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# Archiving Interactive Narratives at the British Library

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**Abstract.** This paper describes the creation of the Interactive Narratives collection in the UK Web Archive, as part of the UK Legal Deposit Libraries Emerging Formats Project. The aim of the project is to identify, collect and preserve complex digital publications that are in scope for collection under UK Non-Print Legal Deposit Regulations. This article traces the process of building the Interactive Narratives collection, analysing the different tools and methods used and placing the collection within the wider context of Emerging Formats work and engagement activities at the British Library.

**Keywords:** Interactive Narratives Collection, New Media Collection Management, Digital Storytelling, Emerging Formats, Web Archiving, Digital Preservation.

## 1 Introduction: The Emerging Formats Project and the UK Web Archive

With the introduction of new digital media in the publishing landscape [1], cultural heritage institutions need to consider how new formats and their technical dependencies are shaping their collection policies, and how they can ensure meaningful collection and preservation of current digital outputs over the long term.

In order to address these issues and successfully represent the breadth of today's digital offer in their collections, the British Library (BL), together with the other five UK Legal Deposit Libraries (LDLs) set up the 'Emerging Formats Project' [2].

The UK Legal Deposit Libraries (Non-Print Works) Regulations 2013 [3], which extended legal deposit to include non-print publications alongside print works, provide the context for the Emerging Formats Project. The main objective of these Regulations was to help ensure comprehensive collection of UK publications, as well as safeguard born-digital publications against the risk of disappearance. Since 2013, the UK LDLs have been collecting a variety of born-digital material, mainly comprising eBooks, eJournals and archived UK websites [4]. All six UK LDLs, as a collaborative effort, are now looking at digital publications that are in scope for collection under Non-Print Legal Deposit (NPLD) Regulations, but whose formats, structure and content are more complex than those currently in their collection, and could pose a challenge to their existing collecting practices.

For this purpose the Emerging Formats Project was launched in 2017. Emerging formats were defined as born-digital publications with no print counterpart that have

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strong software and hardware dependencies, and often consist of more than one media type. They are created within a continuously changing marketplace, and most of these new formats are already at risk of rapid obsolescence [5].

In order to correctly identify user needs, The BL conducted targeted UX research into user behaviour and expectations for access to emerging formats. The research identified a strong interest in the added value of a curated collection of emerging formats, as well as support for the collection of contextual information around publications [6]. The anticipated need was for researchers - from a variety of fields, e.g. literature, digital humanities, history of science, social sciences, programming - and for creators of emerging formats. With regards to access, support from reference and curatorial staff was viewed as important, as was the idea of new types of library environment in which to use complex digital publications. These findings helped us shape the collection management methodology for emerging formats, including what and how we collect complex digital objects, and informed plans for future access.

The main goal of the Emerging Formats Project was to devise a system to identify, collect, describe, preserve and make available complex publications within scope of NPLD in a timely manner. This was to be achieved by means of different resources and collaborations (with creators, users, researchers, etc.) The UK LDLs chose to prioritise specific formats to begin their research: Book as mobile apps and web-based interactive narratives. The former refers to digital books published as mobile apps - they tend to have strong hardware and software dependencies and often make use of interactive features characteristic of mobile technology. The latter are online text-based stories, which require the reader's active input to determine how the narrative unfolds.

While the collection of mobile apps was uncharted territory for the LDLs, capturing web-based interactive narratives could be supported by workflows and tools already employed by the UK Web Archive (UKWA). The UKWA was originally founded at the beginning of 2005 as a consortium (UKWAC), and only operated on a permission base, with curators carefully selecting websites and asking domain owners for permission to archive their work [7]. With the introduction of NPLD Regulations in 2013, the UKWA moved to archiving the UK web under Legal Deposit Regulations on behalf of all six UK LDLs. This includes an annual automated crawl of all UK websites (those that have either a UK top-level domain or can be identified as hosted or based in the UK), as well as the curation of special collections around specific topics and themes. This results in an archive of many millions of websites and hundreds of special collections.

## 2 Experiments and engagement activities that enabled the British Library to better understand the Interactive Narratives landscape

The BL established a Digital Scholarship department in 2010, with the aim to promote new methods of research using born digital and digitised library collections [8]. From its inception, this department fostered an interest in creative innovation and partnerships. Including seeking opportunities to collaborate with experimental writers and digital makers of narrative games and interactive fiction, to better understand the emerging digital format works, which they were creating.

The Library instigated experiments and initiatives, which included competitions, transmedia writing residencies, interactive writing summer schools and online game jams.

### 2.1 **The Off the Map game design competition**

An early creative collaboration was the Off the Map competition [9], organised in partnership with GameCity festival and the videogame publisher Crytek. Launched in 2013, this competition set UK higher education students the task of creating videogames and virtual interactive environments using digitised British Library collection items, including maps, views, texts, illustrations and recorded sounds as creative inspiration [10].

A team of students called Pudding Lane Productions from De Montfort University, Leicester, won the first competition with their stunning interpretation of seventeenth century London before the great fire of London in 1666 [11]. Later Off the Map competitions were themed to coincide with BL exhibitions on gothic literature, William Shakespeare and Lewis Carroll's Alice's Adventures in Wonderland. Submissions offered completely new interpretations of the Library's collections and included interactive fiction entries, which had been created using the open source Twine platform.

### 2.2 **Transmedia writing residencies in the British Library**

The BL further learned about interactive storytelling methods, tools and technologies, via hosting creative residencies. Theatre-maker and entertainer Christopher Green was the Library's first writer-in-residence. His research into the history of hypnosis in the Library's collections, inspired him to write a book and a song cycle of original material through his character the Singing Hypnotist, who healed and mesmerised at Library performances and via online videos [12].

Following in these footsteps, Rob Sherman, author of experimental The Black Crown Project [13], undertook a transmedia residency interconnected to the Library's Lines In The Ice exhibition, which displayed collection items relating to Arctic exploration expeditions, including John Franklin's ill-fated voyage to find the Northwest Passage in 1845.

In a hybrid physical/digital installation On My Wife's Back, Sherman created a multimedia narrative about the fictional Isaac Scinbank, commissioned to search for Franklin's missing expedition [14]. This residency used many techniques, from songwriting, to baking ships biscuits and writing on them, to book binding, via an artistic collaboration with BL book conservators to make a faux-historical diary, called the "salmon book", which was installed in the gallery as an 'exhibit' and which Sherman updated with Scinbank's diary entries [15].

Sherman's residency included public workshops, where he taught attendees how to use the interactive narrative writing open-source programme Twine, to create their own hypertext stories. These workshops were further developed into week long interactive fiction writing summer schools held at the BL in 2017 and 2018. Jonathan Laury, writer of Ostrich, attended the 2018 summer school, mentioning it in the work's credits as being important to the piece's creation [16].

## 2.3 Online interactive fiction writing jams and AdventureX

Building from the experience of the Off the Map competitions, creative residencies and summer schools, the BL continued learning about web-based interactive narratives, by running online interactive fiction writing jams in partnership with Surrey Libraries and Read Watch Play: a global online reading group.

In 2017 Odyssey Jam was held, in which Lynda Clark created a Twine entry 108 Suitors, retelling the story of Penelope and her 108 suitors [17].

In 2018 a Gothic Novel Jam celebrated the 200th year anniversary of the publication of Mary Shelley's Frankenstein. It received 46 entries from all around the world including the UK, Australia, America and France [18].

The Bitsy game development community engaged with these jams, using their software to create 1980s retro style 2D games. Freya Campbell, whose works are in the UKWA collection, used both Twine and Bitsy to create her gothic novel jam submission THE TOWER [19], a work about trans women, tarot, therapy, and alien abduction. In addition to participating in Gothic Novel Jam, Campbell exhibited works, Superlunary [20] and Perseids, or, All This Will Go On Forever [21] at AdventureX; The Narrative Games Convention, which was hosted by the BL in 2018 and 2019 [22]. This event is dedicated to narrative-driven gaming and interactive storytelling, providing a forum for writers to share and celebrate their work. The AdventureX convention also provides opportunities for the BL to meet with the developer community and make contacts to facilitate collecting some of these works - inkle's mobile app 80 Days [23] was collected as part of the Emerging Formats project thanks to the direct collaboration with the studio, after discussions with co-founder, Jon Ingold, at AdventureX 2018 [24].

## 2.4 Archiving the outputs of British Library interactive writing experiments, collaborations and research projects

In the early days of these experimental creative and research collaborations, collecting and preserving the digital outputs as Library collection items was not part of project aims for the Off the Map competitions, the online game jams, or the interactive fiction writing summer schools. However, with experience gained from each of these initiatives and events, the Library has increased its knowledge and understanding of the technologies and tools, such as Twine and Bitsy, which writers commonly use to create web-based interactive narratives. This reflection led to the development of research questions, which shaped Lynda Clark's BL post-doctoral placement project; investigating whether web archiving methods and web crawling technologies could capture, preserve and effectively play-back, these types of web-based interactive narrative works [25].

# 3 Building the Collection[1]

The Interactive Narrative collection was established as part of a six month post-doctoral placement entitled 'Emerging Formats: Discovering and Collecting Contemporary British Interactive Fiction'. The decision to focus on interactive fiction arose out of the Library's Emerging Formats project, acknowledging that without intervention, many culturally valuable digital artefacts are at risk of being lost. As observed by Joseph Tabbi in 2004, the experimental methods employed by many creators means they do not necessarily subscribe to standardised production practices, and have few centralised locations to share their work, a problem which is yet to be entirely solved [26]. However, this wild experimentation also means that digital interactive fiction is created by and for a wide variety of audiences and creators.

During the UX research mentioned previously, it was found that creators (more than readers) were particularly concerned about their work becoming unavailable in the future. Therefore, a creator-centric approach was adopted for the project. Selection was initially based on searches for British interactive fiction using a variety of specially selected websites, e.g. the Interactive Fiction Database (IFDB), and the entries of key interactive fiction competitions, e.g. The Interactive Fiction Competition (IFComp), plus submissions to various jams, including those organised by the BL. A callout was also issued via the BL's Digital Scholarship blog requesting that creators submit their own eligible work. In order to comply with LDL regulations and take ethical and technical considerations into account, the collection criteria specified that items must: be digital and web-based (e.g. not downloadable files); contain at least one interaction mechanic which advances the story; be a work of fiction (although it was acknowledged that the collection should later be expanded to include non-fiction works); be complete (e.g. have at least one beginning, middle and end - this was to address ethical concerns around inadvertently collecting texts which were not in the final release version intended by the creator); be made by an individual creator or small team, not a major studio; and be easily discoverable (e.g. hosted on a public site or entered into a competition, this was to avoid accidental inclusion of games, which creators did not intend to be widely shared). Items consisting purely of moving or static images; audio; or which were purchasable, or behind a login screen were excluded (due to the additional technical difficulties associated with collecting content of this nature).

## 3.1 Collection Tools

Tools used were W3ACT and Conifer (formerly Webrecorder). W3ACT, or ACT, the Annotation Curation Tool is Open Source software designed by the Library to help librarians, curators and subject specialists curate specific parts of the Web [27]. It interfaces with the Heritrix crawl engine built by the Internet Archive. Both ACT and the Heritrix crawl engine are web archiving tools geared towards crawling the web at scale rather than in high fidelity. Rhizome's Conifer specialises in content which relies "on complex scripting, such as embedded videos, fancy navigation, or 3D graphics" [28] and had already been successfully used to collect a variety of complex content in

[1] This section is an amalgamation of extracts from two reports originally produced for internal use at the British Library during the research project: https://doi.org/10.23636/1193 & https://doi.org/10.23636/1192

the Net Art Anthology [29]. It was therefore adopted as a secondary capture method for items which could not easily be crawled due to multi-media content.

Conifer's capturing tool hosts collections of works online, which can also be downloaded as WARC files (although it should be noted that they are actually WARC.GZ). Conifer is also able to emulate older browsers, allowing capture of works which use older versions of javascript and Flash (Flash becoming obsolete was a key concern for some creators in the UX research). In order to get the best captures from Conifer, pre-planning is necessary, with an initial exploration of the work to determine how much needs to be captured, and to determine the best route to take through the work in the event that capturing in its entirety would prove too time-consuming. In an effort to ensure clarity of metadata for this project, each work was downloaded as an individual WARC file, although the tools do allow for combining multiple items (even entire collections) into single WARC files.

Broadly speaking, Conifer and ACT were each suited to capturing different types of works, although there were some works which neither could capture and some which worked well with both. Works which included YouTube videos could only be captured with Conifer, although this proved time consuming, as it seemed videos had to be played fully in order to guarantee good capture.

### 3.2 **Categorising Collection Items**

As this was a community-driven project, categories were developed from terms most often used within the community [30] and which could be easily explained to Library staff unfamiliar with IF: parser-based (works in which '[t]he player reads textual descriptions of the world and takes action by typing commands') [31]; choice-based (works in which the reader-player makes decisions as to the direction and/or outcome of the story at various branching points), hypertexts (primarily link-based and often non-linear) and multi-modal (works which 'link together many forms of communication: text, graphics, animation, sound, video, etc.') [32].

However, works made with Bitsy proved a challenge to categorise, as they often have a strong visual and textual element, but do not fall neatly into these existing categories. Therefore an additional category was adopted to refer to works created with Bitsy and similar tools: avatar-driven. Bitsy titles were considered within scope for this study because Bitsy creators tended to self-identify as creators of interactive fiction, as was seen both in how they categorised their work on itch.io and their entries into the Library's online jams.

It should also be noted these categories are not discrete and may overlap. As observed in previous BL studies of the form: 'Authors, readers, and technological development are all combining to create new kinds of literature, and thus fresh digital preservation challenges' [33]. Therefore, some works may arise which do not fit any of the aforementioned categories, or which recombine them in unexpected and challenging ways.

### 3.3 **Findings**

For the most part, Conifer is the best option for parser-based works. Inform 7 works can be captured very quickly – for the vast majority, visiting the title page and pressing space bar was sufficient to capture the entire work. They are then fully replayable in

the capture, with users able to type any valid commands in any order. As many Inform 7 works use an emulator to run, most could not be captured with ACT. However, there were exceptions. Robin Douglas Johnson's Aunts and Butlers is a parser-based game created with his bespoke Versificator engine which captured successfully with ACT in a fully-playable state [34]. Similarly, 1k Cupid, an Inform 7 work by Elizabeth Smyth [35] uploaded to the Itch.io platform also captured successfully with ACT, which suggests the way the creator has structured and/or uploaded their work is of greater importance than the tool used, when it comes to how easily the work might be archived. One format which could not be captured by Conifer or ACT was Quest. Reasons for this are unclear, but as most Quest games are available both online and as downloadable files, and the Quest Software is open source, it may be possible to archive these files in a different manner [36].

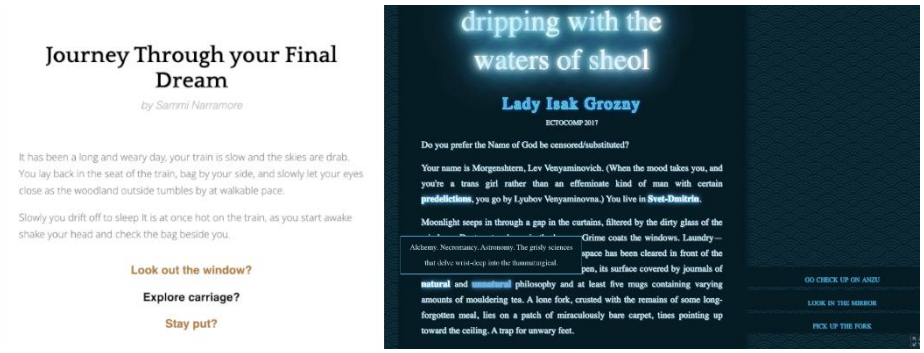


**Fig. 1.** Standard format Ink (l) vs customised format Ink with hover text and other styling (r)

Plain text works created with Ink, capture well in ACT and are fully playable. Ink works with customised interfaces, such as Isak Grozny's dripping with the waters of SHEOL, would not capture with ACT, but captured well with Conifer [37] (see Figure 2.). This was more time-consuming than capturing parser-games, as each page was visited to ensure good capture. Visiting only the title page captured all links, but not any images or dynamic content on individual pages. Therefore each page should be visited to ensure good capture, which may not be actionable for large, multi-branching works. Obtaining walkthroughs may help direct captures, or serve as alternatives to capturing entire works, but are unlikely to be available for many works.

Works created with ChoiceScript can be captured with Conifer using its Firefox v49 emulator, although this is not without errors. However, experimentation showed that problems with capture in ACT appear to be due to the fact that many ChoiceScript authors host their files (even for complete, finished works) in an 'unfinished' state. When the files are finalised and compiled into a single html file, ChoiceScript works can be captured equally well with any version of Conifer and ACT. As ChoiceScript's standard output is a single html file, it should be possible to obtain these files from creators and archive them with relative ease, or suggest that creators host their files in this format prior to capture.

The majority of hypertext works capture well with ACT, although images are often missing. However, as with parser works, there are exceptions - Sleepless by Natalia Theodoridou was captured with all backgrounds and dynamic text. Only audio was missing, and this was successfully captured with Conifer [38]. Missing images in Twine

games are generally due to use of the standard Twine file structure for images: http://game-name/images/image-name, while the game itself is usually kept at something along the lines of http://game-name/game. This can be resolved by adding the image URLs as separate seeds. (Right clicking the image or using a tool such as Link Klipper will generally yield the URL for the image). Some Itch embedded works made with Twine will not capture with ACT - this seems to be related to whether the creator has used a clickable 'run game' button to start the game – as works with autorun enabled (and therefore no button present) are less likely to capture. Twine works which use extensive Javascript are best captured with Conifer using the Firefox v49 emulator.

The vast majority of Bitsy works captured well with ACT, despite functionality being primarily based around the use of arrow keys. As with other itch.io works, those with the auto run feature enabled did not capture with ACT, but captured successfully with Conifer. Only one work made with RPG Maker was found during the course of this study, but this also captured with ACT and retained full functionality including point-and-click and arrow key controls, although not without some technical problems. For example, skipping the title sequence sometimes causes a crash in the captured version. Increasing the capture limit in ACT seemed to improve the capture – the work was fully playable from beginning to end without error, even if the title sequence was skipped.

**Fig. 2.** Winnipeg captured in Conifer (l) vs ACT (r). In both cases, the coloured text remains dynamic, but in ACT, background images and additional moving text is lost.

Generally, Conifer was most effective for capturing multimodal work due to its versatility with video and audio content, flash and javascript, and its ability to combine several interlinked sites into one WARC file. However, ACT proved surprisingly effective where multimodal works were concerned, depending on their construction, and provided they didn't contain Flash. Maria Mencia's The Winnipeg captured reasonably well with most background images and some animated text obtained (see Figure 2) [39]. Some of the page's dynamic content failed, as did the browsable archive, since this required typing keywords rather than typical clicking. Similarly, works made with Unity captured unexpectedly well in ACT. Often, where a javascript page capture appears to have failed with ACT, finding the page which incorporates the html index file usually results in a good capture of the fully working piece. (This will generally be the url ending in index.html). This was the case with J.R. Carpenter's Along the Briny Beach [40], where capturing with ACT had the added benefit of capturing each asset used within the work, and the webpage's CSS stylesheet, which could not have been obtained using Conifer. These additional assets are likely to be useful to future researchers. In another of Carpenter's works, This is a Picture of Wind, neither ACT nor Conifer were able to capture the dynamic content present on the website since it

uses live wind data to generate poetry [41]. However, during its crawl of urls associated with the site, ACT captured an example thumbnail of one of the poetry fragments. This demonstrates that even when a functioning version of the site cannot be captured, crawling may still be worthwhile.

Itch.io is a hosting site which hosts games of all kinds, including a large number of interactive fiction works. Capturing author's work from their itch page has the advantage of showing their work across different formats, plus any comments reader-players may have left for them, plus any development notes they themselves may have left. Works on these pages tend to be updated with greater regularity than those hosted on author's personal sites, and therefore may be useful to future researchers as a means of examining how interactive works are developed over time, or how creators evolve their work across different tools and projects.

ACT usually manages to capture multiple works from an itch page, although as mentioned previously, if the creator has used the 'auto run' button on any of work, this may result in a partial capture containing only the itch.io 'frame' and not the embedded content. As mentioned above, capturing with ACT may still be valuable regardless because of the other contextual information provided. Conifer (using Firefox javascript & Flash emulation where necessary) can successfully capture embedded itch works in all formats (at least, all those tested – Inform 7, Bitsy, Ink, Twine, Texture, Unity & compiled ChoiceScript), although it is necessary to click through each work in one single recording session in order to have a fully replayable capture. For some works, this took upwards of 30 minutes per work, and required QA of a comparable duration, which may not be feasible for Library staff where larger works, or larger collections of works are concerned. This also has the additional issue that any captures will only be a single instance of a work, with no method to see the work develop over time, aside from undertaking additional manual captures at later dates. Therefore, as Montfort and Wardrip-Fruin stress, it is important to encourage creators to capture their own work, and provide them with the means to do so [42].

Perhaps unsurprisingly, there is no single solution for capturing interactive narrative content on the web. Generally, works which are primarily text-based (with the exception of parsers) are best-captured with ACT, while those with images, video, Flash and javascript elements are best captured with Conifer. Some works (for example, those made with Bitsy) capture equally well with either method. Ideally Itch pages would be captured with ACT due to the likelihood of updates, but in reality, each must be considered individually to ensure good capture. A summary of which tool to use for which type of work can be found below in Table 1.

For those works where it is difficult to identify the tools used in creation, using the Chrome Web Developer Plugin to 'view source' may provide this information. Creating sample works with some of the tools was invaluable for testing purposes. Sample pieces were created in Twine and ChoiceScript to facilitate testing of creator-applied settings and how this affects webcrawling. Collaborating with creators to obtain sample works in other formats, experimenting with different settings and uploading methods is likely to be highly beneficial as the project continues. While large scale collection of such works is unlikely due to their labour-intensive nature, it is possible that in the future further crowd-sourcing activities may be possible, an approach recommended for archiving complex resources in the Digital Curation Centre's State of the Art report [43].

**Table 1.** Tool Usage Recommendations

| Creation Tool | Notes | Recommended Capture Tool |
|---|---|---|
| Any | Works containing significant video, audio, or visual elements | Conifer (any browser) |
| Any | Works which require a button press or text entry to start rather than a click. | Conifer (any browser) |
| Twine | Most images in Twine works capture successfully with ACT, particularly if image URLs are added. Some may require Conifer if javascript or dynamic images are used. | ACT in the first instance, Conifer with any browser to eliminate issues with images, Conifer with Firefox v49 to eliminate issues with javascript |
| RPG Maker | | ACT |
| Bitsy | If the work has an opening page which can be started by clicking, ACT will be able to capture successfully, if not, use Conifer | Click to start: ACT<br>Arrow keys to start: Conifer |
| Inform 7 | While Conifer is generally recommended for Inform 7, ACT can work equally well depending on whether it is click to start, or space bar to start, and where and how it has been uploaded. | Conifer (any browser) |
| Emulated BBC Micro (online) | | Conifer (any browser) |
| Adventuron | | ACT |
| Ink/Inklewriter | Basic Ink works capture well with ACT, those which have been heavily customised may require Conifer | ACT in the first instance, Conifer with any browser to eliminate issues with styling such as dynamic or hover text elements. |
| Texture | | ACT |
| ChoiceScript | Only compiled works can be captured fully, although any CS works can be captured to some degree with Conifer (Firefox v49) | ACT (compiled)<br>Conifer (uncompiled – errors likely) |
| Flash | | Conifer (Firefox v49) |
| Quest | | Cannot be captured with either tool. |
| Genarrator | | Cannot be captured with either tool. |
| Construct 2 | | ACT |
| Unity | | ACT |
| Javascript Website | Depending on the nature of the dynamic content, it may be best to run the site through ACT to ensure CSS code, images, html index files etc are captured and follow up with Conifer to see if more of the 'feel' of the site can be obtained. | ACT & Conifer |

## 4 Conclusions

The Interactive Narratives collection is a living and growing collection, counting almost 200 websites (190 at the moment of writing [44]). It includes a variety of web-based works, created with different tools and exhibiting different interaction patterns. Many

websites containing contextual information (e.g. author websites, project blogs, press kits, promotional material, etc.) have also been added to collection, to "fill in the gaps" for what couldn't be captured and to provide context to the collected publications.

This research also provided the basis for a new collection of interactive digital works: the New Media Writing Prize collection, which will be added to the UKWA, and will include shortlisted and winning entries to the prize since its launch in 2010. The New Media Writing Prize (NMWP) is a UK-based prize awarded annually to interactive digital works that use technology in innovative and often experimental ways [45]. While adopting methods and workflows already established during the work on the Interactive Narratives collection, the NMWP collection introduces new challenges - for example, the worldwide nature of the prize means that works by non-UK artists can only be captured on a permission basis (authors are being contacted with the help of Bournemouth University, organiser of the award). Further challenges are presented by the fact that not all works are web-based, but often include a variety of formats (from interactive fiction created using Adobe Flash, to augmented reality pieces requiring physical elements to be activated), many of which have already disappeared from use or are about to become obsolete (Adobe Flash, among others [46]). Collecting and curating contextual information around these publications is especially valuable in these cases: as an alternative to collecting the original artefact, when the object itself could not be collected or there are no access options available. This type of descriptive material can also help give a sense of the original "look and feel" of a publication; it clarifies authorial intent and context and provides instructions on use, especially when a specific format becomes obsolete.

The research findings from the UX testing and the work conducted on the Interactive Narratives collection confirmed that there is value in libraries collecting and preserving complex born-digital publications. The knowledge and expertise gained with this project can be shared with other cultural institutions dealing with new media types and rapid technological change, whether it's collecting time-based media art, video game preservation, or other challenges. Likewise, we can learn from other projects and researchers tackling similar challenges: The BL is one of the founding members of the subject specialist network Videogame Heritage Society [47] and actively participates in events organised by the Digital Preservation Coalition [48]. In a rapidly evolving landscape, cultural heritage institutions need to adjust the way they collect and manage born-digital material, in order to provide meaningful user experiences, and to successfully represent the changing nature and cultural diversity of the UK digital landscape.

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