist, Caitlin Jones, argues that the centrality of documentary evidence when writing history is invaluable. Her paper 'Surveying the state of the art (of documentation)' (2008) advocates how curators, conservators and researchers rely on the production, provenance, and evolution of information contained in comprehensive, well written and thoroughly researched documentation.

Jones assures, with the use of factual and evaluative documentation, complete checks can be made to reassure curators of preservation strategies for individual artworks. During a residency at the Daniel Langlois Foundation in 2007, Jones and media arts specialist, Paul Kuranko, surveyed the many documentation models used by case studies of individual artworks, including physical models proposed by the Documentation and Conservation of the Media Arts Heritage Project (DOCAM) and theoretical models raised on the Curatorial Resource for Upstart Media Bliss (CRUMB) discussions list. By using a case study approach to their research, Jones and Kuranko identified three distinct phases of documentation:

-Collection and creation—data gathered on the conceptual, technical, and experiential nature of the work.

-Arrangement—the structure of the archival arrangement of the work.

-Description and access—components of artwork and the relationship to the collection as a whole and how the work can be accessed physically or digitally.

The three phases identified above are pertinent to the design of the Database. Each instruction requires the documentation of elements critical to futureproofing the artworks and their histories.

The artworks within the NGCA collection are historical, with the earliest having been created in 2005. It may not be possible to locate all the data ascribed above to document them thoroughly but as the collection grows, the relevant information for the preservation, display, exhibition, and technical longevity of the artwork should be documented. Returning to Caitlin Jones, who, at a CRUMB seminar, discussed how important it is to capture preliminary documents, or what is referred to as the 'research and development process' agrees that to document the artist's original drawing can contribute to the way of understanding how the piece should exist. (Jones, 2008) This type of documentation can also provide instructions on the display of the artwork for all gallery staff involved in the installation. Jones raised a valid point that is often overlooked:

Too often we only ever hear the name of the artist when in fact there were numerous technicians and numerous installation people, numerous computer programmers, all the people who are really important to possibly talk to in the future or have acknowledgement on these kinds of projects. (Jones, 2008)

The credit to the many others who contribute to an individual artwork is often overlooked and I have included this field of data within the design of the Database (see section 5.4). But then, a wall label is intended to be 'innocuous' and not intended to detract from the viewer's study of the artwork itself. Therefore, the issue arises on how to impart all relevant data onto the viewer. If the data is noted within the documentation, the curator and artist can decide on how to approach this together.

Although collected institutionally, new media artworks tend not to have a taxonomy of their own, but as part of a sub collection and can be catalogued along with photography or print as curators did not quite know how to categorise them. For example, generative software artist, Casey Reas' software for *Code for Process 18 (Software 3)* (2010) can be found in the Prints, Drawings and Paintings collection at the V&A. I examined the internationally recognised Dublin Core Metadata Initiative (DCMI), a set of metadata used to describe digital or physical resources. I am familiar with the Collections Management System (CMS) eHive, which uses the schema.

The original version comprises of fifteen metadata elements:

- 1. Title
- 2. Creator
- 3. Subject
- 4. Description
- 5. Publisher
- 6. Contributor
- 7. Date
- 8. Туре
- 9. Format
- 10. Identifier
- 11. Source
- 12. Language
- 13. Relation
- 14. Coverage
- 15. Copyright

Although this schema is used successfully as the structure for traditional Collections Management Systems, data fields that would support the documentation of time-based media artworks do not exist, such as where to enter technical instructions and preservation strategies in a way that the user would be able to find easily.

Mark Tribe, artist, and founder of Rhizome, an organisation that supports the creation, presentation, and preservation of emerging artistic practices that engage technology, also found himself faced with the same issue when creating the platform's digital archive, ArtBase in 1999. When researching models and existing standards, including the Dublin Core, the data fields were found not to be applicable, so he created a taxonomy of metadata that was appropriate, adding key words, genres, categories, and technologies. (Tribe, 2013)

While the Dublin Core Schema was a valuable starting part, acknowledging its omissions, I also used Tribe's experience as a reference point for the sections that were missing. New media scholar and curator, Beryl Graham confirms that a vocabulary does not exist when searching for new media art using prescribed metadata:

If the working definitions of new media art might differ from traditional art-from specific departments, then this becomes even more important when considering the importance of definitions, categories, and taxonomies in collecting, and in collections using new media and Internet search terms in particular...in practice, what this means for online databases of museum collections is that some new media art can be difficult to find. (Graham, 2017, p. 118-119)

After identifying missing documentation from early new media artworks integrated into their collection, a project to create a new cataloguing system was initiated by the Time-Based Art Team at the Art Gallery of New South Wales (AGNSW) in 2016. Drawing upon the resources created by the Variable Media Network (VMN) (Guggenheim, 1999) and the Documentation and Conservation of Media Arts Heritage (DOCAM), (Daniel Langlois Foundation, 2005), the

team looked at the gaps in collections management practices in their own institution to establish what it was they needed to include. From a case study concluded by the AGNSW on the time-based artwork Unity in Diversity (2003) by Nalini Malani, acquired in 2012, it was established that significant components of the artwork had not been documented as well as the presentation intentions of the artist. Further to that, the soft copies had not been stored in an accessible location. As a request to loan the artwork had been made, the team contacted the artist to collect more detailed information (for their own purpose and for the purpose of the loan). Due to the lack of information on the assembly of the artwork, the loan did not materialise as the borrowing institution was unable to accommodate the work's installation due to lack of space in their gallery. (Sherring, 2018, p. 4.) The project highlighted the need for collaborative engagement from institutional departments to ensure their aims were achieved. AGNSW Conservator, Asti Sherring remarked that a collaborative approach was taken, which required extensive cross-departmental consultation. (Sherring, 2018) This is an example of how sharing knowledge between departments can contribute to the success of a project, but in the case of NGCA, which has two members of staff; the interim curator and the technician, the need for a comprehensive guide to documentation is paramount.

Software and database conservationist and engineer, Diego Mellado, recognises the requirements for caring for new media artworks and that using outdated collections management models simply will not work:

The content and the supported media can be mixed up, and criteria for collecting, exhibiting, and conserving used for other classical media such as painting, or sculpture are no longer valid. Its nature, copy-prone, challenges the standards of distribution, reproduction, exhibition, and storage. (Mellado, 2018, p. 4)

My research focuses on the fundamental practice of documentation that should capture valuable, relevant, and critical data from the point of pre-acquisition and throughout the lifecycle of an artwork. Much emphasis on the artist interview or questionnaire by organisations such as the Daniel Langlois Foundation and DOCAM, the VMN, and LIMA has proven successful in assimilating the data fields required for curatorial, exhibition, and collections management staff to gather the relevant conceptual and contextual information. But documentation does not and cannot stop at that point in time; the components of new media artworks mean that they can become unstable, mutate, may need to be replaced or replicated, and can become obsolete. Where the process of making is more commonly an integral part of the artwork, traditional documentation models cannot be used. While some institutions have adopted variations of these models, they tend to stop documentation at the point of acquisition.

How does a small gallery approach acquisition with limited resources where new media artworks are concerned? There is no 'one-size-fits-all' approach, as recognised by Pip Laurenson, Head of Collections Care Research, Tate:

Each contemporary art museum, like any institution, has a distinct character. In some cases, different models will be adopted at different times within the history of a specific institution; furthermore, institutions may also adopt hybrid models...most of all these models have emerged as a response to changing attitudes regarding the nature of conservation. (Laurenson, 2013)

Laurenson's observation confirms there cannot be one all-encompassing, universal model for institutions to use as a collections management bible. Even within Tate, different approaches to individual artworks and artists are applied. For example, Bruce Nauman's video artwork, Violent Incident (1986) is comprised of twelve old television monitors showing various scenarios of a practical joke that has gone terribly wrong. The monitors are required by the artist to always be the same model. Through my participation in the online Media Art Preservation Institute course, time-based media conservation specialist at Tate, Patricia Falcao, revealed Tate bought extra models at the time of acquisition in 1993, but as they have become difficult to replace, the artist has accepted the use of contemporary technology for future presentation. Currently on display at Tate, St. Ives, Stephen Partridge's Monitor (1974) has proven that by obtaining multiples of the crucial elements at the point of acquisition in 2015, the artwork can stand the test of time. Again, Falcao, advised that the monitor is recorded by a camera which results in infinite successions of itself, the monitor being the crucial element of the artwork. Falcao also pointed out that the 1973 Sony monitor was backed up by two of the same model provided by the artist and Tate purchased two from eBay. (Falcao, 2021)

2.1.4 Outwitting oblivion and obsolescence — the purpose of preservation

"Understanding that this digital heritage is at risk of being lost and that its preservation for the benefit of present and future generations is an urgent issue of worldwide concern." (UNESCO, 2009, p. 1)

The practices of preservation and documentation can and do intersect and, are considered as important as each other by LIMA. The interplay of the two activities is stressed by the director, Gaby Wijers who argued that "Documentation- a work's physical remnant or trace— is created and used in different ways, depending on its use, perspective, and timing. In performance and digital art, documentation has become the focus of conservation and preservation strategies". (2020, quoted in Hendricks, p.1) Known as the 'Dullaart-Sakrowski Method', the two activities became split-screen bedfellows for net art where a video of the artwork is displayed as well as the artist's own reflections regarding the concept, the creation process, and how they envisage the presentation of the work in the future. It also performs by moving beyond documenting merely technical specifications, blurring the lines between what is the work and what is the documentation. Net art can be complex to interpret and document as it is constantly evolving, the server is always performing.

Assuming the prerequisite to accessioning a time-based artwork is that it and its components are in full working order, the process of preservation is undertaken to ensure future presentation of the work. The terms preservation and conservation can often become confused; the act of preservation endeavours to prevent future damage of an artwork, while conservation attempts to counter existing damage. Research undertaken by organisations such as the Variable Media Network which emerged from the Guggenheim's efforts to strategise the preservation of its new media art collection aim to combat these concerns. The researchers produced the research publication, 'Permanence through change: The Variable Media Approach' (2003) with the intention of establishing a process to address the care of

artworks created across a variety of media and materials and to bring a flexible approach to the preservation of a range of creative practices. Their aims are expressed by Jon Ippolito:

We need artists- their information, their support, and above all, their creativity- to outwit oblivion and obsolescence. That is why the Variable Media Approach asks creators to play the central role in deciding how their work should evolve over time with archivists and technicians offering them choices rather than prescribing them. (Ippolito, 2003, p. 47)

The Variable Media Questionnaire delves deeper into the nuts and bolts of an artwork or performance. To understand the needs of each artwork, each physical component becomes a case study which is broken down into four main strategies of preservation:

-Storage and collecting (hardware)

-Emulation (recreation of operation systems- not the artwork itself)

-Migration (is it possible to present on an alternative platform?)

-Reinterpretation (is it possible to transfer to an alternative technological framework?)

As each artwork should be approached from a preservation point individually due to its specific components and behaviours, it is important at the point of pre-acquisition that consideration is taken to plan for malfunctions, repairs, replacing parts, and even obsolescence. The intentions of the artist must be factored into how the artwork can be presented for years to come without it losing its original integrity. Through the use of the Variable Media Questionnaire, the four preservation concepts of storage, emulation, migration, and reinterpretation aspire to prevent the demise of the artwork in the event of component failure, but he still recognises "Of course, no matter how open the questionnaire may be to different options and perspectives, it's impossible to predict every decision necessary to preserve a work, especially regarding its translation into mediums that don't even exist yet." (Ippolito, 2004, p. 95) This honest and frank acceptance that preservation documentation might not save the day every time serves to remind us that nothing is infallible but by preparing for the worst using the Variable Media Questionnaire's four concepts an institution can certainly prolong longevity. The concepts should be discussed with the artist/s and other stakeholders where possible as where emulation may be acceptable for one artist, it may be abhorrent to another. While Ippolito acknowledges that the intentions are not "commandments carved in stone" - rather "a matrix of preferences rendered in a fluid, digital form", it is better to have the preferences than nothing at all. (Ippolito, 2004, p. 96) As a collecting institution, this documentation can be counted upon when decisions on presentation need to be made where the artist is unavailable, without fear of repercussions from their estate.

At the practical seminars and workshops I have attended throughout this research project, speakers have been very generous in sharing their experiences of when they had to rethink preservation and documentation strategies, and this is reflected in this chapter. I have been

fortunate to hear, first hand from time-based media conservators about the challenges they face, and how, institutionally, parameters, remits, and documentation templates have had to be re-assessed. As there are so many variations of the make-up of a time-based media artwork, each report is specific to the corresponding artwork. The variety of components and materials of an artwork can result in it not being able to be 'classified' resulting in documentation challenges. As collection registrar and researcher at Tate, Steven Huyton, determines:

Any uncertainty in the accurate classification of material can have a direct impact on the ability to safeguard, display and interpret the work on behalf of the nation. The determination of an object's status and collection-type has crucial implications on how it is managed and cared for, as well as the impact on the financial value of the material. (Huyton, 2019)

The aim for the Database is for data fields to be added as the NGCA collection grows and to have guidance within the procedural sections on how and where to add extra fields. Users should not be afraid of adding further data fields as and when required.

2.1.5 Combatting the complexities behind collecting

My research has confirmed that institutions in the UK that collect new media art have their own, specific methods of documenting, preserving, and distributing as well as their own approaches to embarking upon collecting. While the importance of an institutional Collections Development Policy cannot be understated, the idea of an absolute and total bible of institutional collecting does not fill me with confidence. It has in fact, made me rethink whether it is fit for purpose, as discussions with curators, personal experience, and research has shown that a significant number of published policies are outdated by several years and need to undergo a long, carefully considered process (with board members, stakeholders, and staff) before changes can be made to acquisitions policies. The Victoria and Albert Museum (V&A), London, are an excellent example of this with their 'Rapid Response Collecting' initiative, where an object that has made significant cultural or newsworthy impact is acquisitioned and displayed quite soon after its appearance to ensure it is time relevant. Due to the dynamic, mutable characteristics, and behaviours of new media artworks this traditional model would have to be updated to allow for a quicker and less bureaucratic process. As Peter Latchford, CEO of systems and strategy consultancy, Black Radley, and author of 'The Future of Museums: A Think Piece' confirms:

In too many museums, the Collections Development Policy is seen as a technical, quasi-mystical document shaped by the experts and to be protected from the utilitarian or populist concerns of other stakeholders. Consequently, it can be simultaneously too narrow and too broadly based, giving objects primacy over stories, perpetuating the existing areas of specialisation, and missing out on the defining contemporary issues of the place. (Latchford, 2018, p. 25)

The thought process that goes into deciding what to collect and considerations taken prior to collecting due to technical complexities is reflected by researching the Computer Arts Society (CAS) and papers written by member Sean Clark. The society created a more formal collection

'CAS50' on their golden anniversary in 2018. The society is member-based and had the foresight to form in 1968 to encourage the use of computers in the arts. The society aims for the collection to grow according to the complexities of the artworks, from the initial set of 2D printed works and works on paper donated to the project by artists such as Daniel Brown and Ernest Edmonds, to elaborate installation works in the latter phases of the project.

The process is taking some time— as of 2018, the Society had just embarked on Phase 3 of the project, although the attention to detail is very thorough. As well as the ordering of the process, as a researcher, I would like to see a projected timeframe for the project's six phases and collecting guidance for each stage. Attention was paid during the acquisition process to ensure a fair representation of media in accordance with phase 1— works on paper, printed works, computer drawings, and computer printouts, while ensuring a fair gender balance of artists and coherent themes. Phase 2 concentrated on video works, with phases 3-5 focussing on screen- based works. Phase 6— considered to be the most complicated form will concentrate on installation works. Amongst the artists are Lumen prize winners and members of the society dating back to its inception. The collection has forty prints and works on videotape as well as publications and ephemera. This created two issues of where the material is stored and who owns it.

The solution to both issues led to the creation of the Computer Arts Archive Community Interest Company in January 2020 with artist and curator, Sean Clark, addressing the following objectives:

The Computer Arts Archive is a non-profit company that collects, exhibits, and promotes computer artwork for the benefit of artists, audiences, curators, educators, and researchers. It collaborates with other collections, museums, and galleries to explore the impact of digital culture and ensure that computer art is recognised as a significant contemporary artform with a rich and diverse history. (Clark, 2020 p. 138)

This is an example of a strategic, progressive approach to collecting, with realistic timescales. As the project progresses, research is undertaken and documented, which could serve as a case study for potential collecting institutions.

The Stedelijk Museum in Amsterdam has collected time-based media artworks since the 1960s and has a collection policy for new media and digital art but faces the challenge of how the old and the new mediums work together in one space. (van der Meulen, 2019, p. 97) Professor of Contemporary Art, Sjoukje van der Meulen's research has highlighted an issue that I had not previously considered as I had been looking at how an institution integrates new media art into a collection of object-based artworks. Van der Meulen's research focuses on convincing approaches to curating and collecting digitally based art in a museum of modern and contemporary art, considering the continuing interchange between the collection and the exhibition programme. The problem was overcome by the total reorganisation of the whole museum by then curator, Beatrix Ruf, in 2014. A tripartite design split the exhibition spaces: Stedelijk Base, where nearly three quarters of the space is devoted to permanently displaying the collection, highlights, and art-historical canon; Stedelijk Turns, which presents a changing program of collection displays, each showcasing new perspectives, new curatorial approaches, and topical themes; and Stedelijk Now, home to a roster of

temporary exhibitions. Van der Meulen also echoes my own position when she states, "A well-researched anthology on important and ground-breaking new media curators and curatorial models and approaches in Europe and the US (and possibly beyond) could be a welcome addition to the literature on new media and digital art in the context of museums of modern and contemporary art." (van der Meulen 2019, p. 97) Splitting the museum space into three separate and distinct areas provides the visitor with a better understanding of what themes they will find and how to make sense of them.

2.1.6 Presentation beyond the white cube

Art Curation: Challenges in the Digital Age (2019) edited by digital art historian Francesca Franco, provided some very recent and relevant insights into challenges faced by institutions, organisations, curators, and artists. Of specific interest to my research is again, the article by Sjoukje van der Meulen, 'Going Digital? New Media Art at the Stedelijk'. Van der Meulen tackles the questions of 'what are the issues involved in re-contextualising and exhibiting artworks made in the 1960s and 1970s?' and 'what are (adequate) curatorial approaches regarding digital art?' The first question is relevant to my research as the artworks I worked with during my practical work are historical and have been displayed previously within various contexts and sites. The key word of interest in the second question is the word 'adequate'. Although I aim to provide more than 'adequate' guidelines within the Database, often challenges faced by small organisations with limited budgets and skeleton staff can only hope to meet adequate measures of collections management. Van der Meulen raises the point that an exhibition programme is linked to a museum's collection development policy, which was also made by Graham and Cook when they stated that museums are "largely defined by their collection, but (many) have yet to start creating a collection of new media art". (2010, p. 149) This is relevant to my preparation for programming the NGCA collection space from 2020-2022 to ensure the singular artwork displayed provides a narrative for the collection and is in keeping with the exhibition and related educational programme in the main gallery space. Christiane Paul admits that most museums are equipped to exhibit object-oriented works such as sculpture and photography, but time-based, interactive digital artworks raise numerous issues:

Museum buildings are mostly based on the 'white cube' model rather than being completely wired and equipped with flexible presentation systems. The success of the exhibit and the audience's appreciation of the art is invariably dependent on the effort the institution puts into the exhibition, both in technical and educational respects. (Paul, 2015, p. 15)

As the NGCA gallery and the Collection Space were purpose built to be multi-use spaces and to display contemporary art in 2018 and 2013 respectively, the worry about display issues Paul discusses with regard to 'white cube' spaces are not of concern to my plans.

Also relevant to this research project is Pip Laurenson's work outlined in the paper, 'The Management of Display Equipment in Time-based Media Installations' (2005), which aims to provide a practical policy for the care and management of the display equipment that is integral to the artwork. Most of the artworks of the NGCA collection are screened via a stock projector and various stock screens so display equipment is not an integral or aesthetic

component of the artwork. Due to the ongoing acquisition process as and when a new exhibition is commissioned, it is important that the curatorial staff have instructions on how to care for the kit. Laurenson states:

Display equipment warrants special attention because it presents specific challenges to our ability to display these works in the future as the artist intended...display equipment is certain to fail and become obsolete, therefore, any strong link between specific display equipment and authenticity or value will mean that a degree of loss is inevitable. (Laurenson, 2005)

The questions listed below were designed to establish the aesthetic, conceptual or historical significance of the display equipment of Tate's time-based media installations:

1. Artist involvement — was the artist actively involved in the specification of the display equipment? Is the artist specific about the equipment used?

2. Visibility and impact — is the equipment visible? Does the equipment form part of the aesthetics of the artwork? Has it been modified by the artist?

3. Relationship to context and history — is the equipment distinctive and/ or visible and does it place the work as belonging to a particular time? Does the work make explicit reference to a particular technology? Is the significance of the technology linked to contemporary use of that technology? Does the equipment relate to the spirit in which the work was made?

4. Qualities produced — does the equipment create specific qualities in the sound or picture that are valued by the artist? (Laurenson, 2005)

It should be noted that the above information can be sourced directly from the artist by use of the artist questionnaire (discussed in further detail in sections 4.4-4.6) which also confirms the artist's involvement in the specification of the display is key. This also emphasises the Variable Media Network recommendations when considering preservation during the documentation process, mainly the description of components of the artwork, and how it relates to the work, directly from the artist.

Matthew Gansallo embarked upon the online only project *Uncomfortable Proximity* with Tate and artist Harwood@Mongrel in 2000. The project raised many inter-departmental issues and comments from confused online visitors as it unfolded due to the 'hacktivist' nature of the artwork appearing on every fifth hit by an unsuspecting visitor to the Tate website. Gansallo discussed the unexpected issues that unfolded as the project got underway during a CRUMB seminar:

How much do artists who are asked to commission works online, through a link, how much should they get paid?...Another interesting thing we had to go through, was that art projects online reviewed the standard contracts Tate prepares for artists and raised new issues and laws of copyright...other issues were addressed such as

ownership, acquisition, procurement, collection, archiving and provenance- how do you collect such a work? (Gansallo, 2001)

Gansallo was confronted by the issues mentioned above in the early days of the World Wide Web, which highlights the necessity for documentation planning at the start of a project.

The first artwork streaming model to appear online was Vdrome in 2013. This was not a virtual exhibition or a film of the gallery space, the kind of which had been shown in documentaries on TV, but a streamed single moving image artwork for a limited time. The artwork, *Spectres* (2011) by Sven Augustijnen had been screened at festivals previously but for a seven-day period it was streamed advertisement free in HD, accompanied by an explanatory text. This model served to become the forebearer of digital collection, exhibiting, and selling platforms we are so accustomed to now such as Vdrome and S[edition], where the artwork is presented on screen as it was intended by the artist (not as a screenshot) which can determine a sale for potential buyers or traders.

2.2 Collections management tools, models, and guidance

My professional background of collections management and my understanding of the current Arts Council England accredited Spectrum 5.0 standard and traditional collections management systems designed for documenting 'static' artworks have been useful to establish which sections should be included in the Database and which should be omitted. The Spectrum Standard is used internationally as a guide and framework for the documentation of artworks, and museum and heritage objects and is accepted as one of the leaders in the sector.

The Spectrum model has nine primary documentation procedures (correct as of October 2023) that are expected to be adhered to for every object or artwork within a collection for the museum to attain or maintain its Arts Council England Accreditation status. They are as follows:

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Object entry	Logging all objects coming into your care for whatever reason,				
	including loans, enquiries, and potential acquisitions				
Acquisition and accessioning	Taking legal ownership of objects, especially (but not always) to				
	add to your long-term collection through the process of				
	accessioning: the formal commitment by your governing body to				
	care for objects over the long term				
Location and movement control	Keeping a record of where all the objects in your care can be				
	found, and updating the location each time an object is moved				
Inventory	Making sure you have the basic information to be accountable for				
	the objects in your care, and tackling the backlog if you do not				
Cataloguing	The ongoing process of recording and managing information				
	about collections, often from multiple perspectives, to meet the				
	needs of a range of users				
Object exit	Recording when objects leave the buildings you are responsible				
	for and pass out of your direct care				
Loans in	Managing objects you borrow for a fixed period of time and for a				
	specific purpose				
Loans out	Assessing requests for you to lend your objects and managing the				
	lending process until loans are returned to you				
Documentation planning	Making your documentation systems better and enhancing the				
	information they contain as an ongoing process of continual				
	improvement				
The policies, plans and procedure	es of the institution are based around the nine primary procedures				
to ensure operational activities meet best practice laid out by Spectrum.					
The three categories are:					
-	management, users, and their experiences				

Organisational health, collections management, users, and their experiences

Table 1. Spectrum nine Primary Procedures of collections management as prescribed by the Collections Trust (2022). Table created by Georgia Smithson (2022).

The Collections Trust aims to assist institutions and organisations with the care of their collections by providing collections management standards and advice. It is worth noting that since my research began in 2017, their aims have been updated to include digital collections and the use of online visitations. The Spectrum Primary Procedures form the basis of my documentation model, but while there were gaps for caring for new media artworks, this resource appears to cover all other aspects of the collections management field. In April 2023, The London Museum Documentation Network launched the 'Toolkit for Managing Digital Collections' based on the Spectrum framework. The aim of the 114-page document is "to ensure museum professionals are provided with the correct information to enable them to identify, retrieve, store, preserve and access all types of Digital Collection Objects, both now and in the future." (Bolton, 2023, p. 7)

The introduction to the toolkit outlines their strategy:

Digital Collection Objects (DCOs) are considered part of a museum's collection and like physical objects, are subject to the same suggested procedures described in Spectrum. This toolkit is designed to provide museum professionals with a suite of practical, tried and tested tools and workflows, taken from the digital preservation community and

adapted and interpreted for them, within the framework of Spectrum's suggested procedures. (Bolton, 2023, p. 7)

Members of the London Museum Documentation Network who contributed to the document through workshops held in 2021 and 2022 range from collections managers and archivists to PhD students and time-based media conservators. In an email newsletter from the Collections Trust, on the date of its launch, 4th April 2023, the toolkit is described as having been created "to help staff and volunteers identify, retrieve, store, preserve and access all types of digital material, both now and in the future." (Gosling, 2023) The collaboration between industry professionals and research students to create the toolkit is the latest example of joined up working and thinking to try and combat the anxieties of collecting complex artworks. Collaborative work over the past twenty years by the larger, international cultural institutions and galleries to allay fears and promote long-term care are evident while searching on their institutional websites (e.g., Guggenheim, Tate, Smithsonian). By making their research and documentation strategies accessible, their resources can be interpreted by small galleries for their own use on a project-type basis using the correct staff expertise. Larger institutions have a knowledgeable staff base, training on in-house models, and have undertaken grant-funded collaborative projects to produce working models of documentation. The Guggenheim with their Variable Media Questionnaire, The Daniel Langlois Foundation's Documentation and Conservation of the Media Arts Heritage (DOCAM) and multi-partner collaboration, Matters in Media Art, are pioneers and still at the forefront of such research. The V_2 Capturing Unstable Media Conceptual Model is intended to work as an independent reference framework, where an institution can tailor its own needs depending on the nature of the artworks housed within the collection, while LIMA's Artwork Documentation Tool is for artists whose time is often challenged and cannot research documentation and preservation methods at great length. It is vital that the documentation process starts at the point of preacquisition or pre-commission and continues for the whole life of the artwork under the care of the institution.

The DOCAM Documentation Model recognises the necessity of an exhaustive documentation strategy and system due to the variations that can take place over time in works with unstable characteristics dependent on technology, effects, form, and time. The model outlines a lifecycle for artworks, based upon the following four events:

Creation — conception, production

Dissemination — production, installation, presentation, deinstallation, criticism

Research — activities surrounding the study or critical analysis of the work

Custody —accessioning, cataloguing/ documentation, management and curation, conservation (DOCAM, 2013)

Each of the broad categories can be sub-divided to allow for further examination and documentation at each step of the lifecycle.

The collaborating partners of Matters in Media Art and the philosophy of their open-source format encourages knowledge and skills to be shared to help those who collect video, film, audio, and software-based installations. The project aims to be a resource for collectors, artists, and institutions of all sizes caring for works of art that have moving image, electronic, and digital elements. (Matters in Media Art, 2015) Their documentation guides are open access and are very comprehensive but require rationalising to meet the requirements of a small gallery, like NGCA.

INCCA (International Network for the Conservation of Contemporary Art) formed as a wholly collaborative project in 1999, with 23 representatives from 11 institutions including Tate, the Stedelijk and the Guggenheim Museums of New York and Bilbao forming to create 'A Guide to Good Practice' which advocates the use of the artist questionnaire to collect information from the artist or their representative while they are still alive. Their website documents sixtyfive interviews and makes for a useful template when preparing to design an interview specific to an artist and their medium. The first record of anyone having questioned artists to document their techniques and concepts was art historian, Büttner Pfänner zu Thal, at the start of the 1900s. It was recorded that his two hundred requests for information were not very successful with only a 1.5% return rate. (Stebler, 1985, p. 20) In the latter half of the twentieth century, from 1978-1983 conservators at the Restaurierungszentrum in Düsseldorf undertook a consultation of 'modern' artists with thirty-nine questionnaires being completed by the artists themselves. The questions were technical in their nature, concerning supports, grounds, techniques, and coatings. Relevant to this research were the notes on maintenance and broken parts, with points raised, such as "With conservation of modern art, the following problem seems of special importance to me" or "Would you eventually cooperate to solve the problem?" (Hummelen and Sillé, 1999, p. 385) Here, Heinz Althöfer and Hiltrud Schinzel, the interviewers, recognise the importance of the artists' involvement with the future preservation of the artworks.

The Variable Media Approach asks creators "to play the central role in deciding how their work should evolve over time with archivists and technicians offering them choices rather than prescribing them". (Ippolito, 2003, p. 47) The Variable Media Questionnaire delves deeper into the inner workings of an artwork or performance. To understand the needs of each artwork, each physical component becomes a case study which is broken down into four main strategies of preservation, storage and collecting, emulation, migration, and re-interpretation. During the Media Art Preservation Institute course (MAPI) that I undertook from December 2020 to March 2021, the participants created a 'Preservation Toolbox' for use at the pre-acquisition stage. The very concise document covers the curatorial tick list required to gather information on the following data and does not appear as intimidating as the multi paged documents from the Matters in Media Art templates:

Artwork
Artist
Toolbox Team Members
Description
Link List
Materials
Challenges
Related literature or other preservation examples
Artist Interview
Questionnaire
Resource List (replacements/ upgrades)
Other information

Table 2. Media Art Preservation Toolbox curatorial tick list (2020). Table created by Georgia Smithson (2020).

During the MAPI course, participants experimented with artworks that we were familiar with and had access to contextualising data. The form can be as detailed, with the addition of further subsections, or as concise as is required.

In 2018, I made a visit to The Gallery of Modern Art (GOMA), Glasgow, to interview curators, Katie Bruce and Martin Craig, around the subject of acquisition practices within their organisation. I chose GOMA as it is a collecting institution and is registered as a charity, run by a local authority, and has limited funds. A meeting with the curators revealed the process and thought involved prior to acquisitioning artworks. A 'new acquisitions proposal' is drafted stating the rationale behind the proposed acquisition (i.e., research potential, how it fits into the rest of the collection, impact on audience, learning and engagement impact). This proposal is forwarded to the Collections Committee who conclude if the work will fit in with the collecting remit of the gallery. Consideration is given to any artists classed as 'missing' from the canon and artists of colour, from the LGBTQ community, and of local importance. The reason given for most rejections is that of conservation and preservation, the artwork may be affordable and deemed worth the purchase, but the cost of maintenance and preservation of the work may be beyond the budget of the gallery. Both curators admitted that an artwork has never been rejected as it was deemed as too controversial although they have had complaints from visitors previously as new media artworks do not come with a cinema style rating system. A table I drafted following the visit to GOMA illustrates the factors that should be taken into consideration prior to submitting a new proposal can be found in Appendix 1, Table 12.

2.3 Issues and concerns on collecting new media art

Prior to the turn of the millennium, The Variable Media approach (est. 1999) was borne from the Guggenheim Museum's understanding that new media artworks necessitated a different approach to traditional preservation strategies. Further futureproofing research has continued as more galleries and institutions recognise the importance of collecting new

media artworks to keep up with their audience's thirst for all things electronic or digital and to preserve works for their future audiences. "Collecting, preserving, and exhibiting these artworks poses complex technical and ethical challenges to conservators. Instability and change are inherent to these artworks since artist-selected equipment and technologies fail and become obsolete." (Guggenheim, 2022) The Guggenheim has become one of the first museums in the world to dedicate conservation staff specifically to the care of its media art collection and promotes the sharing of knowledge with other collectors and institutions as well as collaborating with organisations to document new findings and best practice. An ongoing project is the Media Conservation Lab, (est. 2008) which provides the technical infrastructure to examine equipment and historic and contemporary media formats. The conservation of time-based media artworks is intended to determine and oversee the acceptable range of change that may affect an artwork during its life through exhibition, technician's preferences, technological developments, and its time in storage. The artists' original intentions as well as the make-up of the artwork must be considered at all times. Having understood the concept and components, the conservator must be confident in understanding the characteristics and technologies involved in making as low an impact to the original work as possible when conservation work is required to be carried out.

Domenico Quaranta acknowledges that when museums started acquiring new media artworks and came up against the accepted novel issues of how to care for the artworks without the task becoming too burdening, the question of how to preserve the artworks began to be explored.

There are misconceptions that new media art raises specific issues that can only be tackled by a 'media art curator' and that the art-form raises some insurmountable challenges for those interested in collecting and preserving it. Both of these ideas are based on the assumption that new media art is one homogenous mass with the same curatorial and conservation issues. Yet, the so-called 'new media' are about as complex and varied as you can imagine, and the variety of forms that it can take means that a single strategy (and term) is entirely inadequate. (Quaranta, 2014, p. 181)

With that statement in mind, The Time-Based Media Art Curatorial Guide and Database I have created is interactive, cross-disciplinary and encompasses as many examples or templates of varying mediums, behaviours, and characteristics as possible. There are so many reasons and sub-reasons for keeping records and keeping them up to date, which have applied to collecting since its inception by private collectors as well as institutions.

2.4 Distribution and engagement through new media when the doors are closed

The Wrong (Biennale), is an online, decentralised exhibition platform, founded in 2014, by curator David Quiles. Guilló is an excellent hybridised example of catering for both online and offline followers of new media art. The Wrong is an example of being prepared to continue operating and exhibiting throughout lockdown as the infrastructure was already in place, therefore being able to continue to distribute artworks. The Wrong has an ethos of radical inclusion and promotes a democratic alternative to art fairs that are sometimes considered

elitist. An open-sourced team of curators research, select, and feature work using 'online pavilions' as their virtual exhibition space. Several artworks were also shown in onsite embassies, institutions, and galleries around the world. During the pandemic, offers included downloadable pdfs, and links to artists' own art projects on Instagram and art magazines. The University of Sunderland's Fine Art Department had their own 'pavilion' during the 2019/20 event *KnackKnack* at the Shaun Project Space at the Priestman Building. The curator and event co-ordinator was James Hutchinson, Senior Lecturer within the Faculty of Arts and Creative Industries. Some artworks were presented in real life and others could only be viewed using the Wrong Router, a wall vinyl numbering system (similar to a QR code) and an app on the viewer's smart device which placed the artwork in the gallery when viewing through the device's screen. The 'Wrong Router' is a device designed and engineered to display digital artworks in a specific 'new no-space' to everyone nearby with a smartphone, tablet, and Wi-Fi.

The router is described as a game changer by Guilló due to the following factors:

It allows you to showcase your digital art solo or group shows without the need of internet, wall space or screen set ups. This is big.

If you are a gallerist, this is the perfect 'new no-space' you needed to display solo or group shows of digital art.

If you are a curator or an artist, it allows you to become your own gallery, and run your show, anywhere. (The Wrong, 2019)

The theme of the second collaboration in 2022 was 'succour', or assistance and support in times of need or distress, which was certainly very appropriate for the time, post pandemic. With the strapline being 'In this pandemic era we are all suckers for succour', the artworks' commonality was drawn from mundane domesticity, solitude, and reflection on the UK lockdowns between 2020 and 2021. Documentation of the exhibition exists in the form of a pdf catalogue on linktr.ee with the names of all artists and their Instagram handles. Assuming the exhibition followers have access to Instagram, work from the exhibition can be viewed from a smartphone through an online catalogue of work, as well as works previously undertaken by the artist. Providing a catalogue of works documents the exhibition, the artworks and artist involvement, and also allows the viewer to access the exhibition retrospectively.

2.5 Summary

An observation by associate curator of film and media at the Smithsonian in 2013, Michael Mansfield, gives a stark insight into his understanding of the art of time-based media:

One thing that is very clear about time-based art is that it would be impossible for one individual to understand every aspect of the field in all its complexity. There is a joint, time-based art conservation initiative that includes representatives not only from

each museum, but each discipline within the museum. We can tackle challenges facing our time-based art collections by communicating with truly knowledgeable experts in other fields. (Mansfield, 2013)

The considerable number of specialist staff recognised as having partial knowledge on the subject matter illustrates the complexities of the artworks and the necessity to form collaborative working groups through the transfer of knowledge and experience. Mansfield's observation has proven that I was naive to think that I could produce a guide for all the curatorial activities associated with all types of new media art. Templates and guidance from institutional and organisational models discussed in this chapter provide a starting point for data that should be collected for each time-based media artwork and entered onto the Database. Providing the flexibility to add new fields for each artwork can also ensure no data is omitted. Work undertaken by the Daniel Langlois Foundation and The Computer Arts Society, which identified distinct phases of documentation, can prepare staff to organise the structure of documentation, while the four main strategies of preservation outlined by the Variable Media Questionnaire can assist with looking ahead to future proofing artworks.

Chapter 3: Case studies of distribution, collecting, cataloguing and documentation strategies

3.1 Introduction

A fundamental task of any collecting gallery or institution is that of identifying and describing the artworks correctly and adequately to fully represent the nature of the work, the concept, the context, the components and how the artwork co-exists within a collection. All of these factors allow for the future presentation and/ or distribution of artworks. With the advent of new media art and the complexities involved in the components of the artwork, display, storage, and preservation, further detailed information needs to be documented. The aim of this chapter is to explore institutional and organisational methods of distribution and collecting with diverse initiatives and strategies. The first section of this chapter focuses on the early distribution of video art, while the second section examines two very different approaches to collecting time-based media artworks. The last section looks at the crossover between collecting and distribution while examining the purpose of the online archive.

3.1.1 Castelli/ Sonnabend Videotapes and Films (CSVAF)

From the early days of the 1970s moving image artworks had separated into two distinct modes of presentation: single channel and installation, with pioneers such as Nam Jun Paik and Dan Graham pushing the boundaries of installation to the technical parameters available at that time. The approach to distribution that was taken by art dealers Leo Castelli and Ileana Sonnabend in 1974 had to be different to the twenty-first century on-line formats we take for granted today. We now have the benefit of cost-free multi-platforms that are accessible from anywhere an internet connection is found. Advocates of the moving image as an artform, Castelli and Sonnabend formed a moving image distribution arm of their galleries, in So-Ho, New York, entitled Castelli/ Sonnabend Videotapes and Films (CSVAF). CSVAF offered a model like film distribution companies by loaning out artworks to increase their circulation and raise the profile of the artists.

To advertise the works for sale, the first CSVAF supplement or catalogue was published in November 1974 followed by two further issues in 1975 and 1977, available at the time of writing (October 2023) via the Castelli Gallery website. The supplements with accompanying texts written by art and film theorists listed works available to rent or to buy with prices ranging from \$25— \$150 for a loan and \$100—\$500 to purchase the work. There are no edition numbers listed in the supplement as CSVAF's aim was to sell unlimited editions and upon reflection, the gallery stated:

Though the contradiction may seem obvious now, selling as a work of art an object that was celebrated for the ease with which it could be produced and infinitely reproduced, rather than something which is privileged for its scarcity— this effort quite radically positioned film and video art as saleable goods. (Castelli Gallery, 2020)

The number of times a work could be loaned or sold was unlimited and unrestricted although the 'Conditions of Rental and Sale' stated that purchasers and renters acquire a limited licence

under copyright subject to specific restrictions outlined in the terms and conditions. The works could not be copied or duplicated, loaned to others, or exhibited away from the purchaser or renter's premises. The works could not be broadcast, and admission fees may not be charged to view them.

Rentals of artworks proved more popular than purchases, but the rental fees were so low that the returned revenue was insufficient to maintain staff and preservation materials for the artworks. The CSVAF operation closed in July 1985, although the gallery is in its tenth iteration, having been located on Madison Avenue and Broadway at points in its life. The appointment only gallery now focuses on sculpture, installation and photography by single artists and group exhibitions.

The gallery website serves as an archive of the activities, happenings, and display of work from the contemporary art scene in New York since 1957. Of special interest to this research are the exhibitions from 1974- 1975 where the individual exhibitions by Frank Gillette, Paul Kos and Frank Stella are documented. The artists appear in the supplement as well as group shows with the inclusion of video artworks by Bruce Nauman whose work is also for sale or rent. At its peak, CSVAF offered approximately 400 videos and films for sale or rent and represented upwards of 35 artists. Shows dedicated to video artworks from 1974-1977 to coincide with the supplements are listed as:

June 1974: *The Group Video Exhibition* presented work by Vito Acconci, John Baldessari, Robert Bell, Lynda Benglis, Peter Campus, Frank Gillette, Tina Girouard, Nancy Holt, Joan Jonas, Paul Kos, Richard Landry, Andy Mann, Charlemagne Palestine, Richard Serra, and William Wegman. (Castelli Gallery, 2020)

Contextualising information for artworks listed for sale or loan from the CSVAF 1975 Supplement, including artist, title, year, visual format, length, and audio format. The information also provides a text description of what the film is portraying as only one still of each artwork was displayed in the Supplement. An example of this is noted below for William Wegman's *Selected Works, Reel 6* (1975).

Against a black background float ordinary objects and a dog — a rocker, a bed. Man Ray — using the techniques of superimposition and video keying. Wegman mocks scientific and political rhetoric in a halting, deadpan voice, pausing at all the wrong places. In another sequence, he uses part of the Mike Douglas show on which ooh-ing and ah-ing guests see a demonstration of a Venus Flytrap devouring an insect. (Castelli Gallery, 2020)

3.1.2 Electronic Arts Intermix (EAI)

Just prior to the distribution work of CSVAF, non-editioned videos were the main focus-point for gallerist Howard Wise, who, in 1971 founded Electronic Arts Intermix to protect the rights of the artists and distribute video and media art. The EAI collection has approximately 4000 works from the mid-1960s to the present day and is recognised as one of the most comprehensive video art collections in the world representing over two hundred artists, ranging from Nam June Paik to Cory Arcangel. The reason for the protection element of the

organisation's aim came about after it was agreed that "The traditional principles governing operations of galleries and the market were not adapted to technological challenges, such as the fact that artists often did not control the so-called 'original copies', relishing the possibility of their unrestricted distribution." (Nowak, 2014)

Therefore, restrictions to the circulation of video artworks by EAI allowed artists to have autonomy over the quality of copies and how they were displayed, but on the other hand some artists enjoyed the fact that their work was accessible to a broader audience at a low cost. Works from the collection are made available to the public and other organisations and institutions through the EAI Artists Media Distribution Service via a range of engagement activities, such as screenings and exhibitions, online resources, and public programmes. The wider distribution of the collection is central to the aims of EAI through allowing audience access to the editioned and non-editioned works. Predetermined restrictions are in place to govern how the artworks may be used when on loan from EAI to protect the rights of the artist as well as their vision and intentions. The artists are paid a fee as and when their work is loaned, exhibited, or sold. (EAI, 2006)

Access to the artworks held within the collection is provided through a physical viewing room which is free of charge to enter and by appointment only. A digital interface has recently been launched to enable visitors to directly access over half of the collection without a member of staff having to locate the artwork. This service is regarded as one of the world's leading resources for video artworks and is the oldest existing video artwork distribution operation. As well as being a leader in the promotion of the distribution of artworks, therefore making them more accessible, an integral aim of EAI is to protect the artworks. Preservation strategies are researched and carried out within the institution with the aim of protecting the collection through preservation, cataloguing, and restoration. From their own research and findings, the EAI Online Resource Guide for Exhibiting, Collecting and Preserving Media Art was created with the intention of "providing access to basic information, recent developments and critical dialogue, we aim to broaden understanding and demystify the process of exhibiting, collecting and preserving media art." (EAI, 2006) The resource covers single channel video works, computer-based art, and media installation.

Under the three activities of exhibition, collection, and preservation curatorial guidance, templates, and interviews on each of the three formats of single channel video, computerbased arts and installation are separated into ten categories for further investigation. For relevance to this research project, I have focused solely on computer-based arts. Single channel video were created, for the most part, to be presented on videotape, while complex installation works do not feature in the NGCA collection.

	Exhibition	Collection	Preservation
Introduction	Background on format and how to present the works	Background on format and basics on collecting	Background on format, understanding problems and finding solutions
Best practice	Communication with artist or artist's representative, source	Communication with artist or artist's representative, source	Documentation, inspection, data storage, preservation

	material installation	matorial rights	activition according
	material, installation, testing and maintenance, documentation, permissions, and rights, deinstallation	material, rights, installation, equipment, documentation, preservation	activities, assessing the risks, preservation strategies: migration, emulation, encapsulation, quality control, initiatives, and resources
Basic questions	Differentiating between other formats, what can the work be displayed on? Can a copy of the work be kept?	Compression, streaming, DVDs, metadata, hardware, and software, preserving the artworks, what makes up the artwork if it solely computer code?	Challenges of preservation, saving the files, screen shotting for preservation, migration and emulation, other preservation strategies
Planning process	Creating a checklist, permission and rights, the artist interview, gather materials, plan installation, equipment, install the work, bug testing, documentation, shipping, and dispersal	Create a budget, contact artist or artist's representative, source material, acquire work, equipment, preservation planning	Documentation, inspection, data storage, preservation strategies, quality control
Agreements/ contracts templates. Condition report templates	Infringements, sample agreements	Sample agreements	Condition reports and installation template
Budget	Loan fee/ artist fee, exhibition equipment, technical staff, construction and fabrication, network connections, packing and shipping, contingency budget	Acquisition fee, equipment, shipping and installation fees, technical support, cataloguing and storage, maintenance, and preservation	Research/ documentation, equipment, programming, conservators, data storage
Equipment and technical issues	Hardware (personal computers, servers, input/ output devices, connections, and cables), software (operating systems, application software, browsers, video/ audio playback, codes), networks	Hardware (personal computers, servers, input/ output devices, connections, and cables), software (operating systems, application software, browsers, video/ audio playback, codes), networks	Failure, storage media, hardware and display equipment, obsolescence, operating systems, software, storage media
Interviews	Cory Arcangel (artist), Michael Connor (head of exhibitions, BFI), CRUMB	Cory Arcangel (artist Michael Connor (head of exhibitions, BFI), CRUMB	Chris Doyle (artist), Francis Hwang

	(discussion list), Rhizome (online exhibition and collections platform) Magda Sawon (director of gallery)	(discussion list), Rhizome (online exhibition and collections platform) Magda Sawon (director of gallery)	(conservator), Sara Tucker (curator)
Case studies	Cory Arcangel, CRUMB, Rhizome	Cory Arcangel, CRUMB, Rhizome	The Erl King (emulation study), net.flag (web art study), reBlog (art and technology blog), Waking Dream (interactive/ performance work study)
Articles	Scholarly articles on exhibiting practices published by CRUMB	Scholarly articles on collecting practices (various authors)	Scholarly articles on preservation strategies (various authors)

Table 3. Electronic Arts Intermix (EAI). Table of accessible curatorial resources. Data taken from EAI Resource Guide. Table created by Georgia Smithson (2023).

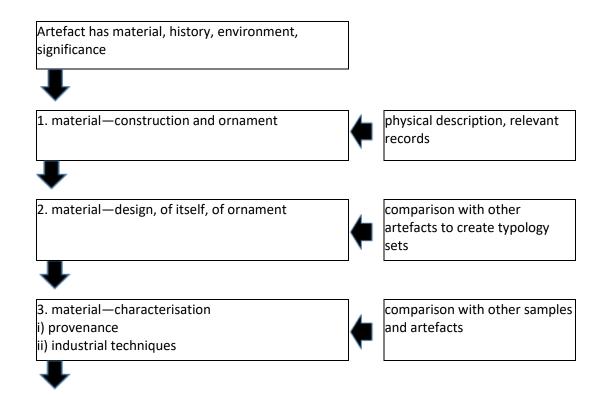
Without understanding the curatorial activities that are associated with computer- based artworks, the works cannot be expected to be fit for future presentation and therefore cannot be distributed and made accessible. The way in which the distribution of artworks has evolved since the early 1970s seems aligned to the aims of today; to protect the rights of the artist, provide exposure for the artist and artwork, and to edition works with the aim of maintaining a value of uniqueness.

3.2 Collecting and cataloguing

This section offers an examination of two very different collecting institutions and organisations: the local authority owned Harris Museum, Preston, UK, and the independently owned Thoma Foundation, USA. The Harris undertook an experiment into how to choose, for the first time, and integrate a new media artwork into its existing collection, while the Thoma Foundation's ethos is to loan out and exhibit artworks from their own existing collection and support individuals and innovators in the arts. I chose to research the Thoma Foundation's collecting practices due to the organisation being a privately owned collection, rather than a large, national collecting institution, to understand how their practices may differ. Although both have distinctly different collecting practices, with Harris commissioning their first artwork recently, while Thoma loan from their extensive collection, a common denominator that is shared between the two is that the documentation of the artwork is of extreme importance.

The need to contextualise an artwork or object by assigning knowledge to it makes it more valuable in many ways— social interest, personal association, historically, culturally, and

monetarily. As discussed previously in section 2.1.3, documentation is not always as comprehensive as it should be, with the intention of the artist and the guidance for future presentation not being noted. This fact is also re-enforced by The Collections Trust as one of the nine Spectrum Primary Procedures is specifically 'documentation planning' which has guidance on retrospectively documenting works or 'breaking down the backlog' into manageable projects. In the UK, this is a requirement of Museum Accreditation. On occasions, a specialist or consultant employed by the institution to investigate the documentation inadequacies has then established how the implementation of future strategies can be facilitated more effectively. In my experience, past failings have been addressed; plans for retrospective and future documentation are put in place, procedures are written and followed by staff until sometimes it all becomes too much work. This often results in the documentation being carried out retrospectively rather than at the time of acquisition. Many different approaches apply and have applied over the years from day books, ledgers, even knowledge kept in the minds of curators, up to the computerisation and digitisation of data and the introduction of computerised collection management systems and archives. Figure 3 demonstrates how the documentation data that is required to comprehensively contextualise an object has not changed since the 1980s when Susan Pearce created the Model for Object Study (1986) based on the premise that all objects have the same basic characteristics: a material body, a history, a place in the environment, and a cultural significance. (Pearce, 1992, p.272) Although this model is object-based and from an archaeology discipline, the principles align with the documentation requirements of new media art, whereby the characteristics of the material (components), a history (the story behind the artwork), a place in the environment (where and how it fits in to the collection), and cultural significance all apply. Boxes 1-6 express various approaches to gathering data about the object. Box 7 requests an analysis of the data related to the object and box 8 represents the sum of all data allowing for meaningful interpretation of the object.



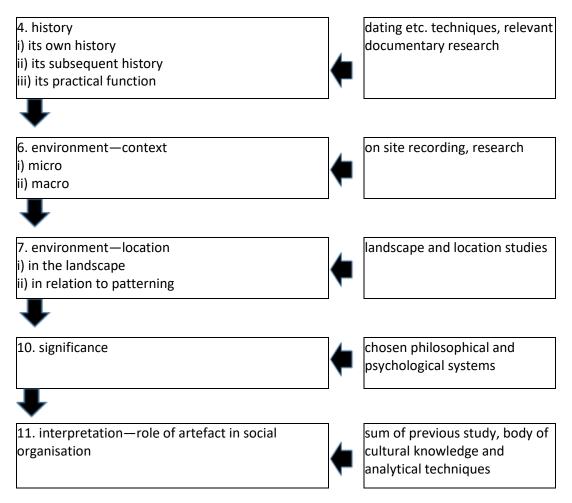


Figure 3. *Museums, Objects and Collections*. Pearce, S. (1992) p.272. Model for Object Study by Pearce (1986). Reinterpreted by Georgia Smithson (2020).

3.2.1 The Harris Museum and Art Gallery: an experiment into collecting digital art

An example of an experimental and collaborative approach to collecting between institutions, arts agencies, and artists is the Harris Museum and Art Gallery, Preston, UK, whose collections include fine art, photography, costume, textiles, and archaeology. The Harris is a local authority owned museum and art gallery which collaborated with a local arts charity to produce an exhibition, acquisition, and debate. *Current: an experiment into collecting Digital Art* (2010) was intended to form a practical case study for the collection and integration of digital artworks into permanent collections. (The Harris, 2010) Curator at the time, Lindsay Taylor stated that "the aim of the project was twofold: to celebrate innovative and creative use of digital artworks into existing permanent collections." (Taylor, 2017, p. 118-9)

By understanding the principles for future and experimental collecting from a traditional, municipal perspective, this approach could be translated to a university gallery such as NGCA who has similar budget and bureaucratic restrictions. Following research into the Harris' Collections Development Policy, I contacted Lindsay Taylor to request further information on the new collecting strategy. I was sent a 'Scoping Report' written by specialist visual arts

advisor, Wendy Law, commissioned by the Harris in 2009. The purpose of the report was "to support the Harris in developing a nationally significant collection of new media work and to be undertaken in conjunction with the Harris' overall collecting policy, with new media acquisitions being integrated with existing contemporary and historic collections." (Law, 2009, p. 9) The aims and objectives of the 2006 Arts Council England Turning Point long-term strategy to build on existing investment and the success and impact of contemporary visual arts were incorporated into the Scoping Report which was an appendix to the Collections Development Policy at that time. The new media art collection is now housed within the photography collection which confirms that collecting new media art was a new venture when the Scoping Report was produced in 2009.

The *Current* experiment at the Harris proved successful, measured by positive and encouraging feedback from visitors, with a public debate to share findings on the best practices of collecting digital art held in Spring 2011. In 2012, the exhibition was followed by *Digital Aesthetic 2*, a multi-site exhibition, website and conference curated in partnership between the Harris and the University of Central Lancashire. The exhibition curator, Lindsay Taylor, had expertise in curating exhibitions and developing public collections of contemporary art, particularly in areas currently underrepresented in museum collections nationally. Taylor was the curator at the Harris for the duration of the Current project and invited professionals from Computer Arts Society, FACT and Tate to be part of the expert panel who would eventually select the artwork to be included in their collection. The chosen artwork was by Thomson and Craighead, *The distance travelled through our solar system this year and all the barrels of oil remaining* (2011), which made use of a live internet data stream displaying the number of oil barrels left in the world, alongside the distance the Earth had travelled in that year. (Smithson, 2019) The artwork was acknowledged by the Museum as:

not initially having the obvious connections with the Harris' collections, however, artists have always been concerned with helping us to understand the world we live in. Through the Current process we have acquired a piece which is both experimental and innovative. (The Harris, 2010)

Support from the Contemporary Art Society and other agencies demonstrate the success of the project as its legacy lives on and is acknowledged on the museum website that photography, film, and video are being used increasingly in contemporary art practice. Taylor is now Curator at the University of Salford Art Collection and has acknowledged in the Collections Development Policy that there is a digital gap in museum collections-often due to concerns about the longevity of the technology required to experience the artwork.

The Harris Museum & Art Gallery has been acquiring work over the past twenty years largely through participation in the Contemporary Art Society's Special Collection Scheme. In 2000, Lucy Gunning's video artwork, *Climbing Round My Room* (1993) became the first video installation to be acquired for the collection. The *In Certain Places* (2006- present) project is a collaborative public art scheme, based in Preston, delivered by the Harris, the University of Central Lancashire, and Preston City Council, exhibiting a programme of temporary public artworks within the city. The project is intended to explore the role of artists within regeneration schemes and increase public cultural engagement with art in the city. (UCLan, 2023) Commissioned, public new media art includes a sound piece, *Homing* (2016) by Jen

Southern and Sam Thulin. Although the Harris does have a database of sections of the collections on the local authority managed website, and does mention that it collects digital art, the documentation of any digital art could not be located. It must be noted that in June 2023, the Harris was closed to the public as a major refurbishment was underway after securing funding for £16 million for the project. 100,000 objects were moved from the building to keep them safe while the works were carried out. This was an excellent opportunity for staff to catalogue objects and artworks and re-assess the collection's taxonomies in preparation for potentially digitalising the whole collection.

This collecting strategy could apply to the collecting remit of NGCA as the gallery gave first UK shows to artists such as Cory Arcangel several years prior to other galleries acknowledging recognition of the artist. As the gallery commissions work it also collects from the commissioned artists and has a volume of photographic prints. As NGCA comes under the umbrella of Sunderland Culture, which also includes the National Glass Centre and the Sunderland Museum, its specific collecting remit reflects the gallery's commitment to exhibiting and collecting innovative, experimental art. (Smithson, 2019) NGCA has an online archive of past exhibitions where the exhibition is documented with dates, contextualising information, and a short artist bio as a standard format. A small number of artworks and exhibitions have supplementary information or printable 'takeaways', such as Patrick Hough's *The Black River of Herself* (2021) which displays a trailer video of the artwork and a downloadable text explaining the context of the artwork. A free limited run risograph print and signed audio CD accompanied Graham Dolphin's work *Gnossiennes* (2021). Individual artworks are not listed unless they were displayed on their own in the NGCA Collection Space, which was intended to display one artwork or artist at a time.

3.2.2 The Carl and Marilynn Thoma Foundation

The Carl & Marilynn Thoma Foundation was founded in 2014 with an aim to lend and exhibit artworks from their ever-growing collection and support individuals and pivotal initiatives in the arts. The Thomas hold a strong belief that the arts play a seminal role in society, and the establishment of an arts-specific foundation allowed them to ensure their passion in this area would be sustained for decades to come. Physical exhibition spaces in Santa Fe and Chicago present works from four distinct collections: art of the Spanish Americas, Japanese Bamboo, Post-War Painting and Sculpture, and Digital and Media Art. The Digital and Media Art Collection is recognised as being distinct from other areas of contemporary art and is used to strengthen social connectivity, personal autonomy, and accessibility to information.

Software art, video and moving image, early computer drawing, light sculptures and interactive art are collected with works from notable artists such as Eduardo Kac, Jenny Holzer, and Vera Molnár. (Thoma Foundation, 2022) Employing a successful model of distribution, from 2015 to 2020, the Foundation lent more than 1,000 works of art to over 115 exhibitions across the globe. By 2022 the Foundation had made over 65 grants to non-profit organisations, awarded funding to 21 individuals for scholarly research, and hosted 26 exhibitions at its spaces. In 2023, the Foundation's collection numbered more than 1,600 works of art and continues to grow. (Thoma Foundation, 2022)

The data below was assimilated from the 'Documenting & Preserving Emerging Technology' talk, broadcast via Zoom, 28 July 2021, by the Thoma Foundation's collections manager and registrar, Kate Weinstein.

Pre-acquisition responsibilities	
Artists	Collectors
software, code, and equipment	staff, time, and money
display preferences	infrastructure
obsolescence preferences	policies and procedures
conservation preferences	preservation and conservation
	processes

Acquisition responsibilities		
Artists	Collectors	
installation and operating manual	purchase agreement	
wiring diagrams and schematics	artist questionnaire	
speciality hardware	speciality hardware	
certificate of authenticity	certificate of authenticity	
software, code, equipment, and collaborators	ask questions	
warranties, support, and rights		

Testing and assessment. Test and install verification of:	
functionality and unintended defects or glitches	
required components for installation	
installation and operating manuals	
environmental or viewer interaction	
run time	

Accession process
cataloguing
physical components
digital components
behaviour and technical summaries
user manuals and spec sheets
video assessment
physical storage

Physical components
artist or gallery provided carrier (computer)
certificate of authenticity
original artist materials (edition boxes, image proofs etc.)
artist modified equipment (monitors, LEDs, circuit boards etc.)
artist or gallery provided equipment (monitors, projectors etc.)

	dedicated art elements (sculptural components or props)
artist supplemental materials	

Table 4. Thoma Foundation. Responsibilities of stakeholders during the pre-acquisition and accession processes. Table created by Georgia Smithson (2021).

The curatorial processes noted above were observed to be of strategic importance for decision making on whether an artwork can be viably accessioned and were factored into the design of the Database as examined in section 5.4.2. Pre-acquisition responsibilities agreed between the Foundation (the 'collectors') and the artist establish the feasibility of collecting an artwork and the processes outlined in the table follow.

The two institutions' approaches to collecting and their collecting remits vary, and it is also worth noting the difference in the two approaches to online access to artworks between the two. As with most institutions, an online, catalogue of works with accompanying information is expected for accessibility. The Thoma Foundation display their full collection on their website, although only a still of the artwork is provided and no moving image can be viewed. Information on the artwork is also limited to artist, title, date, dimensions and medium. This section of the website serves as more of a catalogue than repository, artworks can be loaned upon request.

Through the course of my research, I have noted the differing terms used for where artworks and their contextualising information are stored. Catalogues can be physical publications and are used to promote the sale of artworks. They can also be where the artwork description, accession number, dimensions, medium, etc. can be found online. Repositories and archives are where the artwork can physically be stored and either made accessible to the public or stored until requested to be viewed. Again, they too can be found online. Databases tend to be a back-office resource for institutional use.

3.3 Collecting for the accessible digital archive or repository

Accessible, digital databases for the presentation, distribution, and archiving of new media art are intended to serve varied purposes and perform to certain prescribed parameters. Institutional collections databases (Tate, V&A, Smithsonian) tend to present an opportunity purely to 'look up' an artwork or request to view it, in real life, if in storage, or online from a distance to more complex, research-focused repositories such as The Archive of Digital Art (ADA).

3.3.1 Archive of Digital Art (ADA)

The Archive of Digital Art (ADA) was one of the first digital archives or repositories in the field of new media art founded by Professor Oliver Grau of the Danube University in 1999. The aim was not just to archive the artworks but also document their technical make up and histories, which was pioneering for its time. Grau has written extensively and presented internationally for over twenty years on the challenges of the preservation, collection, and archiving strategies of galleries, libraries, and museums. The statement below from his collaborative 2019 publication, *Digital Art through the Looking Glass: New strategies for archiving, collecting, and preserving in digital humanities* endorses the factors that I have previously outlined that can successfully contribute to the longevity of digital artworks:

Digital art preservation necessitates a network of collaborations: between the artists and technicians that developed and constructed the work, the institutional staff responsible for collection and preservation, scholars, and conservationists. A theory of digital art preservation is therefore transdisciplinary not only due to the collaborative nature of this art's production, but in the necessity of combining theoretical writing with practice-based research by all of the professions involved. (Grau, 2019, p. 17)

Although collaborative and transdisciplinary research can deliver fruitful discourse and strategic forward planning, Grau recognises the need for the same requirements for the design of the database:

The methods on how to collect and organize vary depending on what to collect (by specific genre, geographic area, technology etc.), conservation type (emulation, rewriting) and documentation (metadata system, data sheets). Many databases today are co-creatively designed and shared, but they can also be (semi-) curated by an editorial team. However, databases are rarely inter-operational and often lack a long-term preservation and sustainability plan. The goal of archiving this contemporary art form for more than a few years is still an open question which needs to be debated between artists, scholars, and conservators. (Grau, 2019, p. 20)

The ADA database addresses the need for cataloguing artworks with processual and interactive behaviours by applying an "expanded concept of documentation." (ADA, 2023) Cataloguing not only the artworks but documenting events, literature, exhibitions, and other work connected to the selected artist provides a more optimised exploration of the subject matter and the artist for researchers and chronicles the context of their work. Research in the field undertaken by scholars is also documented, which allows the reader the opportunity of discovering the latest research methods and findings on methods of production, preservation, and collecting. According to the International Network for the Conservation of Contemporary Art (INCCA) ADA has become the most important scholarly online archive for media art. The selection criteria for contribution to the archive is a minimum of five exhibitions and/ or publications which is an effort to keep standards high, although this does leave a gap for emerging artists and researchers to distribute their work. Artist's works are catalogued using the categories illustrated in table 5.

Image	High resolution of artwork and installation images
Video	High resolution video of artwork in situ or the artwork
	playing
Information	Artist information, including background, CV, works, news,
	exhibitions and events, publications, and references
Descriptions and essays	Context and concept of the artwork

Technology (display and material)	Components on how the artwork is displayed and any sculptural or additional materials
Literature	Publications on the artwork or artist or exhibition
Exhibitions and events	Links to exhibitions where work has been displayed

Table 5. Archive of Digital Art (ADA) table of categories of contextual information related to an artwork. Table created by Georgia Smithson (2023).

The categories listed above have informed the design of the Database, as I understand capturing the context of the artwork and any contextualising materials can aide with interpretation and future presentation of the work.

A critical component of any archive is the ability to search for subject matter with ease and without the confusion of having to deal with ambiguous language or keywords. The archive has a thesaurus which is arranged into either hierarchical, alphabetical, cloud-based, or keyword search functions. The top layer of categories is arranged by aesthetics, genre, subject, and technology divisions and by clicking onto a chosen keyword will take the user to all artworks, research or event linked to that word. For example, the artwork *Mulholland Drive* (2005) by Scott Hessels has a keyword search result with the following categories and subcategories of keyword connected to the work.

Top layer category	Second layer	Sub layer
Aesthetics	Installation-based	
	Navigable	
Genre	Installation	Performance
		Installation
	Performance	Computer
		Performance
		Happening
		Multimedia
	Robotics	
Subject	Art and science	Algorithm
		Geography
		Machine
		Psychology
	Arts and visual culture	Expanded cinema
	Body and psychology	Movement
	Nature and environment	Environment
		Landscape
		Nature
	Society and culture	Entertainment
		Popular culture
Technology	Display	Electronic
		Displays
		Projector

	Robotic
	Non-electronic
	Sculpture
Interface	Robotic interfaces
Software	C++

Table 6. Categories of keywords connected to *Mulholland Drive* (2015) by Scott Hessels. Table created by Georgia Smithson (2022).

While the level of detail and research that has gone into ensuring the links between the artworks and their histories are connected for some 50,000 entries, the time limits on my research project would not allow this level of detail to be administered in the Database, even for the small NGCA collection. This may be an area of future research if the collection is digitised for the public to view.

The success of the ADA archive exists due to its interoperability and capability to capture not only the aesthetics of an artwork but the "expanded concept of documentation," (ADA, 2023) which allows for the integral factors of its creation, how it is presented and the curatorial challenges that are documented alongside the work. As a research tool, it is invaluable due to the high academic standards of its contributors and the meticulous way in which it is presented.

3.4 Summary

With so many diverse approaches to collecting and distribution, there exists no specific tailormade approach to either activity to suit a small collecting institution such as NGCA. Artist, Cory Arcangel, in an interview with the Smithsonian Institution Time-Based and Digital Art Working Group, in 2013, agrees with this statement, when asked "what process do you go through when a collector acquires your work?"

It all depends; there's no one-size-fits-all. Museums will ask for certain stuff, and everyone asks for something different. Usually, I just give them what they ask for. Some people want an uncompressed video file at a certain resolution; other people want a DigiBeta, and so on. The best way I can answer that is to say that I don't have a real standard. It's just done on a case-by-case basis. (Smithsonian, 2013, p. 2)

Following the case-by-case approach, I identified that it was important to look at both collecting practices and distribution methods, with the examples of concerns and issues covered in section 2.3 providing a starting point for furthering my research into each activity. Returning to research Question 1, this Contextual Review has identified several problems for the practicalities of collecting time-based and new media art, specifically:

-Traditional institutions and their outdated collecting remits

-Concerns regarding the future proofing and preservation of artworks

-Finding an appropriate setting to display work

- -Integrating artworks into traditional collections
- -Lack of expertise in the care and display of works
- -Limited acquisition budgets

Having established the problems identified above, this became a starting point for guidance on the creation of the Database to be demonstrated to staff from NGCA. The answer to Research Question 2 will be formulated throughout the testing process by means of case study analysis and practical work alongside NGCA staff.

Steve Dietz states that "The clearest process may be to place new media works in the museum's permanent collection, under whatever existing mission that collection has." (Dietz, 2005, p.94) When considering the three characteristics of new media art; connectivity, computability, and interactivity, it is evident that the title 'new media art' has become an encyclopaedic term for an ever-expanding range of creativity and artistic practice. By taking an open-minded and progressive approach to collecting data and the creation of a comprehensive cataloguing model/guide, I have intended the content to be flexible and open to updates and amendments as technologies progress and as staff feedback on the user experience. The research questions ask what are the practical problems of collecting and distributing time-based media artworks and how can small contemporary art organisations use new models for collecting and distributing time-based media artworks? The objectives below address the requirement for a procedural database to guide staff in the documentation process by:

-Allaying the concerns of institutions who would not ordinarily collect time-based media artworks

-Enabling staff to be confident when dealing with the five curatorial activities identified as collecting, presentation, documentation, distribution, and preservation

-Encouraging institutions to collect time-based media art therefore allowing visitor engagement and further accessibility to works in this classification

Chapter 4: Northern Gallery for Contemporary Art: Cataloguing and curating

4.1 Introduction

The aim of this chapter is to provide a background on the previous and current collecting, display, preservation, documentation, and storage practices of the Northern Gallery for Contemporary Art (NGCA) and to assess the impact that the work I have carried out will have on operational curatorial practices. As part of my research project, it was always intended that I would curate a time-based media exhibition in the Northern Gallery for Contemporary Art Collection Space. This should have taken place midway through my studies to allow time for planning, thorough reflection, analysis, and revision of plans in accordance with action research methodology. Due to lockdowns of the gallery in 2020 and 2021, I was unable to action the practical work as planned. However, it was agreed that I could undertake a sixmonth, one-day-a-week placement towards the end of my studies starting in February 2023.

Prior to my studies, in 2016, I attempted to document the whole collection, which consists of editioned prints, photographic works, and sculpture, as well as time-based media. The aim was to capture basic information using the condition report forms; mainly the status (accessioned/ non accessioned), location, condition, and storage specifications of the artworks. Unfortunately, the documentation work was not completed due to budget constraints. For a month, the exhibitions officer, an intern, and I worked offsite at a temporary storage facility, resulting in approximately fifty percent of the collection being condition checked only. The nature of this work was slow; each sub-collection was located, the artworks unwrapped, visually condition checked, photographed to illustrate any damage and as an identifier of the artwork while packaged, condition report forms were completed, the artworks rewrapped, and the location documented. The failure to complete the work resulted in many of the artworks not being catalogued, with no location control noted, and left uncontextualised which can become problematic for future presentation.

The work that I have undertaken seeks to resolve this precarious situation and aid staff in carrying out the important work that is yet to be completed with minimum training and prior knowledge of the documentation process. At the start of the project, the Northern Gallery for Contemporary Art was located in the city centre of Sunderland and its staff and operations were managed by the local authority. During the cataloguing project, the University of Sunderland and Sunderland Culture took ownership of the gallery. A new purpose-built space opened in April 2018 within the National Glass Centre, which is situated on St Peter's Campus, part of the University of Sunderland, and thus, NGCA became part of the institution and the newly formed Sunderland Culture (est. 2016).

The importance of comprehensively logging collections management data cannot and must not be understated. The ownership title of the artworks on the Object Entry form is a formal agreement and will prevent any issues arising if the ownership is disputed. It is often the case that artworks are left on site after an exhibition on a temporary basis, either for logistical or storage benefits to the artist and retrieved later, if at all. In this case the documentation would confirm the agreement or arrangement by both the artist and a representative of the gallery. The insurance of the artwork while in storage should then also be considered: who is liable if a disaster were to occur? It is not always in the best interest of the gallery to accommodate the needs of the artist on the basis of a favour. Storage facilities at several museums in the UK have been flooded over the last few years, notably the Ironbridge Gorge Museum in Shropshire, Jorvik Viking Centre in York, and the Abbot Hall Art Gallery in Kendal. All these institutions are near rivers, with the buildings and their contents subject to water damage due to the rivers bursting their banks. The storage area for NGCA is on the lower floor of National Glass Centre which is located on the banks of the River Wear, which could pose a risk to flooding in the future as sea levels rise.

To cover procedures including location and movement control, the forms I designed to capture the data were the Object Entry and Condition Report forms only. The decision to use only two cataloguing forms was informed by the fact that time was very limited due to the budget for the original project being only one year to locate, catalogue, and gather contextual information for each artwork within the National Glass Centre and NGCA collections. At the time of its relocation, NGCA had a part time director of programming, a full-time technician, and a full-time learning and engagement facilitator. I was able to call on the technician for assistance for two weeks with locating the artworks that had come out of the NGCA city centre storage and been relocated to an off-site storage facility. We used an inventory to check what was listed as part of the collection to prioritise what should be catalogued and checked first. A major issue we faced was that the inventory was not as detailed as we had hoped, and that there were many crates of artworks that were not listed on the inventory, either due to it not being updated or because the artists had requested their works remain in storage at NGCA due to their own lack of storage. We could not assume that a collection of works had not been accessioned due to the titles not being listed on the inventory. It also became clear that there was no documentation at all for any of the artworks other than the inventory.

			FIDOTNAME	OUDMANE	TITLE	DATE		DIMENSIONS	Artworks in
1	Ass. No.	Which coll	FIRSTNAME	SURNAME	IIILE	DATE	MEDIUM PC-based	DIMENSIONS	Collectio
2		museum	Daniel	Brown	Tropic of Sunderland	2007	application	n/a	1
3		museum	Kelly	Richardson	Ferman Drive	2005	SD video (DVD) presented as projection or on 4:3 monitor	n/a	?
4		museum study	Simon Katia / Peter	Martin Maver / Chadwick	Untitled Davs Lost (IV & V)		HD video exhibited as single-screen projection 16:9 Inkiet print	n/a c36x24"	?
2		study	Ragarreter	mayer / onadmick	Days Lost (IV a V)	2013	inger print	00024	2
6	A22	museum	Chris	Cornish	The Adventure and the Resolution	2010	HD video exhibited as single-screen projection 16:9	n/a	1
7	A21	study	Heather	Phillipson	A is to D what E is to H	2013	Archival pigment print on Museo Silver Rag 300gsm, framed	c10x8"	1
8	A5	study	Eric	Bainbridge	Two Sausages	2012	Archival pigment print on Hahnemühle Museum Etching	203 x 250mm,360 x 432mm paper size	1
9	A4	study	Benedict	Drew	The Persuaders	2012	Archival pigment print on Metalurgy 200gsm	6x6"	1
10	A8	study	Ben	Jeans Houghton	Blackcloud No6	2011	Archival pigment print on Hahnemühle Museum Etching	10x8"	1
11		study	Chris	Harrison	l Belong Jarrow (I and II)		C-type prints	20x16"	?
12		museum	Graham	Dolphin	Come Together	2013	Two-channel HD video 16:9, synchronised, presented as projection	optimal screen size 16x9ft each	?
13		study	Clarita	Lulic	Seven Short One Long - Ship Life (I-III)		Inkjet print	20x16"	?
14	A13	study	Clarita	Lulic	Professional Portraits	2011	Inkjet print	10x8"	1

Figure 4. Partial inventory of NGCA artworks (2016).

Figure 4 demonstrates the limited information accessible to catalogue the artworks at the start of the project. The physical artworks such as photographic works, paintings, and prints were bubble-wrapped or in folios with little information on the packaging other than the artist's name and the title of work. There were no accession numbers (temporary accession numbers were assigned during the work) or images on the packaging of what was inside to cross reference with the inventory. Without images to associate to titles, artists, and contextual information the work involved unwrapping artworks, counting editions, and trying to locate missing numbered editions, which was problematic and time-consuming. As one of our purposes at this stage was to condition check all the artworks and photograph them, the task of unwrapping and then re-wrapping and labelling the works was justified. Labelling the packaging is a simple but fundamental task to prevent staff in the future from having to open the packaging to discover what artworks are present or missing. By assigning a temporary accession number, artist name, title, year, and number of editions on the package label, the Object Entry Forms and Condition Check forms can be cross referenced with the artworks. The forms will also note if any of the artworks have been moved to another location or are on loan. As the technician had previously worked with most of the artworks during installation, he had knowledge of which exhibition they had featured in. We also used the now defunct NGCA online archive to document dates and provide contextualising information. The archive was invaluable but has become inaccessible since the new NGCA website was incorporated into the Sunderland Culture umbrella site.

4.2 Northern Gallery for Contemporary Art

An established gallery of nearly fifty years (under private, civic, and now university ownership) and with two core staff and a small budget for exhibitions and acquisitions, NGCA is a perfect partner organisation for my research and experimentation as it has been collecting timebased media art since 2005. Comprising of more than one hundred artworks, there are currently nine time-based media works, with the Cory Arcangel artwork, *a couple thousand short films about Glenn Gould* (2005), being jointly owned by NGCA and The Film and Video Umbrella (FVU), which was the primary commissioner of the work.

The NGCA time-based media collection is a small but rich software time-based collection, and the artworks and components are relatively uncomplicated. This fact is evident as four of the artworks were displayed between 2019 and 2022 without any problems for the technician during installation, which only takes two to five days. The technician had prior experience of displaying the works, however, if this was left to an inexperienced member of the team, there would have been cause for concern as physical installation instructions do not currently exist. Usually, stock equipment such as plasma screens, a white painted board for projections, projectors, and a Mac Mini are used to display the artworks within the Collection Space, one artwork at a time. None of the artworks have any sculptural or added elements. The works tend to be stored on memory sticks and backed up on hard drives. My aim was to capture the relevant curatorial data related to each artwork (mainly documentation on preservation, installation, exhibiting, storage, and materials such as publications, reviews, and artist questionnaires) to allow staff to be able to easily contextualise the artworks when promoting or displaying them. The time-based media artworks in the collection are listed below:

-Daniel Brown, Tropic of Sunderland (2007), PC based application.

-Simon Martin, Untitled (2011), HD video exhibited as single screen projection.

-Kelly Richardson, *Fermon Drive* (2005) SD video (DVD), presented as projection or on a 4:3 monitor.

-Chris Cornish, *The Adventure and the Resolution* (2010), HD video exhibited as single screen projection.

-Graham Dolphin, *Come Together* (2013) and (2020), two-channel HD video 19:9, synchronised, presented in projection.

-Graham Dolphin, Gnossiennes (2021), two-channel digital film with soundtrack.

-Stuart Whipps, The Carboniferous Epoch (2013), 16:9 projection.

-Marie Toseland, Untitled (2016), HD single screen video 19:9 projection.

-Cory Arcangel, a couple thousand short films about Glenn Gould (2005), 2 channel video ('Collection-ish'), co-commissioned by NGCA and FVU.

I focused entries onto the Database using the Graham Dolphin artwork, Come Together (2020) and an artwork by Cory Arcangel, '(2019) which has not been accessioned but presented at NGCA in 2023 and used as a case study as a 'new acquisition'. As discussed in section 2.2, it is vital that the documentation process starts at the point of pre-acquisition and then continues for the whole lifecycle of the work. As this was not possible for the Graham Dolphin artwork, which had not been documented previously, I was required to document it retrospectively onto the Database. The positive outcomes of training staff as they assisted with the experimental stage of my research were twofold. It gave them an understanding of the format, content, structure, and guidance sections and provided valuable feedback for analysis and reflection. The intention of this exercise was to question the staff's understanding on using the guidance sections and therefore their efficacy. Feedback was crucial at this stage, and assessments from both staff were conducted. The results of this feedback can be found in Chapter 5, section 5.5. In-depth feedback from NGCA staff can be found in Appendix 4. Graham Dolphin was happy to complete an artist questionnaire for his artwork, Come Together (2020) (see Appendix 2), which assisted with data entry onto the Database.

4.3 Curatorial case study of '(2019), Cory Arcangel

In 2007, NGCA and the Film and Video Umbrella (FVU) co-commissioned international new media artist and curator, Cory Arcangel, to produce an artwork for display at the previous Fawcett Street NGCA location. Under joint ownership of both organisations, *a couple thousand short films about Glenn Gould* (2005) rescores Johann Sebastian Bach's famous 1741 composition of *The Goldberg Variations*. The artwork was created by splicing together nearly 2000 clips of amateur musicians' performances of the piece from sharing platforms such as YouTube. Every single note from the score is from a different clip and a different musician. The artwork is an unintended collaboration of a recreation of Bach's composition.

The artwork makes an interesting case study as it is jointly owned and as such, statements on ownership rights to display and promote the work are required to be documented for future presentation. As it stands, the FVU have the reshowing rights which extend to NGCA as original participants in the project. The FVU believe that the artist should always be consulted prior to presentation. (This is evident in section 4.4) When I requested to loan the artwork for presentation in the NGCA Collection Space between April and July 2023, the FVU contacted the artist to confirm that he would be happy for it to be displayed at NGCA, fifteen years after its last iteration at the gallery. The artist informed us that the artwork would need to be remade as the DVD sync system used originally was no longer suitable for the purpose of display. The artist and a technical expert would need to fix the problem and NGCA would need to pay for the work to be conducted. The complications attributed to showing a work that had not been presented for fifteen years are apparent here. It not only demonstrates that components can become obsolete, but that future presentation can be a costly undertaking. Whether it was agreed at the initial commissioning stage as to who was responsible for the care of the work and any maintenance or repairs remains to be seen. As the artwork needed reparation at a high cost, and after much dialogue with the FVU and the artist's studio, it was decided to show a new artwork from the *Runners* series, ' (2019). My role was to liaise with the studio, the artist, and the FVU to ensure the artwork was presented according to the artist's intentions, an endeavour which made an interesting case study as staying true to the artist's original intentions is a key goal in this research. Although the artwork will not be accessioned to the NGCA collection, I benefitted from the experience by using it as a 'test' subject to add curatorial data to the Database.

I started a dialogue with the FVU in Summer 2021 regarding the loan of the artwork and how it may be presented from April to July 2023, according to the wishes of the artist and the FVU. As I have come to discover through the course of my research, working with external organisations is not a speedy process due to heavy workloads and since the pandemic, regular staff shortages. Cory Arcangel's studio spoke with the artist who suggested showing a new, different work, in working order, one or several of the video artworks from the *Runners* (2019) series. A reason for this suggestion was that *a couple thousand short films about Glenn Gould* (2005) had previously been shown at NGCA. The artworks are screen recordings of a 'runner bot', which scrolls through social media accounts and likes, and scrolls and likes continually. The subjects are the official social media accounts of the Ford Motor Company, Pope Francis, Amazon, and the official Facebook account on the same platform. Recordings from Instagram have audio, whereas those from Twitter and Facebook are silent. Each 'Runner' is a single channel screen recording and can be displayed in a number of ways, either alone, together, portrait or landscape format and as a projection or on a screen or screens.

The artist's studio was keen to know more about the exhibition space, so images and dimensions were sent by email. A list of stock display equipment that met with the request, by the artist, to show the works on a landscape format was also provided. We also offered the option of playing two *Runners* at the same time on the screens illustrated below, each screen is 49 inches, can be mounted in portrait or landscape, and video files can be played through media players.



Figure 5. Double 49-inch flat plasma screens, NGCA stock equipment. Photo credit: Dean Turnbull (2023).

Aside from the technical aspects of the loan, the artist was keen to understand the context in which the artwork would be shown as the exhibition in the main NGCA gallery often compliments the display of the artwork in the Collection Space and vice versa, contextually. Fiona Crisp exhibited in the main NGCA gallery at the same time as the presentation of ' \bigcirc '. Crisp is a photography and moving image and installation artist, whose interest lies in science and innovation. *Weighting Time* (1 April- 3 June 2023) explored thirty years of her work, elements of her large-scale photography and film installations were reconfigured and recontextualised to reveal new insights into changing relationships to space, place, and time. Her studies have examined how views are framed, which links to the screen aspect of ' \bigcirc ', as we view social media through the frame of the phone screen or frame on a tablet, laptop, or PC.

After assessing the choice of *Runner* artworks and which would be most suited to the space and the context of the Fiona Crisp exhibition, we (myself, the NGCA curator, and technician) suggested we deliver/ the king checked by the queen. The artwork is a 2-channel H.264 MP4 screen capture video of a game of chess played on 26 February 2020, by two AI bots communicating through Instagram, the photo and video-sharing social networking service owned by Facebook, Inc. We requested the loan of the artwork as we have the stock equipment to display it on using a landscape format, as previously suggested by the Studio. The Studio reply advised that they would prefer us to show a single channel artwork using a landscape format. This was frustrating as we had picked the Instagram *Runner* as it had intermittent sound and the focus was the interaction between the two AI bots. After discussing other options with the NGCA curator and technician we decided to stay with an Instagram *Runner* due to the audio element. The artwork we chose was the Amazon *Runner:* (\bigcirc) (2019).

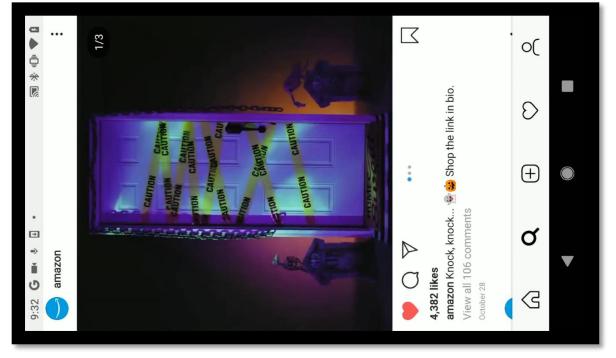


Figure 6. YouTube screenshot of '(2)' (2019) – Amazon Runner by Cory Arcangel (2022)

The *Runner*, '(2019) is a single-channel screen recording of a live bot performance on Instagram, 8 December 2019. It is programmed to 'like' every post on Amazon's feed for a year. The reason for displaying the artwork in a landscape format was to give the viewer the impression of watching a film in landscape view rather than the conventional scrolling down motion of using a smart device. The artist's intention is to highlight how everyday use of a smart device and the constant barrage of advertising encourages capitalist consumerism. This was certainly a topic of discussion between visitors and Visitor Services staff, so the artist's intention had the desired effect. It was also observed that visitors spent considerable time reading the contextualising wall text that I penned (Figure 7).

Cory Arcangel: 🥯

Single-channel screen recording of a live bot performance on Instagram (Amazon) , December 8, 2019. Courtesy of the artist.

is from a series of artworks called *Runners* by American artist Cory Arcangel. Arcangel's work explores the potential and failures of old and new digital technologies, highlighting their obsolescence, humour, aesthetics and, at times, eerie influence on contemporary life.

is a single-channel screen recording of a live bot performance on Instagram. Screen captured via a smartphone on 8 December 2019 the recording scrolls through a year's worth of Amazon's Instagram feed with a live bot programmed by the artist liking each post in turn. The screen has been turned horizontally to give the viewer the impression of watching a film tracking from left to right as opposed to the conventional scrolling down motion of Instagram. The artist's intention is to highlight the pervasiveness of advertising that encourages capitalist consumerism.

Social media platforms are progressively being used to covertly extract meta data on personal interests for commercial gain. The use of pop-up advertisements extend the browsing time of users for this purpose and Arcangel exposes the often mundane and surreptitious methods they use to seduce users into buying 'things' they do not often need.

Cory Arcangel (born 1978, Buffalo, New York) is an artist, composer, curator and entrepreneur living and working in Stavanger, Norway. His work is included in many public collections, including the Hammer Museum in Los Angeles, MoMA in New York, the Tate, London and the Smithsonian Museum of American Art, Washington D.C.

Produced in collaboration with Georgia Smithson, NPIF/ AHRC funded PhD researcher, the University of Sunderland. Supported by The AHRC Northumbria-Sunderland Centre for Doctoral Training (CDT).



Arts and Humanities Research Council

Figure 7. Text panel written by Georgia Smithson for '9' (2019) by Cory Arcangel.

In the context of this research, the work was exhibited as a curatorial project and as a case study on how collecting galleries need to keep up with changing formats and technology to ensure future presentation of the work. By using ' \bigcirc ' (2019) as a subject for testing the Database, it was established which areas of curatorial activity fit into the designated tabs, the results of which can be found in Appendix 4. Work to input the curatorial data was undertaken during installation, while the technician and curator were onsite to ascertain technical information from them while the work was live.

The NGCA curator created the digital images below to illustrate to the Arcangel Studio how we proposed to present the artwork. The screen was landscape oriented and positioned to the left-hand side of the entrance to the Collection Space. The entrance does not have a curtain. The screen was suspended from the ceiling by wire and secured to the floor by wire to prevent it swinging. The decision to place the screen on the left-hand side of the entry was taken so the visitor would be required to come into the Collection Space for a closer, more immersive experience.

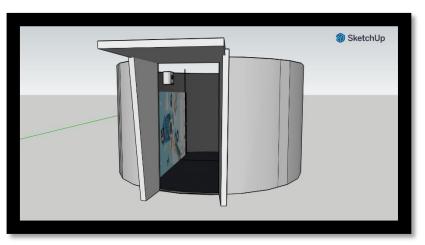


Figure 8. Entrance to the NGCA Collection Space showing the position of the entrance and screen. Illustration by Jon Weston (2023). Entrance to the NGCA Collection Space showing the position of the entrance and screen. Illustration by Jon Weston (2023).

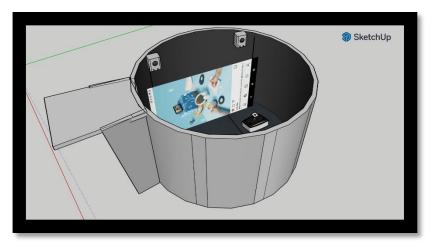


Figure 9. Overhead view of the NGCA Collection Space showing the position of the screen, speakers, and projector. Illustration by Jon Weston (2023).

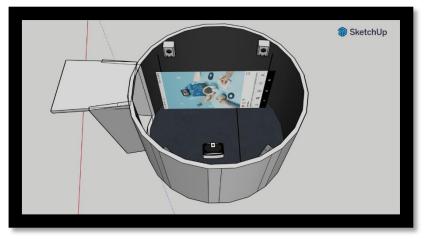


Figure 10. Overhead view of the NGCA Collection Space showing the position of the screen, speakers, projector, and benches. Illustration by Jon Weston (2023).



Figure 11. Exterior shot of '(2019) at the NGCA Collection Space showing the entrance, the screen, and the contextualising text panel. Photo by Colin Davison (2023).

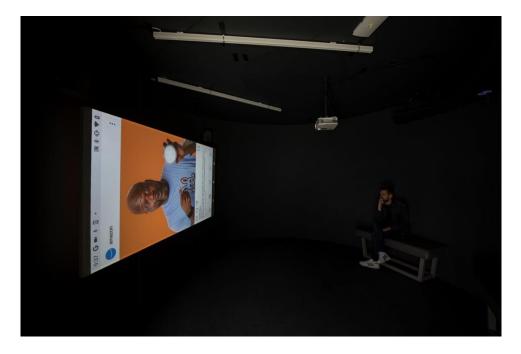


Figure 12. Interior shot of '(2019) at the NGCA Collection Space showing the positions of the screen, the projector, and the viewing bench. Photo by Colin Davison (2023).



Figure 13. Interior shot of '(2019) at the NGCA Collection Space showing the positions of the entrance, the screen, and the projector. Photo by Colin Davison (2023).

The intention of the project was to use ' Θ ' (2019) as a curatorial case study, as though NGCA were acquiring the artwork into their collection. The project was divided into two stages. Stage 1 involved the planning and dialogue with the studio, the artist, the NGCA curator and technician, while stage 2 was the presentation of the artwork. Built into both stages were areas of consideration for addition to the Database. Based on the contextual research

presented in Chapters 2 and 3, I had designed the structure and content of the Database, but by seeing a project from the planning stage provided a real-life, real-time experience which enabled me to add data fields that I had overlooked. The addition of a 'Correspondence' section now captures key agreements by email between the studio and the gallery and after adding the artist questionnaire to the Database, I found that cataloguing answers into the relevant sections became much easier. As the artist questionnaire is structured into differing curatorial categories, the information provided by the artist is clearly understood and can be matched to the relevant section.

4.4 The artist questionnaire

The artist interview or questionnaire is a documentation tool to ensure the futureproof presentation of an artwork, as prescribed by the artist or otherwise agreed by the artist and curatorial staff of the commissioning and collecting institution. By working together to ensure both creative and operational intentions are fulfilled, key aspects of the five main curatorial activities are documented to ensure the work is:

-displayed correctly, as the artist intended and within the gallery parameters

-is seamlessly accessioned into the collection, it is in a contextually correct subcollection

-is stored correctly, all preservation strategies have been examined and noted

-can be publicised, loaned out and distributed legally, fairly and without prejudice

-catalogued and documented, to provide contextual information for use by staff and visitors

During my research I have discovered that institutions take varying approaches to the artist questionnaire and that they may not even be aware that they are formally taking this approach. At the point of pre-acquisition, The Metropolitan Museum of Art specifies that an artist questionnaire must be conducted prior to a work being considered for acquisition. Following analysis of the questionnaire, a list of deliverables will be requested from the artist, including detailed installation instructions and a certificate of authenticity. (Met Museum, 2022) Anything noted and documented by the artist related to the artwork can become this useful curatorial tool, from display glitches and how to overcome them, to how to locate components if they fail and how they envisage their artwork sitting within the collection and what it should hot be displayed alongside. The artist questionnaire is advocated by the Computer Arts Society, Tate, and The Daniel Langlois Foundation. INCCA (International Network for the Conservation of Contemporary Art) considers the artist questionnaire to be of such importance that they created the Database for Artist Archives which houses unpublished research on contemporary artists by INCCA members. Jon Ippolito's belief that collecting and documenting the artist questionnaire, technical instructions, and manuals of equipment is critical to the longevity of the artwork. (Ippolito, 2003)

Patricia Falcao, time-based media conservator at Tate, discussed how she approached the artist questionnaire, specifically when to do it, how to tailor it to the artist/ artwork and how to harvest the best data from your questions. During attendance at the Media Art Preservation Institute course, organised by The Danube University (December 2020- March 2021), I learned that the importance of the artist questionnaire cannot be underestimated. This cannot always be documented retrospectively, so an emphasis on interviewing the artist at the time of acquisition or pre-acquisition has been made by larger collecting institutions such as Tate and the Smithsonian. Falcao gives the six main reasons for this:

-To understand the technical aspects of the work from the point of view of the artist

-It is beneficial to understand what the work is prior to acquisition (even look it up on Google)

-The questionnaire is not a static document —opinions/ thoughts and intentions can change.

-By documenting these changes, the artwork/ artist's intentions can be understood more easily

-By interrogating the questionnaire, the power to understand whether acquisitioning the artwork is viable is determined

-Be as broad in your questioning as possible and then narrow the answers down (Falcao, 2021)

For the design of my questionnaire, I intended to make a template which can be used as a basis where/from which to start after researching the artist and the work. The researcher will not establish all they need to know prior to submitting the questionnaire or conducting the interview but an understanding of the Modus Operandi of the artist assists with the design of the questionnaire. I also turned to the Daniel Langlois Foundation for advice and found the interviews between artist Rafael Lozanno-Hemmer on his installation, 'Subtitled Public' (2005), researcher Lizzie Muller and DOCAM's Caitlin Jones well explained, documented, and well structured. Indeed, Jones stated that the artist interview formed the backbone of their research. The documentation is constructed in categories by way of short, filmed interviews. Breaking down the questions into subject-specific bite-sized sections makes sense of how the questionnaire can be laid out or documented in a logical order. This can then be translated to the relevant sections of the Database.

The table below demonstrates how the interview is broken down into subcategories:

Concept	A conceptual background to and contextualisation of the work
Audience	Intentions, audience experience record
Installation	Lighting, projection, components, installation parameters
Technical details	Technical drawings, specific component specifications, hardware, software,
	versioning
Exhibition content	What will the artwork be displayed alongside?
Preservation	Audience experience record
General information	Collaborators, credits, links to other shows/ works etc.

Table 7. Fondation-langlois (2021) Artist interview breakdown of categories by Lizzie Muller and Caitlin Jones (2007). Table created by Georgia Smithson (2021).

4.5 Artist questionnaire template

Below is a direct copy of the newly created artist questionnaire template from the Database. The basic format table is a quick guide to what categories are covered. The in-depth questions are a basis to start with when creating the questionnaire specifically for an artist and their artwork.

Explanation of data to be harvested:

-To understand the context/ concept of the artwork.

-To understand audience involvement, interaction, impact the artwork may have upon them.

-To understand the technical aspects of the work from the point of view of the artist.

-To understand if and/ or how the work can be reproduced or duplicated.

-The questionnaire is not a static document—opinions/ thoughts and intentions can change.

-By documenting these changes, the artwork/ artist intentions/ processes can be understood more easily.

-By interrogating the questionnaire, the power to understand whether acquisitioning the artwork is viable is determined.

-Be as broad in questioning as possible at first and then narrow the answers down to suit the artwork.

-Pre-acquisition: It is beneficial to understand what the work is prior to acquisition (even look it up on Google).

Concept	Concept behind the work, influences, inspiration	
Audience	Interactive experience, experiential intentions, discrepancies between artist intent and audience experience, examining failures, survey of audience reaction, participation.	
Installation	Room dimensions, projector angles, lighting levels, didactic materials, hardware: projector resolution, limitations, software: font and size, artist's relation to the code, language, and diversity.	

The basic format of the artist questionnaire is as follows:

Technical details and specifications	Computer, router, software, closed circuit video camera, video projector, lighting, documentation.
Exhibition content	Single artist/ joint exhibition, venue, part of a festival?
Preservation	Artist guidance on how the components/ equipment should be stored, artist's own conservation documentation, stock equipment for future presentation or equipment specific to the integrity of the artwork? Replicate the same intention using different software/ equipment?
General information	Collaboration or contributions, credits to others and how they were involved, links to other shows/ works etc.

Table 8. Basic format of questions for artist questionnaire. Table created by Georgia Smithson (2021).

In depth questions for the artist:

Context

- Can you describe or explain the concept behind the artwork?
- Does the theme of the artwork deal with any subjects that viewers may find sensitive?
- What reactions do you hope to evoke?
- Does this artwork stand alone, or does it form part of a story belonging to other artworks or a wider narrative?
- Do you prefer to write your own contextualising information (labels,
- programme texts etc?)
- Would you prefer to sign off contextualising information before presentation/ publication?
- Do you have any existing documentation that you would like to share, and which would assist in the contextualisation of the artwork?

Audience

- What audience interaction do you anticipate?
- How do you wish to measure audience engagement/ reaction to the artwork?

Installation

Installation/ display guidelines

- Can you provide an illustration/ map of how the equipment should be placed?
- Do you have any preference on the equipment to be used? Are the use of projectors, speakers, and playback devices specific to your artwork?
- Do you have manuals for the equipment?
- Do you have contact information for the manufacturers?
- Does the equipment have a warranty/ guarantee?
- Can you say something to how the synchronisation is being achieved?
- Can you envisage other ways of showing the work?

Technical-How was the work made?

Media/ master and exhibition copy

- Which equipment was used?
- Which file format(s) were used for recording and editing?
- What editing platform was used and how were they finally mastered?

• Is the sound element an important aspect of the work? Can you confirm how the sound was recorded, and if it was edited or enhanced in anyway after the recording?

• Is the sound embedded in one of the videos, or is it a separate file? If it is separate, which file format would it be?

• Is it stereo, 5.1 or 7.1?

• Can you provide a comprehensive list of the media materials you plan to supply as part of the acquisition? (Please note this may require discussion)

• What are the formats of the current master copies and the exhibition media? Please specify codecs and wrappers when possible (e.g. codec: v210; wrapper: QuickTime mov).

- Is the artwork available to view on Vimeo/ YouTube etc?
- Is the work editioned, and if yes, can you let us know which edition we are acquiring?
- Can you tell us who owns the other edition? (If applicable)

Exhibition Content

• Is this artwork intended to be displayed alone, as part of an exhibition of your own work, or as part of a group exhibition?

- For future presentation, in what context would you prefer your artwork to be exhibited if part of a group exhibition?
- Is there any reason why, how, or where you would not accept your artwork to be exhibited?

Preservation

- Do you have your own personal guidance on how the components/ equipment should be stored while not on display?
- Can you provide us with any of your own conservation documentation?
- In the event of the equipment you have supplied breaking down do you
- approve of the gallery using stock equipment for future presentation?
- Is any of the equipment specific to the integrity of the artwork?
- Could you replicate the same intention using different software/ equipment?

General

- Can you provide us with any links to critiques, reviews, or commentaries about the artwork?
- Do you have any physical publications related to the work?
- Who should we credit alongside yourself?

While this may be an ideal scenario for prospective commissions and artworks whose artists are still alive, how can the problem be tackled retrospectively? An interesting solution to this problem was discussed in 2022 in a Plural Art Mag article by Clarissa Chikiamco, curator of

video art and *The Future is Now* exhibition (Dec 2021- March 2022) at National Gallery Singapore. The Nam June Paik retrospective threw up many challenges with regards to ensuring the artists' intentions were met. As the artist passed away in 2006, it was impossible to consult him. Chikiamco acknowledged "For me, a key fundamental difference between working on the Nam June Paik show and my other exhibitions involving moving-image art is that Paik is no longer around. When an artist is no longer living, there's a lot of interpretation necessary." (Plural Art Mag, 2022) It was decided that the best course of action would be to consult with the curator of the Paik estate, Jon Huffman, who worked with Paik extensively to recreate iterations of his artworks as faithfully as they could. Chikiamco endorses the importance of the artist interview or questionnaire during an explanation of how they approached the recreation of just one of the artworks, *TV Crown* (1965). Chikiamco recognises that when an interview with the artist is no longer possible, the next best option is to speak to collaborators, such as technicians, who worked closely with the artist throughout their career, who understand how artworks can be recreated without compromising the artist's intentions.

4.5.1 Cory Arcangel artist questionnaire, '8' (2019)

The text below is a direct copy of the completed artist questionnaire by Cory Arcangel based ' \bigcirc ' (2019) which was displayed at the NGCA Collection Space from 22 April – 9 July 2023.

Artist questionnaire

Context:

- To understand the concept of the artwork
- To understand the technical aspects of the work from the point of view of the artist
- To understand if and/ or how the work can be reproduced or duplicated in the event of technical breakdown or obsolescence

• The questionnaire is not a static document— opinions/ thoughts and intentions can change. By documenting these changes, the artwork/ artist intentions/ processes can be understood more easily

• By interrogating the questionnaire, the power to understand whether acquisitioning the artwork is viable is determined

Artist Introduction

• Please tell us about your background, how you got into this style of work and how this current artwork came into being.

My name is Cory Arcangel. I was born in Buffalo, New York in 1978. I spent the first 15 years of my post collegiate life in New York, and the last 8 in Stavanger, Norway. My interest in the moving image started as a child in the 1980's watching a lot of TV and playing with a camcorder loaned a few weeks every year from my aunt. In high school I was lucky to be exposed to experimental media and video art in a video art class.

(https://www.youtube.com/watch?v=SwYN7mTi6HM)

• Are you usually involved in the design of the space where your work is presented?

Most of the time. But generally, my work is flexible, and has no 'fixed' design. I try to maximise the possibilities of each space within budget, time, etc, etc.

• What information would you usually provide a gallery with prior to installation as a matter of course?

Checklist, technical, loan, and copyright information.

Concept

• Can you describe or explain the concept behind the artwork?

There is no concept behind the work, and I can not say what the work is about — that is up to the viewer. I can though, elaborate on how the work was made, which perhaps might illuminate some things. In this case, the work was made by programming an Instagram bot to scroll down social media feeds, and 'like' every post.

• Does the theme of the artwork deal with any sensitive subjects?

The work has no theme. A better question would be, "Does the artwork deal with any controversial subjects." Depends on your reading of the work, and definition of controversial subjects! — Amazon, Instagram, etc, etc.

• What reactions to you hope to evoke?

Melancholy? A sigh? Sadness? WTF?

• Does this artwork stand alone, or does it form part of a story belonging to other artworks or a wider narrative?

This artwork is part of a series called Runners, which are works programmed in the API Monkey Runner which is an Android API for programming cell phones. In this series, the code scrolls and likes and scrolls and likes on any social media feed with a star or heart, etc, etc. I hope to do one for each letter in the alphabet — Apple, Barnes and Noble, Capgemeni, etc, etc,

• Do you prefer to write your own contextualising information (labels, programme write ups etc?)

I like to edit such text, but not write it.

• Would you prefer to sign off contextualising information before presentation/ publication?

Yes.

• Do you have any existing documentation of your own that you'd like to share with us that would assist in the contextualisation of the artwork?

https://coryarcangel.com https://www.youtube.com/user/coryarcangel

Audience

• What audience interaction do you anticipate?

Befuddlement? Surprise? A laugh?

• How do you wish to measure audience engagement/ reaction to the artwork?

I do not wish to measure audience engagement/ reaction.

• Do you have any concerns around where your work is displayed? I.e. that the audience demographic 'might not get it'?

I do not underestimate the audience. The world is full of such weird and mysterious objects, scenarios, and situations. Therefore, any audience can 'get it', not to mention, there is 'nothing to get'. I do though like to amp up the idea these kinda things are artworks (cause they look so unlike other artworks!) by displaying them in much the same manner as other more traditional things. In this case, I believe, we did an install not dissimilar to other such things you had in this space.

Installation

Installation/ display guidelines (please ignore these questions as this has been discussed with Rute at your studio, unless there is anything else you would like to add).

• Can you provide an illustration/ map of how the equipment should be placed?

();

• Do you have any preference on the equipment to be used? I.e. projectors, speakers, playback devices or are they specific only to your artwork?

 \odot

Do you have manuals for the equipment if artwork specific?

۲

• Do you have contact information for the manufacturers?

8

• Does the equipment have a warrantee/ guarantee?

Can you say something to how the synchronisation is being achieved?

(i)

• Can you envisage other ways of showing the work?

₿

Technical- How was the work made?

Media/ master and exhibition copy

• Which equipment was used?

Artist code: https://github.com/coryarcangel/runner-suite Google Pixel phone (screen capture). Adobe Premiere (post editing).

• Which file format(s) were used for recording and editing?

Mp4 / H.264

• What editing platform was used and how was the work finally mastered?

Adobe Premiere (post editing): the Google pixel screen-capture was cut at the front and end.

• Is the sound element an important aspect of the work? Can you confirm how the sound was recorded, and if it was edited or enhanced in anyway after the recording?

Yes, it is. It was recorded as a readymade through screen-capture.

• Is the sound embedded in one of the videos, or is it a separate file? If it is separate, which file format would it be?

Embedded.

• Is it Stereo, 5.1 or 7.1?

Stereo.

• Can you provide a comprehensive list of the media materials you plan to supply part of the acquisition? (Please note this may require discussion)

Mp4 file, certificate of authenticity (with tech & install info).

• What are the formats of the current masters and the exhibition media? Please specify codecs and wrappers when possible (e.g. codec: v210; wrapper: QuickTime mov).

1920 × 1080 H.264 AAC, 48000 Hz

• Is the artwork available to view on Vimeo/ YouTube etc?

Y. https://www.youtube.com/user/coryarcangel

• Is the work editioned, and if yes, can you let us know which edition we are presenting?

Open edition.

• Can you tell us who owns the other edition? (If applicable)

Na.

Exhibition Content

• Is this artwork intended to be displayed alone, as part of an exhibition of your own work, or as part of a group exhibition?

Either way OK.

• For future presentation, in what context would you prefer your artwork to be exhibited if part of a group exhibition?

I'm flexible.

• Is there any reason why, how, or where you would not accept your artwork to be exhibited?

Hard to say ... but nothing comes to mind.

Preservation

Please use this space to let us know your thoughts on the preservation of your own work, how you tackle it and if you have had any advice or formal training on the processes involved.

• Do you have your own personal guidance on how the components/ equipment should be stored while not on display?

The components are interchangeable. The file is the work.

• Can you provide us with any of your own conservation documentation?

I (plan) to use Fixity to do annual checks of the integrity of my files.

• In the event of the equipment you have supplied breaking down do you approve of the gallery using stock equipment for future presentation?

Υ

• Is any of the equipment specific to the integrity of the artwork?

Ν

• Could you replicate the same intention using different software/ equipment?

Y

General Information

• Did you collaborate with any other artists, technicians, organisations to produce the artwork? Can you explain how they were involved?

Henry Van Dusen wrote the code and produced the video. At the time he was on salary at my studio as production manager.

• Who should we credit alongside yourself (if anyone)?

Na

• Can you provide us with any links to critiques, reviews, or commentaries about the artwork?

https://taz.de/Ausstellung-Flying-Foxes/!5903352/ https://szene-hamburg.com/michel-majerus-cory-arcangel-kunstverein/

• Do you have any physical publications related to the work?

Na

Acquisition

• (Although NGCA are not acquiring this work, it would be very useful to understand the process you go through prior to a collector/ institution acquiring your work, i.e. the checks, documentation, exchanges, and agreements that take place)

Pretty simple! A price is agreed on, and the file along with a cert are exchanged. If necessary, a contract can be sorted. The institution is buying the rights to show the work.

As is evident from the content of the artist questionnaire completed by Cory Arcangel, using free text, the artist responds in their own voice, which can reflect their character. The installation section is answered by a selection of emojis, which corresponds with the context of the artwork. Not all of the questions have been answered in the way in which I could document a specific answer. All other categories have been answered allowing the documentation to be transferred to the relevant sections of the Database, which was the original intention of conducting the artist questionnaire. As the sections of the questionnaire reflect the data field tabs in the Database, this should be a simple undertaking. Preparation is key when designing the content of the questionnaire: research on the artist and the artwork must be undertaken, and the questions should be tailored to suit the physical makeup of the artwork, the display and storage parameters of the gallery.

4.6 Summary

Through my own experience of working with the NGCA collection prior to commencing this research project, it was evident that maintaining a collections management standard of good practice was an area of concern and was inadequate for the following reasons:

-The inventory was not complete nor up to date.

-There was no coherent database in existence.

-The data that was available was disparate and stored in various locations both digitally and physically.

-Guidance and instructions on installation were not documented but passed on by word of mouth.

-There was no documentation for location control of artworks either on or off site. -Two permanent members of staff at NGCA simply do not have enough time to undertake the research and creation of a new procedural database.

The concerns listed above were the basis for the justification of designing the Database to catalogue the NGCA artworks and bring all of the data into one coherent space. In doing so, combatting the problems of missing or lost data can be overcome while the guidance sections aid staff who are not familiar with the end-to-end curatorial processes.

Chapter 5: The Time-Based Media Art Curatorial Guide and Database

5.1 Introduction

Traditional collecting and cataloguing models are not suitable for recording the variable nature of an artwork whose characteristics have the potential to change, are made of multiple components and with the passing of time, create a challenge to its integrity. This chapter examines, compares, and contrasts an established Collections Management System (CMS), eHive, used in museums and galleries internationally, the Smithsonian Institution's Time-Based Media online resource, and the Database I have designed. The guidance I have researched and collated is more suited to larger institutions with collections that include varying mediums of new media art and to rationalise the relevant sections would be a time-consuming undertaking to suit each video artwork. Most CMS have running and storage costs and as the volume of images and data increase, the package becomes more expensive to run and maintain. As my aim is to create a cost-effective model, it was a logical decision to create my own system using free, readily available, and user-friendly software. Another factor that persuaded me to create a bespoke system was that I remain in control of the data fields and titles and the order in which they are presented, making the procedural aspect of the system more achievable.

As the user works through the Database, a chronological step-by-step guide ensures the five identified curatorial aspects are captured and noted in real time. From my research, I noted that this structure had not been attempted previously, in that the guidance and the documentation areas were disparate. The decision to create a database with a guidance system all in one place is unique, especially structuring the guidance in a 'real time' order. There also appears to be a lack of flexibility in the user's choice of data field subject headers so they cannot be edited to suit the specific requirements of the gallery. My intention for the Database is that it can be changed and adapted to suit the nature of specific artworks as the data fields from a traditional CMS are usually not relevant to and do not represent the factors and components of the requirements of a video artwork. They do not capture the future and present needs of the artwork, the past display iterations, instructions, and installation guidance. Joanna Phillips, senior conservator of time-based media at the Guggenheim, confirms:

Trying to document the change of a time-based media artwork on the component level, and the decisions underlying this change, proves difficult with existing documentation tools and models. Reporting different iterations of the same artwork and tracking varying component constellations for these iterations is not easily possible. (Phillips, 2015, p. 10)

Information captured by traditional CMS ranges from the maintenance of core object information and conservation reporting to the co-ordination of displays/exhibitions and loans. This type of system, widely used by institutions internationally, for example, The Museum System (TMS), is not suitable for documenting time-based media artworks to combat the following technical challenges identified by Tate:

-Industry decisions to discontinue particular technologies (a projector or tape format, for example) means that we must ensure that encoded media can be played back.

-Time-based media installations are complex, if one part breaks down or can no longer be supported, this usually has ramifications for the whole artwork.

-Processes have to be recreated each time the work is installed due to changes in location and environment. (Tate, 2020)

Word documents were created by Tate's Time-based Media Conservation Team to capture the data that could not be added to TMS, specifically for conservation reports, disk imaging guidelines, emulation reports and for the capture of metadata.

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Figure 14. Screenshot of contents page of Tate Software-based Artwork Conservation Report. Links to templates can be found in Appendix 1. CC BY SA 4.0 DEED. Tate (2020)

5.2 A case study of eHive Collections Management System

The decision to create the Database was driven by two factors; cost-effective design, storage, and maintenance, and to control the data fields, specifically the structure, which guides the user through a progressive pathway ordered by the categorisation of curatorial activities. While working in a gallery environment, a professional CMS that I chose to catalogue glass

artworks was eHive, a web-based collection cataloguing system, developed by Vernon Systems. A key factor for choosing eHive was that it is a Spectrum Partner and is compliant with the Collections Trust Standard of collections management data. The documentation of artworks and having plans, policies, and procedures in line with the Spectrum Standard is a crucial undertaking that must be adhered to prior to applying for ACE Accreditation status. eHive is a system used by various institutions and private collectors worldwide to manage and document their collections and make them accessible to their audiences. The system can also be attached to an institutional website. The system works very well for traditional artworks and objects and was a particularly useful starting point for my research on how to improve and adapt a CMS to suit the unstable and unpredictable nature of time-based media artworks. The system is more commonly used for artworks with fixed components and museum objects that require less documentation. Indeed, it proved highly effective for cataloguing the contemporary glass artwork collection for National Glass Centre. When I was asked to start cataloguing the NGCA time-based media art collection in 2016, I was already aware that the system was inadequate for 'non-static' works. The system works on a 'front-office' and 'backoffice' basis and is split into the following taxonomies for cataloguing purposes:

> -Archives -Archaeology -Art -History -Library -Natural science -Photography and Multi-Media

The Art and the Photography and Multi-Media options have the same data fields and do not differentiate from each other to suit the specific genre of work. Frustratingly, the data field titles are fixed and cannot be changed to suit the user's requirements. At the start of my research, on enquiring with the developer if the data field titles can be modified by the user to suit works with an unstable nature, I was advised that this is not an option. eHive review the user experience regularly and send out newsletters to members to explain operational updates, but from 2020- 2023 the focus has been on setting up multi-user accounts, improving analytics for the evaluation of visitor engagement and creating new collection areas that focus on heritage, cultures, and social history.

While considerations are made for general collections management data; acquisition, registration, valuation which are applicable to cataloguing time-based media artworks, the conservation field is considerably basic and a free text box covers the current condition of the artwork, handling notes, display notes, storage, and packing details. Complicated works with numerous components could not be catalogued effectively using this system. There is nowhere to store data on support files, manuals, installation images and diagrams, physical contextualising materials, guidance on daily maintenance or installation parameters. Condition and accession reports (used universally by institutions) cannot be stored on the system, either by attachment or the copy and paste function.

The detail fields are not conducive to a 'guidance' system, and the terminologies used in the field titles are often confusing to a new user with no explanation of what they mean.

Currently, the back-office section of eHive, which feeds into the customer viewing website, or 'front end', has data field headings that do not apply to collecting, exhibiting, preserving, and cataloguing video artworks. I recently enquired with eHive if they could change the data field headings to suit my requirements, but, again, was advised that currently this was not possible.

Under the 'art' heading, there are seven subcategories. The detail fields feed into the front end, customer facing section of the system, with the others being for staff, gallery, or institutional use only. Simply examining each field within the eHive CRM demonstrates the difficulty in finding a cataloguing system to suit the variable nature of time-based media. Omissions are observed as not allowing for documenting iterations of displays, reports, the history attached to the work and the collaboration that goes into ensuring the future display of the work. These omissions were factored into the design of the Database.

5.3 A case study of the Smithsonian American Art Museum Time-Based Media Digital Art online resources

My decision to utilise a free programme was informed by the fact that The Smithsonian and Tate use free Microsoft Office programmes to report and document conservation, digital preservation, installation, and registration. (see Appendix 1 for links to the resources) Documentation template reports, workflows, and guidance are available for all branches of their collections on the Smithsonian website and broken down into categories of specialism. Time-based media has its own specific resource pages. Figure 33 illustrates the categories that are covered:

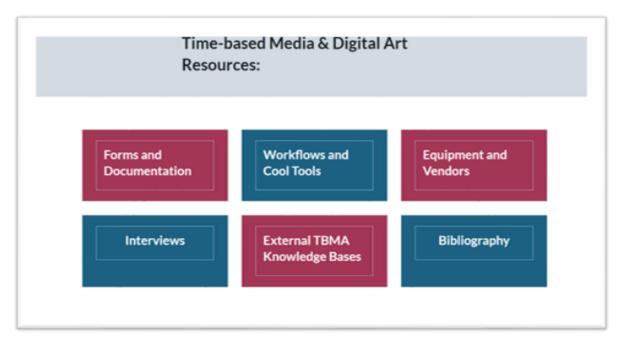


Figure 15. Screenshot of categories of time-based media and digital resources. CCO, Smithsonian Institution (2020).

The sections have downloadable templates, tools, guidance, and examples of how nine artworks have been documented for online users to be able to contextualise the artwork. The examples serve as a guide or template for the user to follow or create their own version. They also illustrate the amount of work the curatorial staff undertake to develop conservation strategies and how to collect and exhibit time-based media artworks effectively and responsibly. The Smithsonian has a Time-based and Digital Art Working Group which seeks to forge relationships with other institutional or organisational collectors to share information about the conservation, acquisition, installation, and exhibition of artworks. This aspiration to garner external knowledge demonstrates the willingness of the Smithsonian and other contributing time-based media collecting institutions or organisations to freely share and distribute knowledge. Hyper-links are provided to Matters for Media Art, Rhizome, and The Variable Media Network to name just a few. The interviews documented are with artists, curators, and conservators. The three artist interviews or questionnaires provide an insight into the creative minds of the artists and their oeuvres. The conversations are not specific to a certain artwork and do not provide technical or conservation advice or the artist's lasting intentions towards an artwork. The artist questionnaire format that I have designed is intended to capture this information for a specific artwork to make it as futureproof as possible with direct input from the artist.

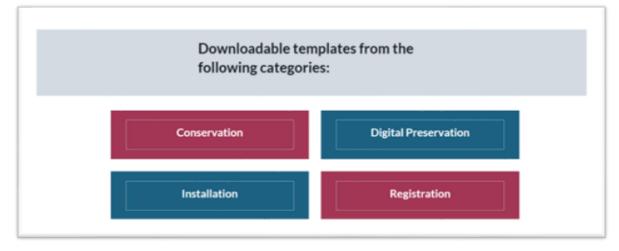


Figure 16. Screenshot of categories of downloadable templates. CCO. Smithsonian Institution (2020).

The templates listed above have four categories: conservation, digital preservation, installation, and registration. Choosing a category will take the user to sample forms for the relevant Smithsonian Institute. The templates are accessible and downloadable. For this case study, I pursued the following paths from the eight branches of the museum's accessible resources:

Conservation: Smithsonian American Art Museum (SAAM) Digital Preservation: Office of the Chief Information Officer (OCIO) Installation: Smithsonian American Art Museum (SAAM) Registration: Smithsonian American Art Museum (SAAM)

The table below illustrates the four curatorial categories, the accessible templates (reports and guides), and the data that they are designed to capture:

	Report	Guide	Contents
Conservation			All forms note artist, title, date, medium, accession number
TBMA pre-arrival	✓		Description of components, formats, and equipment list
master list			
Identity report	√		Description, statement of significance (care), exhibition and iteration history, components, diagrams, plans, risk assessment, handling notes, conservation plan, storage, and transport recommendations
Iteration report	V		Exhibition information, who created and supervised the iteration? Time taken to install, artist influence, modifications, issues, visitor feedback, damages, installation specifications, format of artwork, equipment, installation elements, technical set-up, maintenance through the show, consumables, safety concerns
TBMA object review preparation form	✓		Description of artwork, key information, statement of significance, collecting goals, risk assessment
TBMA testing and	✓	1	Preservation, access, exhibition and other formats, and list of
acceptance form			equipment
Digital Preservation (guidance on Digital Asset Management System)			
DAMS guidelines for required and recommended DAMS metadata		V	The document defines the recommended DAMS guidelines for embedded and DAMS level metadata for digital images, audio, and video at the Smithsonian Institution. The document defines only the required and minimum recommended fields. It represents a consensus of practitioners across various units about how to better manage the data that is populated into digital image, audio, and video files. Its intention is not to dictate practice, but rather to provide guidance.
TBMA package definitions– Smithsonian DAMS		~	Packages to be defined by each Museum according to their specific needs/workflows. The TBMA Checklist is REQUIRED for assets/files that are managed in DAMS as TBMA Content Type and subject to all auditing procedures.
An introduction to the SI DAMS Digital Art Metadata Model		~	DAMS currently has three established metadata models created by various pan-institutional working groups of digital content stakeholders. All files stored in the DAMS are assigned to one of these metadata models upon import and provide fields for administrative and rights tracking, technical documentation about the files, embedded data, and enhanced description. The models are media specific for Images, Audio, and Video assets.
Installation			
TBMA installation parameters			Dependencies, display, monitors, sound, volume, playback, components, installation space
TBMA installation planning guide	×		Staffing estimates, display proposal, time estimates, technical needs, maintenance, consumables, hazards, back up equipment
Registration			

Accession memo worksheet	√	List of all content formats and assign format types according to SAAM guidelines and curatorial input. Include description details based upon information in record and curatorial input. Assign unique number identifier
Testing and	~	Preservation, access, exhibition and other formats and list of
acceptance form		equipment

Table 9. The four Smithsonian time-based media curatorial categories, accessible templates (reports and guides), and the data that they are designed to capture. Table created by Georgia Smithson (2022).

Curatorial category			
Registration			
Contract			
Artist/s/ Collaborator/s			
Location control			
Physical components			
Medium			
Condition			
Concept			
Cataloguing notes			
Digital Preservation:			
Preservation format			
Artist questionnaire			
Diagrams/ plans			
Risk assessments			
Handling and storage instructions			
Contextualising information			

Table 10. The curatorial categories that have been identified by using eHive and the Smithsonian time-based media resources. (2022) (An in-depth table (14) can be found in Appendix 1) Table created by Georgia Smithson (2022).

Table 14, found in Appendix 1, has a breakdown of the further data field headings that were identified that can be found under each of the categories in table 10. The information I identified is extensive and table 14 can be used as a reference tool for staff if they find they require further guidance or understanding of terminologies.

Although the Smithsonian resources are comprehensive and provide guidance as well as documentation templates in the Time-Based Media and Digital Art section of the website, the area requires a degree of understanding of their collections to navigate to the correct guidance forms and templates. They can be found under the Hirshorn Museum and Sculpture Garden, Smithsonian American Art Museum, National Portrait Gallery, Cooper Hewitt Smithsonian Design Museum, National Museum of African History and Culture, and Office of the Chief Information Officer sections. This demonstrated a need for the Database to be

easier for the user to navigate, as well as providing consistent UK- friendly terminologies to follow.

5.4 Creation of the Time-Based Media Art Curatorial Guide and Database: The rationale behind the design of the Database

The objectives of this research are informed by the knowledge that time-based media art and its cultural heritage is threatened by rapid technological obsolescence and inadequate documentation strategies. As I have discussed in Chapter 2, section 2.2, it is vital that the documentation process starts at the point of pre-acquisition and then continues for the whole lifecycle of the work.

By previously working with NGCA to retrospectively document artworks held in their collection, I had firsthand experience of the challenges faced by a small, resource restrained organisation, including basic documentation practices with no prescribed framework to follow. As a result, data which should have been assimilated and stored in a cohesive manner was disparate, missing or stored in email inboxes and across hard drives and memory sticks of former and current members of staff. Due to limited funding and time resources, time has not been spent on implementing collections management training, as this time is spent on visible tasks such as programming, the delivery of projects, and related learning and engagement activities.

Providing an accessible tool, with minimal training required, to document all aspects of collections management suited to time-based media became a necessity, especially with the planned imminent move of the gallery to another site. The Database can be used to document artworks remotely, with or without the need for a wi-fi connection (not always possible when working in the basement of buildings) on a laptop. It can be emailed to other users, using password protection. It can be kept up to date by operating it on a password protected cloud storage system with user access levels set as deemed necessary for users. This also allows the operation of multi- users at the same time.

Working alongside NGCA staff assisted with the experimental stage of my research. The intention of this exercise was to question the staff on using the guidance sections and therefore their efficacy, ease of use, and relevance to the artwork being documented. Feedback was crucial at this stage as, after assessment, suggestions on improvements and how to achieve them were noted and considered. (Feedback questionnaires from NGCA staff can be found in Appendix 2). Theoretical research from the Smithsonian's accessible resource platform of documentation strategies and templates, research from Electronic Arts Intermix (EAI) on recording objects as well as artworks and guidance from the Variable Media Initiative and the DOCAM (Documentation and Conservation of Media Arts) Research Alliance contributed to the initial background research stage of the project.

As my aim was to create a user-friendly, accessible, interactive database, this chapter breaks down the data fields with an explanation of why they have been chosen, points to consider, and instructions on how to conduct curatorial and cataloguing tasks. The Database also notes the factors listed above for guidance and instruction to the user. Considerations of the design of the Database are listed below:

-It should be a system or programme that is cost-free (or very inexpensive to maintain, as the database stores more data, the cost increases for a commercial system such as EHive or TMS).

-All data will be found on one document.

-Forms and data fields should be managed in accordance with the Collections Trust Spectrum industry standard collections management framework.

-The Database will be tailored to suit the variable nature of time-based media during its whole lifecycle.

-It should be simple to navigate and interactive. (I have previously used Excel to create databases, but it can be quite unwieldy when it comes to storing and saving images).

-The Database must be user-friendly and provide comparable examples enabling the user to feel confident on where to enter the correct data. Providing a comparable example will also serve as a guide/ template for the user to follow.

-The terminology cannot be confusing. A glossary will be provided for reference.

-The main Database for each artwork will take the form of an Excel document, with a tab for each subject, pre-acquisition, registration, etc. The Smithsonian and the Guggenheim use Microsoft Excel and Word document templates to document registration, installation, conservation and digital preservation for their databases and they are fit for purpose.

-Instructions should encourage the user to add as much data as possible and not restrict data entry by there being an unsupported field (the Database is interactive, and updates are encouraged).

-A list of all other contextualising materials that are not stored electronically will be noted as well as their location.

The Database is arranged into curatorial and guidance sections. Spectrum Primary Procedure adherence is noted for each category. The way in which the Database is structured serves as a real-time guide. Sub-note sections instruct on procedural matters and links to institutional websites for examples of how to approach tasks and where to go for further in-depth advice. Where data fields are duplicated over multiple tabs, the Database automatically prepopulates the form, specifically from the artist Questionnaire tab. A detailed version of this table can be found in Appendix 1 with references to sources used throughout the research.

Curatorial sections	Sub sections
1. Pre-acquisition checks	Artwork research
	Explore artist
	Assemble expertise
	Determine deliverables
	Condition assessment
	Determine acquisition, installation, and maintenance costs
	Negotiation
2. Registration	Artist
	Title
	Date of work
	Accession number
	Components (further schematic details in Technical section)
	Brief description of the artwork
	Duration of playback
	Edition number
	Artist supplied materials
3. Reports	Object/ artwork entry form
	Condition report
4. Technical	User manuals
	Illustrations, photographs, videos
	Certificate of authenticity
	Warrantees
	File locations and types of file
	Testing check records
	Schematic diagrams
	Notes and diagrams from the artist
	Notes and diagrams from the technician
5. Installation	Preparation notes for gallery
	Instructions on parameters
	Measurements
	Positioning of artwork and equipment
	Lighting
	Sound levels
	Visitor signage
	Health and safety
	Documentation of the installed artwork
6. Artist questionnaire	Concept
	Audience
	Installation
	Technical details and specifications
	Collaborators and contributors
	Exhibition content
	Evaluation

7. Exhibition	Display parameters
	Decisions
	Agreements
	Risk assessments
	Daily maintenance
	Responsibility for fixes/ updates
8. Contextualising materials and audience response	Exhibition literature or publications
	Gallery text
	Labels and interpretation
	Feedback
	Comments
	Engagement with audience
	Marketing assets
9. Preservation	Guidance on how to handle, maintain and service the components
	Storage and packing/ unpacking instructions
	Artist guidance from artist questionnaire
10. Iteration reports	Previous display reports
11. Correspondence	Emails between gallery staff, artist, studio.
12. Physical materials and locations	Note list of physical contextualising materials and where they are stored
13. Loans in	Paperwork for loans to the gallery is stored here
14. Artwork exit	Paperwork for the artwork leaving the gallery is stored here
15. Loans out	Paperwork for loans from the gallery is stored here
16. Copyright	
17. Terminologies	
18. Links to useful	
resources	

Table 11. Structure of the Database. Table created by Georgia Smithson (2022).

5.5 Testing of the Database, reflection, and critical analysis

The first draft of the Database was completed towards the end of 2021, having researched the content requirement throughout the closure of the gallery due to the national lockdowns. I was unable to add data to it until the gallery reopened in May 2021 and I could arrange time to work with the NGCA staff to locate the NGCA hard drives and any physical materials associated with the artworks. I undertook a part time placement with NGCA at the start of 2023 to locate and log data onto the Database using Graham Dolphin's updated version of *Come Together* (2020) as a test subject. As the artwork was displayed at the NGCA Collection Space from January to February 2022, I was able to call on recently created marketing content, installation, and exhibition information from the interim curator and technician, as well as a completed artist questionnaire which had contextualising information and instructions on the preservation of the artwork. This activity allowed me to edit and improve the choice of data field headers, specifically in the areas of installation, exhibition, and

contextualising materials. The artist questionnaire was of particular importance, as I was able to transfer data from the questionnaire to relevant sections of the Database. The choice of where specific sections were transferred to are noted in Appendix 2 in Graham Dolphin's completed artist questionnaire.

The second artwork documented was by Cory Arcangel. As I was present at the installation of Arcangel's artwork () work and had negotiated the loan between NGCA and the artist's gallery, I had access to data and documentation material. Following this, a meeting took place with the interim curator and technician at NGCA. I presented the content, structure, and reasoning behind the choice of field data headings and provided an example of the Cory Arcangel artwork (9)' (2019) in the appropriate headers. Obviously, not all headers had content added. This is standard with many areas of documentation as the artist may not have provided data or the header is not relevant to the artwork that is being catalogued. Explanations were provided on the structure of the artist's questionnaire and how the data fits into specific data fields of the Database. I promoted the importance of preparing an artist questionnaire for each new commission or acquisition by explaining how the data collected feeds into the Database and how it can be used for future presentation of the artwork. I explained that the questionnaire template, found on the blank Database template, should be tailored to each artwork and artist at the point of pre-acquisition. Both members of NGCA staff were given a feedback questionnaire (see Appendix 3) to establish their opinions on the content, structure, and guidance sections of the Database as well as establishing their opinions on user navigation. Positive comments were received on the navigation of the Database and the overall accessibility for users, with both staff noting that the structure was well laid out and the sections very clear to distinguish between. It was also noted that a degree of collection management, registrar, or curatorial experience to navigate and understand the terminology, and purpose of the documentation work would be required, suggesting that a casual member of staff with less curatorial experience would require help using it. The Guidance sections within the Database (the Terminologies and Links to useful resources tabs) are intended to assist with translating terminologies. They also provide links to institutional terminology guides and glossaries if the user requires further exploration of the subject.

It was also noted that it would take a substantial amount of time to populate and provide full access to information on the artwork, exhibition (if relevant), and artist, which might not always be possible. To rectify this concern, it was suggested that going forward, for each new commission or acquisition, the Database would be utilised as a guide to capture as much information as possible throughout the pre-acquisition to exhibition stages. Due to staff constraints on time, the Database has not yet been implemented. It is the intention to utilise it prior to the NGCA Gallery and collection relocation due to the closure of the National Glass Centre site in 2026 and to then use it as a documentation tool for future acquisitions.

On using Excel as a platform, feedback was generally positive advocating its use, as it is relatively easy to complete sections and add information. A concern was raised around issues with Excel files corrupting, permissions restricting opening of files, or multiple copies accidently being produced, and which software databases avoid. It was pointed out via the feedback that software databases provide a smoother experience but are subject to costs and

subscriptions which NGCA was at the time unable to afford. The implementation of commercial software databases was not a realistic solution as it would require a dedicated member of staff who could manage the system. It was also noted that for a more analogue database, the Database seems to do a good job however there may be issues with useability, such as access to Excel sheets, overloading of the Excel sheet, and high-resolution images take up a lot of space. Concern was raised around the Database containing confidential information such as artist contact details and insurance values. Consideration will be required on the safety of emailing the forms or saving on laptops or computers to adhere to GDPR regulations. To address these concerns, it has been suggested that a 'backup' copy of the Database for each artwork will be kept on a rolling basis on Teams, meaning that there will always be two of the most up to date versions, with one document being labelled 'Master copy' and the other 'Backup.' Teams automatically notes the last date the document was used meaning that it is possible to identify the most up-to-date version. Reading and editing permissions will be granted to the interim curator and the technician only to ensure confidentially is maintained.

Returned feedback on the subsections within the Database and their relevance to time-based media artworks was that they can be used for other types of works too and will depend on whether the artwork/s have been commissioned, exhibited, and acquired, previously loaned, or acquired with no further connection. Not all subsections will be relevant or hold information; this will depend on the amount of information supplied by the artist, institutions, and NGCA staff connected to the artwork/exhibition. It was expected that all subsections would not be completed; this would depend on the nature of the artwork.

Both members of staff agreed that the terminologies section was useful, and they understood the terms used. It was observed that understanding may depend on the user's level of knowledge of artwork documentation and contemporary art as some of the definitions still require a level of knowledge to understand. It was noted that using it would require more experience, closeness to the artwork, and consistency of recording than a casual staff member could manage. There are also issues around GDPR, paying people fairly for skilled work, and having continued contact with the person over a sustained period if questions arise on a form. Therefore, the Database is not considered suitable for casual staff with no curatorial experience to use. Both staff members agreed that there were no unnecessary subject fields or over-duplication.

The three main challenges on using the Database identified by NGCA staff would be:

1) Finding the staff or human resource to complete the records both for the timebased media artworks and the existing collection of over 100 artworks (documenting the other collections is outside of the scope of this research) and when new artworks are acquired.

2) Finding the relevant information for the existing time-based media artworks and committing to time to complete the work or supply this information when selling or donating the artwork.

3) Requesting the artist to complete the artist questionnaire may be troublesome, although the two artists who have completed them to date were more than happy to participate in this research and therefore contribute to the documentation of their works.

It was suggested that it would also be useful to check how the Database sits in terms of what is needed for ACE museum accreditation for the NGCA collection in the future. This suggestion has been noted and will be discussed further in the final chapter, section 6.4, areas for future research.

As the NGCA staff feedback and analysis took part late in the research project due to the national lockdown interruptions, it has not been possible to apply the suggestions on how to operate the Database, listed above. One of the nine time-based media artworks has been comprehensively documented ('Come Together' (2020) by Graham Dolphin) which will serve as a read-only template for future Database users with limited documentation experience. The content does not require any change as it suits the nature of the artworks in the current collection, other than to add data field headers to suit the nature of future acquisitions if they are anything other than a digital format. It must be acknowledged that due to the time limitations at the end of this research project, user feedback was collected only from the two core staff members of NGCA. It would have been beneficial to interview at least two casual members of staff to gather and assimilate data following their testing of the Database and how it was received by them. Due to the casual nature of their roles and limited time to carry out duties during exhibition installations, I felt it was not appropriate to ask them to take the time to examine the Database and then provide feedback.

Following positive feedback on the accessibility and ease of use of the Database, I would promote the sharing of the Database template with other similar sized, capacity poor organisations for use in their collections management activities. This can be carried out retrospectively (but taking into consideration the fact that some data may not be located or now accessible). I would also advocate the implementation of the Database for institutions who are embarking on the collection of time- based media artworks, as it serves as a guide on how to carry out collection management activities prior to acquisition or commissioning of works. At the time of writing (2024), Tyne and Wear Archives and Museums, a regional museum, art gallery and archive service across Tyneside, UK, has only two time- based media artworks listed in their collection. Nellie (2013) by Fiona Tan and The Deliverers (2022) by Jeremy Deller sit amongst a vast collection of paintings, photographs and prints, suggesting that they are very new to collecting time- based media. To assist with allaying concerns on how to document artworks, an overview of collections management practices specific to time-based media works with a training session would be the most beneficial method of introducing the Database, as took place with the NGCA staff. Due to the Database template being an Excel document, it is transferable to any institutions that use the Microsoft Office suite of programmes and can be used on and offline.

Having researched time- based media artworks and how they are institutionally catalogued, I discovered that the University of Bristol's Hull Time Based Arts Archive holds a variety of formats from 1984 VHS video to prints which have not yet been fully catalogued, although a

list is available upon request. The Database would be a useful tool to comprehensively catalogue the collection. Although instruction on the collections management of VHS tapes is not covered, guidance from the institutions I have researched, such as the Guggenheim and the Smithsonian can be assimilated and extra documentation fields specific to this format may be included.

An example of an organisation who may benefit from the implementation of the Database is the Locus + Archive, an office- based visual arts organisation, which claims to be the largest archive of time- based media in the UK. The online archive holds works from 55 artists including Stefan Gec, Bruce McLean and Jewyo Rhii. Upon selecting an artwork, you can view excerpts, images and read the contextualising information as well as viewing the artist's name, title of work, date and the owning organisation. There are also links to related information on the artist and their artworks. The entire archive is housed within Special Collections at Newcastle University. I have approached the organisation and the University to inform them of my research and of the functionality of the Database and to enquire if it may be useful to them. I believe understanding how adding the capability to include the documentation of an online archive would be beneficial to further enhance the functionality of the Database as currently, the NGCA Collection is not accessible through an online archive.

As the Database was created as an adaptable, procedural documentation tool, it can be utilised as an in depth or basic logging tool, depending on the nature of the artworks and what is yet to be documented, although thorough and rigorous documentation would always be advocated. Individual tabbed sections can be added or removed, and the guidance sections (Copyright, Terminologies and Links to useful resources) can be added to by the user.

Chapter 6: Conclusion

6.1 Introduction

This chapter concludes the findings and future intentions of this research project. At the start of this thesis, I highlighted that traditional collections management systems are not suitable for recording the many and varied instructions, intentions, and iterations that are essential to ensuring a time-based artwork retains its integrity. The initial aim and starting point of this project (Question 1) was to research existing curatorial practice and guidance, from large, international collecting institutions and consolidate and reorganise the data to suit the care of behaviours of new media artworks belonging to a small, regional gallery within the UK with limited resources. To summarise, the curatorial activities I identified and researched by use of institutional collecting case studies, interactive workshops and seminars, curatorial discussions and current models are listed below:

-Documentation procedures
-Preservation strategies
-Collecting practices
-Presentation and display guidance
-Modes of distribution

Case studies of established collecting institutes as well as data assimilated from participatory workshops with collecting institutions has informed the decision to utilise chosen methods as well as disregarding those that have failed.

The practical aim of this research (Question 2) was to create an economic database for cataloguing and documenting all available material related to time-based media artworks using the five curatorial activities as scope for data collection.

This chapter offers an overview of the original aims of the project and how they evolved to become more refined than the original research question had anticipated. It then abridges the research questions and the resulting findings and how they came to encompass more than what they originally stated as the research advanced quite organically to include five key curatorial activities. The significance and contribution to knowledge section highlights the benefits of the production of the Database to the gallery in answer to the original research questions.

My research drew on collecting institutions and organisations with a focus on documenting, distributing, collecting, presenting, and preserving new media art, while upholding the artists' original intentions. The purpose was to create a time-efficient, cost effective, user- friendly, accessible guide and database for the collection and future distribution of time-based media artworks. The benefits of the creation of a new Database are threefold:

1. It will allay concerns to institutions who would not ordinarily collect time-based media artworks (and it is imperative that works of this genre are collected, documented, preserved and accessible or they will become un-presentable).

2. It will enable staff to be confident when dealing with the five curatorial activities identified as collecting, presentation, documentation, distribution, and preservation.

3. It will encourage institutions to collect time-based media art therefore allowing visitor engagement and further accessibility to and distribution of works in this classification.

6.2.1 Research Question 1: What are the key practical problems of collecting and distributing time-based media artworks?

The key problems identified for collecting and distributing time-based media artworks are specified in chapter 1, section 1.2, the research context, with curatorial specialists Bruce Altshuler and Beryl Graham acknowledging that there is no centralised, universal guidance on the complex and diverse array of activities and strategies required to care for artworks from an institutional perspective. Indeed, Graham recognises that this may be down to the institution itself having a slowly evolving acquisition procedure, resulting in a change of collecting remit being painfully slow. Steve Dietz and Sarah Cook value the acceptance of creating unique strategies of collecting and distribution, with both acknowledging that traditional models are not fit for purpose for artworks with such complex behaviours. From the pioneering work of Jasia Reichardt in 1968 to display and promote the use of technology in the arts, the V&A embarked upon collecting works, specifically prints, created by machine, although the 'Computer Art' Collection at the V&A until recently sat under the 'Prints, Drawings and Paintings' Collection (now the 'Word and Image Department' Collection) suggesting that the curators were not entirely sure where to place the category when they ventured into collecting.

Chapter 2 articulates the issues affecting collecting new media art as a whole, with Domenico Quaranta stating that an assumption is made that new media art is one uniform category of artworks with the same behaviours and curatorial requirements. Pioneering work was undertaken by the Guggenheim, pre turn of the millennium, to reflect this understanding with the institution having dedicated conservators for new media artworks. Not only do the conservators care for its media art collection, but they promote the sharing of knowledge with other collectors and institutions as well as collaborating with organisations to document new findings and best practice.

Another significant factor concerning Steve Dietz, that years of new media art history may be lost, if suitable documentation strategies are not institutionally implemented, is the contribution the artist makes to futureproofing their work. The gallery and the artist should work collaboratively to document the artist's intention and creation of instructions on the five curatorial activities I have identified. The artist interview or questionnaire can provide invaluable guidance for future presentation. Breaking down curatorial categories within the questionnaire provides a logical way of transferring data to relevant sections of the Database.

Question 1 served as the basis to my project with the theoretical research informing the creation of the Database. After initial discussions with the two members of NGCA staff, the

interim curator and technician, it was evident that their frustrations echoed my concerns on the practical problems of collecting and presenting their collection of time-based media art when it came to documentation practices. The key problems identified were due to the lack of a comprehensive documentation system, with both physical and digital data currently being stored disparately, and with no concrete methods of location control for physical components. The lack of clear curatorial guidance for other staff who may be required to document artworks was also a concern, although both staff members felt that they could manage this confidently.

While Graham and Cook created the practical resource and archive, CRUMB, and encouraged discourse on overcoming new media curatorial problems, I have identified the key causes for concern on collecting time-based media from the perspective of a small, regional gallery. The data I collected has been rationalised to suit the requirements of the collecting remit for NGCA and other galleries with similar constraints on their resources.

6.2.2 Question 2: How can small contemporary art organisations use new economic models for collecting and distributing time-based media artworks?

Question 2 investigates how small collecting organisations can use new models for collecting and distributing time-based media works. The body of research collected throughout Chapters 2 and 4 and Appendix 1 not only discuss how organisations use current modes of making artworks accessible and the curatorial activities that take place behind the scenes, but also why collecting and having a well-considered strategy is so important. Preserving work for the future is key for several reasons; historically, educationally and for the love of art. Chapter 2.4 discusses how important it was for audiences to still be able to engage with art throughout the lockdowns during the COVID-19 epidemic by using digital distribution methods and creative engagement activities. Fortunately, many institutions already had a digital offer, with the technology and capacity to keep an online presence while the doors to their galleries were closed, although none could have imagined how having this in place would have become so important.

The key problems of collecting and distributing time-based works were evident from the outset of my practical research with NGCA, the collection, and archives. Six concerns became apparent that the creation of the Database could address going forward:

- 1) Data on all the artworks was not comprehensive enough to cover all five curatorial collections care activities.
- 2) The data that was available was disparate and stored in various locations, both digitally and physically.
- 3) There was no database in existence.
- 4) Guidance and instructions on installation were not documented, they were passed on by word of mouth.
- 5) There was no documentation for location control of artworks either on or off site.
- 6) Only two permanent members of staff at NGCA simply do not have enough time to undertake the research and creation of a new procedural database.

The reasons for comprehensive documentation have been discussed throughout this thesis, covering the identified five curatorial activities in greater detail, specifically sections 4.1, 4.2, and 4.3 with a commentary on the practices previously employed by NGCA. Discussions, research, and calls to action for the urgent necessity of comprehensive documentation has been tackled by academics such as Beryl Graham and Sarah Cook, independent curators, Christiane Paul, and Steve Dietz, as well as collaborative endeavours from the Guggenheim and the Foundation Daniel Langlois. The resulting findings of this research project confirmed that there is no 'one size fits all' approach to cataloguing the artworks of a small collecting institution with limited resources.

The motivation for collecting, and for the future presentation and distribution of artworks to make the most of their accessibility, both online and in real life underpins this whole research project. Although institutions are reticent to admit how much of their collections are mostly kept in storage, it is thought that on average about 5% of museum collections are on display at any time. Contributing factors are of course, display space, deterioration, a backlog of conservation, and sometimes the context of the artwork has been lost. During this research project, it became evident that NGCA have a programme to display as much of the time-based media as possible. A typical show runs for three months in the Collection Space, but the challenge is to find new material as the collection is small in comparison to its other main collection of photography and prints. The reason to curate and exhibit a non-collection artwork for the testing of the Database was informed by the fact that I had contact with the artist, his studio, and the contextualising data to be found was all new, as if starting from scratch with a new acquisition or commission. Undertaking a practical case study not only gave me experience in curating a show and dealing with an artist and their studio, but also enhanced the theoretical work that was researched in preparation for the design of the Database.

The research undertaken to create the Database is the sum of the documented theoretical and practical research, found in this thesis. The starting point for researching an industry standard framework was informed by my previous work using the Spectrum Collections Management Standard. As discussed in section 2.2, at the start of this project, the care of time-based media art was not a consideration. The nine Spectrum Primary Procedures (covered in Table 1) were incorporated into the design of the Database to suit the NGCA collection. By understanding how the gallery operates, their collecting programme, staff and financial resources and skillsets, I was able to refine the data fields of the Database, removing irrelevant content resulting in a user-friendly application. The choice of data fields and guidance tabs is examined in section 5.4.2 covering all eighteen categories from the preacquisition checklist to a terminology guide. The examination of an industry standard Collections Management System that I had used previously confirmed the areas that were lacking for the documentation of time-based media artworks. Through the research undertaken at the Media Preservation Institute, I had identified that the Smithsonian Institution's Time-Based Media online resources would inform the choice of categories I would select. The list of resources (Variable Media Initiative, Computer Arts Society, Tate Projects, and Guggenheim) was vast and complicated to assimilate and the need to analyse and rationalise the collected data was necessary.

The Database was studied by the NGCA interim curator and technician, after all data found and collated for the Cory Arcangel artwork '(2019) was added, resulting in constructive feedback critical to the final design and structure. The findings from reviewing the Database with NGCA staff have been consolidated below with reference to my original design consideration aims, noted in section 5.4.

- The Database should be inexpensive and to run and maintain. Excel does not incur any running costs as the amount of data increases.
- All data will be found on one document. Each artwork will be documented on one Excel spreadsheet and will be clearly named.
- Data fields and reports will be compliant with the Spectrum Standard of collections management.
 The Database data field headers source eight of the pine Drimery Dresedure

The Database data field headers cover eight of the nine Primary Procedures, with the exception of Documentation Planning which was outside the scope of this research project and is considered for areas of future research.

- The Database will be tailored to suit the variable nature of time-based media during its whole lifecycle.
 Following guidance from larger institutions has informed the choice of data field headers within the Database to capture preservation strategies suitable for time
 - based media artworks, with the artist's direct input.
- The Database should be simple to navigate and provide flexibility to adapt to artist and user input when documenting an artwork.
 Additions to the data field headers can be made easily, unlike those of a commercial CMS. Instructions encourage the user to add as much data as possible and not restrict data entry by there being an unsupported field (the Database is interactive, and updates are encouraged).
- The Database must be user-friendly and provide comparable examples enabling the user to feel confident on where to enter the correct data. A read only completed artwork database will be accessible for guidance on how data should be entered.
- The terminology used within the Database cannot be confusing. A terminologies section has been added to the Database for user reference.
- A list of all other contextualising materials that are not stored electronically will be noted as well as their location.
 The Contextualising Materials section allows for location control data to be noted.

The dual purpose of The Time-Based Media Art Curatorial Guide and Database serves as a guide and cataloguing system in one document, with guidance following a real-time format, from the pre- acquisition stage to the safe long- term storage of the work.

6.3 Contribution to knowledge

The creation of The Time-Based Media Art Curatorial Guide and Database was the primary outcome aim of this research project. Interrogating Question 1 provided the groundwork for

the answer to Question 2. The significance of my research and the production of the Database was firstly, to rationalise the vast amount of literature, guidance, surveys, schemas, and models in wider institutional use, to produce an economic, user friendly, working cataloguing and documentation system and user guide. Creating the Database was a timely reaction to NGCA's relocation from their city centre site to a purpose-built gallery space at the National Glass Centre in 2018 when I was leading on cataloguing and condition checking the collection. It was apparent that, although there had been attempts to catalogue the collection, even the elemental task of having an inventory was not up to date.

The Time-Based Media Art Curatorial Guide and Database, specifically for NGCA and small, regional galleries that operate under the pressures of similar limited resources, advocates the collection of time-based media artworks, and assures the staff capabilities of handling the five identified curatorial activities. Following feedback from NGCA staff, it has been recognised that casual staff with no previous curatorial experience would require training prior to data input. As of October 2023, there is uncertainty around the relocation of the NGCA gallery due to the imminent closure of the National Glass Centre, and as such, an opportunity to create a comprehensive inventory of works and to thoroughly document the collection presents itself prior to the move. One of the requirements for ACE Accreditation specifies that "The museum must have plans to improve its collections documentation and documentation systems." (ACE, 2023) Currently, the thorough documentation of the whole NGCA collection is of paramount importance as it takes time and as noted by both staff in their feedback, is a stretch on resources. The implementation of the Database can offer a tool to future proof the collection during the relocation of NGCA.

The unique benefits to small, regional galleries identified through the creation of the Database, and feedback from NGCA staff are as follows:

- All documentation for each artwork can be found in one place, which prevents loss of important data.
- The user has control over the data field headers, which can be changed and updated to reflect the inclusion of further forms of new media art, unlike existing CMS.
- Guidance is provided on the Database, in a real time format, on how to document the artworks and where to find the data that should be included.
- Guidance on the theory behind why artworks should be documented thoroughly serves as an educational tool.
- A completed version of the Database will be available for users to follow as a template.

Time, knowledge, and budgeting resources are issues that have prevented documentation previously being undertaken at NGCA. With technological obsolescence being the main threat to the future presentation of the collection, it is vital that a documentation plan is implemented. Integral to meeting the aims of this research project was the design of a new economic Database to undertake retrospective and future documentation work. The groundwork has now taken place which will ease the strain on staff time resources.

6.4 Areas for future research

As noted in Chapter 5.5, understanding how the Database can be used in preparation for ACE museum accreditation for the NGCA collection is an area for future consideration. As the Spectrum Primary Procedures (which are the basic requirement from ACE to be documented in order to apply for accreditation) underpin the structure of the Database, it is placed in a good starting position, although extra procedures may be required, such as:

- Use of collections
- Emergency planning
- Valuation
- Collections review
- Regular condition checking and technical assessment
- Documentation planning

As mentioned in the introduction to this chapter, as the original plan to locate and comprehensively catalogue the physical archive at NGCA became an impossibility, this area of research is still of interest to me. Physical documentation storage can become a 'belt and braces' defence strategy when faced with external threats to digital resources. Curator and new media researcher, Rene Alberto Garcia Cepeda is an advocate of storing documentation physically after conducting a case study on Laboratorio Arte Alameda's Priamo Lozada Documentation Centre Mexico City. The documentary store was founded in 2001 and contains physical material from every exhibition staged. Cepeda outlines four advantages of physical over digital, one such reason being the threat of earthquakes in the location of where the gallery is situated. Following on from the digital documentation of the NGCA collection, and after having seen the disparate and uncatalogued storage of the physical archive firsthand, how it should be stored securely and documented is a cause for concern. With the recent announcement (early 2023) of the relocation of the National Glass Centre operation, encompassing Northern Gallery for Contemporary Art, the need for the implementation of an archival strategy is of great importance and would complement the outcome of the work undertaken throughout this project.

Another factor that advocates the use of physical storage is the threat of cyber-attacks. Academic institutions are often targeted by attackers which results in disruption to students and staff alike. Further to the external threat of cyber-attacks that target individual organisations are electromagnetic pulse (EMP) weapons that can cause huge collateral and infrastructural electrical damage. Although EMPs have no known adverse effect on living organisms, they can destroy or short circuit commercial computer equipment and communications systems. Institutions whose methods of data storage is by digital means only should consider implementing the risk of an EMP attack into their risk assessments and disaster recovery strategies as the damage can be irreversible. The use of digital vaults to safely archive, store and protect data can provide an extra layer of security, although they can be expensive and the impact upon the environment of continually running servers contribute to greenhouse gas emissions and direct toxic endangerment to people through the use of ewaste disposal.

Another area of global environmental concern which became prominent towards the end of my research, is the NFT (Non-Fungible Token) phenomenon, a contentious topic of discussion on social media, between colleagues and fellow researchers and often in art newspaper headlines. It would be remiss not to have explored the art branch of NFTs which can include abstract art to memes from an institutional, curatorial perspective. The very title of this digitally based type of artform or asset, meaning unique and unable to be replicated, suggests that they require a specific and unique strategy of care if they are to be collected responsibly and within the same context as a conventional art collection. As NFTs are relatively new (first created in 2014 but reaching an almost frenzied fetishisation in 2021) and it has taken upwards of sixty years to formulate plans for the care of time-based media, there is an urgency for this research to be investigated. NFTs can be presented in two types of galleriesin person galleries, such as London's Quantus Gallery and metaverse galleries, such as Spatial. While the in-person galleries can present the artworks for sale and exhibition purposes in real life, how would a gallery or institution start to understand how to collect these artworks? As the Guggenheim and the Centre Pompidou are already collecting NFTs, their display and collection is a topic ripe for discussion. Yet Guggenheim and Pompidou are already collecting NFTs.

Digital technology has progressed in the six years since I started this research project, and the use of artificial intelligence in generating and distributing art has increased. This has prompted debate on whether AI can be defined as art and how artists can protect their intellectual property when AI uses copyrighted works to generate an artwork, mostly created without the artist's consent. Within the context of my research, the documentation and safe storage of AI works, specified as such, is a new and highly debated area of research. Within the scope of this thesis, NFTs and AI artworks have not been covered due to not being collected by NGCA and are not currently included in the Collections Development Policy remit.

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Appendices

Appendix 1: Curatorial Guidance

Issues	Checklist of considerations PRIOR to acquisition				
Curatorial:	Does the material fit the acquisitions policy: Quote relevant paragraph				
	reference. Is it of the appropriate quality for its purpose?				
	Curatorial time to process and accession material: Number of				
	days and confirmed with Line Manager				
	Provenance: spoliation, bona vacantia, endangered species.				
	Licence Requirements: firearms/explosives, bird's eggs, and other Licence/ Permit requirements.				
	Donor's ownership of donation checked: is the donor the legal owner and are they have the right to transfer ownership to GM				
	COPYRIGHT: who will own this after procurement?				
H&S Issues	Toxins, radioactivity, lifting, handling etc. cite anything specific or known.				
Research	Research potential and quality for purpose (also discussed with Research Manager – cite officer contacted).				
L&A	Learning & access potential (also discussed with L&A – cite officer contacted)				
Conservation	Environmental requirements				
	Packaging for transport and storage				
	Checking stability of items PRIOR to agreement to acquire, infestations.				
	Duration required in Isolation Room				
	Check with Conservation – cite officer				
	Freezer – duration required				
	Check with Conservation – cite officer				
Collections	Check for duplicates etc, inventory, data entry, object marking.				
Management	Contractor required to assist?				
	Assistance from Inventory/Documentation required? Cite officer contacted				
Storage	Storage space with appropriate conditions identified? Cite officer contacted				
Transport	Getting the items to us: internal transport or external transport. Cite officer contacted				
Photography	Photography requirements? – for cataloguing only				
Display if grant funded	Marketing/press coverage/display labels etc.				

Table 12. Glasgow Life. Table to illustrate the factors that should be taken into consideration prior to submitting a new proposal. Table created by Georgia Smithson (2018).

Table 12 (above) demonstrates the factors that should be taken into consideration prior to submitting a new proposal. This information was sourced during a face-to-face interview with curators Katie Bruce and Martin Craig, from the Gallery of Modern Art (GOMA), Glasgow in

2018. This also provides a framework for curators to take into consideration the current acquisitions policy, conservation, and collections management activities relevant to my research.

Report	No. of data entry fields	Data required (further detailed data requirements are incorporated into these field
Structure and condition report	22	headings) Label info, duration, description, components, media, display equipment, sculptural elements, packing, other purchases required? Assessment of risks, conservation plan.
Video artwork	25	General info, component info, production history, condition assessment, assessment of risks.
Audio artwork	21	General info, component info, production history, condition assessment, assessment of risks.
Film artwork	22	General info, component info, production history, condition assessment, assessment of risks.
Slide artwork	15	General info, component info, production history, condition assessment, assessment of risks.
Computer-based artwork	25	Presentation parameters, visitor interaction/ participation, structure, computer environment, component info, media, software, assets, condition assessment, assessment of risks.
Computer-based display equipment	99	Inventory, status of equipment, type of computer, provenance, passwords, power equipment, condition assessment, maintenance, servicing, failure, repair, dimensions and packing, risk of obsolescence.
Playback device display equipment	52	Inventory, status of equipment, type, cataloguing info, associated items, provenance, power requirements, condition assessment, maintenance, servicing, failure, repair, dimensions and packing, key ops notes, risk of obsolescence.
Video projectors display equipment	54	Inventory, status of equipment, type, modifications, cataloguing info, associated items, provenance, power requirements, condition assessment, maintenance, servicing, failure, repair, spares and consumables, dimensions and packing, risk of obsolescence.
Screens and monitors display equipment	67	Inventory, status of equipment, type, modifications, cataloguing info, associated items, provenance, power requirements, condition assessment, maintenance, servicing, failure,

		repair, spares and consumables, dimensions and packing, risk of obsolescence.
Film projectors display equipment	62	Inventory, status of equipment, type, modifications, cataloguing info, associated items, provenance, power requirements, condition assessment, maintenance, servicing, failure, repair, spares and consumables, dimensions and packing, risk of obsolescence.
Slide projectors display equipment	62	Inventory, status of equipment, type, modifications, cataloguing info, associated items, provenance, power requirements, condition assessment, maintenance, servicing, failure, repair, spares and consumables, dimensions and packing, risk of obsolescence.

Table 13. Breakdown of the hand-written, free text data that is required to document components of a timebased media artwork (although not all may be part of one artwork). (2020).

Data for table 13 (above) is extracted from: Smithsonian Time-based Media online resources, <u>https://www.si.edu/tbma/resources</u>

Guggenheim Iteration Report, <u>https://www.guggenheim.org/wp-</u> <u>content/uploads/2015/11/guggenheim-conservation-iteration-report-2012.pdf</u>

Tate Software-based Art Preservation forms, <u>https://www.tate.org.uk/about-us/projects/software-based-art-preservation</u>

Curatorial/ real- time guidance documentation sections	Source and reference to page numbers within thesis. Links to online resources can be found in Appendix 1	
 Pre-acquisition checks: To determine if it is viable for the gallery to acquire the work. Research artwork Explore fabricators/ artist Assemble expertise Determine deliverables Condition assessment Determine acquisition, installation, and maintenance costs Negotiation 	 Carl and Marilynn Thoma Foundation Acquisition Flowchart (p.70) Matters in Media Art guidelines (p.43) Patricia Falcao presentation at MAPI (p.92) DOCAM Documentation Model (p.41) Spectrum Acquisition and Accessioning standard (App.1) Smithsonian Incoming Acquisition Report (App.1) Smithsonian Artwork Pre-Arrival Master List (App.1) MAPI Curatorial Checklist (p.44) 	

	• The Metropolitan Museum of Art Acquisition Procedures (App.1)
 2. Registration: Where the primary data is stored. Artist Title of work Date of work Accession number Medium Components (with further detailed data to be added in Technical Section) Brief description of the artwork Duration of playback Edition number Artist supplied materials (edition proof, edition boxes etc. manuals, diagrams, instructions, other materials, sculptural elements, props etc.) 	 Smithsonian registration online resources (App.1) Old NGCA reports (App.1) Collections Trust/ Spectrum framework (App.1) Guggenheim iteration report (App.1) The Metropolitan Museum of Art Acquisition Procedures (App.1) Spectrum Object Entry standard (App.1) MAPI Curatorial Checklist (p.44)
3. Reports: Object entry form, condition report.	 Collections Trust/ Spectrum templates (App.1) Tate Time-based Media guidelines (App.1) DOCAM Documentation Model (p.41) Tate Software-based Artwork Conservation Report (App.1) Smithsonian Time-based Media Condition Report (App.1) The Metropolitan Museum of Art Artwork Identity Report (App.1)
 4. Technical: All components and accessories of the artwork are listed (an inventory). User manuals or notes from technicians Illustrations, photographs and videos from previous iterations or artist instructions Certificate of authenticity Warrantees and manuals Copies of file locations and types of file Testing checks 	 Guggenheim iteration report (App.1) Matters in Media Art guidelines (p.43) Carl and Marilynn Thoma Foundation Acquisition Flowchart (p.70) Smithsonian TBMA Installation Parameters (App.1) Tate Software-based Artwork Conservation Report (App.1) MAPI Curatorial Checklist (p.44) The Metropolitan Museum of Art Artwork Identity Report (App.1)
 5. Installation: Specifications for installation from artist or curator are noted here. Notes on preparation of gallery Instructions on parameters Measurements Positioning of artwork and equipment Lighting Sound levels 	 Guggenheim iteration report (App.1) Guggenheim Time-Based Media Resources (App.1) Matters in Media Art guidelines (p.43) Smithsonian TBMA Installation Parameters (App.1) Smithsonian Installation Planning Guide (App.1)

 Visitor signage Health and safety Documentation of the installed artwork 	• The Metropolitan Museum of Art Artwork Identity Report (App.1)
 6. Artist questionnaire: The intentions of the artist for all five curatorial activities are stored here. Concept Audience Installation Technical details and specifications, Collaborators and contributors Exhibition content Evaluation 	 Daniel Langlois Foundation Artist Interviews (App.1) Patricia Falcao presentation at MAPI (p.92) The Metropolitan Museum of Art Artist Questionnaire (App.1) Clarissa Chikiamco, curator of video art at the National Gallery, Singapore (p.98) DOCAM- Caitlin Jones guidance (p.28) EAI Artist Interviews (App.1) MAPI Curatorial Checklist (p.44)
 7. Exhibition: Display parameters Decisions Agreements Risk assessments Daily maintenance Responsibility for fixing/ updating 	 Guggenheim iteration report (App.1) Rene G Cepeda- The Manual for the Curation and Display of Interactive New Media Art (App.1) LIMA Moving Image and Digital Art Distribution (p.25) The Metropolitan Museum of Art Artwork Iteration Report (App.1)
 8. Contextualising materials and audience response: Exhibition literature or publications can be saved here digitally if available. Gallery text Labels and interpretation text Feedback Comments Engagement with audience Marketing assets (digital and physical) 	 Capturing Unstable Media Conceptual Model (CMCM) (App.1) Rene G Cepeda- The Manual for the Curation and Display of Interactive New Media Art (App.1) MAPI Curatorial Checklist (p.44) The Metropolitan Museum of Art Artwork Identity Report (App.1)
 9. Preservation: Previous maintenance checks noted here. Guidance on how to handle, maintain and service the components stored Storage and packing/ unpacking instructions noted Artist guidance from the artist questionnaire is logged here 	 DOCAM Documentation Model (App.1) Guggenheim Preservation Models (App.1) Variable Media Network (p.32) Tate TBM Conservation- Emulation Report (App.1) Smithsonian Treatment Log Template (App.1)
10. Iteration reports: Previous iteration reports should be saved here to aid with future installation specifications.	 Smithsonian Iteration Report (App.1) Guggenheim Iteration Report (App.1) Joanna Phillip Reporting Iterations Documentation Model (App.1)

	 Tate TBM Conservation Emulation Report (App.1) The Metropolitan Museum of Art Artwork Iteration Report (App.1)
11. Correspondence: Emails between gallery staff and artist or studio, notes from conversations.	 Patricia Falcao presentation at MAPI (p.92) Variable Media Network (p.32) Rene G Cepeda- The Manual for the Curation and Display of Interactive New Media Art (App.1)
12. Physical material and its location: Location of stored components noted here. Location and movement control. Where physical materials are available to be archived, the location should be logged. A labelled archival box or folder should be used for this purpose and stored on the premises in a specific, noted location.	 Rene G Cepeda- The Manual for the Curation and Display of Interactive New Media Art (App.1) Spectrum Location and Movement Control Standard (App.1) MAPI Curatorial Checklist (p.44)
13. Loans in: Loans to the gallery: Paperwork for any artwork loans to the gallery is saved here.	 Spectrum Loans In (Borrowing Objects) Standard (App.1)
14. Artwork exit: Paperwork for the artwork leaving the gallery for any reason is stored here.	 Spectrum Object Exit Standard (App.1)
15. Loans out: Paperwork for any artworks loaned from the gallery to other institutions is stored here.	 Spectrum Loans Out (Lending Objects) Standard (App.1)

Information / guidance			
16. Copyright	eHive Rights Types (App.1)		
17. Terminologies	 ZKM Collection Search Terms (App.1) C3 Centre for Culture and Communication Foundation Catalogue (App.1) 		
18. Links to useful resources	http://mattersinmediaart.org/ https://www.guggenheim.org/conservation/ti me-based-media https://www.si.edu/TBMA/resources https://www.variablemedia.net/e/welcome.h tml https://www.eai.org/about-eai-faq https://www.tate.org.uk/about- us/projects/software-based-art-preservation		

https://collectionstrust.org.uk/spectrum/prim
ary-procedures/

Table 14. Structure of the Database showing sources used to assimilate data. Table created by Georgia Smithson (2022).

Links to sources from Table 14. (All websites accessed between May and June 2023)

- Spectrum Acquisition and Accessioning standard <u>https://collectionstrust.org.uk/resource/acquisition-and-accessioning-the-spectrum-standard/</u>
- Collections Trust/ Spectrum framework
 <u>https://collectionstrust.org.uk/spectrum/primary-procedures/</u>
- Spectrum Object Entry standard <u>https://collectionstrust.org.uk/resource/object-entry-the-spectrum-standard/</u>
- Spectrum Location and Movement Control Standard <u>https://collectionstrust.org.uk/resource/location-and-movement-control-the-spectrum-standard/</u>
- Spectrum Loans In (Borrowing Objects) Standard <u>https://collectionstrust.org.uk/resource/loans-in-borrowing-objects-the-spectrum-standard/</u>
- Spectrum Object Exit Standard <u>https://collectionstrust.org.uk/resource/object-exit-the-spectrum-standard/</u>
- Spectrum Loans Out (Lending Objects) <u>https://collectionstrust.org.uk/resource/loans-out-lending-objects-the-spectrum-standard/</u>
- Smithsonian Incoming Acquisition Report
 <u>https://www.si.edu/tbma/resource/acquisition-condition-report-template</u>
- Smithsonian registration online resources <u>https://www.si.edu/tbma/registration</u>
- Smithsonian Time-based Media Condition Report <u>https://www.si.edu/TBMA/resource/condition-report-template</u>
- Smithsonian TBMA Installation Parameters
 <u>https://www.si.edu/tbma/resource/installation-report-template</u>
- Smithsonian Installation Planning Guide <u>https://www.si.edu/tbma/resource/installation-planning-guide</u>
- Smithsonian Treatment Log Template
 <u>https://www.si.edu/TBMA/resource/treatment-log-template</u>
- Smithsonian Artwork Pre-Arrival Master List
 <u>https://www.si.edu/TBMA/resource/artwork-pre-arrival-master-list</u>
- Smithsonian Iteration Report <u>https://www.si.edu/TBMA/resource/iteration-report</u>

- The Metropolitan Museum of Art Acquisition Procedures
 <u>https://www.metmuseum.org/-/media/files/about-the-met/conservation-and-</u>
 <u>scientific-research/time-based-media-working-group/softward-acquisition-</u>
 <u>procedures.pdf?sc_lang=en</u>
- The Metropolitan Museum of Art Artwork Identity Report <u>https://www.metmuseum.org/-/media/files/about-the-met/conservation-and-</u> <u>scientific-research/time-based-media-working-group/artist-identity-</u> <u>report.pdf?sc_lang=en</u>
- The Metropolitan Museum of Art Artist Questionnaire <u>https://www.metmuseum.org/-/media/files/about-the-met/conservation-and-</u> <u>scientific-research/time-based-media-working-group/software-artist-</u> <u>questionnaire.pdf?sc_lang=en</u>
- The Metropolitan Museum of Art Artwork Iteration Report <u>https://www.metmuseum.org/-/media/files/about-the-met/conservation-and-</u> <u>scientific-research/time-based-media-working-group/artist-iteration-</u> <u>report.pdf?sc_lang=en</u>
- Guggenheim iteration report <u>https://www.guggenheim.org/wp-content/uploads/2015/11/guggenheim-</u> <u>conservation-iteration-report-2012.pdf</u>
- Guggenheim Time-Based Media Resources
 <u>https://www.guggenheim.org/conservation/time-based-media</u>
- Guggenheim Preservation Models
 <u>https://www.guggenheim.org/conservation/time-based-media</u>
- Tate Time-based Media Guidelines <u>https://www.tate.org.uk/about-us/projects/software-based-art-preservation</u>
- Tate Software-based Artwork Conservation Report <u>https://www.tate.org.uk/about-us/projects/software-based-art-preservation</u>
- Tate TBM Conservation- Emulation Report <u>https://www.tate.org.uk/about-us/projects/software-based-art-preservation</u>
- Daniel Langlois Foundation Artist Interviews <u>https://www.fondation-langlois.org/html/e/liste.php?Selection=DIV+ent</u>
- EAI Artist Interviews
 <u>https://www.eai.org/resourceguide/exhibition.html</u>
- Rene G Cepeda- The Manual for the Curation and Display of Interactive New Media Art <u>https://inmamanual.wordpress.com/</u>

- DOCAM Documentation Model
 <u>https://www.docam.ca/en/presentation-of-the-model.html</u>
- Joanna Phillip Reporting Iterations Documentation Model <u>https://revistaharte.fcsh.unl.pt/rhaw4/rhaw4_print/JoannaPhillips.pdf</u>
- eHive Rights types
 <u>https://help.ehive.com/rights-types-available-in-ehive.htm</u>
- ZKM Collection Search Terms
 <u>https://zkm.de/en/collection-archives/collection</u>
- C3 Centre for Culture and Communication Foundation Catalogue <u>http://www.c3.hu/c3/publications/index_en.php?type=katalogus</u>

Table 15:	Comparison of data field headers used on collections documentation from eHive, Smithsonian and the Database.			
Curatorial category	eHive. Term used. (Where to find data field)	Smithsonian. Term used. (Where to find data field)	The Database. Term used. (Where to find data field)	Comments
Registration	Object number (Detail Fields)	Accession number (Accession memo worksheet)	Accession number (Registration)	The unique number that identifies the object/ artwork distinguishes it and will make it easier to search for on the database
	Accession date (Detail Fields)		Date of accession (Registration)	The date that the artwork formally entered the collection
	Name/ title (Detail Fields)	Artist/ title (Accession memo worksheet)	Artist/ title (Registration)	The name of the artist/ artists/ collaboration. The title of the artwork.
	Collection type (Detail Fields)		Collection/ Sub- collection (Artwork Entry Form)	For use if part of a series of works.
	Number in series (Detail Fields)	Edition (Accession memo worksheet)	Edition number (Registration)	Note here the number of artwork if it belongs to a series.

			T	
	Controlling institution (Detail Fields)	Credit line (Accession memo worksheet)	Transfer of title (Artwork Entry Form)	Who legally owns the artwork?
	Collection type (Detail Fields)		Collection (Artwork Entry Form)	Overall classification of artwork
	Object type (Detail Fields)	Medium (TBMA Installation report template)	Medium (Registration)	What is the artwork made up of?
	Dublin Core (Detail Fields)			eHive- From 'Physical Object' option in the dropdown menu choices are: Collection, interactive resource, moving image, physical object, sound, still image, text.
	Description (Detail Fields)	Description (general description of what the artwork looks like, how it is displayed, its behaviours) (TBMA Installation report template)	Description of the artwork (Registration)	Use this space to note any information which tells the story of the object such as dates, collaborations, basically- if you were wanting to know more about the object, what would you want to know about it?
	Public description (Detail Fields)		Description of the artwork (Installation)	The description of the artwork you would like the visitor to see
Contract			Contract or loan agreement (Registration)	
Artist/ Collaborators	Creator or maker (Detail Fields)	Credit line (Accession memo worksheet)	Collaborators (Registration)	Artist/ artists/ collaboration
	Creator or maker role (Detail Fields)	Credit line (Accession memo worksheet)	Collaborators (Registration)	What type of artist do they identify as? Note the work the

				collaborator has
				undertaken
	Date made	Date (Accession	Date of work	Date of artwork
	(Detail Fields)	memo worksheet)	(Registration)	creation
	Place made		Research (Pre-	Country/ countries
	(Detail Fields)		acquisition checks)	where the artwork was made
	Place notes (Detail Fields)		Research (Pre- acquisition checks)	Expand on the location of production- organisations/ manufacturers/ studios
	Production notes (Detail Fields)	(Artist questionnaire) Separate to the accessible documents)	(Artist questionnaire)	Note from artist questionnaire
Location Control	Location history (Detail Fields)	(Iteration and condition reports)	(Object entry form, Pre- acquisition check guide)	Where has the artwork been located prior to this collection?
	Location history notes (Detail Fields)	(TBMA Installation planning guide)	Location control (Preservation)	Note where the artwork is displayed, loaned, or stored
	Current location (Detail Fields)	(Installation report)	Location control (Preservation)	Where is the artwork now? In storage, on loan or on display?
Physical components	Item count (Detail Fields)	Equipment/ Display (TBMA Testing and Acceptance Form)	Components (Technical)	How many components make up the object?
	Item count notes (Detail Fields)	Equipment/ Display (TBMA Testing and Acceptance Form)	Digital components (Technical)	Note each component and assign a number
	Part ID number (Detail Fields)	Equipment/ Display (TBMA Testing and Acceptance Form)	Components (Technical)	Note the catalogue number of the part/ component
Medium	Medium/ materials (Detail Fields)	Equipment/ Display (TBMA Testing and		What are the physical materials of the

		Acceptance		artwork and its
		Form)		components?
	Measurements	Run time	Duration	Measurements of
	(Detail Fields)	(Condition Report)	(Registration)	physical components
Condition	Current condition description (Conservation)	(Condition Report/ Incoming Acquisition Condition Report)	(Condition Report)	
Concept	Significance (Detail Fields)	(Artist Interview)	(Artist Questionnaire)	What historical, contextual, or geographical significance does the artwork represent? How does the artist see the work?
	Subject association	(Artist Interview)	(Artist Questionnaire)	What is the artwork related to contextually?
	Subject and association keywords (Detail Fields)		(Metadata)	Note here key search words (tags)
Cataloguing notes	Catalogued date (Detail Fields)	All reports	All reports	Date of entry of documentation.
	Cataloguer (Detail Fields)	All reports	All reports	Name of person completing the documentation
	General notes (Detail Fields)		(Contextualising materials and audience)	Hyperlinks to online references, notations of physical references and where they are stored
Digital Preservation: Preservation format		(TBMA Testing and Acceptance Form)	(Technical)	The format the preservation copy of the artwork is held on
Access format		(TBMA Testing and Acceptance Form)	(Technical)	The format the access copy of the artwork is held on
Access format		(TBMA Testing and Acceptance Form)	(Technical)	The format the exhibition copy of the artwork is held on
Other format		(TBMA Testing and Acceptance Form)	(Technical)	Any other back copies noted here

			Artist supplied	Edition boxes, proof
			materials	of authenticity
			(Condition	Incoming acquisition
			report and	condition report,
			artwork entry	iteration report,
			, report)	condition report
Artist		(Artist	(Artist	The artist's account of
questionnaire		interview)	questionnaire)	the curatorial
•				activities that should
				be documented for an
				artwork to ensure its
				longevity and that the
				integrity of the
				artwork is not lost
				due to technical
				obsolescence
		Statement of	(Artist	Based on views of
		significance	questionnaire)	artist, curator, and
		(Artist		conservationist. Aim
		interview)		to guide future
				decisions about the
				ongoing care and
				display of the artwork
Diagrams/		Installation	Installation	Drawings or plans of
plans		images	guidance	connection and
		(Iteration	(Installation)	installation
		reports)		instructions
Risk	Risk and	(ТВМА	Risk assessment	Key risk areas of
assessments	handling	Installation	(Installation)	deterioration or
	(Conservation)	Planning Guide)		obsolescence of
				components noted
				here
Handling and	Handling	(ТВМА	(Preservation)	Guidance from artist
storage	details/ storage	Installation		on how to handle the
instructions	details	Planning Guide)		artwork, how it
	(Conservation)			
Contract all de	Ciercifica and I			
-	-	•		
mormation	-	interview)		
				Story of the artwork
			questionnancy	
Contextualising	(Conservation) Significance and subject and association description (Detail Fields)	(Artist interview)	(Contextualising materials and audience. Artist questionnaire)	should be stored safely, how to pack and which transport companies to use Information from the artist that tells the story of the artwork

Table 15. Comparison of data field headers used on collections documentation from eHive, Smithsonian and the Database. Table created by Georgia Smithson (2023).

Appendix 2: Artist questionnaire

The capitalised bold text illustrates where the data should be added to the Database.

Graham Dolphin, Come Together, 2020

Date: 6 July 2022

Received by email.

Concept- CONTEXTUALISING MATERIALS (8)

Your work is heavily influenced by popular culture, can you give us a background on how you became interested in this?

Growing up in the 1970s and 80s in a small provincial midlands town in the UK access to culture was limited. The only real culture was through objects such as books, records, films (VHS video tapes) and TV, I didn't visit an art gallery until I was 16 on a school trip. I have therefore never made any assumptions about what is high and low in culture, the format I first experienced any form of culture had a universal form, the vessels that held it all being equal and mass produced. I am interested in how the use of popular culture in whatever form shapes identity and values, how it

can be read as a substitute for religious belief where is echoes many of the tropes and feelings found in religious rites.

How did the concept of the original 2013 artwork arise? - **CONTEXTUALISING MATERIALS (8)** Come Together is the first film work I made from my own filmed footage and came through a short residency with a music festival in the North East of England. I was given access to all areas of the weekend festival where I filmed close up the performers and audience. While filming I didn't know what the film would be but I knew it would focus on the area between the performance the audience. By focusing in close up to the faces of individual performers and audience and slowing the film down there are moments of abandonment and euphoria in both. By positioning the film on two screens the viewer, one for performer, one for audience with them facing each other the connection is evident with a ritual like bond between them.

Were the bands interested in your project and the artwork that resulted from it? How did they respond to the theme of idolatry?- *CONTEXTUALISING MATERIALS (8)*

I didn't talk to any of the bands directly as they were concentrating on their work but I did gain an insight into how the performer becomes another entity as they take the stage. It was evident that they took on a different character when stepping out on to the stage.

What do you hope that your audience will take from the artwork? Does the concept need to be described to them?- *CONTEXTUALISING MATERIALS (8)*

I would hope this work, and all of work, is easily understood, with all the information you need to get something from it there in its making. There are different layers of understanding if you know some of the performers in the film but it is enough just to know that there is an audience and a performer to see what is 'happening'. Come Together is different to many of the films I've made as it has more of an atmosphere and is less formally structured. There is a level of voyeurism in the cameras gaze which is emphasised with the lingering, slow motion that I hope the viewer becomes aware of which can feel uncomfortable but is also quite hypnotic.

Why did you take the decision to have no audio considering the musical theme?- **CONTEXTUALISING MATERIALS (8)**

Any sound would have been a distraction to the images and pulled the viewer into another feeling. Sound and image work so closely and can easily slip into manipulative devices. It also felt wrong to and arbitrary to add anything from what I had filmed. I also liked the notion of silent musical performance with the concentration being on the face not what sound is produced.

A lot of your works deal with pop culture and idolatry, does this artwork form part of a wider range of artworks?- *CONTEXTUALISING MATERIALS (8)*

Yes it's very much in keeping with other ideas in my work around fan, audience, receiver and popular culture. The fan is very much evident in this work, you actually see them watching, whereas it is implied in most of my other work.

Is there anything else you'd like noted about the concept and reaction to the work?-CONTEXTUALISING MATERIALS (8)

The different in size of the image has been interesting to see – the original version was projected as cinema size screens whereas the updated version has been on large monitor screens. I was worried the power would be lost at a smaller scale within the smaller, more intimate room of the NGCA collection space afforded a longer and more comfortable viewing time.

Audience

Do you have any existing documentation of your own that you'd like to share with us that would assist in the contextualisation of the artwork?- **CONTEXTUALISING MATERIALS (8)** How do you wish the gallery to measure audience engagement/ reaction to the artwork? *Only if it is something the gallery already do.*

Installation

Can you provide an illustration/ map of how the equipment should be placed?- **INSTALLATION (5)** Please refer to installation photos

Do you have any preference on the equipment to be used? Projectors, speakers, playback devices or are they specific only to your artwork?- **INSTALLATION (5)** No

If specific-

do you have manuals for the equipment?

Do you have contact information for the manufacturers?

Does the equipment have a warrantee/ guarantee?

Can you say something on how the synchronisation is being achieved? Running from two mac mini's – please refer to Dean's method for synching these

Can you envisage other ways of showing the work?- *INSTALLATION (5) The two versions, monitor and projection would be the preferred methods* Do you prefer to write your own contextualising information (labels, programme write ups etc?) *No*

Would you prefer to sign off contextualising information before presentation/ publication? *Yes*

Technical- How was the work made?- TECHNICAL (4)

Why did you update the work for 2020? It felt right to revisit the film as it was being presented in a different format.

How is it different to the original version?- **TECHNICAL (4)** It's a slightly longer edit, with more footage added to help contextualise the stage and audience setting which helped to give more atmosphere to the film. Where are the master-copy and exhibition copy currently stored?- **TECHNICAL (4)** I have all of the original footage and finished working copies on a Hard Drive.

Which equipment was used for the recording of the artwork?- **TECHNICAL (4)** One camera a Canon XHA-1

Which file format(s) were used for recording and editing?- **TECHNICAL (4)** AVI

What editing platform was used and how were they finally mastered?- **TECHNICAL (4)** Adobe After Effects

Can you provide a comprehensive list of the media materials you plan to supply as part of the acquisition to our collection? (If applicable)- **TECHNICAL (4)** The two MP4 films are supplied on USB flash drives

What are the formats of the current masters and the exhibition media?- **TECHNICAL (4)** *MP4*

Is the artwork available to view on Vimeo/ YouTube etc? If so, could you provide links. - **TECHNICAL** (4)

There is a small edit of the original presentation at NGCA – <u>http://www.grahamdolphin.co.uk/come.html</u>

Is the work editioned, and if yes, can you let us know which edition we are acquiring?- **TECHNICAL** (4)

The work is an edition of 3 with one Artist Proof – NGCA has the artist proof copy

Can you tell us if any editions of this work are owned by other galleries/ institutions? *None as yet*

Exhibition Content

Is this artwork intended to be displayed alone, as part of an exhibition of your own work, or as part of a joint exhibition?- **EXHIBITION (7)** It can be any of those contexts

For future presentation, in what context would you prefer your artwork to be exhibited if part of a joint exhibition?- **EXHIBITION (7)**

It would need to respect the scale and space needed to present the work but it could be presented within other works if these and the technical conditions are adhered to.

Is there any reason why, how, or where you would not accept your artwork to be exhibited?-**EXHIBITION (7)**

I would like to be consulted to check if the work was being presented in the right context beforehand to make a judgement on it being exhibited.

Preservation

Do you have your own personal guidance on how the components/ equipment should be stored while not on display?- **PRESERVATION (9)**

I would recommend making a back up copy of the files

Can you provide us with any of your own conservation documentation?

NA

In the event of the equipment you have supplied breaking down do you approve of the gallery using stock equipment for future presentation? (if applicable) NA

Is any of the equipment specific to the integrity of the artwork?- **PRESERVATION (9)** No

Could you replicate the same intention of your artwork using different software/ equipment?-**PRESERVATION (9)**

Yes

General

Can you provide us with any links to critiques, reviews or commentaries or blogs about the artwork?-**PRESERVATION (9)**

https://www.thecrackmagazine.com/view-editorial/1220

Do you have any physical publications related to the work? No

How do you wish the work to be publicised by the gallery? Are there any social media platforms that you would not be happy with us using? Yes and NO

Installation Spec: Display equipment required: Artwork stored on: Location of copies: Display information for gallery staff: Checks to be made while on display: Loan out stipulation: on loaning out 'a copy' of the digital video file, it must be stated that the file needs to be deleted everywhere upon the loan ending.

Appendix 3: NGCA Staff Feedback

The text below is a direct copy of both completed Database feedback questionnaires from two NGCA staff (July 2023) Participants codes GS1 and GS2.

User navigation

1. Overall accessibility of the procedural database

The database is very thorough and would make for a useful central point of information for collection artworks. The sections are clear but would require a degree of collection management, registrarial or curatorial experience to navigate and understand terminology, purpose and level of information required. The form would likely take a while to populate and full access to information on the artwork, exhibition (if relevant) and artist would be needed which might not always be possible.

2. Ease of use of database

Excel makes it relatively easy to complete sections and add information. All subsections are stored together to reference across. However, there might be issues with excel files corrupting, permissions restricting opening of files or multiple copies accidently being produced which software databases avoid.

3. Ease of navigation to sub sections

Subsection click through works well and is clearly laid out. There are a lot of subsections to click through, some more useful than others.

4. Relevance to artworks

The relevance of the subsections will depend on whether the artwork/s have been commissioned, exhibited, and acquired, previously loaned, or acquired with no further connection. Not all subsections will be relevant or hold information, this will depend on the amount of information supplied by the artist, institutions and NGCA staff connected to the artwork/exhibition.

5. Does the guidance help with understanding the cataloguing process of a time-based media artwork?

The terminologies and links yes, but the links are more time-consuming to delve into.

- 6. Do the terminologies make sense to you?
- Yes, but this may depend on the user's level of knowledge of artwork cataloguing and contemporary art some of the definitions still require a level of knowledge to understand.
- 7. Have any necessary subject fields been omitted?

No

8. Have any necessary subject fields been over duplicated?

No but some fields will be used less regularly than others.

Changes to database

How could the database be improved?

Software databases provide a smoother experience but are subject to costs and subscriptions which NGCA is currently unable to afford. Setup of software databases again is not realistic as is a dedicated member of staff who could manage the system.

For a more analogue database this seems to do a good job however there may be issues with useability such as access to excel sheets, overloading of the excel sheet – hi-res images etc, crashing of excel sheets, accidental duplicating of versions of an excel sheet etc.

Certain permissions will need to be setup for the folder the excel sheets sit within as they contain confidential information such as artist contact details and insurance values.

Other users

Do you think that casual staff would be able to use this basic training?

No – I think the forms would require more experience, closeness to the artwork and consistency of recording than a casual staff member could manage. There are also issues around GDPR, paying people fairly for skilled work and having continued contact with the person over a sustained period if questions arise on a form.

Do you think that casual staff will understand the terminologies?

I think it might be a stretch for casual staff.

Would you be happy to allow a casual member of staff to catalogue an artwork using the database?

I think it might be beyond what is realistic and reasonable for a casual member of staff.

Comments

Please provide any other feedback here.

Some thought would be needed into how the excel sheets are stored together securely, the safety of emailing the forms or saving on laptops or computers, who needs and should have access to the forms, when they need to start being compiled to make sure the data is collected in time and not lost – maybe a sheet of rules or guidance around the process of cataloguing artworks.

The biggest two challenges with the spreadsheet would be firstly finding the staff or human resource to complete the records both for the existing collection of over 100 artworks and when new artworks are acquired. The second challenge would be finding the relevant information for existing collection artworks and committing artist time to fill in blanks or supply this information when selling or donating the artwork.

It would be interesting to see how the database sits against the NGC database and compare usability. Also, it would be useful to test in real life situations, hear the thoughts of artists, lenders and other staff on the form and make sure it reflects the information currently being asked for on loan agreements, artist contract, acquisition forms etc. It would also be useful to check how the database sits in terms of what is needed for museum accreditation for the collection in the future.

Other organisations in the North East of England such as Mima or TWAM could be contact to discuss their processes, experiences and review the database as required from these conversations.

User navigation

- 1. Overall accessibility of the procedural database: Very easy, well laid and thought out
- 2. Ease of use of database: Very easy
- 3. Ease of navigation to sub sections: Very easy
- 4. Relevance to artworks: Can be used for both digital as well as other works

5. Does the guidance help with understanding the cataloguing process of a time-based media artwork? Yes

- 6. Do the terminologies make sense to you? Yes
- 7. Have any necessary subject fields been omitted? No
- 8. Have any necessary subject fields been over—duplicated? No

Changes to database

How could the database be improved? N/A

Other users

Do you think that casual staff would be able to use this basic training? As long as they have an example such as supplied, yes

Do you think that casual staff will understand the terminologies? Yes

Would you be happy to allow a casual member of staff to catalogue an artwork using the database? Yes

Comments

Please provide any other feedback here.

Extremely thought out and presented with and ease of use that will be appreciated especially with the links straight to the sub sections. I also like that it can be used for Time based media but adapted to other works in a collection.

Appendix 4: The Time- Based Media Art Curatorial Guide and Database

An example of how the Database should be populated is illustrated within this section using the artwork, ' \mathfrak{G} ' (2019), by Cory Arcangel. *Image and table labels are noted at the top of each category*.

Interface tab. (Contents page).

The tab titles link the user straight to the desired curatorial or guidance tab.

Name of artist:	
Name and date of work:	
1. Pre-acquisition check guide	A checklist to assess if the gallery has the expertise and infrastructure to present and car for the artwork
2. Registration	Accession number, description, artsist details, name of artwork etc.
3. Reports	Object entry and condition report
4. Technical	Diagrams, components, equipment, testing of artwork
5. Installation	Description, diagrams, parameters, H&S, daily maintenance
6. Artist interview	Artist's intentions captured here for display, storage and preservation. Context and artist information
7. Exhibition	Dates, credits, interpretation, diagrams
8. Contextualising materials and audience	Links to artist, iterations of presentation, audience's intended engagement
9. Preservation	Artist's guidance on failure of components, emulation, migration or death of artwork
10. Iteration reports	Reports of previous iterations
11. Correspondence	Notable email correspondence, agreements etc.
12. Physical material	Where are physical materials related to the exhibition stored?
13. Loans in	Loan contract and agreements
14. Artwork exit	Documentation approving disposal
15. Loans out	Loan contract and agreements
16. Copyright	Guidance on display rights
17. Terminologies	List of terminologies used within the field of time-based media art
18. Links to useful resources	Resources that can provide further guidance
Staff member documenting artwork	
Date	

Tab 1: Pre-acquisition checklist.

The questions are designed to assist with establishing if the artwork is viable to acquire. Does the gallery have the curatorial expertise to display and care for it? Are all components in working order? What is the cost? How will it fit within the collection? What are the expectations and agreements between the gallery and the artist?

Back to contents		
Artist	Cory Arcangel	
Title	@	
Pre-Acquisition Checklist		Add comments here
Research and development	Checks to be made	
If artwork exists		
Research the artwork	Is there existing documentation on the artwork in publications, online, inhouse or at another institution or gallery?	Yes- artist supplied information found in Artist Interview tab
Research the artist/s	Gather background information on the artist/s to assist with contextualising the work- do they work to a theme or main genre or specific oeuvre?	Artist supplied information found in Artist Interview tab
If artwork is yet to be created		
Do we have the expertise to deal with the work?	Plan a discussion with the artist/s around the components and technical make up of the work. A test install of a similar artwork may answer the question.	N/a
What condition is the artwork in?	Are the technical components in working order? How much life do they have left? are the files in a playable condition?	N/a
Determine costs	The cost may not just be that of the artwork. Consider the costs to update components (if the artist is in agreement), the files may need re-writing, the display may require hidden costs for hard materials etc.	N/a
Transport	Consider transport insurance.	N/a file transfer
Presentation- note artist preferences	Catalogue any diagrams, photographs or instructions from the artist.	Artist supplied information found in Artist Interview tab
Storage	Is the storage facility appropriate to the artworks and its components?	N/a file transfer
Maintenance	Who will be responsible for the maintenance of the artwork while on display and in storage?	
Testing and testing timeline		
Ensure all components are present	Is all the equipment there for the artwork to operate properly?	Yes
Test install	A test install helps you understand the functionality of the artwork - does it correspond with what the artist has described it to work? Will the artwork run for the length of time the gallery is open every day? Are there any glittches?	
Check all manuals are present	Will this work for future iterations in house or to other galleries?	None provided
Copy artwork for backup	From artist copy, prepare an exhibition and preservation copy	No backup required- studio will replace file if any problems
Testing timeline	The artwork can be tested over a period of time that will show up any glitches or updates that may affect the playback.	
Accession		
Catalogue the work	Complete the artwork entry report and condition report.	
Location control management	Where will the file be stored while not on display?	
Software copy for backup	Where will the back up file/s be stored?	
Plan conservation/ preservation	Will the artwork stay alive or die? Obsolescence/ migration/ emulation?	
Expectations of artist (negotiation)	To know the software code, equipment and video files they are providing as part of the artwork Know how the artwork will be displayed in the exhibition space.	
	now now the attwork will be displayed in the exhibition space.	

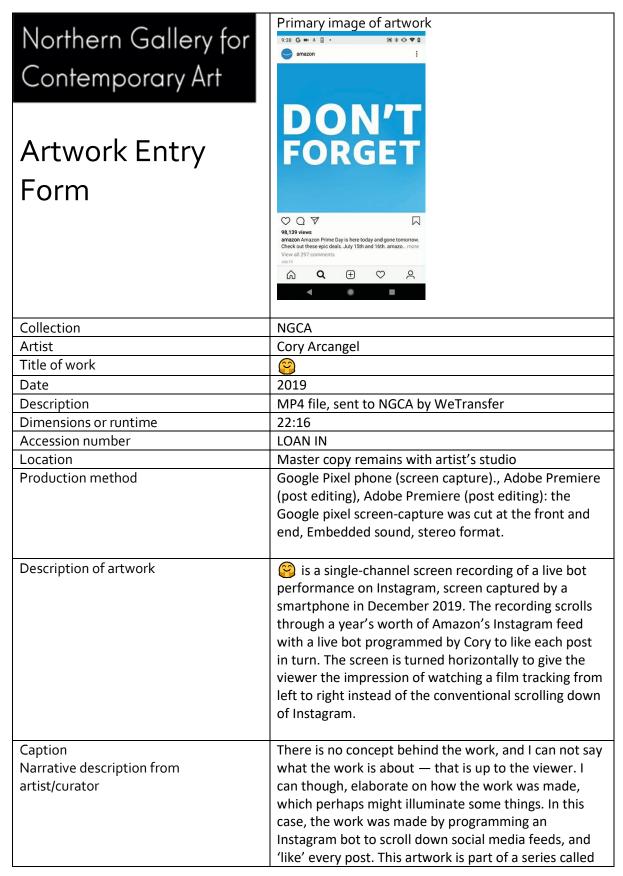
Tab 2: Registration.

This tab captures basic catalogue information on the artwork, components, manuals, and collaborators as well as the contract.

	Gallery found data	Data from artist/ artist studio
Artist	Cory Arcangel	
Title	€ [−]	The emoji is in unicode browser / apple - please see here for reference: https://www.unicode.org/emoji/charts/fu II-emoji-list.html#1f917 (Rute Ventura, Studio)
Date of work	2019	
Accession number		
Date of accession		
Medium	is a single-channel screen recording of a live bot performance on Instagram, screen captured by a smartphone in December 2019	
Components (further detailed information to be added in Technical section)	Artwork was sent as an MP4 file by WeTransfer	
Description of the artwork	is a single-channel screen recording of a live bot performance on Instagram, screen captured by a smartphone in December 2019. The recording scrolls through a year's worth of Amazon's Instagram feed with a live bot programmed by Cory to like each post in turn. The screen is turned horizontally to give the viewer the impression of watching a film tracking from left to right instead of the conventional scrolling down of Instagram.	There is no concept behind the work, and I can not say what the work is about — that is up to the viewer. I can though, elaborate on how the work was made, which perhaps might illuminate some things. In this case, the work was made by programming an Instagram bot to scroll down social media feeds, and "like" every post. The work has no theme. A better question would be, "Does the artwork deal with any controversial subjects". Depends on your reading of the work, and definition of controversial subjects! — Amazon, Instagram, etc., etc.
Duration	22:26	
Edition number	open edition	This artwork is part of a series called Runners, which are works programmed in the API Monkey Runner which is an Android API for programming cell phones. In this series, the code scrolls and likes and scrolls and likes on any social media feed with a star or heart, etc, etc. I hope to do one for each letter in the alphabet — Apple, Barnes and Noble, Capgemeni, etc, etc,
Aspect ratio		
Documentation: Catalogue:		
Artist supplied materials	Checklist, technical, loan, and copyright information. Mp4 file, certificate of authenticity (with tech & install info).	
Digital components	MP4 file, sent to NGCA by WeTransfer	
Collaborators	Henry Van Dusen wrote the code, and produced the video. At the time he was on salary at my studio as production manager.	

Tab 3. Reports:

NGCA Artwork Entry Form. Designed by Georgia Smithson (2020). To be used when the artwork enters the collection.



Credit (If gift, is a credit needed or do they want to remain anonymous?)	Email address Contact number	
Artist donation (Which collection/ exhibition is linked to this artwork)		
Relationship (Linked to other objects in the collection)		
Transfer of Title (Donor)	I, the owner, confirm that I the object/ artwork with fu ownership to the governing	ll power to transfer
(Depositor)	ownership to the governing body of the gallery. ORI, the depositor, acting on behalf of the owner(s), confirm that the owner(s)have undisputed title to the object/ artwork with full power to transfer ownership to the governing body of the gallery, and that I am authorised to act on their behalf to that effect.The title in the object/ artwork(s) listed above is/ are hereby transferred to the governing body of the gallery.	
Signed		
Signed Date of deposit		
Date of deposit		

Location of copies:	No other gallery copies other than gallery copy
Display information for gallery staff:	
Checks to be made while on display:	
Additional information:	

Tab 4: Technical specifications:

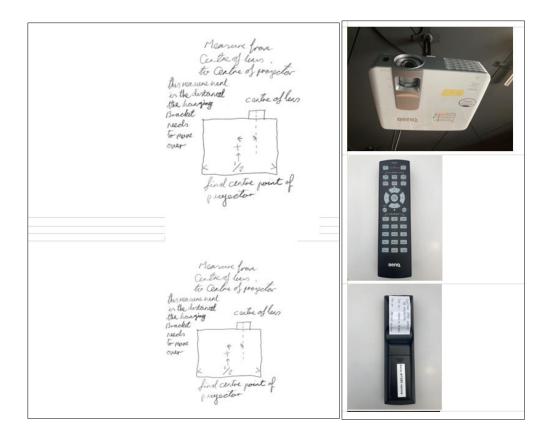
Intended to capture all data associated with the playback of the artwork.



Comprehensive list of all components, software, hardware, sculptural element	
List of collaborators	Henry Van Dusen wrote the code, and produced the video. At the time he was on salary at my studio as production manage
Warranties, manuals	
Certificate of authenticity (To ensure that the work is not	
copied or transferred, and this copy is THE authorised copy.	
Testing (post acquisition)	
Test playback	
Timings	22:26
Loop	Gap of a few seconds between each loop
Glitches	None
Components	
Artist or gallery provided carrier	MP4 file, sent to NGCA by WeTransfer
Artist modified equipment	NA
Artist provided equipment (Media players, monitors etc. Will this be replaced when stops functioning?)	NA
Dedicated components (These are integral to the artwork and the artwork cannot run without them)	N/A
Supplemental materials (Contextualising materials- creative processes for labels etc. Stills of video works etc.)	N/A
Resource list	
Links to suppliers, fixers, etc.	
Copies	
Digital support files	Media/ master and exhibition copy
Digital support riles Artist main file (used to create exhibition copy) explain the format and how it	Mediar master and exhibition copy Artwork was sent as an MP4 file by WeTransfer
was copied	Artwork was sent as an MP4 file by we i ransfer
Exhibition file (explain the format and how it was copied)	
Preservation video file (for preservation only)	
Copies for loans out	
Migration file (explain the format and how it was copied)	
Equipment used to create the artwork	Artist code: https://github.com/coryarcangel/runner-suite
	Google Pixel phone (screen capture).
	Adobe Premiere (post editing).
	Adobe Premiere (post editing): the Google pixel screen-capture was cut at the front and end
Audio	It was recorded as a readymade through screen-capture. Audio delivered via two external speakers
	Embedded sound, stereo format
Formats of master copies (link to file)	1920 × 1080
romación master copies (initio me)	H.264
	AAC, 48000 Hz
	HHC, T0000112

Artist	Cory Arcangel		
Title	@		
Date	2019		
Accession number	Not applicable (documentation provided as example work for accessioning to collection)		
Medium	⊕ is a single-channel screen recording of a live bot performance on Instagram, screen captured by a smartphone in December 2019		
Components (basic)	Artwork was sent as an MP4 file by WeTransfer		
Duration	22:26		
Description of the artwork	screen captured by a smartphone in December 2019. The recording sorolls through a year's worth of Amazon's instagram feed with a live bot programmed by Coryto like each post in turn. The scceen is turned horizontally to give the viewer the impression of watching a film tacking from left to right instead of the conventional scrolling down of Instagram.		
Display			
Display space	A circular shaped build with one entrance with the capacity to have a built flat wall/ screen for a projection either horizontally or vertically. The dimensions are 4.4 m in width and length.		
Video and audio playback	Media player, projector, speakers paced at each side of the screen at the top corners		
Daily maintenance	Projector to be switched on by gallery staff every day, audio and playback stay switched on. Switch on projector every morning using Benq projector remote control, kept at Visitor Services. Switch off projector every night before closing at 17:00.		
Document installed artwork			
Record the work in its existing state as it enters the collectio	r Natanniaahla		
Photograph the exhibition and components	as below		
Video the installation			
Specific components, models, makes and type			
Installation parameters (Diagrams)	0		
	Sketchüp		





Tab 5: Installation:

Intended to capture guidance on how the artwork has been installed (current iteration and previous).



Tab 6: **The artist questionnaire template and the completed artist questionnaire** which has been covered in Chapter 4, sections 4.4 and 4.5.

Back to Contents	
sack to contents	
Jse this space to capture conceptual nformation about this iteration of the display of the artwork.	
Artist bio	My name is Cory Arcangel. I was born in Buffalo, New York in 1978. I spent the first 15 years of my post collegiate life in New York, and the last 8 in Stavanger, Norway. My interest in the moving image started as a child in the 1980's watching a lot of TV (https://www.youtube.com/watch?v=SwYN7mTi6HM), and playing with a camcorder loaned a few weeks every year from my aunt. In high school I was lucky to be exposed to experimental media and video art in a video art class.
/ENUE	NGCA Collection Space
DATES	22 April - 9 July 2023
NTERPRETATION	Cory Arcangel: 🕀 🕀 Single-channel screen recording of a live bot performance on Instagram (Amazon), December 8, 2019. Courtesy of the artist. 🕀 🕀 is from a series of artworks called Runners by American artist Cory Arcangel. Arcangel's work explores the potential and failures of old and new digital technologies, highlighting their obsolescence, humour, aesthetics and, at times, eerie influence on contemporary life. 🕀 🕀 is a single- channel screen recording of a live bot performance on Instagram. Screen captured via a smartphone on 8 December 2019 the recording scrolls through a year's worth of Amazon's Instagram feed with a live bot programmed by the artist liking each post in turn. The screen has been turned horizontally to give the viewer the impression of watching a film tracking from left to right as opposed to the conventional scrolling down motion of Instagram. The artist's intention is to highlight the pervasiveness of advertising that encourages capitalist consumerism. Social media platforms are progressively being used to covertly extract meta data on personal interests for commercial gain. The use of pop-up advertisements extend the browsing time of users for this purpose and Arcangel exposes the often mundane and surreptitious methods they use to seduce users into buying 'things' they do not often need. Cory Arcangel (born 1978, Buffalo, New York) is an artist, composer, curator and entrepreneur living and working in Stavanger, Sweden. His work is included in many public collections, including the Hammer Museum in Los Angeles, MoMA in New York, the Tate, London and the Smithsonian Museum of American Art, Washington D.C. Produced in collaboration with Georgia Smithson, NPIF/AHRC funded PhD researcher, the University of Sunderland. Supported by The AHRC Northumbria Sunderland Centre for Doctoral Training (CDT)
	Training (CDT)

INSTALLATION (TEXT PANELS)

Cory Arcangel: 鰮

Single-channel screen recording of a live bot performance on Instagram (Amazon) , December 8, 2019. Courtesy of the artist.

is from a series of artworks called *Runners* by American artist Cory Arcangel. Arcangel's work explores the potential and failures of old and new digital technologies, highlighting their obsolescence, humour, aesthetics and, at times, eerie influence on contemporary life.

is a single-channel screen recording of a live bot performance on Instagram. Screen captured via a smartphone on 8 December 2019 the recording scrolls through a year's worth of Amazon's Instagram feed with a live bot programmed by the artist liking each post in turn. The screen has been turned horizontally to give the viewer the impression of watching a film tracking from left to right as opposed to the conventional scrolling down motion of Instagram. The artist's intention is to highlight the pervasiveness of advertising that encourages capitalist consumerism.

Social media platforms are progressively being used to covertly extract meta data on personal interests for commercial gain. The use of pop-up advertisements extend the browsing time of users for this purpose and Arcangel exposes the often mundane and surreptitious methods they use to seduce users into buying "things" they do not often need.

Cory Arcangel (born 1978, Buffalo, New York) is an artist, composer, curator and entrepreneur living and working in Stavanger, Norway. His work is included in many public collections, including the Hammer Museum in Los Angeles, MoMA in New York, the Tate, London and the Smithsonian Museum of American Art, Washington D.C.

Produced in collaboration with Georgia Smithson, NPIF/ AHRC funded PhD researcher, the University of Sunderland. Supported by The AHRC Northumbria-Sunderland Centre for Doctoral Training (CDT).





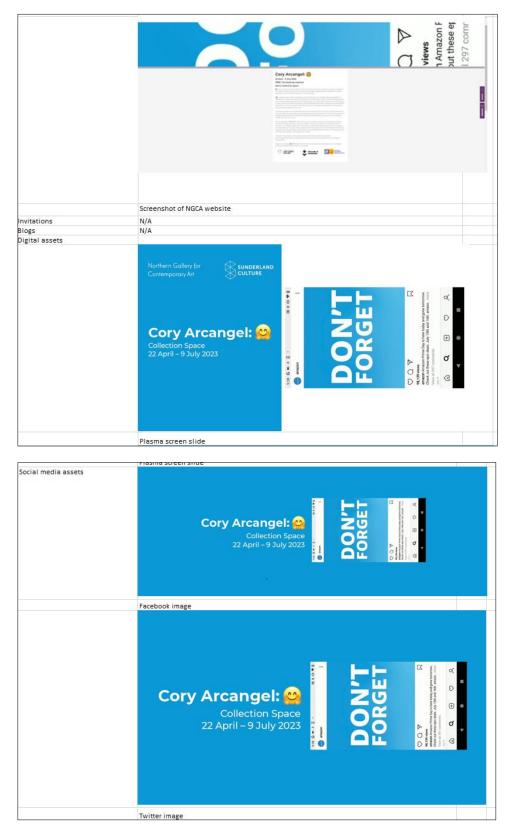
Georgia Louise Smithson 2023

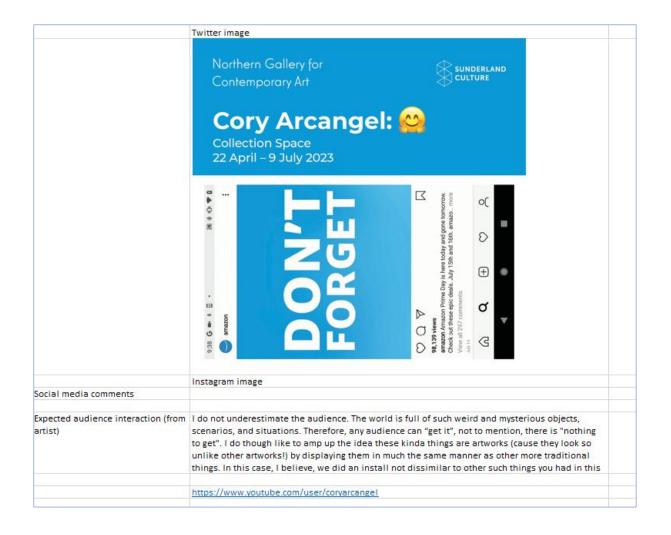
Tab 7: Exhibition:

This tab is a space to capture information on this iteration of the presentation of the artwork.

Back to Contents					
Artwork context (from exhibition vinyl	Single channel scre 2019.	en recording of a li	ve bot pe <mark>rf</mark> ormance (on Instagram (Amazon), December 8,	
	💮 is from a series	of artworks called I	Runners by American	artist Cory Arcangel. Arcangel's work	
	explores the potent	tial and failures of	old and new digital	technologies, highlighting their	
	obsolescence, hum	our, aesthetics and	, at times, eerie infl	uence on contemporary life.	
	via a smartphone o Instagram feed wit been turned horizo to the conventional pervasiveness of ac	n 8 December 2019 h a live bot program ntally to give the vie scrolling down mo dvertising that enco	the recording scrolls imed by the artist lik ewer the impression tion of Instagram. Th urages capitalist con	mance on Instagram. Screen captured through a year's worth of Amazon's ing each post in turn. The screen has tracking from left to right as opposed e artist's intention is to highlight the nsumerism. mposer, curator and entrepreneur living	
	Hammer Museum i		A in New York, the T	many public collections, including the ate, London and the Smithsonian	
	Produced in collabo	oration with Georgia	a Smithson, NPIF/ AH	IRC funded PhD researcher, the	
	University of Sunde	rland. Supported by	The AHRC Northumb	oria-Sunderland Centre for Doctoral	
	Training (CDT). ACE	logo, AHRC logo.			
Artist reviews					
Exhibition reviews	https://ropac.net/n	ews/1181-cory-arcar	ngel-at-the-ngca-coll	ection-space-a-solo-show-in-sunderlan	d-uk/
Audience reviews					_
Audience evaluation					
Neb decise	Whethe On Cuide D	NF			
Handouts	What's On Guide PI	JF			
	What's On	northern galaxy for contemporary and any old		ter from geforg for uniter goes / price of	
	RCA Collection Space Collection Space Collecti	Here a Craige Watching the a source of the source of the source of the source of the source of the source of the source of the s	and detrif lattery present There is a transport of the property over pre- taining the second second second second term of the second se	Since metable provem to reserve public device images - in the pailing, in the park, in your horne, anywhere you like	
	Sa Statistican	scale public commission, Brindene (Mowbroy Ponk), for Sunderland's Mowbroy Park.	O		

Tab 8: Contextualising Materials and Audience: This tab is a space to log audience interaction, comments, digital assets, and marketing materials.





Tab 9: Preservation: This section is designed to capture information from the artist on futureproofing the work and its components.

Back to Contents	
Please refer to the artist questionnaire for further artist specific guidance.	
· · · ·	Gallery and Learning Facilitators will be shown how to
	switch the artwork on and off, and will be shown how to
	fix audio and visual basic problems. Any errors should be
Who is responsible for daily maintenance checks of the artwork?	escalated to the curator or technician.
Display equipment:	
Which equipment is critical or integral to the work?	N/A- artist specified gallery stock equipment can be used.
Can gallery stock equipment be used?	Yes
Storage:	
How and where will the artwork be stored?	N/A
What are the names of the files?	
What are the labels or names of the components?	
Presentation copy (add date)	
Backup copies (add date)	
Add storage guidelines here:	
Unique identifier number	
Title of work	
File format/s	
Artist/ creator/ collaborator	
Always label the version of the work	
Conservation treatment reports	
Add any reports to this section	
Major damage reports	
Disaster recovery plan	
Guidelines for packing, handling and transport	
Artist conservation documentation	
Could you replicate the same intention using different software/ equipment?	

Tab 10: Iteration reports: Previous iteration reports can be logged here (if available).

Tab 11. Correspondence: It is crucial to document correspondence between the gallery, studio, artist, and any other stakeholders, specifically if text determining agreements are noted.

Tab 12: Physical Materials: Log the nature, location and format of any physical materials that may accompany the context the artwork or exhibition here. This could be publications, flyers, posters etc.

Tab 13: Loans In: This is the space that should be used to document any loan agreements for loans of artworks to NGCA.

Tab 14: Artwork Exit: This is the space that should be used to log any proposals, correspondence, or agreements regarding the final exit of an artwork, for whatever reason.

Tab 15: Loans Out: This is the space that should be used to document any loan agreements for loans of artworks from NGCA to another gallery or institution.

Tab 16: Copyright: A reference guide to copyright and reproduction rights. Sources: Artsy.netavailable at: https://www.artsy.net/article/artsy-editorail-art-copyright-explained(Accessed December 2021) Available at: The Pool. http://pool.newmedia.umaine.edu(Accessed December 2021) Available at: The Pool. http://pool.newmedia.umaine.edu

Status	Reproduction rights (databases)	lcon
No rights reserved	If you are a holder of copyright or database rights, you can use this public domain tool to waive all your interests in your work worldwide to the maximum extent permitted by law.	DOMAIN
Copyright status unknown	The copyright holder for the content is unknown. Others may contact the organisation or individual who catalogued the content if they know more information. The account holder is always displayed at the top of the record's detail page.	
Copyright status unknown (orphaned work)	The account holder (the organisation or individual who catalogued the content) has conducted diligent research, but has been unable to identify or contact the rightsholder. Others may contact the organisation or individual who catalogued the content if they know more information. The account holder is always displayed at the top of the record's detail page.	
Creative Commons – Attribution	This license lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation.	© 0 **
Creative Commons – Attribution – Share Alike	This licence lets others remix, tweak, and build upon your work even for commercial purposes, as long as they credit you and licence their new creations under the identical terms. This licence is often compared to open source software licences. All new works based on yours will carry the same licence, so any derivatives will also allow commercial use.	CC 00
Creative Commons – Attribution – No Derivatives	This licence allows for redistribution, commercial and non-commercial, as long as it is passed along unchanged and in whole, with credit to you.	
Creative Commons – Attribution – Non- commercial	This licence lets others remix, tweak, and build upon your work non-commercially, and although their new works must also acknowledge you and be non-commercial, they don't have to licence their derivative works on the same terms.	CC 0 S
Creative Commons – Attribution – Non- commercial – Share Alike (This licence lets others remix, tweak, and build upon your work non-commercially, as long as they credit you and licence their new creations under the identical terms.	
Creative Commons – Attribution – Non- commercial – No Derivatives	This licence is the most restrictive of the six main Creative Commons licences, only allowing others to download your works and share them with others as long as they credit you, but they can't change them in any way or use them commercially.	0080
All rights reserved	Under this licence the copyright holder reserves all the rights provided by copyright law, such as distribution, performance, and creation of derivative works. Others may not copy, re-use or modify the content without the permission of the copyright holder. The account holder is always displayed at the top of the record's detail page.	C All Right Reserved

Subject	Reproduction rights
Artist	After an artist creates an artwork they have the right to make copies of their work, distribute the copies, perform or display the work publicly or make works that deriv from the original.
Collector	Not all of those rights transfer to the collector who has purchased the artwork. Copyright only transfers to the artwork's new owner if the artist evidences that is their intent to transfer it. If purchased you have the right to display the artwork (you copy). But unless you have received explicit permission from the artist you do not have the legal right to take photos of the piece (for example, to make postcards or prints and sell them on)
Tangible artworks	The rights afforded by copyright aren't infinite-there are limitations such that provisions don't stifle creativity in the name of protecting it. Many of the rights enshrined in in copyright are tied to the physical work. But the statute does not extend to intangible aspects of an artwork. Ideas, procedures, methods and concepts cannot be copyrighted unless they're written down and recorded.
Intangible art forms	
	Copyright of an art form that is inherently intangible (like a performance) applies to the notions of the choreography or documentation of the event but not the event or performance itself.
Section 107 of the Copyright Act 1976- FAIR USE	The provision provides a legal defence to copyright infringement. The most importa question is 'are you using the image for commercial purposes?' (this could cause huge problems if infringed) or non-profit and educational purposes? (this is accepted). It also depends on the nature of how you are using the copyrighted work The 'less original' or less creative your use, the weaker your fair use claim. Another factor is the total amount the copyrighted image is being reproduced. If the image is being transformed or parodied it can also be protected under fair use.
Practice Appropriate Appropriation	Artists such as Vik Muniz and Cory Arcangel's practice fosters the use of pre-existing objects or images with little or no transformation applied to them. Their original form is instantly recognisable. It is considered that judicial decisions can seriously restrict artistic practice. The case of Rogers v Koons 1992. Koons admitted to having copied the image intentionally, but attempted to claim fair use by parody.
Source	https://www.artsy.net/article/artsy-editorial-art-copyright-explained

Classification	Reproduction rights
All rights reserved	The strongest form of copyright, and prohibits sharing or altering the original in any way outside of Fair Use. For example, an audio file with this restriction could not be distributed on a peer-to-peer filesharing network
No combinations	The artifact must be presented as is, without its incorporation into or combination with other artifacts in the same or other media. For example, a song with this restriction must be played alone and cannot be edited or incorporated into another song or video.
No transformations	The artifact cannot be distorted or re-edited in its original medium. As long as the creator hasn't selected 'no combinations,' it may still be combined with other artifacts provided its original form remains intact. A song with these conditions may be reused as the soundtrack of a video if aspects like tempo, pitch, and instrumentation aren't modified.
Public domain	Has no license at all, giving away all control over how the work is used. (Experts disagree on whether this is "freer" than a sharealike license.)
Combinations allowed	The work can be combined with other material to create a new work; for example, a JavaScript could be used to make a website.
Transformations allowed	The work can be changed to create a new work; for example, a song could be speeded up, re-orchestrated, or remixed.

Tab 17: Terminologies: A guide to terminologies used within the collections management, display, and storage of time-based media art.

Tab 18. Links to useful resources: This section can be used for further reading or guidance from the accessible resources that informed the content of the Database.

Matters in Media Art	http://mattersinmediaart.org/
This site aims to be a resource for collectors, artists, and institutions of all sizes caring for works of art that have moving	
image, electronic, and digital elements.	
Soloman R Guggenheim Museum	https://www.guggenheim.org/conservation/time-based-media
For many years, the Guggenheim Museum has advanced the field of contemporary art conservation, particularly with its role in	
the Variable Media Initiative, which was based at the museum from 1999 to 2004. Building on the accomplishments of this research	
project and other recent international developments in contemporary art conservation, the Guggenheim's Conservation	
Department has added the new specialty of time-based media conservation to address the specific needs of media artworks in the	
Smithsonian Time-based Media Resources	https://www.si.edu/TBMA/resources
The Time-based Media & Digital Art Working Group is a voluntary, pan-institutional, and cross-disciplinary body dedicated to	,
the dissemination and sharing of information about the conservation, acquisition, installation and exhibition of time-based	
and digital art among Smithsonian units.	
Variable Media Network (VMN)	https://www.variablemedia.net/e/welcome.html
The Variable Media Network proposes an unconventional preservation strategy based on identifying ways that creative	
works might outlast their original medium. This strategy emerged from the Guggenheim Museum's efforts to preserve its	
world-renowned collection of conceptual, minimalist and video art. The growth of the Variable Media has been supported by	
the Daniel Langlois Foundation for Art, Science, and Technology, and subsequently promoted by the Forging the	
Future alliance. The aim of this diverse network of organizations is to develop the tools, methods and standards needed to	
Electronic Arts Intermix (EAI)	https://www.eai.org/about-eai-faq
ounded in 1971, Electronic Arts Intermix (EAI) is a nonprofit arts organization that is a leading international resource for	
video and media art. A pioneering advocate for media art and artists, EAI's core program is the distribution and preservation	
of a major collection of over 4,000 new and historical video works by artists. For 50 years, EAI has fostered the creation,	
exhibition, distribution and preservation of video art, and more recently, digital art projects	
Tate software-based preservation	https://www.tate.org.uk/about-us/projects/software-based-art-preservation
In order to better understand the challenges faced and how they might ensure the longevity of software-based artworks in	
the collection, Tate's Time-based Media and Collection Care Research teams have engaged in a programme of collaborative	
research over the past decade.	
Collections Trust Primary Procedures	https://collectionstrust.org.uk/spectrum/primary-procedures/
Spectrum gives tried-and-tested advice on the things most museums do when managing their collections. Some of these are	
daily activities, such as moving objects around and updating location records. Others are occasional, like updating insurance	
cover. Spectrum calls all these activities procedures and there are 21 of them.	