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Global Ireland and the Digital Footprint: The Abbey Theatre Archives in the Digital Repository of Ireland

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Abstract:

While digital technologies were initially seen as harbingers of globalization, scholars increasingly acknowledge their role in the rise of nationalism. This paper argues that the policies and practices of the Digital Repository of Ireland (DRI) simultaneously resonate with national as well as global opportunities in light of the vision of Global Ireland 2025. As a trusted national digital repository for Ireland's humanities, the DRI can be a celebration of the Abbey Theater collection as a prototype of these national and global opportunities. This paper outlines the earlier attempt of the Abbey Theater Digitizing Archive Project at the National University of Ireland, Galway's library (NUIG) and its limitations, as well as the policies and Practices of open access, collaboration, and metadata management in the Digital Repository of Ireland. In doing so, the paper draws on the conceptual framework in light of Global Ireland's objectives and the publications of some of the stakeholders and directors of the DRI, such as Sharon Webb and Aileen O'Carroll. The outcomes of this paper are that the DRI globally contributes to representing the national position of Abbey Theatre by ingesting and visualizing the scenes that express the Irish struggle for freedom and identity, illuminating the importance of Irish literary discourse over time and place. Also, the use of the interdisciplinary approach uncovers how the use of digital tools highlights the opportunities that the DRI can offer to disseminate, discover, and visualize the dramatic performances of Abbey Theatre as an Irish literary heritage and as an essential part of the Irish national canon.

Keywords: Abbey Theater Digital Collections, Abbey Theatre Digitizing Archive Project, Global Ireland 2025, Interdisciplinary Approach, The Digital Repository of Ireland

1. Introduction

Digital preservation is a complex process associated with numerous unresolved organisational, managerial, and technical issues. Indeed, managing institutional repositories is a challenging task. Numerous preservation activities to date have focused on the creation of repositories, the depositing of content, the promotion of content, the discovery and access of content, and/or the promotion of a necessary cultural shift. However, digital preservation has not been incorporated as an integral part of repositories workflow, and there is a lack of experience and consensus on the best practices to be used for digital preservation (Hockx-Yu 2006). To understand the processes needed to achieve the long-term digital preservation of objects deposited in a repository, it is helpful to break down what is understood as "effective preservation".

Despite the challenges posed by digital preservation, cultural transformation requires its implementation. According to the Digital Preservation Coalition (DPC) mission statement, digital preservation has multiple purposes, which vary according to the reasons for preserving digital content, preserving the originality of digital content and protecting it from damage and loss is one such reason¹. The current European policy framework for the digitisation of cultural heritage is supported by a collection of strategies, initiatives and programmes that aim to comprehend the relationship between cultural heritage and education, tourism, sustainability, development, and job creation². Some critics argue that the European policy framework for the digitisation of cultural heritage is structured along a number of axes. One axis is concerned with promoting cultural heritage-driven innovations and the social and economic benefits they offer. Another objective is to assist in reversing the negative effects of COVID-19 on cultural heritage-relevant sectors, via digitisation (Münster, Utescher, Ulutas Aydogan 2021). This demonstrates a multidimensional approach to the digital preservation of cultural heritage and its associated benefits. However, this European policy applies to all European nations, and is not primarily concerned with the national potential of digitising the cultural heritage of individual countries.

According to Irish digital cultural preservation policy, users must be taken into account, so as to support a vision in which digital cultural heritage is accessible and shared in order to entertain and educate³. The Irish policy resonates with Paul Wheatley (2004) who summarises primary preservation objectives as follows:

1) Data is maintained in the repository without being corrupted, lost, or maliciously altered.

2) Data can be located, extracted, and served to the user.

3) Data can be interpreted and comprehended by the user.

The first objective is a fundamental requirement which every digital repository must meet. The second and third objectives require repositories to support search and retrieval functions in order to improve information accessibility.

Digital preservation research has received a great deal of attention in recent years. In this respect, standards such as the Open Archive Initiative Protocol for Metadata Harvesting (OAIP-MH) have made it easier for service providers to create discovery services across repositories using repeated metadata harvesting (*ibidem*). These are the objectives that digital preservation must meet. It is insufficient simply to preserve the original bit-stream that represents the data stored in a digital object. The challenge is to ensure that users can access and understand the intellectual property of content that has been ingested into the repository in the past, despite

¹ See About – Digital Preservation Coalition, <https://www.dpconline.org/about> (05/2023).

² See *Digital Cultural Heritage – Shaping Europe's Digital Future*, <https://digital-strategy.ec.europa.eu/en/policies/cultural-heritage> (05/2023).

³ See Digital Preservation – Digital Repository Ireland, https://dri.ie/digital-preservation#> (05/2023).

hardware and software changes over time. In this respect, the DRI supports the reuse of cultural heritage data in research, education, the creative industries, and tourism. However, this content needs to be curated responsibly, and preserved and shared, not only on websites run by individual organisations, but via national and international platforms such as DRI, HeritageMaps. ie, Data.gov.ie, and Europeana⁴.

If we take into account the goals of the Global Ireland 2025 initiative, and the Culture Ireland Strategy 2017-2020, it could be argued that the DRI relates to Irish policies on digital cultural preservation and Irish cultural dissemination worldwide. Indeed, according to *Global Ireland: Progress Report Year 1, June 2018-June 2019,* one goal for communicating with the Irish Diaspora is to promote Irish culture and values (*Global Ireland 2018*). In this respect, Global Ireland emphasises the significance of Irish expatriates, which is a 70 million-strong Diaspora, as well as the ability of Irish culture and heritage to forge new international connections. In this way, Global Ireland 2025 encourages Irish culture to be tangible and visible to a variety of users and audiences, including the Irish Diaspora, students, scholars, and tourists. Global Ireland 2025 also works to strengthen relationships and communications with large numbers of Irish and non-Irish citizens abroad⁵. To achieve these goals, and to measure progress, five prominent cultural ambassadors were appointed, and a Global Ireland Stakeholders' Conference was set up, as part of a multi-year plan to double the scope and impact of Ireland's global footprint by 2025. This initiative was also designed to reflect the Irish Government's commitment to dissemination goals.

Taking into account the goals of Global Ireland 2025's promotion of the dissemination of Irish cultural heritage, the remainder of this paper is divided into three sections. Section 1 will discuss Global Ireland and the Abbey Theatre, and section 3 will discuss the digital footprint of Ireland and the Abbey Theatre. In this context, section 2 will define the Global Ireland 2025 initiative, and will provide evidence for the Abbey Theatre's role in promoting this initiative. Section 3 derives its conceptual framework from a description of the Abbey Theatre's digital archive project at the Library of the National University of Ireland in Galway (NUIG), and this section will also consider the limitations of the project. Section 4 will explore DRI opportunities for the Abbey Theatre's and will outline policies and practices used as part of the project, namely: Ireland's national policy for digital preservation and open access; the policy of federation; collaboration and partnership policy; and usability, archiving and access policy. Section 5 will discuss metadata management policy, including deposit policy and storage policy, and section 6 will present a conclusion. In this regard, the paper will consider DRI publications, including reports and guidelines drafted by the DRI's stakeholders and directors, including Sharon Webb, Aileen O'Carroll, and Dr. Natalie Harrower.

This paper will use an interdisciplinary approach and a digital humanities lens to highlight the opportunities that the DRI can provide for disseminating, discovering and visualising details of past dramatic performances stored in the Abbey Theatre's archives, as part of Irish literary heritage. These archives form a significant part of the Irish national cultural canon. Further, in order to achieve its objectives, the paper will consider the practices of the aforementioned policies, in relation to the Abbey Theatre's archived collections. The Abbey Theatre's archived collections form part of *The Inspiring Ireland* project. Further, Inspiring Ireland and the National Library of Ireland, views the Abbey Theatre as an important visual arts venue. In this context,

⁴ See Digital Cultural Heritage | Digital Repository Ireland, https://dri.ie/digital-cultural-heritage> (05/2023).

⁵ See gov.ie – Global Ireland: Ireland's Global Footprint to 2025. (n.d.), <https://www.gov.ie/en/campaigns/globalireland/> (05/2023).

sources reviewed include the Abbey Theatre's archived administrative records, the Abbey Theatre's archived prompt script collection, stored items from the Abbey Theatre's archived photographic collection, the Abbey Theatre's archived poster collection, and the Abbey Theatre's archived Anne Yeats collection. The paper will conclude by addressing the following question: What are the advantages of preserving the Abbey Theatre's archives digitally in an interactive, reputable, national, and collaborative digital repository like the DRI?

2. Global Ireland 2025 and the Abbey Theatre

Global Ireland 2025 is an Irish Government initiative which aspires to spread the power of Ireland globally. Traditionally, Dublin's focus for foreign relations has been on Washington, London, and Brussels. The Republic of Ireland now seeks to reduce this reliance using its Global Ireland 2025 initiative, which was launched in 2018. Global Ireland 2025 represents the Republic of Ireland's largest international expansion since the 1920s. It aims to double the scope and influence of the Irish state throughout the world over the next decade by strengthening and establishing new cultural, economic, and political alliances. Under this initiative, the Republic of Ireland has already established missions in Wellington (New Zealand), Vancouver (Canada), and Monrovia (Liberia). Further, new missions were established in 2019 in Bogota (Colombia), Santiago (Chile), Amman (Jordan), Cardiff (Wales), Los Angeles (United States), and Frankfurt (Germany). Other plans to strengthen Ireland's global power include promoting Irish arts, heritage, and culture to new generations and a new audience worldwide⁶.

The archived collections of the Abbey Theatre were earmarked to be used as part of the promotion of Global Ireland 2025. The Abbey Theatre holds high national, literary, and cultural status in Ireland for several reasons. In the late nineteenth century and the early twentieth century, there was a general lack of interest in Ireland for Irish literature and drama. Indeed, at this time, Ireland experienced a significant decline in the number of literary and dramatic works produced there. The reasons for this include poor economic conditions, as well as sectarian conflicts between Catholics and Protestants which led to heated political disputes. In the twentieth century, the proximity of Ireland and Britain also hindered the development of Irish literature because English culture, Modernism, and Capitalism heavily influenced Irish popular literature, drama and culture. In English and international theatres, and in the Arts in general, Irishmen were portrayed, at best, as comical drunkards and, at worst, as indolent, lustful, or dangerous figures.

The Abbey Theatre was founded in 1904 in an effort to present to the world an Ireland rich in culture, and to free Irish literature from English influence. The Abbey Theatre gained a significant foothold in the Arts compared to other theatres in Dublin, such as The Queen's, and the Gaiety Theatre. Members of the Abbey Theatre desired to demonstrate to England that Irish culture was in no way inferior by establishing a school of Celtic and Irish dramatic literature. The first two and three seasons of productions were successful, during a time when people were barely interested in picking up a book or going to see a play, because they were struggling to provide for their basic needs. Early associates of the Abbey Theatre were the Irish National Theatre Society, W.B. Yeats, Lady Gregory, Edward Martyn and John Millington Synge⁷, who were able to successfully attract the attention of Ireland's National Press, and newspaper outlets abroad. At this time, many literary, political, and patriotic figures looked to revive the Celtic

⁶ See *gov.ie:* Global Ireland – Ireland's Global Footprint to 2025 | Ireland – This Is Ireland, https://ireland.ie/en/global-ireland-strategies/global-ireland-ireland-global-footprint-to-2025/ (05/2023).

⁷ See *History – Abbey Theatre*, <https://www.abbeytheatre.ie/about/history/> (05/2023).

culture, literature, and language through peaceful means. In this respect, a literary nationalist movement which celebrated and honoured Ireland as an independent nation emerged, and was linked not to acts of violence and bloodshed, but to art.

Prior to the establishment of the Abbey Theatre, Irish theatres staged mainly English dramas, and intentionally and unintentionally promoted the English culture. In resistance to this, the Abbey Theatrical Company made numerous tours of England and of the United States, in order to promote Irish literature and culture abroad. Inspiring Ireland has exhibited the text of a 1912 Abbey Theatre tour programme from the Abbey Theatre Archive's Master Programme Collection. In 1912, this tour landed at the Plymouth Theatre in Boston. The Abbey Theatre Tour Programme, 1912, describes the important role of the Abbey Theatre in the global revival of Irish drama⁸. Further, this description ties in with the objective of Global Ireland 2025 which is to spread information about Irish cultural heritage.

Through the leadership of W.B. Yeats, a circle of Celtic literary figures joined forces to eradicate the negative portrayal of the Irish in English literature, and to try to revive Irish literature and language using Romanticism, and the revival of ancient Irish legends and Irish heroes and heroines. This Circle wanted to establish an Irish national theatre that would demonstrate that Ireland was a cultured and civilised nation. This led to the founding of the Abbey Theatre in Dublin. J.M. Synge was among the playwrights who became a member of Yeats' circle. Yeats discovered a new outlet in Synge's unique dramatic style, which focused on the peasant lifestyle of the Irish people. The role of the Abbey Theatre in the promotion of literature and drama can be evaluated based on selected dramatists' works and the impact of their plays on Irish society.

3. The Irish Digital Footprint and the Abbey Theatre

Using a global communications strategy, the Global Ireland 2025 initiative aims to increase Ireland's visibility, raise its profile, and enhance its reputation by establishing a digital footprint. This initiative has encouraged the emergence of digital humanities in Ireland, in a similar way to how cultural initiatives in Japan and China have worked. According to the *Global Ireland Progress Report 2018-2019*, capital expenditure was put aside for digital infrastructure investment. As a result, Ireland has strengthened its capabilities in ICT and data analytics (Collins, Harrower, Smeaton 2017). The DRI and the digitisation of the Abbey Theatre's archived collections are outcomes of this investment in digital expertise.

In Ireland, the digital archiving of the Abbey Theatre's production collections is an example of digital foot-printing in the humanities. The NUIG undertook the digitisation of the Abbey Theatre's archives between 2012 and 2015. This was the largest theatre archive digitisation project in the world and had a significant impact on the University and its Library. Nevertheless, few studies have examined the significance of this project for Irish theatre and drama history, and for Theatre Studies in general (Bradley, Keane 2015; Cox 2016, 2017).

The scope of the digitisation project presented a number of obstacles, such as fragile content, limited time, maintaining streamlined workflows, complex digital rights management, and ensuring efficient systems. The project was completed in 2015 on time and within budget using a "more product, less process" methodology (Greene, Meissner 2005, 208). Access to the Abbey Theatre Digital Archive has had a significant academic impact on the NUIG, generating new

⁸ See <https://repository.dri.ie/catalog/9593x022p/> (05/2023).

research income and international connections, and contributing to the University's improved ranking. The Digital Archive allows for new types of research, such as text and data mining, and has reshaped undergraduate curricula. It has also had a profound impact on the Library as the project's leader (cf. Cox 2016). In this respect, the archivist's role has evolved, and partnerships with the academic community have grown. This growing emphasis placed on digital publication has prompted the evolution of an organisational structure based on function rather than on subject, and one which promotes participation in digital scholarship initiatives, with archives and special collections assuming a new position of prominence (Cox 2017).

The need to complete the digitisation project within three years amplified the difficulties posed by the volume of the Abbey Theatre's archived material. An initial institutional partnership was agreed for twenty-six years, and so time was of the essence. It became clear at an early stage that digitisation on this scale, within the defined timescale, could not be achieved using existing Library resources. This necessitated the outsourcing of a substantial portion of the project. In this respect, the NUIG was fortunate to find an excellent contractor, namely an archivist firm that understood the needs of all parties; the firm employed qualified archivists to process a quantity of challenging material in an appropriate manner. The materials which posed challenges included the following: fragile documents that had been damaged in a fire in 1951; a variety of formats and sizes, including different press cuttings and stage designs; a mixture of handwritten correspondence and typescript records; and audio or video recordings presented in legacy formats and/or in a fragile condition (*ibidem*).

Employees working in the Library benefited from the Contractor's knowledge of efficient workflows, which were essential for achieving rapid throughput. It was essential for both contracted workers and library archivists to share their knowledge. The University's library workers engaged closely with the Contractor to establish the system's infrastructure. This was a crucial component for enabling large-scale digitisation and meeting complex requirements for rights management. Components included a variety of Digital-Asset-Management (DAM) systems which were designed by the Belfast based firm Aetopia Limited. The DAM was essential for managing digital rights, as follows: it enabled automatic redaction based on the occurrence of certain words; it facilitated the withholding of sections as opposed to entire documents; and it approved the automatic release of documents after the expiration of agreed embargo periods for certain categories, such as thirty years for board minutes. Cloud-based computing and storage infrastructures were successfully deployed throughout, and Amazon's Safe Secure Storage (S3) service was selected for this purpose.

Two aspects of the project are particularly noteworthy. Access to the digital archive was restricted to designated workstations in the NUI Galway Library's Archives Reading Room. This was specified in a partnership agreement with the Abbey Theatre. The Theatre had concerns about publishing their archives on the open web, because of rights management issues and relationship management concerns with living actors. However, most librarians favour open access (OA) and, therefore, it is frustrating that the digital archive resource is restricted in this manner. However, the reading room model is advantageous because exclusive access helps attract academic staff, students and international visitors to the University. As a compromise, minutes from 1904 to 1939 were made open access, and it is hoped that additional content will be made available in the future.

The second area of focus involved metadata. A streamlined methodology, as exemplified by the "more product, less process" approach was adopted in order to complete full digitisation in three years (Greene, Meissner 2005, 208). Integration of the Abbey's own productions database enabled the linking of a substantial amount of material, such as scripts and theatre programmes, relating to specific plays. This worked to associate the content with the relevant cast and venue, and also worked to bring together the various document types associated with a play or production. It was not possible to link all documents to a play, of course. For this type of content, a brief descriptive record was created, and Optical Character Recognition (OCR) was implemented wherever possible to optimise full-text retrieval. The online environment enables a variety of methods for locating information, and, therefore, innovative approaches to processing archives should be available, to save time that would otherwise be spent on meticulous arrangement. The DAM provided robust search capabilities, and users have expressed satisfaction with the digital archive (Cox 2017).

According to Cox, attempts to digitise archived material in a library database, like the one at NUI Galway, poses some access and retrieval limitations. In response to these digital challenges, and as a continuation of the promotion of digital archives, it is necessary to determine how the DRI can overcome challenges in relation to the preserving, managing, and provision of access to digital objects pertaining to the Abbey Theatre. Further, what opportunities does the DRI offer to digitise a wider variety of Abbey Theatre objects?

4. Opportunities for the DRI

4.1 Ireland's National Policy of Digital Preservation and Open Access

The DRI defines a digital repository as, "an infrastructure that provides long-term storage management, preservation, and access to digital resources"⁹. This confirms that the DRI is a system used for managing and preserving digital materials over the long term, as well as for providing reliable access to such resources. To understand the DRI in detail, scholars, practitioners, and relevant stakeholders gathered in Dublin and Maynooth in 2012 for a three-day workshop entitled *Realising the Opportunities of Digital Humanities*, which was organised by the DRI, the Digital Enterprise Research Institute (DERI), the Digital Humanities Observatory (DHO), and Digital Research Infrastructure for the Arts and Humanities (DARIAH-EU). In order to promote the adoption of digital humanities knowledge, techniques, and technologies, this workshop sought to identify the most pressing research questions in the field, and to strengthen academic-industry cooperation¹⁰.

Dr. Sandra Collins explained in 2013, when the DRI joined the Digital Preservation Coalition, that the DRI is working to raise awareness of the need for and benefits of digital preservation and open access, while respecting and acknowledging ownership, copyright, intellectual property rights, privacy, and confidentiality¹¹. Dr. Collins explained that it is crucial to preserve the social and cultural heritage of Ireland in a digital format, and, thus, digital cultural preservation must assume a prominent position. The DRI states that digital preservation is the active management of digital content over time to ensure its continued accessibility, and highlights two main goals of digital preservation, namely, long-term preservation and open access. In the pursuit of these goals, the DRI conducted a national programme of stakeholder interviews to determine the digital preservation needs of, and access practices of cultural institutions, libraries, higher education institutions, funding agencies, and others (Webb, O'Carroll 2012).

⁹ See Digital Preservation – Digital Repository Ireland, <https://dri.ie/digital-preservation#> (05/2023).

¹⁰ See *Realising the Opportunities of Digital Humanities – Digital Repository Ireland*, https://www.dri.ie/realising-opportunities-digital-humanities (05/2023).

¹¹ See *Digital Repository of Ireland Joins the Digital Preservation Coalition – Digital Preservation Coalition*, https://www.dpconline.org/news/digital-repository-of-ireland-jons-the-digital-preservation-coalition (05/2023).

As part of their national programme of stakeholder interviews, the DRI undertook interviews with forty institutions, focusing on the methods and practices adopted in the humanities and social sciences to archive and maintain the data in collections. These interviews also explored the maintenance of digital data. The findings addressed multiple aspects of the digital lifecycle, including types of digital data, sharing and reuse, preservation, storage and formats, metadata and inter-operability, user tools, and structuring content (*ibidem*). The outcomes of these interviews shaped the specific requirements of building the national repository and were used to begin a process to agree national guidelines on digital preservation for the humanities and social sciences. This strategy entailed determining national practices, collaborating with the community to develop national guidelines, and informing national policy as a result. Thus, digital preservation in Ireland was recognised as having national potential.

As a national Trusted National Digital Repository (TNDR), the DRI promotes national policies and guidelines for long-term digital preservation, and enduring access to Ireland's humanities, cultural heritage, and social sciences data. It also offers digital data stewardship for a variety of member organisations, including: higher education institutions; cultural heritage institutions (the GLAM sector of galleries, libraries, archives, and museums); government agencies; county councils; and community archives. Further, the reach of the DRI was expanded using diverse collections and outreach initiatives in 2022. This was done so that the digital cultural heritage of Ireland could be explored for educational and recreational purposes.

In addition to facilitating the long-term preservation of, access to, and discovery of Ireland's social and cultural data, the DRI serves Irish cultural heritage in a specific way. Culturally, Ireland is torn between American, British, and European influences. Therefore, there was a need for a credible national project to preserve the cultural identity of Ireland. The DRI project was officially launched in 2015 as a national cultural project and looked to form partnerships and connections with other Irish humanities projects, such as Inspiring Ireland, which provides opportunities for the innovative preservation of Irish humanities heritage. The DRI works to refine and expand the conventional depiction of humanities scholarship. Further, it illuminates the national culture of Ireland through the lens of digital humanities. Therefore, Irish culture becomes more tangible, visible, and approachable. Thus, the DRI can be viewed as an attempt to redefine and modify the traditional representation of Irish humanities heritage. Conventional knowledge purports that there are boundaries between disciplinary humanities repository serves as a starting point for the dissemination of the interdisciplinary humanities concept in Ireland.

The Abbey Theatre benefits from the DRI as a TNDR for several reasons. The Abbey Theatre is viewed as a national theatre, and so the digitisation of the Abbey Theatre's past production archives is seen as a crucial factor in an apparent "return" of nationalism, an ideology which re-emerged alongside several contextual factors, such as the 2008 economic crisis, the subsequent austerity measures imposed, and migration-related demographic and cultural shifts. As evidenced by an abundance of research, political parties around the world rely on digital media to spread nationalist rhetoric and to promote anti-immigration and anti-liberal views (Alvares, Dahlgren 2016; Engesser, Ernst, Esser *et al.* 2017; Fuchs 2019; Pajnik, Sauer 2017; Waisbord, Amado 2017). In many ways, the digitisation of the Abbey Theatre's dramatic performances works as a means of communication with the Irish Diaspora. For example, Chancellor's Pho-

tographic Studio captured a scene from *Kathleen Ni Houlihan* by W.B. Yeats in 1902¹². This scene was transferred into the DRI, Abbey Theatre, on 16 June 2015. The scene depicted is from a play about the 1798 Rebellion, which could be perceived as empowering feelings of Irish nationalism among the Irish Diaspora.

4.2 The Policy of Federation and the DRI

For navigating the landscape of the humanities, institutional digital repositories are a new and essential vehicle. By means of free and unrestricted online availability, digital repositories facilitate a researcher's ability to disseminate and share research outputs, thereby supporting the open access objective of scholarly communication. According to the Scholarly Publishing and Academic Resources Coalition (SPARC), institutional digital repositories are becoming an integral part of the structure of scholarly communication (Crow 2002). These vehicles offer authors more visibility and users more information more easily. Institutional digital repositories also have the potential to benefit academic institutions, to boost their research profiles, and to attract funders, who see a greater dissemination of research outputs. The DRI in Ireland is constructed via a research consortium of six academic institutions, collaborating to deliver the DRI's policies, guidelines, and training, namely: The Royal Irish Academy (RIA, Lead Institute), the National University of Ireland, Maynooth (NUIM), Trinity College Dublin (TCD), the Dublin Institute of Technology (DIT), the National University of Ireland, Galway (NUIG), and the National College of Art and Design (NCAD). These parties are the members of the DRI's research consortium.

This policy of federation among Irish institutions offers indirect benefits to academic partners, including to the NUIG, which was the first partnership established with the Abbey Theatre, and is one of the six academic institutions of the DRI. In addition, the potential benefits of the DRI extend to enhancing the visibility of the creators and publishers of the Abbey Theatre's archived collections. These partnerships also enhance the DRI's role in the global dissemination of research outputs. In this regard, the DRI Conference invited demonstrators such as Prof. Patrick Lonergan to present a demonstration of the Abbey Theatre's digital archiving project, as the result of a partnership between the NUIG and the Abbey Theatre. The Demo's description explains that the DRI project aims to represent a new era of international scholarship for Irish theatre, and seeks to shed light on Irish theatre, history, culture, and society. Furthermore, it looks to alter the conventional notion of Irish drama. In this context, it is generally accepted that the history of Irish drama is the history of Irish plays as written scripts. However, as a full multimedia archive, the digital archive provides researchers with access to the entire range of materials associated with theatre performance: not only scripts, but also visual materials (such as costumes, set designs, and lighting designs), sound materials (music scores and sound effects), and supporting materials (advertisements, press releases, and reviews)¹³.

4.3 The Policy of Collaboration and Partnership

The DRI's policy of collaboration and partnership presents a number of opportunities for the Abbey Theatre and other collaborators. As previously outlined in detail, the DRI is constructed as a research consortium comprising of six academic partners. The DRI's partnerships

¹² See A Scene from Kathleen Ni Houlihan by William Butler Yeats, 1902 – Digital Repository of Ireland, https://repository.dri.ie/catalog/9593x0247> (05/2023).

¹³ See Demos | Digital Repository Ireland, <https://www.dri.ie/demos> (05/2023).

with these academic institutions reflect its educational and research objectives (Webb, O'Carroll 2014). In addition, the DRI's Depositor Manual states that the target communities for this repository are students and academics¹⁴.

As a result of the DRI's partnership and collaboration with the Abbey Theatre, the global knowledge gap about the Abbey Theatre's archived collections and its sources is narrowed. For instance, the Partnership works to preserve various elements of the Abbey Theatre's archives, including its archived photographic collection, its Anne Yeats collection, its archived administrative records, and its archived prompt script collection. The DRI's Anne Yeats Collection serves as an information resource about Anne Yeats, who was Head Designer for the Abbey Theatre, as well as other associates of the Theatre. Anne worked with oils when she undertook her designs for the Theatre and for publications. Anne was the daughter of W.B. Yeats and, together with her father, was immersed in Irish Revival culture. For example, the Anne Yeats Collection contains painting-formatted images of costume designs for Charles Ricketts who played Cuchulain in the 1915 production of *On Baile's Strand* by W.B. Yeats¹⁵.

The DRI's policy of collaboration and partnership contributes to the sharing of archived collections and the recognition of the contributions of Irish universities, such as the University College Cork School of Film, Music and Theatre. In 2017, the Abbey Theatre commissioned Dr. Marie Kelly to develop an online research package to coincide with the premiere of its production of Teresa Deevy's *Katie Roche* (which was directed by UCC alumna Caroline Byrne). The objective of this package was to compile scholarly articles, interviews, photographic material, and archival information on the play, as well as a variety of writings on the 2017 production, for the consumption of theatre scholars, artists, and general readers. The final research package comprises articles by Una Kealy and Kate McCarthy (Waterford IT), Chris Morash (TCD), Eibhear Walsh (UCC), Fiona Beckett (University of Leeds), and Cathy Leeney (UCC)¹⁶. There are also contributions from performance artist Amanda Coogan and interviews with director Caroline Byrne, and dramaturg Morna Regan. The pack is also accessible via the Abbey Theatre's website¹⁷.

The digital preservation of the Abbey Theatre's archived material in a collaborative national trustworthy digital repository, such as the DRI, secures the valuable position of resource materialin the national consciousness, especially relating to retelling the history of Ireland, the struggles of her people for freedom, and the preservation of its arts and culture for the future. Moreover, by collaboration with the Abbey Theatre, its role as a resource in the context of the interdisciplinary approach to humanities is secured for educational and research purposes, and its history is revitalised.

4.4 The Policy of Usability, Archiving and Access

The dissemination, discoverability, and long-term preservation of the Abbey Theatre's archived collections are influenced by the DRI's usability, archiving, and access policies for three distinct reasons. Firstly, the Graphical User Interface (GUI) of the DRI is designed to

¹⁴ See Introduction – Digital Repository of Ireland Documentation, <https://guides.dri.ie/depositor-guide/01-intro.html> (05/2023).

¹⁵ See <https://repository.dri.ie/catalog/9593x025h> (05/2023).

¹⁶ See Katie Roche Resource Pack – Digital Repository of Ireland, <https://repository.dri.ie/catalog/gh93wm59r> (05/2023).

¹⁷ See <https://www.abbeytheatre.ie/whats-on/katie-roche/> (05/2023).

meet certain requirements for usability, accessibility, and functionality. In this regard, the functionalities of the DRI's GUI can be broadly classified as browsing, discovery, and searching. Secondly, open access provides opportunities for sustainable access, discovery, browsing, and searching in the Abbey Theatre's archived collections, sub-collections, and objects. Thirdly, the DRI's use of an Open Archival Information System (OAIS), International Organization for Standardization (ISO) reference model is crucial for global accessibility and preservation.

The OAIS reference model has been widely adopted and utilised elsewhere, to guide the creation of preservation tools and repositories, and is predicated as, "an organisation of people and systems that has accepted the responsibility to preserve information and make it accessible to a Designated Community"¹⁸. In this context, the Consultative Committee for Space Data Systems (CCSDS) defines a "designated community" as, "an identified group of potential Consumers who should be able to comprehend a particular set of information. Multiple user communities may make up the designated community"¹⁹. This refers to users who possess the knowledge base necessary to comprehend information presented, independently, and as it is preserved and made accessible by the OAIS. This system aids in establishing boundaries and in determining the quantity of metadata that must be retained and managed to support the preservation process. A broader scope of the designated community implies less specific domain knowledge, and, as a result, more metadata will be required to render and comprehend long-term preserved information.

Serving the needs of a specific community requires a detailed comprehension of the users' knowledge base. This allows managers of institutional repositories to determine what information must be developed and maintained to guarantee the content's usability, in the present and in the future. In addition, this approach helps define how to present and provide access to content and may even determine its format. All of these factors have a direct bearing on preservation over time.

The CCSDS of the National Aeronautics and Space Administration (NASA) first initiated the process of OAIS, and it was adopted as an ISO standard in 2003. The OAIS reference model is a conceptual framework for a generic archival system committed to both information preservation and access. It is essential to remember that the OAIS reference model works at a high level. However, it often lacks implementation-specific information and does not guarantee consistency or inter-operability between implementations. Its strength is that it offers a common vocabulary and a set of concepts for describing repository architectures and comparing implementations. Numerous organisations have utilised this reference model to inform the planning and design of diverse types of digital repositories. Frequently, the management of access to an infrastructure, repository, or application server can be centralised or distributed. Access management is dependent on the system's level of federation and access policies. Further, access management can be centrally administered or delegated back to the community. In the Institute for Quantitative Social Science (IQSS, Harvard University) and Europeana infrastructures, for instance, contributors determine what is accessible and what is not. As for the DRI, control is delegated (federated) to its organisation members (Webb, O'Carroll 2014).

The OAIS reference model includes a functional model which describes the six functional components that collectively fulfil the system's responsibility for preservation and access. It also defines the external environment in which the OAIS operates, and it provides high-level descriptions of the information objects managed in the archive via an information model. The

¹⁸ See Home – OAIS Reference Model (ISO 14721), <http://www.oais.info/> (05/2023).

¹⁹ See Search – Consultative Committee for Space Data Systems, 2002, <http://public.ccsds.org/publications/>(05/2023).

OAIS model's functional components are as follows: ingestion, archival storage, data management, preservation planning, administration, access, and common services (Tiernan, Tang, Bako 2014). These items are described in more detail below.

1) Ingestion refers to the services and operations that accept data from producers, and which prepare it for storage and management in the archive.

2) Archival storage oversees the long-term storage and maintenance of the digital materials entrusted to the OAIS, ensuring that they remain complete and accessible over time.

3) Data management maintains descriptive metadata to facilitate the search and retrieval of archived content as well as the management of internal operations.

4) Planning for preservation creates a preservation strategy based on the changing user and technological environment.

5) Access manages the processes and services that locate, request, and receive the delivery of archival content.

6) Administration is in charge of daily operations and coordinating the five other OAIS services.

The Inspiring Ireland Project – Abbey Theatre is a federated archive²⁰, that includes the name of a collection, its sub-collection, and fifteen objects. These items were selected from various Abbey Theatre archive collections, and the formats of these items comprise photographs, documents, ephemera, and paintings. The collection is listed under the entry "The Inspiring Ireland Project – Abbey Theatre", which comprises 15 objects in a sub-collection called "Abbey Theatre". All are archived under *The Inspiring Ireland Project. Inspiring Ireland* is a component of a systematic preservation, access, and discovery programme of digital objects in the cultural institutions of Ireland. The Project forms part of Ireland's large-scale preservation infrastructure relating to Irish cultural heritage and is a curated exhibition featuring high-quality digital images of objects, expert interpretation, and contextualisation.

The OAIS reference model defines federated archives as a group of archives that make their holdings accessible via one or more common finding aids. In this context, a global community is defined as an extended consumer community that, in the context of a federated archive, can access the holdings of multiple archives via one or more common finding aids. In this way, the DRI is most similar to the structure of a global site, because global access is achieved by exporting a standard-format associated description to a global site. The global site independently manages a set of descriptors from numerous archives and provides finding aids for determining which archive owns an interesting collection. The consumer is provided with a centralised, consolidated view of the holdings of multiple sites. To view a document's details, a user must visit the website containing the actual document. This is simplified when both sites and clients support a standard set of protocols (*Consultative Committee for Space Data Systems*, 2002).

According to Dublin Core Metadata, the prompt script for the world premiere of J.M. Synge's *Riders to the Sea* appears on the DRI²¹ and also on *Inspiring Ireland – A Sense of Place*²². Thus, the user can access this website for additional information and to view the document.

²⁰ See *The Inspiring Ireland Project – Abbey Theatre – Digital Repository of Ireland* (n.d.), <https://repository. dri.ie/catalog/5999n594j> (05/2023).

²¹ See <https://repository.dri.ie/catalog/9593x0204> (05/2023).

²² See <www.inspiring-ireland.ie> (05/2023).

5. The Policies of Metadata Management

The DRI defines metadata as structured information that performs the following tasks²³:

- 1) It describes, explains, and facilitates the discovery and delivery of digital content.
- 2) It identifies and makes it easier to retrieve the aforementioned content.
- 3) It also makes it easier toutiliseand / or manage other resources.

For each dataset, it is essential to know who created the data, when the data were created or published, and the title or descriptive name by which the dataset is referred to. The DRI's metadata guidelines table 1 shows, Mandatory and Recommended elements, and suggested controlled vocabularies/standards for the DRI²⁴. This guide tells us that some metadata elements, such as the title, creator, and description are mandatory, while others, such as language, contributor, and source, are recommended. This policy of metadata management has an impact on the ingestion, discoverability, visibility, and dissemination of Abbey Theatre sub-collections and objects. Furthermore, the descriptive metadata of a digital object is useful for describing the intellectual entity via properties such as description, subjects, and places²⁵. Each important function of DRI metadata management will be described in detail below.

Title	Mandatory
Creator	Mandatory
Language	Recommended
Contributor	Recommended
Identifier	Optional
Publisher	Optional

Table 1 – "Metadata Guidelines", Mandatory and Recommended Elements, https://repository.dri.ie/catalog/2z119b06h>

5.1 Ingestion

In terms of digital formats and metadata creation, the DRI follows best practice guidelines for data preparation. This enables inter-operability and improves the intake of digital repositories such as the DRI. In an attempt to strike a balance between best practices and the realities of existing institutional data, the DRI accepts non-standard formats for data import. Employees of the DRI work closely with new depositors to promote the incorporation of recommended formats, and to highlight poor format selections early on in the membership phase. For instance, see "Abbey Theatre tour programme, 1906"²⁶.

- ²⁵ See Research Data Management Digital Repository Ireland, < https://dri.ie/research-data-and-dri> (05/2023).
- ²⁶ See <https://repository.dri.ie/catalog/9593x023z> (05/2023).

²³ See Research Data Management – Digital Repository Ireland, <https://dri.ie/research-data-and-dri> (05/2023).

²⁴ See <https://repository.dri.ie/catalog/2z119b06h> (05/2023).

5.2 Discoverability

The DRI uses subject, title, name, and place information as metadata for a browsing tool for digital content. This promotes the discoverability of digital assets and objects from its collections. For instance, by entering the word "theatre/theater" as the subject information, a user can find 141 objects about Irish theatres, including the Abbey Theatre. The image entitled "Abbey Theatre, Abbey Street Lower, Dublin City, County Dublin"²⁷, shows the patrons of the Abbey Theatre prior to the start of a performance. Using "Abbey Theatre/Theater" as the title information, 62 objects can be discovered. Further, the image entitled "Abbey Theatre Posters"²⁸, shows various posters for the Abbey Theatre from 1951; the user can discover 15 objects using "Abbey Theatre" as the name information. The image entitled "Opening Night Programme for the Abbey Theatre, 1904"²⁹, shows the Programme for the opening night of the Abbey Theatre in Dublin on the 27 December 1904. Using "Abbey Theatre/Theater" as the location, the user is able to find 10 objects. Furthermore, the image entitled "Old Abbey Theatre Auditorium" shows the old building of the Abbey Theatre in 1904³⁰.

The use of a thematic research collection as a digital research tool in humanities is appropriate for the discoverability function. Carole L. Palmer (2004) identifies five fundamental characteristics of thematic research collections (TRCS), namely, they must be: digital, thematically coherent, heterogeneous, structured, and open-ended. Palmer explains that the significance of thematic research collections lies in the fact that collections of all types can be open-ended, and they have the potential to grow and change based on the commitment of collectors' resources. This is because the majority of thematic collections are not static, and scholars usually add to and improve the content. Indeed, the work on any given collection can continue for generations. Because of the inherent flexibility (and vulnerability) of "born digital" and transcribed documents, individual items within a collection can also evolve (*ibidem*). For example, the Abbey Theatre Archive Master Programme Collection details theatre programmes published for the Abbey Theatre, including their formats, subjects, and locations³¹. This Collection demonstrates the fallacy of constructing disciplinary boundaries. According to the name information, the Collection lists a variety of subjects and themes, including sense of identity, Irish drama, and theatre. In this way, the dissemination of such a digital collection promotes interdisciplinary humanities as an educational resource.

Creating, maintaining, managing, and publishing a digital research collection necessitates the creation of an infrastructure to ensure that ongoing processes are effective, dependable, inter-operable, and governed. It involves numerous interconnected activities. The detailed information which is required to intellectually and physically manage individual files and collections of interrelated files can be divided into four main interrelated categories: descriptive, administrative, file, and relational or structural data. The Metadata Encoding and Transmission Standards (METS) have formalised these categories, which represent the prevalent library model for recording management and control data (commonly known as metadata). Each of these four areas is concerned with a particular type of management and control data, and each is dependent on the others. This enables effective intellectual, legal, and physical control over

³⁰ See <https://repository.dri.ie/catalog/9593x019c/> (05/2023).

²⁷ See <https://repository.dri.ie/catalog/jw82mt243/> (05/2023).

²⁸ See <https://repository.dri.ie/catalog/vx02dz68h/> (05/2023).

²⁹ See <https://repository.dri.ie/catalog/9593x026s/> (05/2023).

³¹See <http://www.inspiring-ireland.ie/> (05/2023).

collections of digital materials when they are interconnected or linked. However, these types of data are predominately data-centric and are, therefore, best represented by database technology (Schreibman, Siemens, Unsworth 2004)³². For example, in the DRI, the title of one collection for Inspiring Ireland is *The Inspiring Ireland Project – Abbey Theatre*. The descriptor of this collection tells us that it is a selection of cultural heritage objects from the Abbey Theatre presented as part of *The Inspiring Ireland* project.

The Abbey Theatre Archive Master Programme Collection includes photographs, programmes, manuscripts, and sketches from the Abbey Theatre archives. These items, spanning the years from 1902 to 2010, provide valuable insights into Irish theatre and the arts, as well as the country's history and social life throughout the twentieth century, and pertains to the international influence of Irish theatre³³. The Abbey Theatre Archive comprises: the Abbey Theatre Archive Administrative Records, the Abbey Theatre Anne Yeats Collection, and the Abbey Theatre Archive Prompt Script Collection, and all these items also display as part of *The Inspiring Ireland Project – Abbey Theatre*.

The search box can be used to locate collections or objects that contain specific terms in their descriptive metadata. To search for simple word combinations, one can just type them into the search box and press enter. By default, individual words in the search can be joined with AND, which means that the search will look for metadata containing all of the entered words. It is also possible to use the OR operation to search for metadata containing any of the words, for example: Abbey Theatre Archive, Abbey Theatre Archive Administrative Records OR Abbey Theatre Archive Master Programme Collection. To search for particular phrases, one can enclose the search in quotation marks, for instance, "Abbey Theatre Archive Master Programme Collection". In addition, searching for Abbey Theatre / Theater as a title is distinct from searching for it as a subject, location, or name. For instance, a search for Abbey Theatre as a title returns 62 results, 61 images and 1 text. For example, the image entitled "Abbey Theatre (Interior)" depicts the old Abbey Theatre building³⁴.

5.3 Visibility

To enhance the visibility of the Abbey Theatre's objects and assets, such as museums and heritage centres, the DRI employs the "exhibition language" (Strepetova, Arcos-Pumarola 2020, 95). This provides opportunity for visibility, which, in turn, facilitates the dissemination of the Abbey Theatre's digital project. The DRI is written in this language because literary heritage is considered an intangible cultural heritage. The relationship between an intangible cultural heritage (ICH) and museums or heritage centres has become a field of research in Museum Studies, because it transforms the concept of the museum from a repository for objects to be displayed and preserved, into a space focused on people/users. This context allows a discussion of the concept of intangible museology, which addresses the difficulties associated with presenting, interpreting, and transmitting ICH through a discourse shaped by tangible mediums in an exhibition setting.

Utilising images, posters, and photographs as forms of media can promote the DRI as a tangible medium of Irish literary objects. For instance, the Abbey Theatre has deposited 94

³² The Companion is available at the following link: <https://companions.digitalhumanities.org/DH/>(05/2023).

³³ See <http://www.inspiring-ireland.ie/> (05/2023).

³⁴ See <https://repository.dri.ie/catalog/gq67z8727/> (05/2023).

objects relating to the Abbey Theatre and drama. These digital assets comprise images, photographs, theatre programmes, posters, and text as, for example, the image of the Abbey Theatre interior³⁵. The image entitled "Licence to perform The Playboy of the Western World by John Millington Synge"³⁶ depicts the text of the licence to perform J.M. Syng's The Playboy of the Western World. The kind of visibility offered by these digital assets to different audiences will set up the Abbey Theatre digital archive collection as a model of interdisciplinary humanities. These collections uncover the interdisciplinary nature of Irish mythology, theatre, religion, history, and visual arts. The image archived as "Poster for Mothers by May Cluskey, 1977"³⁷ is a poster for the production of Mothers by May Cluskey in 1977 at the Peacock Theatre that features Fergus Bourke of the Abbey Theatre Company.

Scenes from plays written by renowned dramatists are also displayed in the DRI to illustrate the importance of the Abbey Theatre in Irish drama. For example, there is an image that shows "a scene from Brian Friel's *Philadelphia, Here I Come!* (1982)"³⁸. The actors featured in this photo are Gerard McSorley, Stephen Brennan, and Marie Kean. The image archived as "a scene from *Christ Deliver Us!* by Thomas Kilroy, 2010"³⁹ depicts a scene from Thomas Kilroy's *Christ Deliver Us!* (2010). These archived images show how digital collections can promote interdisciplinary academic programmes in the humanities on a global scale.

5.4 Deposit Policy

The DRI's deposit policy affords Irish cultural institutions, such as the Abbey Theatre, two advantages. Firstly, the digital collections deposited with the DRI should align with its mission to be the Irish nation's most reliable digital repository for social and cultural data. The collections should comprise materials generated by Irish researchers, held by Irish institutions, or digital materials pertaining to the island of Ireland. Secondly, collections may be in any language and should be accompanied by metadata written in Irish or English, as well as contextual information where applicable.

Creating and arranging objects and assets into collections is connected to deposit policies. *The DRI Collection Policy* (April 2020) provides depositors with an overview of data types, digital assets, and the kind of collections that the DRI intends to preserve. Consequently, depositors can evaluate file formats, metadata, and the copyright status of collections. If their research involves individuals, depositors can also review the DRI's Restricted Data Policy (DRI Restricted Data Policy (Amended 2019).

The DRI organises objects added to the Repository into collections, and every item must be included in one of these collections. Sub-collections are an optional sub-division of collections. Regardless of the metadata standards used for the objects, collections are required. The metadata must be associated with a collection and should be identical to that associated with an object, namely: Title, Date, Creator, Description, Subject, etc. Additionally, collections can have a cover image that represents the collection. It is possible to assign specific access permissions or licenses to the objects within a collection. Additionally, the DRI maintains repositories as Metadata Aggregators, Single-Site Digital Repositories, and Multi-Site Digital Repositories.

³⁵ See <https://repository.dri.ie/catalog/gq67z8727/> (05/2023).

³⁶ See <https://repository.dri.ie/catalog/9593x030c> (05/2023).

³⁷ See <https://repository.dri.ie/catalog/9593x0272> (05/2023).

³⁸ See <https://repository.dri.ie/catalog/9593x031n/> (05/2023).

³⁹ See <https://repository.dri.ie/catalog/9593x0336/> (05/2023).

The Inspiring Ireland project is an illustration of a single-site digital repository. In this context, the Abbey Theatre is a sub-collection of *The Inspiring Ireland - Abbey Theatre* collection, which has a cover image. This sub-collection comprises fifteen items.

The policy of depositing diverse materials in Irish institutional repositories means that assembling collections is required. Raym Crow explains that institutional repositories are, "digital collections that capture and preserve the intellectual output of an individual or community of universities" (2002, 4). In contrast to subject-specific repositories, an institutional repository stores and makes available the educational, research, and related assets of an institution. Although the majority of currently established institutional repositories are e-prints repositories providing open access to the research outputs of a university or research institution, the content need not be limited to e-prints and could include research data, learning material, image collections, and many other diverse types of content, such as the DRI.

As already noted, the DRI is managed by a research consortium of six academic institutions working together to deliver the repository, policies, guidelines, and training. Institutional repositories are a new but key area within the humanities landscape. Through free and unrestricted online availability, digital repositories make it easier for researchers to disseminate and share research output and, thus, they support the open access goal of scholarly communication. As noted by the Scholarly Publishing and Academic Resources Coalition (SPARC), institutional repositories are becoming a major component of the evolving structure of scholarly communication (Crow, 2002). Digital repositories enable authors to gain more visibility, and users can find information more easily. Therefore, the potential benefits of institutional repositories extend to institutions. This can enhance research profiles, and reach funders who can see the wider dissemination of research outputs. The DRI indirectly contributes to the validation of the role of the NUIG in the global dissemination of research outputs and the national significance of the Abbey Theatre. The partnership between the NUIG and the Abbey Theatre was one of the first company and a member partnership established by the DRI, alongside five other academic institutions.

In a digital repository, the purpose of descriptive information is to serve as a mental standin for an object. In order to be able to identify the intellectual and digitally represented objects of a research collection, descriptive information is required. Documenting and tracking the sources and evidence used to develop a research project is essential for both traditional and digital research. For example, if sources are used to create a database that describes individuals and organisations, then the sources must be documented even if they are inaccessible directly from the collection. Subject information may also be included in descriptive information, in addition to author, title, and publisher information.

When existing traditional media are digitised, both the original and its digital representation must be described. Even though some information may overlap, the two objects are distinct manifestations of the same work, because there will be both public and private collections containing traditional media. This is crucial for preserving unique materials, such as manuscripts and archival records, but also for preserving copies, such as published books, because copies are in fact unique, albeit in subtle ways. Repositories and collections, including the researcher's private collection, contain resources that must be recorded and linked to the description of each digitised resource used.

When descriptive data is interrelated with administrative and relations data, it serves the dual purpose of documenting intellectual content and attesting to provenance, and, thus, confirms the authenticity of the sources and their digital derivatives (see Schreibman, Siemens, Unsworth 2004). For example, the Abbey Theatre Company has digitally published an opening night programme for the Abbey Theatre from 1904 in the DRI. Here, the DRI citation is "Abbey Theatre (2015) Opening Night Programme for the Abbey Theatre, 1904, Digital Repository of Ireland [Distributor], Abbey Theatre [Depositing Institution]". This citation differs from the standard format of, "Opening Night Programme for the Abbey Theatre, 1904" (*Digital Repository of Ireland*, n.d.)⁴⁰. According to the DRI, this citation data emphasises the existence of both a distributor and depositor. It explains that this asset is the "Programme for the opening night of the Abbey Theatre, Dublin on 27th December 1904". Other information given includes the author, title, publisher, and date of publication. This descriptive information is helpful for academic and research purposes on a global scale.

The International Education Strategy for Ireland (2016-2020) sets out a vision that aims to, "attract leading international student talent, and places emphasis on a high-quality learner experience, academic quality, research and mobility, and a distinctive Irish offer at the centre of our delivery of international education" (*Irish Educated Globally Connected an International Education Strategy for Ireland, 2016-2020,* 2020, 7). In this respect, the descriptive information impacts on the usability of the Abbey Theatre collections as published by the various sources, publishers, creators, and as distributed by the DRI. In the DRI, the main subjects related to this asset are: a sense of identity, Yeats, Synge, Lady Gregory, and Irish drama. This asset is important for writers or researchers of Irish drama, the Abbey Theatre, and Irish dramatists all over the world.

5.5 Storage Policies

The DRI uses federated storage, which is sustainable for both depositors and users of the Abbey Theatre Archives. Federated storage means that each federated member holds a copy of the repository. Therefore, if one copy "goes down" there are additional copies of the data and metadata available. Nevertheless, as a digital archive and preservation repository, the DRI is not designed as a platform for temporary data storage, or ongoing data analysis. Deposited collections can, however, be updated and added to over time. This set-up ensures that users have sustained access to content. This is a necessary feature from the user's perspective, for a reliable service which garners trust. It also helps to build a user base that has confidence in the service provided (Webb, O'Carroll 2014).

6. Conclusion

The Digital Repository of Ireland demonstrates that the Irish Government is committed to realising the goals of Global Ireland 2025. However, the scope of Global Ireland 2025 is extremely ambitious, and only time will tell if it has an impact on enhancing Ireland's global reputation. In Ireland, the digital preservation of cultural artefacts is a crucial step in the transition to the digital age. Based on the efforts made to promote digital archiving and preservation, as exemplified by the DRI, Ireland serves as a model for cyberculture. Digitisation is a modification and alternative to the traditional representation of national theatre and drama, which contributes to the long-term preservation of Irish theatre history. In addition, this cyberculture may be a means of constructing an Irish heritage unaffected by British or European cultures.

The work of the Abbey Theatre reveals a connection between history, theatre, nationalism,

⁴⁰ See <https://repository.dri.ie/catalog/9593x026s> (05/2023).

and drama in Ireland, and, in this context, the DRI can serve as a platform for interdisciplinary humanities. However, digital preservation is a complex process with many unresolved issues (such as long-term preservation), which pose problems for institutional repositories. Nonetheless, the widespread implementation of institutional repositories offers new opportunities for digital preservation. Indeed, much could be done to initiate digital preservation from the beginning, which is a process that involves authors. Integrating digital preservation into the workflow of repositories would facilitate the preservation of tasks in the future.

Digital preservation is not a problem faced exclusively by institutional repositories. Over time, pressures on information providers to ensure digital storage and continued access will intensify. In this context, the widespread implementation of institutional repositories offers new opportunities for digital preservation. Therefore, much could be done to consider digital curing from the outset, for example, involving authors in contributing to the preservation of metadata during the creation process. Further, integrating digital preservation into the repository's workflow, thereby easing subsequent preservation tasks, should also be considered. Future-proofing against technology obsolescence is one of the potential benefits of incorporating digital assets into a managed repository framework. This is an opportunity to ensure digital preservation efforts that go beyond simply rescuing digital objects, towards building the infrastructure necessary to manage them from the beginning. In this manner, digital stakeholders could work towards a future in which digital preservation is fully integrated into the information management lifecycle and is no longer a separate activity.

The DRI is an Irish national initiative designed to preserve Irish cultural heritage, but it also has global implications in respect of its connection to the Global Ireland 2025 project and the digital footprint. The DRI works to refine, develop, and define a culture's traditional representation, so as to make Ireland's past tangible. In addition, it is an attempt to redefine and modify conventional methods of preservation, serving as a starting point for spreading the Irish concept of cyberculture.

National archives are responsible for a state's records, while national libraries are responsible for preserving and cataloging documents, manuscripts, and other types of materials. Deep collaboration between academic institutions and cultural institutions affords both parties numerous advantages. In this regard, the DRI's policy of collaboration and partnership is effective for hosting collaborative digital humanities projects, such as Inspiring Ireland. Inspiring Ireland is a collaboration between the DRI and leading Irish Cultural Institutions, namely: The Abbey Theatre, Chester Beatty Library, Crawford Art Gallery Cork, the Irish Museum of Modern Art, the National Museum of Ireland, the National Archives of Ireland, the National Gallery of Ireland, and the National Library of Ireland, as well as the Irish Government's Department of Arts, Heritage and the Gaeltacht (DAHG). This partnership illustrates how, using a digital humanities approach, academia, technology, and cultural institutions can collaborate to produce something innovative and of societal, global, and cultural benefit. Moreover, collaborative projects in the digital humanities field, such as *The Inspiring Ireland* project, can demonstrate the significance of digital collaborative national infrastructures in sustaining a national policy of collaboration and partnership.

Digitising the archival collections of the Abbey Theatre has many benefits, including the dissemination of diverse sources and the discoverability of various creators and publishers. This contributes to diverse and innovative forms of publishing and creativity that can be tailored to the needs of a global audience. Moreover, this diversity of sources makes digital preservation policies and practices more progressive and refined. Digitisation offers an opportunity to preserve and absorb a substantial amount of Abbey Theatre heritage. In addition, the DRI enables new forms

of archiving, access, and visibility, which provide new avenues for individuals to gain access to content. No longer is it necessary to physically hold a book or ledger in order to examine its contents, or to visit a cultural institution like the Abbey Theatre in order to use and discover its archives.

Modern content is frequently born digital; there is no physical equivalent for email, websites, social media, etc. This digital world can facilitate new forms of participation for academics, tourists, and the general public. Therefore, if digital technology can be used to digitise the archived collections of the Abbey Theatre, then content can be preserved for future use. However, in the same way that "vinegar syndrome" affects cellulose acetate film, and humidity affects paper, a digital object is also susceptible to damage. Digital objects may also degrade over time due to "bit rot" or ongoing format changes that render the object unreadable or obsolete. Therefore, although digital preservation is the solution for ensuring future access, it entails active, ongoing data management which takes into account changing formats, standards, and software.

Most partner organisations have pre-existing repositories whose autonomy needs to be retained, and yet support is also needed for the task of long-term digital preservation. In this respect, partner organisations are cognizant of the benefits of building links between the collections they hold and collections in other partner institutions. The technical, organisational and legal infrastructure developed by the DRI is responsive to these needs. However, it has the additional benefit of strengthening and supporting partnerships via federated structures that encourage the development of shared infrastructure, policy and advocacy.

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