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The Project Endings Interviews: A Summary of Methodological Foundations

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Abstract

Project Endings is a collaborative SSHRC-funded project conducted by a team of faculty members, librarians, and programmers at the University of Victoria in BC, Canada, that explores questions about the ending and archiving of digital humanities (DH) projects. The main goals of Project Endings are to align the aims of faculty researchers and archivists in the long-term curation and preservation of DH projects, and to develop practical tools to assist with the archiving of both data and interactive elements of digital projects. To achieve these goals, we conducted a survey followed by a series of interviews with DH scholars across Canada and internationally about their experiences ending and archiving digital projects. In April 2021, we also hosted the Endings Symposium, where we brought together members of the Project Endings research team as well as a number of interview participants to further discuss some of the issues facing DH work. This paper will summarize the methodological foundations of the Project Endings interviews and illustrate how these foundations have been reflected in the interviews and subsequent analysis conducted by the Project Endings team. The interview process was guided by constructivist grounded theory, narrative inquiry, and phenomenology. These principles have allowed us to collaboratively co-construct knowledge with each other and with research participants. This paper will discuss the ways in which knowledge has been coconstructed over the course of the Project Endings interviews and analysis, as well as through the 2021 Endings Symposium.

Introduction

In 2016, the *Project Endings* team, a group of experienced digital humanities (DH) scholars, librarians, and programmers at the University of Victoria in British Columbia, Canada, was awarded a multi-year grant from the Social Sciences and Humanities Research Council (SSHRC) of Canada to explore questions around the ending and archiving of DH projects. The overarching goals of *Project Endings* are "to align the aims of faculty researchers producing projects and the archivists who will eventually be responsible for curating their work" and "to provide practical solutions to issues attendant on ending a project and archiving the digital products of research, including not only data but also interactive applications and web-based publications" [Arneil et al. 2019].

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From a brief review of SSHRC-funded digital projects conducted between 2000 and 2009, the *Project Endings* team had learned that many of these projects had no visible surviving digital outputs. This motivated us to seek hard data about the status of digital projects from other countries and other funding programs in order to produce quantitative and qualitative data to support future recommendations. The first task of the research aspect of *Project Endings* was to conduct a survey, which was sent to DH scholars, including faculty members, researchers, programmers, and librarians across Canada and around the world, via various DH and library email lists. In total, 127 survey responses were received. The survey consisted of 37 questions in total, and sought information on topics such as project beginning and end dates, completion status, respondent's career stage, project planning considerations, institutional support, major tools and technologies used, project maintenance, and major obstacles to project preservation. The full list of questions can be found online (https://hcmc.uvic.ca/endings/survey.html). Survey results showed that more than half of survey

respondents had not set an endpoint for their projects, and had no long-term plans for project preservation. 38% of respondents listed a lack of ongoing funding as the main obstacle they faced in preserving their projects long-term, while 33% of respondents listed a lack of expertise or poor choices in technology as their main obstacle [Arneil et al. 2019]. Furthermore, as Arneil et al. (2019) state:

While a reassuringly high 42% of respondents reported that university services were responsible for longterm maintenance of the project's work, an alarming 45% reported that this responsibility fell to the Principal Investigator or nobody, demonstrating either significant vulnerability or great confidence.

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At the end of the survey, respondents were asked whether they were interested in participating in an interview with the *Project Endings* team to further elaborate on their responses and to have a more in-depth conversation about the issues facing DH work. In our approach to the interview process and subsequent analysis, we looked to qualitative methodologies such as constructivist grounded theory, narrative inquiry, and phenomenology in order to faithfully represent the diverse experiences of interview participants. The methodological principles of these approaches align with the collaborative nature of *Project Endings* and have allowed us to collaboratively co-construct knowledge with research participants. This knowledge has been mobilized in a number of practical and tangible ways, such as through conference presentations and scholarly publications (e.g., [Carlin 2018]), as well as through the development of toolkits for ending and archiving digital projects, which are being made available to the DH community. The purpose of this paper is to summarize the methodological foundations of the *Project Endings* interviews and to demonstrate how these foundations have been reflected in the interviews and subsequent analysis conducted by the *Project Endings* team. I will also discuss the many ways in which knowledge has been co-constructed by participants over the course of the *Project Endings* interviews and analysis, as well as through the Endings Symposium in April 2021. Finally, I will provide a brief summary of the interview analysis.

The Project Endings Interviews

After gathering quantitative data through the survey, we wanted to gather more in-depth qualitative data about participants' experiences around the human and technological factors that have contributed to or impeded the completion of their digital projects. From the 127 survey responses received, we conducted 25 semi-structured interviews in the spring and summer of 2018. The interview team comprised three Project Endings primary investigators (Pls) — one from each of three primary areas of expertise (i.e. one faculty member, one librarian, and one programmer) - as well as myself (Comeau) as a research assistant, mainly for administrative and technical support. All interviews except one were conducted via Skype and recorded on a PI's laptop using an external multidirectional microphone in the interview room. One interview was conducted in person and recorded on a standalone microphone. Once interviewees confirmed their consent to being interviewed and to their interviews being recorded, they were invited to describe their project(s) to the interview team. Following this initial question, which provided context for the interviewee's narratives, our two main questions were: "In retrospect, what would you have done differently to improve the possibilities for archiving/preservation?" and "What decisions, plans, and measures proved effective and beneficial?" Interviewers then asked follow-up questions based on the interviewees' responses to these initial questions, and often offered comments. Each interview was transcribed verbatim in order to facilitate text encoding and analysis. Following this transcription, all interviews were encoded in TEI-XML (the eXtensible Markup Language of the Text Encoding Initiative) using the oXygen XML Editor. Encoding was done to make the interviews machine readable and to enable various analysis techniques using different applications, as well as to facilitate data archiving. Transcription and encoding of all interviews were conducted by myself (Comeau) and Danny Martin, another research assistant at the UVic Humanities Computing and Media Centre.

In line with the overall goals of *Project Endings*, these interviews sought the diverse perspectives and experiences of DH scholars in a variety of academic roles related to digital projects, including as faculty researchers, programmers and developers, archivists, and librarians. The questions asked during the interviews were intended to point towards practical solutions for ending and archiving digital projects.

Methodological Foundations

In this study, we have followed the principles of constructivist grounded theory, narrative inquiry, and phenomenology to conduct the interviews and the subsequent analysis. These approaches have influenced our management of the research process, our self-location within the research, and our interpretations of the perspectives and experiences shared with us. These methodological approaches have allowed us to co-construct knowledge in a number of ways, such as through narrative over the course of the interviews, collaboratively as a team through the process of analyzing the interviews, and through in-depth discussions with each other and with fellow DH scholars (previous interviewees) at the Endings Symposium in 2021.

Constructivist Grounded Theory

A constructivist grounded theory (CGT) approach "aims to locate the research participants within the social, cultural, temporal, and situational conditions in which they live and to recognize how structural conditions and positions affect the researcher and the research process" [Charmaz 2020, 168]. In this approach, it is important for the researcher to reflect not only on the holistic context of participants' perspectives, but also on their own perspectives and positionality within the research. According to Coghlan and Brydon-Miller (2014), "positionality refers to the stance or positioning of the researcher in relation to the social and political context of the study — the community, the organization or the participant group" (628). These contexts influence every stage of the research process. The positionality of the researchers includes our individual experiences as university-affiliated DH scholars, developers, and librarians, as well as our access to institutional resources and support — both individually and collectively through *Project Endings* and other DH projects.

CGT recommends the use of interviews as an emergent and collaborative process where the interviewer and the interviewee co-construct the research data through an "exploration of the interviewee's experiences and perspectives" [Charmaz & Thornberg 2021, 317]. In terms of analysis, Charmaz and Thornberg recommend using line-by-line coding and memo-writing to determine what lines of data mean individually and in connection with each other. These were the primary tools we used in analyzing the *Project Endings* interviews. While we did not conduct any preliminary coding during the data collection period, as Charmaz and Thornberg (2021) recommend, we did reflect on the data after each interview and considered how to refine our follow-up questions in subsequent interviews.

One of the main aims of the research interviews was to understand the context of participants' experiences and perspectives on ending and archiving DH projects. This research emerged from *Project Endings* PIs' own complex experiences with project endings. The *Project Endings* PIs have openly shared their own perspectives and interests throughout the research process, and have continually reflected on the "social, historical, local, and interactional contexts" of both participants' experiences and their own, acknowledging their positionality within the project specifically and in the research field more generally [Charmaz & Thornberg 2021, 315].

Narrative Inquiry

A narrative inquiry approach is a collaborative process [Butler-Kisber 2019] where researchers and participants work together to "make sense of experience and organise it into a body of practical knowledge" [Mertova & Webster 2020, 18–19]. As with CGT, an important aspect of a narrative inquiry approach is reflexivity, in terms of what perspectives and preconceptions the researchers bring to the research process [Butler-Kisber 2019]. Using this approach, we have been able to share participants' experiences "holistically in all [their] complexity and richness" [Mertova & Webster 2020, 2], acknowledging that the experiences shared with us are situated within specific contexts and that our understanding of these experiences can change over time. As Butler-Kisber (2019) explains, narrative inquiry "illustrates the selectivity of experience" as iterative and continuous and "emphasizes the social and contextual aspects of understanding" (4–5).

This study follows a narrative inquiry approach in a number of ways. The interviews, and later the symposium, provided participants with the space to share their experiences in a relatively low-pressure environment. Participants were asked whether or not they consented to the interview process (both the audio recording and transcription thereof) at the beginning of each interview, and were given the option of veto-power or full anonymity in terms of how their narratives

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were shared. This allowed participants to speak as freely as they wished, particularly about any potentially negative experiences. Through narrative, participants were able to represent their experiences in their own words, interpreting events that they felt were important to the general topic of the interviews — ending and archiving digital projects.

Project Endings team members were acquainted with a number of the interviewees prior to this project, and as peers and members of the DH community, we also share many parallel experiences with the interviewees. As an observer more than an active participant in the interviews, I witnessed this peer relationship as important to creating trust in the interview process and in allowing interviewees to feel safe enough to be honest about their experiences and perspectives. Mertova and Webster (2019) illustrate, through educational experience narratives, how interviews allow participants to reorder their experiences "into a usable past and present, with the aim of promoting an understanding of that experience and perhaps providing insights into our judgements" (9).

Not only did the interviews themselves deploy a narrative approach, the analysis of the interviews also followed a narrative inquiry approach. The interview analysis was a collaborative process between *Project Endings* PIs and research assistants; we reflected upon common and recurring themes in the interviews. Our analysis was iterative in that our interpretation of the interviews as a whole evolved continually as new themes emerged. We have collectively developed a narrative of the interview analysis and of this research as a whole, and this narrative continues to shift as *Project Endings* team members conduct further analyses and gain new insights into the data.

Phenomenology

A phenomenological approach to research goes beyond describing experiences empirically; it attempts to interpret experiences in order to understand their meaning, how they arise, and how they relate to each other [Cresswell et al. 2007] [Engelland 2020] [Zahavi 2019]. According to Hopp (2020), phenomenology "is a search for genuine understanding, an attempt to render objects, relations, and states of affairs intelligible" (p. 243). Zahavi (2019) further elaborates, explaining that "for many phenomenologists, the task of phenomenology is not to describe empirical and factual particularities, but to investigate the essential structures characterizing our experiences, their correlates, and the connection between the two" (44).

Similar to CGT and narrative inquiry, research using a phenomenological approach often entails "in-depth interviewing, preferably over time, and open-ended questions that draw out accounts of experience, their descriptions and explanations" [Butler-Kisber 2019, 4]. Cresswell et al. (2007) explain that in contrast with grounded theory, which gathers participant views in order to generate theoretical models, phenomenology "describe[s] what all participants have in common as they experience a phenomenon" (252). The researcher collects data from participants "who have experienced the phenomenon and develops a composite description of the essence of the experience for all the individuals — what they experienced and how they experienced it" [Cresswell et al. 2007, 252–253].^[1]

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Several authors make a distinction between psychological and hermeneutical phenomenology. In psychological phenomenology, researchers employ transcendental reduction to set aside their own experiences and preconceptions, become essentially "spectator[s] to experience" [Engelland 2020, 8], and "take a fresh perspective of the phenomenon under examination" [Cresswell et al. 2007, 254]. According to Engelland (2020), "the point of the transcendental reduction is to step back, [and] to retrace the steps that make experience happen" (6). Proponents of this approach argue that it allows researchers to focus more on understanding participants' experiences rather than their own interpretations [Butler-Kisber 2019]. Cresswell et al. (2007) explain that while researchers may aim towards entirely "bracketing out their views before proceeding with the experiences of others" (254), it is rarely achieved perfectly. In contrast, hermeneutical phenomenology focuses on interpreting lived experiences through the researcher's lens. As Butler-Kisber (2019) explains, hermeneutical phenomenology "move[s] beyond description to interpretation where the researcher actively takes a role in explaining participant meanings" (3). The use of a phenomenological approach in the *Project Endings* interviews sits somewhere between these two approaches, though perhaps leaning more towards hermeneutical phenomenology: while we have made a point of trying to set aside our own perspectives in order to describe and organize interview data accurately, a major aspect of this study has been to understand participant narratives as they relate to our own experiences as DH scholars.

Co-constructing Knowledge

There are few references in the literature to the co-construction of knowledge as an intentional practice, particularly in DH research. Rather, the co-construction of knowledge seems to be more often described as a result of particular qualitative methodologies, such as narrative inquiry. As such, there is no clear consensus on what co-constructing knowledge looks like, since qualitative methodologies are used in such wide and varied contexts. However, one idea that emerges repeatedly in the literature is the importance of active participation by all actors in the research task or process. For example, Assmuth and Lyytimaki (2015) talk about the importance of participation in environmental impact assessments, saying that "impact assessments serve as tools for co-constructing knowledge for policy-making, planning and associated resolution of conflicts" (341-342). The authors also describe an open web-platform, called Opasnet, which "collects, synthesizes and distributes scientific and other factual information," and where users can "[engage in] research, store and display data, make and run models, and perform assessments, and discuss all of that work in one workspace" [Assmuth & Lyytimaki 2015, 343]. In another example, Enloe et al. (2021) describe a study they conducted where they used photovoice methods — where participants are provided with cameras and invited to take photos of places and objects in their lives that they connect to a prompt from the researcher — combined with interviews, workshops, and field visits, to learn about the needs and priorities of farmers in Malawi. This method "supported a process of co-constructing agroecological knowledge" [Enloe et al. 2021, 1083] by "provid[ing] a platform through which researchers, practitioners, and farmers could learn from each other, identify priorities for trainings and research, and determine next steps for generating new, locally applicable agroecological strategies" (pp. 1098–1099). These examples reflect what Pratt (2019) describes as the process of co-constructing knowledge, which involves "bringing together multiple kinds of knowledge and multiple perspectives to construct an understanding of research phenomena based on a plurality of situated knowledges" (806).

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According to Pratt (2019), the co-construction of knowledge is an important aspect of public health research, particularly in studies where community-based participatory research methods are used and where social justice is a goal of the research. In Pratt's model of knowledge co-construction, researchers and participants "design and conduct research together in ways that achieve the purpose of both sets of actors" and share responsibilities for "decision-making in all phases of research projects" [Pratt 2019, 806]. Pratt does acknowledge, however, that there is a range of public engagement within participatory research methods, from "informing and consultation to power-sharing strategies of partnership" (p. 806).

In terms of news journalism, Conradie (2012) explains that "interviews represent a special form of dialogue in which 19 knowledge is co-constructed between two or more participants" and which "differs markedly from everyday conversations" (499) in a number of ways. For instance, there is generally a power difference between interviewers and interviewees, however slight, where the interviewer has more control over the interaction and resulting texts. As well, participants' roles in the interview process are governed by particular rules and conventions - for instance, interviewers "[determine] the topic and duration of the discussion" while interviewees "respond within the limits already demarcated by the [interviewer]" [Conradie 2012, 499]. Additionally, all participants understand that the knowledge they co-construct "will eventually be viewed by the public," which can influence what information is shared during the interview [Conradie 2012, 499]. Through the Project Endings interviews, participants — both interviewers and interviewees – co-constructed knowledge by sharing narratives. Much as Conradie (2012) illustrates through news interviews, the roles of the interview participants in our research, and in the subsequent symposium, were clearly defined between interviewer and interviewee. The methodological approaches listed above (constructivist grounded theory, narrative inquiry, and phenomenology) allowed us to co-construct knowledge throughout the interview and analysis processes, and later through the Endings Symposium, both within our research team and with fellow DH scholars as interview and symposium participants.

Analyzing the Interviews

Before analyzing the interviews, the *Project Endings* team (including PIs and research assistants) met to establish a basic taxonomy of codes to guide the analysis. We discussed the recurring themes we noticed from our experiences conducting, transcribing, and reading the interviews, and grouped our impressions into twelve broad themes: Data;

Documentation; Funding; Hosting; Institutional issues; Migration; Project management; Project outputs; Rights; Scholarly or academic issues; Storage, backup, and preservation; and Team. This taxonomy continued to evolve over the course of the analysis process, as each of these twelve broad themes came to include a number of narrower codes. We met around a large table, with emergent themes written on slips of paper, and grouped them into categories. In total, 200 individual codes were established through our analysis of the interviews. See Appendix A for a full summarized list of the themes and narrow codes.

The first few interviews were analyzed through line-by-line coding by Danny Martin and myself (Comeau). For intercoder reliability, we would encode our individual analyses separately in XML, and then meet to discuss any discrepancies between our analyses, eventually coming to a consensus on the final codes. Once we had established a process for conducting the analysis that was straightforward and replicable, we demonstrated this process to the rest of the *Project Endings* team, after which all team members took part in analyzing the remaining interviews. Each interview was independently analyzed by two researchers, who then resolved and merged their coding choices. In order to facilitate analysis on such an extensive dataset, *Project Endings* team member Martin Holmes developed a schema to aid in the visualization of our analyses. Figure 1, below, illustrates how this schema was used to visualize our analyses, with an example from an interview with participant James Cummings. The various colours denote the themes of "Rights," "Storage, backup, and preservation," "Funding," "Data," "Institutional Issues," and "Documentation."

James Cummings It was around then you know but we didn't sort of say Oh these files are

Creative Commons, you know it just, we just said oh this is freely available, you know. It it's funded by you know uh the AHRB as it was then, uh Arts Humanities Research Board, now AHRC, uh uh you know why wouldn't we be making it you know freely and publicly available. Great, you can download the source files, they were there, you you know, everything's available of course it's freely available, but we didn't at- explicitly license it. And that meant when I was at another institution, and that had had this hacking scandal and that kind of thing, that uh they were very reluctant for somebody to take data of theirs and put it up somewhere else. And um you know, the- they had never licensed anything digital at that point, for people to use elsewhere. Getting them to think about those issues, you know it was sort of I I would uh email them, you know, three months later I'd get an answer, you know. I'd explain uh again what I wanted, you know, three months

Figure 1. Excerpt from an interview with James Cummings (June 5, 2018)

These interviews and the subsequent analysis led directly to the 2021 Endings Symposium. Symposium speakers were selected from the scholars we interviewed in 2018, and the key issues that emerged from our analysis of the interviews guided us in selecting both the symposium speakers and the major topics that would guide the symposium discussions. A more in-depth discussion of the interview analysis and results will be published in future articles by *Project Endings* team members.

Conclusion

Knowledge has been co-constructed over the course of the *Project Endings* interviews in several ways. Interviewees shared their experiences, and interviewers followed up with questions based on their own understandings of the shared narratives, as well as their own experiences. The goals of the interviews were clearly laid out ahead of time, as were the objectives of *Project Endings* — to develop recommendations, guidelines, and tools to help with ending and archiving digital projects, from the perspectives of DH scholars, developers, and librarians. Knowledge has also been co-constructed by *Project Endings* team members through the interview analysis process and the subsequent dissemination and mobilization of these analyses. The interview analysis was a collaborative process where *Project Endings* team members engaged in summarizing, interpreting, and distilling the narratives shared with us by other DH

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scholars. Lastly, knowledge has been co-constructed between participants at the Endings Symposium in April 2021 and in subsequent publications (such as this special issue). The Endings Symposium panel comprised *Project Endings* Pls, research assistants, and previous interviewees. During the symposium, participants were invited to reflect on their experiences and discuss their perspectives on ending and archiving digital projects. Since the symposium took place later in the *Project Endings* timeline, participants came to the symposium having already been part of the knowledge co-construction process in the interview phase. The *Project Endings* research team had concluded the TEI-XML encoding of the interviews by this time, and had completed the process of analysis through co-construction of categories and qualitative coding. Our perspectives had evolved over the course of the project and we were able to engage with questions about project endings in deeper ways.

Methodologically, this study was guided by elements of constructivist grounded theory, narrative inquiry, and phenomenology. The *Project Endings* interviews, subsequent analysis, and final Endings Symposium validated many of the researchers' own experiences, at the same time as they provided new perspectives and allowed us to expand our understanding of the issues facing DH scholars with regards to the ending and archiving of digital projects. As DH scholars and members of the DH community, *Project Endings* team members are now well positioned to make recommendations based on the results of this study.

Appendix A: Summarized list of interview themes and narrow codes

Data: issues concerning data formatting; specific file types; data modelling and management; the importance of metadata; findability; decisions around digitization; born digital data; and sharing data as content.

Documentation: the creation, availability, and completeness of documentation; images, text, or video documentation; 26 and metadata as documentation.

Funding: experiences with funding body requirements; public funding through organizations such as SSHRC or the Canada Council; crowd-sourcing; funding difficulties and running out of funds; institutional financial support; and fundraising.

Hosting: experiences surrounding commercial hosting; using platforms such as Google, Wordpress, or Zenodo; hosting and storage issues; housing an archive; loss of hosting; hosting a mirror site; institutional servers and university repositories; and long-term hosting.

Institutional issues: access to administrative, research, and technical support; infrastructure and logistics for supporting DH projects at the institutional level; experiences particular to arts institutions and research institutions; change and continuity in leadership at the institutional level; politics and conflict at institutions; institutional hosting; public vs. private institutions; planning and integration of DH goals into institutional priorities and policies; institutions' responsibilities to DH projects; loss of access to institutional support and resources; jurisdictional issues of ownership and control over DH projects; long term maintenance of DH projects; differences between institutional support available to DH projects across regional and national borders; institutions' reputations regarding support or lack of support for DH projects.

Migration: issues surrounding migration of any kind, including migration of data, project outputs, or hosting.

Project management: project planning and management; organizing project workflow; ad hoc solutions to issues arising in project development or maintenance; deadlines and completion of DH projects; recognizing signals that it is time to end a project; realistic expectations for the scope of a project; tools for project management (e.g. Basecamp, content management, etc.); responsibility for certain aspects or tasks in the development, storage, or maintenance of a project; and complications that arise later in a project's life cycle.

Project outputs: different kinds of outputs, such as immersive 3-D experiences, CD-ROMs, websites, digital and text editions, books, journals, physical or digital archives, and presentations or workshops; accessibility of data or content that is developed and provided through the launching of a project; encouragement of dialogue or helping to change attitudes toward DH (intentionally or not); code, interface, or framework development as project outputs; design issues that become evident after a project is launched; points at which progress within a project is measurable; contribution to

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the development or understanding of interoperability of various technical/technological components; searchability of project outputs; focus on creating content rather than a single product; a focus on results, effects, or changes, etc., rather than a single product; and other less tangible project outputs such as research or pedagogical goals.

Rights: issues surrounding rights agreements; changing privacy laws, complex protocols and implementation; jurisdictional issues and crossing regional legal boundaries; documentation of rights; ethical issues in terms of participant consent, ownership of data, etc.; intellectual property rights for data, content, etc.; Indigenous creators and representation in content, as well as in project governance and team composition; issues particular to open access projects, resources, data, software, etc.; and the researcher's responsibilities to participants, organizations, the project itself, the broader field, society, etc.

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Scholarly or academic issues: issues such as academic value of and credit for DH work; authenticity of digital versions; citing other scholars or being cited by other scholars; disciplinary background and its effects on practice; decisions regarding what to include in a project and how these decisions are made; differences between project genres and how a genre is represented by a project; technical advice provided by programmers, developers, or consultants and humanists being ill-equipped to judge the advice given; Indigenous representation and work in DH; intellectual value of DH work in the academy, in particular fields, and in society in general; the precarity of employment for early-career scholars involved in DH projects, and using DH projects in tenure files; and the impact of scholarly workload on a project.

Storage, backup, and preservation: issues facing the preservation of data and project components for long-term storage; challenges involved in archiving projects; changing attitudes to technology in terms of the preservation of DH projects; backing up project components in case of a single point of failure; causes of failure in long-term preservation; challenges maintaining hardware and software for long-term preservation, particularly the effects of hardware obsolescence; reliance on institutional hosting, specific hardware or software, the WayBack Machine, etc. for long-term storage; fragility and erasure of stored data; preserving projects or components on GitHub; guaranteeing project preservation through a contract with an institution or an independent organization; LOCKSS — using multiple copies and mirror sites to back up a project; searchability of stored data; and particular technologies used for storage, such as USB-connected storage devices, servers, hard drives, DropBox, iCloud, etc.

Team: priorities, commitment, and flexibility of team members or member institutions; challenges in working with creative or independent colleagues; team leadership change because of retirement, career change, death, etc.; changes in the capacities of participants; collaborating on a DH project with other scholars, institutions, etc.; communication problems and conflict that arise between collaborators; community politics and the challenges they present to the archiving process; the importance of common understanding of priorities and practice amongst team members; continuity of team members' involvement in a project; expertise within the team; team composition, including a variety of personnel, e.g. faculty, research staff, students, administrators, fellows, etc.; and the importance of a range of specializations within a team in making decisions about a project.

Notes

[1] This work is ongoing and will result in a final journal article on the *Project Endings* interviews.

Works Cited

- Arneil et al. 2019 Arneil, S., Holmes, M., and Newton, G. (2019) "Project Endings: Early Impressions from Our Recent Survey on Project Longevity in DH", *Digital Humanities 2019 Conference Papers*, Utrecht University, July 2019.
- Assmuth & Lyytimaki 2015 Assmuth, T. and Lyytimaki, J. (2015) "Co-constructing Inclusive Knowledge within Converging Fields: Environmental Governance and Health Care", *Environmental Science and Policy*, 51, pp. 338–350.
- Butler-Kisber 2019 Butler-Kisber, L. (2019) *Qualitative Inquiry: Thematic, Narrative and Arts-Based Perspectives*. London: Sage.
- **Carlin 2018** Carlin, C. (2018) "Endings: Concluding, Archiving, and Preserving Digital Projects for Long-Term Usability", *KULA: Knowledge Creation, Dissemination, and Preservation Studies*, 2(1).

- Charmaz & Thornberg 2021 Charmaz, K. and Thornberg, R. (2021) "The Pursuit of Quality in Grounded Theory", *Qualitative Research in Psychology*, 18(3), pp. 305–327.
- **Charmaz 2020** Charmaz, K. (2020) "With Constructivist Grounded Theory You Can't Hide': Social Justice Research and Critical Inquiry in the Public Sphere", *Qualitative Inquiry*, 26(2), pp. 165–176.
- Coghlan & Brydon-Miller 2014 Coghlan, D. and Brydon-Miller, M. (2014) "Positionality" In Coghlan, D. and Brydon-Miller, M. (eds.), *The SAGE Encyclopedia of Action Research*. London: SAGE Publications Ltd., p. 628.
- **Conradie 2012** Conradie, T. (2012) "Co-constructing Knowledge in News Interviews: An Application of Hardy and Palmer's (1998) Discourse Model", *Southern African Linguistics and Applied Language Studies*, 30(4), pp. 497–509.
- **Cresswell et al. 2007** Cresswell, J. W., Hanson, W. E., Clark, V. L. P., and Morales, A. (2007) "Qualitative Research Designs: Selection and Implementation", *The Counseling Psychologist*, 35(2), pp. 236–264.

Engelland 2020 Engelland, C. (2020) Phenomenology. Cambridge: MIT Press.

- Enloe et al. 2021 Enloe, S. K., Banda, D., Moyo, P., Dakishoni, L., Msachi, R., Kerr, R. B. (2021) "Photovoice as a Method for Co-constructing Agroecological Knowledge in Northern Malawi", *Agroecology and Sustainable Food Systems*, 45(7), pp. 1083–1103.
- Hopp 2020 Hopp, W. (2020) Phenomenology: A Contemporary Introduction. New York: Routledge.
- Mertova & Webster 2020 Mertova, P. and Webster, L. (2020) Using Narrative Inquiry as a Research Method: An Introduction to Critical Event Narrative Analysis in Research, Teaching and Professional Practice. New York: Routledge.
- **Pratt 2019** Pratt, B. (2019) "Engagement as Co-constructing Knowledge: A Moral Necessity in Public Health Research", *Bioethics*, 33(7), pp. 805–813.

Zahavi 2019 Zahavi, Z. (2019) Phenomenology: The Basics. New York: Routledge.



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