

ON REFLEXIVE AND PARTICIPATORY APPROACHES IN DIGITAL PRESERVATION TODAY¹

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On the difference between data aggregators and digital repositories

SL: I would like to begin our conversation about »digital heritage« by framing what you do at the Digital Repository of Ireland (DRI). So, what is the DRI about? What do you ›do‹ there?

NH: I think what we ›do‹ is the most interesting way to approach this – in short, we provide a long-term home for social and cultural data in digital form, and we ensure that people can access this element of culture freely and easily. The Digital Repository of Ireland is a national, long-term ›trusted digital repository‹ (*TDR*) – a *TDR* is a designation based on certification, and we have been certified by the Data Seal of Approval, which is based at Data Archiving and Networked Services (DANS) in the Netherlands. Our primary focus is on the long-term digital preservation of digital assets, and our remit is, broadly speaking, the social sciences and humanities. The data that we have comes from across a number of disciplines under the umbrella of *HSS* (Humanities and Social Sciences).

At the same time, we are also a national infrastructure that is involved in a number of related areas. We publish reports and guidelines on preparing collections, data management, metadata standards, and repository architecture for higher education and cultural institutions. We promote open access whenever possible, with attention paid, of course, to copyright and sensitive data. We are involved in the open science agenda in Europe through the Research Data Alliance (RDA) and the ALLEA e-Humanities Working Group (All-European Academies). Our repository architecture is also based on open source software. For example, we are an official partner in Samvera (formerly known as Hydra), and not too long ago we published our code openly on Github. I was very excited when that happened! Alongside these activities, we run an education and outreach programme. We organise conferences, hold seminars on current topics of interest, and train people in digital preservation, digital archiving, and also specifically on how to prepare data for the repository. We are also heavily involved in policy and advocacy work at the national and the European levels. Throughout these different areas, we work very collaboratively, partnering with different organisations to do targeted activities. So, we have the core work that we do but we then also have a series of collaborative, specific projects, and lots and lots of engagement.

¹ The interview was conducted by Samantha Lutz (SL) on December 18, 2016.

SL: Impressive, this seems to be quite a range of activities and services operated by DRI. What I notice most is that you seem to be a new »player« in the complex field of digital safeguarding. Through digitization, new stakeholders like Europeana, so-called data aggregators, have come into being. How do you perceive your role compared to Europeana or institutional archives, for example?

NH: Good question! While we do bring data together from different sources, I would not describe us as an aggregator, because that term is generally used for services that aggregate metadata from different sources, but do not necessarily hold the digital objects themselves. Our core remit is to preserve digital objects – digital assets and their metadata – for long term access and discovery. What I think is unique about us in the field of digital heritage in Europe is that we are open to deposit from a broad range of institutions, and we support a number of different cross-searchable metadata formats. When you deposit with DRI, your content is findable and discoverable alongside content from all the other depositors. We play the role of bringing together different kinds of diverse data sets from data creators across the country, which is different from what an institutional repository does; instead we provide a complementary service for national exposure. This being said, not all institutions have repositories, so we do offer a long-term home for this content as well.

Also, I think we are seen as a centre in Ireland for digital preservation in general. We often will bring in international speakers and hold conferences and symposia on the topics of digital preservation, digital archiving, and open research, which allows people to come together in a common forum. For example, we have a conference called DPASSH which focuses on Digital Preservation for the Arts, Social Sciences, and Humanities². We first held it in 2015 to coincide with the public launch of DRI in Dublin, with a second conference in June 2017, in partnership with the Digital Humanities Lab at the University of Sussex in Brighton, UK. We created the conference to address domain-specific needs. There are a number of key conferences in our areas of work – PASIG³, iPres⁴, Open Repositories – but they can sometimes focus on technical issues, or topics that do not fully encompass the unique aspects of archiving and preserving arts and HSS data. The realm of digital cultural heritage fits squarely into this conference's remit, and we had a lot of excellent papers, as well as a good community feeling.

Weaving public and individual narratives: The collections of Inspiring Ireland

SL: Thank you for the instructive overview. I would like to ask what kind of digital cultural heritage projects you have implemented with DRI so far?

2 URL: <http://dpassh.org/> (1.11.2017).

3 Preservation and Archiving Special Interest Group (PASIG).

4 International Conference on Digital Preservation (iPres).

NH: Because our remit is broad across the social sciences and humanities, we hold a range of content, but our most coordinated effort so far has been through our national collaborative platform, *Inspiring Ireland*⁵. I would call this our flagship cultural heritage platform. It started as a collaboration between the Digital Repository of Ireland and eight of Ireland's national cultural institutions in 2013, and the purpose was to bring material from different institutions into one place – to share objects and images from diverse collections alongside one another. And key to this process was not just collecting and curating this content online, but preserving it in the repository for the long-term. There are lots of projects that publish wonderful content on websites, but then the project ends, and the website disappears, or the links break. We wanted to create the same user experience that any creative project desires, while at the same time demonstrating how digital preservation is important and compatible. So, all of the objects in *Inspiring Ireland* are first ingested into the repository. The objects go through all sorts of checks to ensure file integrity, to monitor for degradation or format obsolescence, and to make sure they are around for the long term. These activities happen in the background for all digital objects in the DRI. But in this case, we used DRI's API (Application Programming Interface) to pull content into the *Inspiring Ireland* site, creating a linked application that focuses exclusively on Ireland's digital cultural heritage.

SL: And how did you develop the project *Inspiring Ireland*? What is unique to the project for you?

NH: The *Inspiring Ireland* project has had a number of different phases. The first phase, from 2013–2014, was focused on bringing all the partners together, seeing what complementary content the institutions held, and building exhibitions on broad themes that spoke to the collections in those institutions. We created a ›Curation Committee‹ with members from each institution, and after a lot of discussion, we settled on three flexible themes that broadly reflect Irish culture and Irish history: *A Sense of Place*, *A Sense of Identity*, and *A Sense of Freedom*. This pilot project won three e-Government awards that year, and we were so delighted because it was such an amazing group effort, involving so many people and institutions.⁶

We started a second phase of the project in 2015 that was focused on commemorating and reflecting on the Centenary of the 1916 Easter Rising, which is a very significant year in Ireland's history. These exhibitions were called ›Inspiring Ireland: Weaving Public and Private Narratives.‹ For this phase, we added a public history or public humanities element. The centre of this was a series of ›collection days‹ where members of the public could bring in objects that were related to 1916 from their private collections. We developed a series of themes, and put out a call for people to donate objects to Inspiring

5 URL: <http://www.inspiring-ireland.ie/> (1.11.2017).

6 *Inspiring Ireland* won awards for Best Overall Project, Open Source, and Promoting Ireland Overseas at the January 2015 Eircom e-Government awards.

Ireland exhibitions that would sit alongside the more well-known objects from the national cultural institutions. We asked people to look in their attics, to look in the boxes under their beds, to ask their grandparents for memorabilia and personal treasures, and the response was fantastic! Participants brought these objects to the collection day, told us their stories about the objects and the history behind them, we professionally photographed them, and the photographs were ingested in the repository. It was quite moving to hear the stories, and to play a part in adding those stories to the historical record – people talked about how they came to have the object, what its meaning was to their family or friends, how it played a part in the events of 1916.

I think what is unique about this project is that we were able to bring together items from publically curated collections – that people may have seen in libraries, archives, and museums – with private stories from people’s individual family histories. It enriches our collective understanding of the past, and it challenges the idea of what constitutes an ›important object‹ or ›important story‹ from history. And it’s been successful because it gets people really engaged in the project from the beginning; their contributions help to shape the exhibitions. Plus, we put long-term digital preservation at the core of our technical setup, and when you think about it, these objects would not have come to us if they had not been carefully stewarded by generations over time. So our methodology, if you like, underlines how the overall concept of preservation matters for creating a rich understanding of the past. The idea is now that they are digitised, shared, and preserved in a public, trusted digital repository, they will be around for people to see for the next centenary.

SL: What do you think digitisation and collecting from the public adds to the audience experience of cultural heritage?

NH: In Ireland, there are many cultural institutions with very rich collections. They have a lot of material, with a lot of variety. But space and resource constraints affect most institutions around the world, so the collections in *GLAMs*⁷ have differing degrees of accessibility. Some things you can see in the library or museum, and other things are held away in storage and it is very difficult for people to access them. You can keep building other rooms and buildings to take care of this material but that is a very real kind of limitation, and it is costly. Whereas digital objects are stored in a virtual space – the limitation here is the space on a server and backups, so the space solution is more easily scalable. So, objects that may not be available to the public in their original form might be made available for viewing through digital form. And that is a way to expand the offerings that are held in different kinds of collections. Digitisation can also help conserve the original by reducing the environmental stresses on it.

But another thing to think about is that all of these materials are things that have been purchased or gifted to a public institution and have become em-

7 »GLAM sector« is an abbreviation for galleries, libraries, archives and museums.

bedded in our knowledge of the past. They are very important for that reason – people want to see the actual shirt Michael Collins wore, or the actual Book of Kells; these publicly displayed objects are key to collective constructions of cultural identity – they tell a story about our collective past. But there is also a lot more ›out there‹ held within families and handed down through generations. These objects may not make their way into museums, but they are potentially of great interest to people outside of the families that own them. So, we held these collection days to contribute new materials to the better-known stories of the past.

For these, we worked very closely with the National Library of Ireland (NLI), who has run collection days in the past; we were inspired by their collaboration with Europeana on the World War One collection days. Our first day, held at the NLI in October 2015, we did not know exactly what to expect, and it was really remarkable to experience. Contributors were so excited to share their objects and in particular their stories of those objects. We set up different stations so that contributors would complete a kind of circuit. First, interviewers collected their stories, which eventually became embedded in the metadata of the digital object. Then the object went to the digitisation suite for photographing, and the contributors could mingle and have tea or coffee, or visit the ›research‹ station, where a lecturer from University College Dublin was interviewing people on their motivations for contributing to such a project. When the object came back from being photographed, the contributor could then visit the conservator to get advice on how they could best preserve the physical object. One contributor came in with a guestbook of drawings from various visitors to a house in 1916. It was full of notes and drawings and poems, and the spine on it was very broken. The conservator gave advice on what he could do to preserve the book, and in the meantime, it was digitised so he had a copy as a kind of insurance against any further loss of the content.

We had wonderful collaborations in these areas – the interviewers were students from the School of Information and Communication Studies at University College Dublin, the conservator came from the National Museum of Ireland, and the National Library digitisation specialists took the photographs.

We did not know how these collection days would go, exactly, in the beginning. Participants were bringing to the event these very special objects that had been carefully stewarded for decades, often with important family narratives wrapped around them. We wondered how much they would want to share, or if they would feel the need to protect or control what happened to the images of their objects once they were on the *Inspiring Ireland* site. But quickly, it became very clear that participants wanted to share as widely as possible. They were excited to tell their stories, and to talk about how their ancestors had been involved in the events of 1916. They wanted others to know these stories. We had a written agreement that anything digitised would be made available with an open licence – that it could be used on the website or anywhere else. We were not sure if this might turn people away,

but in the end, everyone was very generous and open with their sharing. One family brought in a crucifix that had been given to their grandfather, who was an altar boy in 1916. The priest that gave it to him had administered last rites to Joseph Plunkett – one of the signatories of the Proclamation – before he was executed. And coincidentally, the *Inspiring Ireland* team was preparing an exhibition at that time on Women and the Revolution that included works by Grace Gifford, who married Joseph Plunkett in his prison cell the night before he was executed. It was very exciting to see this idea of ›Weaving Public and Private Narratives‹ come together in such unexpected ways! The objects contributed by members of the public are often considered personal keepsakes or mementos, but not necessarily considered under the umbrella of ›cultural heritage‹. But of course they are – they just are not well known. Their contribution enables broader discovery. Adding private objects to exhibitions of objects in public collections provides a way of enlarging narratives about our past, enriching the historical record, and adding voices to the writing of history – all together this creates a much fuller, more varied and richer concept of history. Providing access to these private objects and their stories democratises the concept of cultural heritage.

SL: This sounds like a huge project in itself. Where did you hold the collection days?

NH: It was a big project, but we managed it through a lot of advanced planning – the team leading this – Caroline McGee and Kevin Long – are great at this! For each event, we put out a call through various networks, and people had to identify what objects they wanted to bring in and give us a rough description of them, so they could be scheduled in different time slots over the day. The average interview took about an hour. Sometimes contributors arrived with multiple objects that had individual stories, and collecting as much of the relevant detail as possible is what makes the final digital object so interesting to a wider audience. The digitisation process is also time-intensive, so we could only schedule in so many interviews in one day.

In the end we held collection days in Ireland, and one in London, and one in New York City. In both international cases we worked with partners at the Embassy or the Consulate. London and New York are historically major points for Irish immigration, so we wanted to include those stories as well. Ireland has a very strong relationship with its diaspora – there is a long history of emigration. So, we felt it important that if we are trying to create even one little story about 1916 that we included Irish voices from abroad.

SL: Besides the Collection Days in the second phase, is there any other option to add or annotate narratives today?

NH: In this moment, we do not have an interface where the public can deposit things into a collection independently, or to annotate existing objects. But it is a fabulous way to build heritage collectively and we might look into it in future phases of the project, but for now we do not have the resources.

Challenges of digital preservation today

SL: Out of your experience at DRI so far, what are in your opinion the challenges of digital preservation today?

NH: I would say that the biggest challenge is time. Properly preparing objects for long-term preservation can be a resource intensive venture, and it takes skilled people at a number of different states. First there is appraisal – what should be digitised. A number of considerations go into this – is the object at risk, or is it worth sharing with a wider audience, etc. Then there is the creation of context around that object so it can be found. Preparation of excellent quality metadata that allows for search and discoverability can also be resource intensive, and maintaining a repository (let alone building one, as DRI has done) takes technical expertise and vigilance. I think that the massive growth of interest in the digital puts institutions in a difficult position – they are expected, or feel they should jump into, the realm of creating digital surrogates and preserving them without having any extra resources. This is where economies of scale are important – e.g. the DRI provides a shared, central repository for many different institutions to use, so not everyone has to do the preservation side in-house, but you still need to draw on domain expertise to prepare the data. So, while there is a growing demand for digital versions of heritage, and a fair bit of work to provide sustained access to things that are born-digital⁸, there are not always the resources to match the demand. There are huge cultural heritage collections, but it takes time to make those ready in a way that they are useful for scholars or for the general public to find and use.

Another challenge is that copyright legislation is struggling to keep up with the changes that have been brought about by the digital, and the concurrent movement towards open access. Different countries have different copyright laws, but of course the digital is something that does not really understand national boundaries – the internet is global. So, there are challenges around trying to make sure that copyright is observed but also maybe trying to push definitions of copyright legislation to match a changing landscape where open access is also encouraged.

SL: If I understood you right, you see legal and technical issues as the main challenges of digital preservation today.

NH: No, I do not actually think that the technical issues are the big challenge. Technology is always changing, and that is both challenging and exciting, but we have very good technical solutions. The restructuring of human resources is important – digital aspects need to be integrated into other workflows, and staff need training to ›upskill‹ in new areas. Cost can be a challenge, of course – there are costs to technology, to storage – but human resources are

⁸ Born-digital materials are those created, from the beginning, using digital technologies. For example, a letter that is composed and sent on email is born-digital, whereas a letter written by hand, then scanned into a PDF document, is ›digitised‹.

the larger cost, and that cost needs to be sustained over time. Digital preservation is not a single activity – it is an ongoing process that requires planning and attention over time, and sustaining those costs is often not considered. A common concern I hear is that it is much easier to acquire funding for a new project than it is to secure funding for the long-term maintenance and growth of infrastructures.

SL: To what extent does digitisation pose new challenges to practices of memory work? What has changed from your point of view?

NH: I suppose that the move towards digital changed or challenged some of the required skill sets for working in the profession. But many of these skills are being developed more broadly in the workforce and the population in general. Working with computers has become standard. The major thing that digitisation of cultural heritage does, in my mind, is to remove some of the barriers to accessing that heritage.

»So, I really look at digitisation as part of a creative democratisation, a widening of a citizen's ability to access heritage materials that are of interest and relevant to them. And also for people to access digital cultural heritage across traditional boundaries that may have made that difficult«.

For example, if you want to see something in a museum that requires a three-hour flight, it will be expensive to do so, but with digital surrogates, you can at least get a first look at an object. I think there has been a lot of concern from the GLAM sector that digitisation will result in a loss of audience – a reduction in the number of people actually visiting museums and libraries, galleries, archives etcetera. But at least in the initial research I have seen, that is not the case. It appears that if you make objects available digitally, you in fact increase your audiences' interest in seeing the original, or seeing what else is on offer. The originals really still hold value. I do not think that a digital object replaces a material cultural object. But it does provide an initial kind of access. And the end result is really a growing interest in cultural heritage because it is not hidden, it is not hard to access, you can see parts of it on demand. Humans are very curious creatures – if you give them a bit of information on something they might be interested in, then they go looking for more!

On remembering ... and forgetting

SL: So how do you decide which cultural materials are kept and sustained and become part of the DRI compared to *Inspiring Ireland* where people bring items with them to the collection days?

NH: Well, that is a really challenging question. In a very functional way, that is not so hard for us to determine because the DRI is the steward of digital objects, but not the owner of them. So it is depositors that make the hard decisions around appraisal. We can offer advice, but we do not claim to be

experts in the different cultural domains. Ownership, copyright, choices in licensing, even to some extent the richness of the metadata – these are all considerations for the depositor. So, when it comes to deciding what should be digitised and what should be ingested into the repository, these are decisions that are made by the depositors because they are the experts in their own material.

The *Inspiring Ireland* example is a bit different, because we were actively creating new collections. It is more hands-on, and in this case DRI was the ›depositor‹, making decisions about what constituted the different exhibitions. But overall, appraisal is a professional practice – it is what archivists do all the time. Decisions consider the perceived value of the object over time, its importance in history, the uniqueness of something, or the need to tuck the original away from damage and provide a digital version for people to access. There are a number of fascinating projects right now that are creating 3D scans of monuments and large cultural heritage objects as an effort to try to preserve them, in case they erode or are destroyed by natural causes or acts of terrorism or war. These are fascinating projects to me because they demonstrate a different aspect of what digitisation can enable. The surrogate in this case might come to stand in the place of the original, or be used to recreate the original.

SL: So, should we then save everything?

NH: Definitely not! We humans produce a lot of brilliant things, but we also produce a lot of rubbish! There may be a challenge that comes with the scale of the so-called ›digital deluge‹, but questions around what to preserve are not new – again, archivists and conservators have been doing this for a very long time.

Creative practices of sharing and reusing open cultural data

SL: I must admit, »digital heritage« is indeed a rather broad field because besides digital preservation I would also like to discuss with you the topic of »creative reuse«. It is interesting to observe that ... let us say, quite a number of creative challenges in the open GLAM sector and initiatives by the creative industries and memory institutions have emerged to reuse open cultural data. What do you think of these individual practices of reuse?

NH: I love how things are creatively reused, and the curious thing is that you really cannot predict how something will be reused. At DRI, we encourage our depositors to use licenses that are as open as possible, while also acknowledging and facilitating restrictions where necessary. This flexibility is a requirement of the interdisciplinary nature of our collection policy. We have, for example, social science data that is sensitive because it contains personal stories, and this data can be restricted in access, or embargoed, etcetera. Depositors can licence material how they best see fit, but we encourage institutions to avoid unnecessary restrictions. As I said you cannot really

predict how something may be reused. Once you make objects available, it is brilliant to see what creative people do with them. So »my attitude is – go ›open‹ where you can and you may be delighted by the outcome«. The *NY Public Libraries emoji bot* is a good example of creative engagement with digital objects. You tweet an emoji to it, and it sends you back something related from their collection. It has this fun element of surprise and serendipity. If you tweet an emoji of an apple, for example, you do not know if you will get back an image of a 19th century Cézanne still life, or the rainbow apple Mac icon associated with Apple's first 20 years. There is a real delight in this discovery because you can see things that you were not looking for. It reminds me of the amazing experience of browsing library stacks. When I was doing my PhD, I spent a lot of time in the stacks trying to retrieve books based on their call numbers. And as I was looking, I would come across another book I did not know about, sitting near the book I was searching for. It had not come up in a library catalogue search. But finding it in this way enabled me to take my interest in a slightly different direction. This kind of unintentional or serendipitous discovery that is made possible through the sharing of objects in a broad way is very exciting. We engage the public through Twitter as well, but in a much more manual, curated way. For example, tweeting objects in the repository that connect to events that are happening at the moment.

SL: Another current phenomenon I would like to address is the emerging issue of assessment in the context of digital heritage. Increasingly, politicians and funders are demanding numbers to show that the tax or private money spent on the digitisation of cultural materials have a tangible societal impact. To what extent do you assess economic practices of digitising and sharing cultural materials?

NH: Well, I see cultural heritage as belonging collectively to the culture from which it emerges. And »I am of the mindset we should be trying to make the products of culture as widely available to those who produced them, and beyond, in cases where it is not politically insensitive to do so«. How much this might cost – what it costs to sustain – is a different question. I suppose I prefer to ask the question of what gets lost if we do not sustain access to cultural heritage? Is this something we can quantify monetarily, or is it better valued in terms of education and cultural understanding, and therefore not quantifiable in this way? How do we sustain access in a broad and equitable way if we do not digitise? Who pays for this is of course another question. There are some aspects of culture and cultural heritage that can be monetised, but that is not, and should not be the sole case for assessing the value of preserving something. The purpose and practice of preserving/conserving cultural heritage is not new, so we need to consider what the digital dimension changes, and how it can aid or abet the larger values behind stewarding cultural heritage objects over time.

Future developments of digital preservation at DRI and beyond

SL: What future developments would you like to see happen with the repository? Or what future developments do you see, for example, with *Inspiring Ireland*? Will the project continue in the longer term?

NH: *Inspiring Ireland* is around for the long term, and I hope to build new exhibitions as time goes on, but they will likely be of a different scale. As I said, the year of 1916 is very important in Irish history – it is significant in the politics of the state but it also holds a very strong place in ›collective memory‹, so it was key to get people involved so that we produced exhibitions that had new perspectives in them. The entire commemorative year seems like a long discussion about Irish history and what the last 100 years have meant for Irish identity. If we could expand the site in the future, I would like to create the ability for anyone to deposit an object and tell the story of that object. And that would mean some technical changes to the site itself to allow for that kind of forum, to allow for a moderation component, etc. This is something that I would like to see happen because it might make the growth of the site more sustainable through this direct, public engagement. We are also hoping to build additional curation tools to allow for the creation of exhibitions within the repository. As I mentioned earlier, *Inspiring Ireland* is a separate website that draws objects from the repository, but we are looking at ways of streamlining that, again, for improving user experience and also making it more sustainable. People are very attracted to stories and to the creation of stories and the reading of stories and to linking stories, so we would like to build that in the repository as well.

Difficult issues and underrepresented narratives

SL: Very interesting, this really gives me a broader picture of how you would like to facilitate participation and to further engage with people in the project. So, besides *Inspiring Ireland*, what projects are coming up next?

NH: We have another major project starting in 2017, called the Atlantic Philanthropies Archives project. This is a collaborative project to preserve, enrich, and make available the archives of the Atlantic Philanthropies, a large philanthropic organisation that made grants approaching \$8 billion USD over the last 35 years to social progress causes around the world. \$1.2 billion of the funds were made to organisations in the Republic of Ireland.

SL: Wow!

NH: Yes! It is a tremendous legacy! The physical archives are going to Cornell University Libraries, and we will be hosting a digital archive of grant-making activity in Ireland. We are working with Cornell to develop metadata guidelines and archiving workflows that make sure these archives are as interoperable as possible across a number of different sites. Again, we have a public component to this project – we will build exhibitions around different funded themes in order to enrich the archives, to tell the stories of the

work done by organisations that were funded, and to add individual voices. The history of Atlantic funding in Ireland is extensive, as they made grants to support higher education, research in ageing, children and youth, reconciliation and human rights (e.g. LGBT rights), and more. »Projects like this really are quite engaging because when you can see individual stories, all of a sudden the larger picture becomes more vivid and more real.«

SL: This sounds like an interesting project to engage individual perspectives through digital technologies, to enrich so-called »difficult issues« in public narratives of remembrance.

The ambiguity of digitally-born cultural materials

SL: Another topic I would like to talk about with you is archiving and preserving born-digital cultural materials. DRI has also been active in the context of safeguarding digitally-born cultural materials and initiated the »The Social Repository of Ireland«. What is the project about?

NH: The Social Repository of Ireland was a short but very interesting feasibility study into the concept and practice of archiving social media. We focused on Twitter, and were trying to determine how we could ›archive‹ discussions that took place on Twitter. We have newspaper archives for seeing the media's perspective on events, but how about the massive discussions that everyday individuals contribute to understanding contemporary events? We decided to focus on capturing the conversations that took place around important events, and see how we could archive those so that they are accessible for research and general use in the future. The social/intellectual impulse behind this is similar to *Inspiring Ireland* – how can we expand the available record of an event to include everyday voices instead of just the newspaper reports on particular events. This was a collaborative project with Dr. Bahareh Heravi's research group at the Insight Centre in the National University of Ireland Galway, and the focus was on determining archival and technical workflows for capturing event-based social media, creating archival packages, and preserving them. We created a feasible way to do it, but it is not something we are looking at implementing in the short term, because it would require additional investment. Social media archiving is massive – the

The Library of Congress⁹ announced many years ago their intention to archive all of Twitter, and they created the archive, but providing access to it has been very difficult. Making it searchable is a massive technical challenge.

SL: So, do you think that digital preservation does reach its technical limits in that respect? To what extent does digitisation and sharing born-digital content maybe challenge current approaches of saving and making available

9 Twitter has recently become subject to heritage making indicated by the attempt by the Library of Congress to embrace Twitter as a digital archival project. For more information see URL: <https://www.loc.gov/item/prn-10-081/> (1.11.2017).

everything? Is this still possible at all? Or do we need to, let us say, »re-collect« cultural heritage?

NH: There are a couple of important things in your question about what to save. One school of thought would be »keep everything and then try to figure out how to sort your way through it later« and another school of thought would be that you must appraise at the source and be a lot more judicious about what you discard. It is hard to say what the best approach is because technically speaking we could keep a lot of stuff but just keeping it does not mean that we can make it usable, right? And this comes back again to the discussion about resources. Making something usable, in my world, means at least archiving it properly so that you can find it later, which means creation of metadata and putting it in places that are safe and accessible.

SL: What we discussed so far gives me a really good idea about digital preservation at the DRI and sharing cultural heritage materials on a broader scale. It seems that you are involved in many projects and that you try to experiment in various areas like digitally-born content to actually promote digital preservation in Ireland and beyond, like on a European level.

NH: Well, thank you for saying so – we are trying, but we are a small organisation! We are actively involved in a lot of European networks – the Digital Preservation Coalition, the Research Data Alliance, ALLEA. What is interesting is that it seems like we are at a moment of big challenges – in all different domains, discussions are taking place around how to steward and preserve data and make it reusable. There is a hunger for data, and a demand for digital content, and we are still figuring out issues of scale. I do not think we will continue to struggle in the same way forever, even though digital outputs are projected to continue growing exponentially. Capabilities and capacities grow as well. »I think finding ways to work together, across sectors and across domains and disciplines, is the key challenge. These are global challenges, and working with the whole world on something is not simple.«

SL: Thank you for your closing words! It was very nice talking to you again and discussing DRI's approach to digital heritage. Many thanks!

NH: You are very welcome Samantha. Thank you for taking an interest in the Digital Repository of Ireland and for taking the time to interview me. It was very enjoyable!



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