KU LEUVEN

FACULTY OF SCIENCE

Laying the Foundations of the DH Commons' Web Presence

Towards a hybrid service-research model that reacts with agility to the needs of researchers and their desire to collaborate

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Abstract

Digital scholarship centers are becoming more pervasive at academic libraries. It is only recently that library staff at KU Leuven Libraries Artes decided to implement a DH initiative in their institution, the Digital Humanities Commons; with the intention of fostering digital projects across faculty boundaries. To help the DH Commons continue to grow, developing a web presence is an important first step. In order to build a website which is embedded in the Digital Scholarship Organization landscape and is useful for the specific context at KU Leuven, a set of guidelines and recommendations are needed about the type of information that should be included when posting projects on the website. To complete this aim, I conducted a case study wherein I subjected a sample set of five digital scholarship center websites to content analysis. The result of the study is an interpretivist qualitative analysis of projects posted across digital scholarship center websites, and a set of recommendations for the DH Commons website at KU Leuven Libraries Artes.

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List of Abbreviations

ADHC	Alabama Digital Humanities Center
ALA	American Library Association
DH	Digital Humanities
DHC	Digital Humanities Center
DSC	Digital Scholarship Center
DSO	Digital Scholarship Organization
DSS	Digital Scholarship Services
GIS	Geographic Information System
IT	Information Technology
IUPUI	Indiana-Purdue University
MOOC	Massive Online Open Course
OA	Open Access
TEI	Text Encoding Initiative
UA	University of Alabama
UNL	University of Nebraska-Lincoln
UO	University of Oregon
UW	University of Washington
UX	User Experience
VRE	Virtual Research Environments
XML	Extensible Markup Language

I. Introduction

As we continue to witness the development of the computational turn in the humanities (Berry, 2012), discourse has increasingly focused on the need for spaces, courses, and specialists to train the next generation of academics in technical research skills. This societal transformation has coincided with the rise of the Digital Humanities(DH), a set of tools, methodologies, centers, and research questions developed by stakeholders who "have proceeded from an important recognition: that we are now in an era of capaciousness, of ubiquitous storage, of networked information and of unprecedented access" (Thomas III, 2016). This development also opens up a range of possibilities for humanities scholars to engage with, question, and develop these technical skills.

While the theoretical borders of DH continue to expand (Kirschenbaum, 2010; Terras et al., 2013; Klein, 2015; Thomas III, 2016), researches are already exploring the practical value of this new cross-pollination of knowledge. As a myriad of promising projects such as DARIAH[1], CLARIN[2] and @note[3] continue being developed, universities are increasingly recognizing the benefits of interfaculty collaboration. One way to put this cooperative model into practice is the creation of a Digital Scholarship Center (DSC) or a Digital Humanities Center (DHC), where the necessary soft- and hardware tools, collaborative spaces, and expert counseling are provided by an intermediary unit such as the university library (Goldenberg-Hart, 2016).

Being an exciting and alternative approach to collaborative research, an increasing number of universities are following this trend, among them the *Katholieke Universiteit Leuven* (KU Leuven). The DH Commons at KU Leuven Libraries Artes was launched on the 15th November 2019. The Commons, consciously named as such to "avoid cloistering digital work within the walls of a designated center," (Martinez & Verbeke, 2019) still in its infancy at the time of writing, with only a webpage to prove its existence.[4] The DH Commons was developed and is managed by a Digital Scholarship Expert at KU Leuven Libraries Artes and the Head of KU Leuven Libraries Artes, and supported by two graduate students in the Advanced Masters in Digital Humanities. This thesis explores the results of a three-month internship in the DH Commons, the main goal of which was the creation of the DH Commons website, a project that was undertaken together with the Digital Scholarship Expert and another intern from the DH Master's program. To accomplish this goal, the author developed and analyzed a small corpus of five Digital Scholarship Organization websites in order to formulate recommendations for the website's design and functionality. These recommendations were then applied to the DH Commons website within the constraints of the KU Leuven web-based style guide documentation and its content management system, Plone.

The project is a key aspect of fostering a collaborative working environment across institutions and faculties, which is the reason why they were chosen as the main focus of this thesis. While KU Leuven is already hosting a number of collaborative digital projects across faculties, a centralized digital project database where interested users can find a complete overview of the project efforts at the university is still lacking. In order to foster such project database, it is important to take examples from similar initiatives. For this reason, the research question for this thesis is the following:

[1] https://www.dariah.eu/activities/working-groups-list/
[2] https://www.clarin.eu/
[3] http://a-note.fdi.ucm.es/GlassAtNote/
[4] https://bib.kuleuven.be/english/research/digital-humanities/dhcommons

- How are projects published on Digital Scholarship Organization websites?

To investigate this question, I collected a corpus of digital scholarship centers across North America and analyzed the way that their DH projects are posted on their webpages. The websites' project pages are then subjected to content analysis to analyze the meta-information that is added when a project is posted on the website. The project pages are analyzed according to the following coding units: subject tags, output type, duration, names of the people who collaborated, title, funding organization, tools, content of the project, a link to an external project website and contact details. Additional attention will be paid to the location of the projects on the website. The final results of the analysis will then be used as the basis for a set of recommendations for the DH Commons website, and put into practice to the extent possible. The practical output could serve as an impetus for further application, and a central DH project access point at KU Leuven.

II. Literature review

Digital scholarship activities conducted within the framework of DH go far beyond the digitization of pictures and documents, which in itself is a complex process requiring specialized knowledge and intense, library-based editorial work (Martinez, 2019). Digital scholarship has been described as an umbrella term that covers data curation and management, digital publishing and visualization, database support, software development, and interface design (Mulligan, 2016b; Li et al., 2020). This is is further elaborated by Rumsey (2011, p.2), who states that "DS [Digital scholarship]is the use of digital evidence and method, digital authoring, digital publishing, digital curation and preservation, an digital use and reuse of scholarship." Similarly, countless attempts have been made to define Digital Humanities in its current state. In fact, defining what Digital Humanities is has almost become as prolific as the field itself (Kirschenbaum, 2010). With definitions ranging from "a crossroads between humanist tradition and the digital age' to 'the first scholars to accept their cyborg-self,"[5] there is clearly no consensus as to what DH should and should not include. Two reasons for this can be distinguished: firstly, as the Humanities includes the study and interpretation of language, linguistics, literature, history, jurisprudence, philosophy, archaeology, comparative religion, ethics and the arts,[6] ways of digital application are legion and thus impossible to grasp in one single definition. Secondly, as the field is in a state of constant evolution and change, definitions can quickly become outdated or limiting to future research and the adoption of digital scholarship (Mulligan, 2016a; Warwick, 2016; Li et al., 2020).

However, Digital Humanities research is not confined to theoretical discussions. Using the motto "more hack less yack" a group of DH scholars is distinguishing "an alleged binary opposition between makers and theorists in DH and beyond" (Warwick, 2016, p.538) by propagating a more practical approach which emphasizes the creation of hard- and software. This "more hack"-ideology has been one of the driving forces behind the creation of DH centers, mostly referred to as Digital Humanities Centers or Digital Scholarship Centers.

The applications of DH praxis are not set in stone, and the physical manifestations and thus understanding of Digital Scholarship Centers are immensely diverse (Lewis et al., 2015; Mitchem & Rice, 2017; Li et al., 2020) . The fact that the digital scholarship center is often referred to as a "center" has been critiqued by Klein (2015, p.79), who pointed out that "the word center is ironic, since most are modest in size and reputation." In practice, issues such as internal politics, controlled vocabulary, and personal preference can play a part in naming conventions.

Likewise, naming conventions range from "Digital Scholarship Center" to "Digital Humanities Center" to "Research Commons" and beyond. (CNI: Coalition for Networked Information, 2014; Goldenberg-Hart, 2016; Mitchem & Rice, 2017), Thus, instead of relying on terminological determinism, it is more reasonable to consider the similarities and trends in the digital scholarship activities conducted in centers.

Considering these factors, "Digital Scholarship Organization" is thus used as an umbrella term throughout the thesis to refer to a set of activities in accordance with a holistic digital scholarship service framework deduced from existing literature on the subject. Mitchem & Rice (2017, p.835) for instance, state that the services provided in Digital Scholarship Organizations

[5] Definitions retrieved from http://whatisdigitalhumanities.com/
[6] Information retrieved from https://www.neh.gov/about

include “digital humanities, data curation and preservation, locating research partners and grants, handling Open Access, copyright and publishing requirements, and research consultation.” A similar framework is discerned by Zhou et al (2019, p.6), who recognize trends in “supporting services, formulating research ideas, locating research partners, writing proposals, conducting research and publishing results,” and Goldenberg-Hart (2016), who mentions that Digital Scholarship Organizations are involved in providing equitable access to high-end hard- and software resources; making spaces available for collaboration; offering access to functional experts in providing assistance, training, and consultation; establishing mechanisms for the curation of digital content; and fostering interdisciplinary connections. Montoya (2017) then emphasizes the pedagogical power of the Digital Scholarship Organizations in fostering digital information literacy.

Digital Scholarship Organizations are often a modern-day colloquium to encourage and facilitate the exchange of ideas, tools, and research methodologies between faculties (Prescott, 2016). Moving away from the well-established confines of the “lone wolf” strategy, where the single-author monographs or academic journal articles are of paramount importance for scholarly output, centers instead promote and even require joint effort across faculty boundaries, which also then require different administrative and dissemination structures (B.Sinclair, 2014; Mackenzie & Martin, 2016; Prescott, 2016).

Alongside galleries, archives, and museums, libraries – and more particularly academic research libraries – are often regarded as natural incubators for digital scholarship (Cunningham, 2010; B. Sinclair, 2014; White & Gilbert, 2016; Poremski, 2017; King, 2018). Rooted in the collection and issuing of information, the activites conducted by library staff constitute an indispensable intersection in the transfer of information between students, teachers and other stakeholders (Hensley & Bell, 2017; McRostie & Konstantelos, 2018). As noted by B.Sinclair (2014, para.4), “[l]ibraries have always been in the business of knowledge creation and transfer, and the digital scholarship incubator within the library can serve as a natural extension of this essential function.” Additionally, library staff have actually preceded many digital humanists by using computing in their work in a variety of ways, such as the automation of tasks related to inventory, cataloging, information search and retrieval, and more (Rayward, 2002). Despite often being portrayed as such, digital scholarship in the library is not new (Stricevic & Jelusic, 2011; Posner, 2013; Currier et al., 2017). In fact, “it is crucial to remember that what we now call digital humanities grew out of a set of practices, and a community of practitioners, which themselves arose in libraries and archives” (Posner, 2013, p.1).

However, a proliferation of tools, datasets, and approaches together with the rise in popularity of DH, require library staff to view their place in the digital ecosystem from a macro-perspective, and to re-examine which new skillsets and roles are needed in digital scholarship projects. This examination must also be balanced with a continued focus on users’ expectations and requirements as well as the development of new digital scholarship services and partnerships in library spaces (Nowviskie, 2011; Posner, 2013; B. Sinclair, 2014; Hartsell-Gundy et al., 2015; Mackenzie & Martin, 2016; Li et al., 2020)). The performance of this balancing act is in itself a lesson for academics in the value of library staff as equal and adept collaborators.

Despite the salient trends in Digital Scholarship Organization activities (J. Lippincott et al., 2014), the types of support provided by library staff working at a given center depend on requests coming from researchers and students, the projects library staff wishes to conduct, as well as the university’s resources and willingness to invest time and effort in this endeavor

(Hensley & Bell, 2017; Mitchem & Rice, 2017 ; Li et al., 2020). However, a general overview of services that are frequently offered by staff at a DSO is necessary to provide further insight in the inner workings of these organizations. Based on the insights made by Goldenberg-Hart (2016); Mitchem & Rice (2017); Montoya (2017); and Zhou et al (2019), the following aspects of the DSO are thus described in further detail: **data services** (data visualization, data encoding, data management, and data curation); **infrastructure** (staff, space, hard- and software); **consultation and teaching**; and **publishing services**.

i. Data services

Since the mid-twentieth century, researchers in the Humanities have increasingly relied on new digital tools and data sets to accomplish projects. As a result, data in the Humanities could refer to (large) corpora of texts, imagery, video material and audio among others (J. Lippincott et al., 2014; Kilbride, 2016; Gold & Klein, 2019). The applications of these different types of data are as varied as the data itself. By way of illustration, a project such as *mARChive* seeks to provide visitors of Museum Victoria (Melbourne) with highly immersive and interactive experience by integrating its museum collection data into a 360-degree 3D space. This would allow visitors to get interactive access to a large data cloud of no less than 100,000 records with images (Kenderdine, 2016).

Projects are not limited to the processing of textual, visual or sonic data, as there has also been a steep rise in the popularity of the "*geohumanities"* where researchers use Geographic Information System (GIS) data to produce geo-temporal visualizations and locative historical storytelling (Presner & Shepard, 2016). A good example of this are the efforts of the *David Rumsey Map Collection*: a private initiative seeking to geo-code historical atlases, maps, newspapers and photograph collections. [7] A similar example is the *Torn Apart/Separados* project, a public project which visualizes the effects of the USA's "Zero Tolerance Policy" of 2018 (Williams, 2018). [8] Digital projects may also include initiatives within musicology, where the development of audio similarity prediction methods have contributed to commercial successes such as the SoundHound music service app (Burgoyne et al., 2016). Also being thoroughly explored are text visualization methods, with digital tools such as *Voyant* and *Textarc* enabling linguists and literary scholars to gain deeper quantitative insights in their textual material (S. Sinclair & Rockwell, 2016). [9,10]

To extract meaning from all these different data formats, the enabling facility (usually the library) has to provide a stable infrastructure. An analysis of the different services provided by the DSOs collected by Mulligan (2016a) shows that the activities performed in DSOs are primarily concerned with data visualization, data encoding, data management, and data curation. The fact that data visualization is so prevalent emphasizes the value of design and "creative computing" within digital scholarship in the Humanities (Blanke et al., 2009; Coleman et al., 2012). Experienced DSO staff members could provide assistance regarding the choice of data visualization tools and/or User Experience (UX) design (J. Lippincott et al., 2014). Additionally, as set out by the Washington University, the DSO can assist in deciding appropriate XML standards to encode project materials based on the resource type (*Washington University Digital Gateway*, z.d.). Text encoding (also known as text markup), is in essence the

[7] https://www.davidrumsey.com/
[8] http://xpmethod.plaintext.in/torn-apart/volume/2/index
[9] https://voyant-tools.org/
[10] http://textarc.org/

conversion of text into workable tagged text data sets using XML. Where the Text Encoding Initiative (TEI) guidelines are one of the ways to encode monographs and books, VRA Core can be used for encoding image based projects. [11]

As for data management, a DSO can "assist researchers in developing data management plans and in organizing, describing, and preserving data" (*Digital Scholarship Services | Fondren Library*, z.d.). This generally includes the collection, tracking and structuring of metadata, with the aim of facilitating the discovery and preservation of project data for future research (*Metadata Services | Georgetown University Library*, z.d.). Several universities, among them Vanderbilt University in Nashville, additionally provide a linked data service in their DSO, specifically aimed at providing "advice on tools, methods, standards and protocols for linked data projects". These methods could include "encoding data from Semantic Web Technologies to Network Analysis and Textual Graphs" (*Digital Scholarship and Communications*, z.d.).

One last (but not least) step in the data services provided by a DSO is the curation and preservation of project data. As textual material, imagery and sound data is increasingly being digitized, the question of how to preserve these massive amounts of data remains a major issue in terms of reproducibility, redistribution and standardization (McRostie, 2016; Babeu, 2017; *Data Curation and Analysis*, 2020). The recent upsurge in digital scholarship has affected many aspects of traditional preservation methods, and "have left libraries with no ready means by which to archive digitally produced publications, reports, video, audio, presentations and learning objects, much of which cannot adequately be represented in print," (Michael et al., 2004).

Nevertheless, as curated data provides valuable virtual research environments (VRE) for researchers (Babeu, 2017; *Data Curation and Analysis*, 2020), there are ongoing efforts in Humanities data curation: projects such as TextGrid are working to create a text and image repository that will serve as a long term data archive for humanities research; [12] ensuring both the availability and interoperability of data (Babeu, 2017). In another case, The Archaeology Data Service (ADS) at the University of York developed an accredited digital repository for heritage data, which works within International e-infrastructure collaborations such as ARIADNE, a large archaeological data infrastructure in Europe indexing about 2.000.000 datasets (Cinzia, 2019). [13]

ii. **Infrastructure**

As pointed out by Posner (2013): "libraries need to provide the infrastructure (access to digitization tools and servers, for example) to support humanities work, but they also need thoughtful, skilled, knowledgeable humanists to actually work on it.". In order to provide digital scholarship services in the library, a DSO requires the right combination of skills and talents to suit their institution's needs (J. Lippincott et al., 2014, p. 2). Yet again, resembling the equally undefined nature of a Digital Scholarship Organization, there is no such thing as a "perfect combination of skills", and employees' backgrounds fully depend on the university's desired path (B. Sinclair, 2014; J. Lippincott et al., 2014; Mitchem & Rice, 2017; Li et al., 2020).

[11] https://www.loc.gov/standards/vracore/
[12] https://textgrid.de/en
[13] https://ariadne-infrastructure.eu/about-ariadne/

In order to foster sustainable digital scholarship projects in a library during all phases of the DH project life cycle, collaboration among library staff who perform a range of administrative, IT, and research activities together with academic faculty members, students, and funding agencies is key (B. Sinclair, 2014; J. Lippincott et al., 2014; Keener, 2015; Currier et al., 2017; McRostie & Konstantelos, 2018). Additionally, "a partnership between digital humanities and digital libraries is being forged, coagulating in a demand for digital humanities centers within academic libraries and an increase in the call for 'Digital Scholarship Librarians'" (King, 2018). In other words, not only do library staff collaborate with IT specialists, they also possess the necessary technical skills themselves, which allows them to provide digital project consultation and to conduct their own digital scholarship research as well (Keener, 2015; King, 2018).

The profiles of the people at work in a library are extremely variable and fluid in nature, which is reflected by the job titles of DSO staff. Research conducted by Wilms et al. (2019) on the European DH landscape found no less than 147 job titles; with the word "digital" figuring heavily in the list and "librarian" following closely. The report noted "a healthy representation of roles as diverse as project manager, developer, programmer, archivist, curator and digital preservation roles," while also recognizing a pervasive skill gap in data analysis and interpretation among library staff (Wilms et al., 2019). A similar pattern can be seen in the work of Greenhall (2019), where in a sample set of 82 job titles in DSOs, thirty-four included the word "digital" in their job title, nine included "librarian," and just four included the phrase "digital scholarship." In this report, library staff respondents agreed that they would like to take a greater role in the more technical/specialist areas of digital scholarship activity.

The traditional skills of library staff, such as cataloguing, curation, and sharing of information, has increasingly been added to metadata, digital preservation, and Open Access (Fallon & Walton, 2019). According to King (2018, p.43), the skills needed by staff to foster research in DSOs include "digital eco-systems (Open Access platforms, digital archives, databases), big data, digital humanities data, coding, website management, database construction, dissemination through social media, outreach, publishing, collaborative work, copyright issues." The UCLA Center for Digital Humanities touches upon additional skills such as data mining, text analysis, text encoding and metadata creation, visualization tools, interface design and programming languages (Ducker & David, 2013); the latter three being "relative newcomers to the librarians bag of tricks" (King, 2018, p.43). Lewis et al. (2015, p.6) distinguish "a general agreement that the components of digital humanities expertise include a mix of analytical skills, domain knowledge, project management skills and communication abilities," which is reflected in the abilities of library staff.

By means of sketching the complexity of the different roles of DSO staff in digital projects, the Center for Digital Scholarship at Brown University is currently working on a project called *Inscriptions of Israel/Palestine*,[14] with the intention of building a corpus of inscriptions in Greek, Hebrew and Latin from the aria of Israel and Palestine from about 500 BCE to 500 CE. Staff working on the project include technical specialists from the Scholarly Technology Group (STG), who have initiated the use of open source XML tools to provide a web searching interface to the inscriptions. The tools also help in dealing with storage, searching, and browser rendering of Unicode data. Staff also includes digital scholarship librarians who supported the project by providing space and consultations for students who want to enter new inscriptions. Additionally, they rewrite the search and display software. Other members of staff are a group of students who write XML files with transcriptions, translations and detailed metadata, a

[14] https://library.brown.edu/create/cds/inscriptions-of-israelpalestine/

project manager and a head of faculty. This project is one example of many, and its division of labor is indicative of the complex interplay of staff and expertise at work in a DSO project.

Apart from a skilled team, a DSO requires a physical space to store its hard- and software and to enable as many forms of coworking and community creation as possible (J. K. Lippincott, 2017). Oftentimes the center is equipped with simple reconfigurable project workstation(s) comprising of a table and several chairs that can be freely used by anyone interested. In some university libraries, like that at Claremont College Library, participants also have access to collaborative "cubes" equipped with computers and displays to support their creations (*Collaborative Spaces*, z.d.).

In another case, The University of Pretoria has expanded their DSO by implementing a library makerspace, which "can be described as a multidisciplinary collaboration and creative hack space" (Pienaar et al., 2019). Although described as "a collision of art, technology, learning, and collaboration" (What Is a Makerspace?, 2015), makerspaces are more specifically focused on art and prototype creation within the design thinking and making framework and "creative computing" (Marsh et al., 2018; Hughes et al., 2019).

Studying the websites of several universities' DSOs shows that the types of software utilized range from, but are not limited to, geospatial software, such as ArcGIS, Google Earth Pro, QGIS; qualitative analysis software, for example NVivo, QDA Miner Suite, Wordstat, SimStat; statistical analysis software, e.g SAS, SPSS, Excel, Stata, R; and data visualization software, like Tableau, Gephi, Voyant, and Omeka (*Software & Technology – Digital Scholarship Center (DiSC)*, z.d.). Oftentimes staff at a DSO also provide help with Python or Perl, two frequently used programming languages within DH projects. Python can be used to "manipulate data and documents, automate tasks, and even build complex applications," (Posner, 2016) while Perl aids in text manipulation activities such as "reading, processing, transforming and writing plain text" (Schreibman et al., 2004). At Michigan State University, the DSO staff use design software such as the Adobe Creative Cloud package (including Photoshop, Illustrator, InDesign, Premiere Pro, Lightroom, etc), Processing (Visual arts encoding) Epic Games Launcher (game development software), and Unreal Engine (3D design and development) is also be present (*Michigan State University*, z.d.).

As for hardware, an equally wide variety can be distinguished in different DSOs, ranging from high-end visualization systems to physical computing facilities and 3D scanners. Some examples are the University of Calgary, which provides researchers and students with a high-resolution touch-enabled display wall to facilitate working with digital information (McDonnell, z.d.), and YURT: a state-of-the-art VR theater at Brown University that displays over 100 million stereo pixels onto a 360-degree surface (*Services - Center for Computation and Visualization*, z.d.), and a TAN VR-Cube (referred to as "the cave"), which is a cubic room where 3D images can be projected on both the walls and floor (*Cave - Center for Computation and Visualization*, z.d.). In another case, McMaster University provides high-performance computing facilities on par with users' needs for the processing of big data through its Research & High-Performance Computing Support Group (*RHPCS - Research & Innovation*, z.d.).

Alternatively, to support their DSO makerspace, the University of Pretoria supplies 3D printers and Arduino electronics kits for researchers and students to encourage creative development (Pienaar et al., 2019). At UP, the makerspace includes 3D Modelling equipment such as a 3D printer and a 3D scanner, electronics and robotics and high-end computing (Pienaar et al., 2019). The same trend can be distinguished at the Temple University, who has also implemented

a makerspace in their DSO where students have access to immersive media technology, 3D reconstructions, text-mining, mapping and GIS software.[15]

iii. Consultation and teaching

While libraries have always engaged in teaching digital literacy, the needs of students have changed. Because of the rise of interest in DH and the continued development of the DSO landscape, academic libraries now engage in teaching digital literacy more than they did in the past (Chowdhury, 2002; Jelušić & Stričević, 2011a; Little, 2012; Hensley & Bell, 2017; Mitchem & Rice, 2017; King, 2018). Digital literacy refers to "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills" (Renaissance, 2019). According to Donham & Green (2004, p.315), this change should create "the power equity appropriate for genuine collaboration" with members of faculty and students.

The rise of digital humanities has brought new teaching opportunities for library staff in digital literacy and more complex forms of digital scholarship requiring increased collaboration with members of faculty and students (Donham & Green, 2004; Little, 2012). As mentioned by Little (2012): "the support that [students] need goes beyond the traditional to helping them make sense of the sheer amount of information available and how to identify, evaluate, and responsibly use the information resources that they find." To foster digital literacy among students, library staff organize lectures, online tutorials such as MOOCs,[16] (Gore, 2014; Ferguson, 2017)) or one-on-one assistance by appointment (Visser & Clark, 2011; Little, 2012; J. Lippincott et al., 2014; Hensley & Bell, 2017; Swati & Rama, 2018). Library staff also frequently provide consultation and teaching about information seeking with databases and catalogues, information retrieval and storage, working with XML, developing data visualizations, and creating Linked Open Data (Evans & Baker, 2009; Ferguson, 2017; Swati & Rama, 2018; Fallon & Walton, 2019). Likewise, a popular method of teaching in libraries often comes in the form of workshops, and examples of these sessions are legion. The University Library of Oslo for example organizes literature searching and reference management workshops for students.[17] The University of Oxford's Centre for Digital Scholarship organizes workshops on data visualization techniques, linked data and the semantic web, and digital curation of scholarly output.[18] In another case, Leiden University organizes workshops and one-on-one sessions on publishing rights and Open Access policies.[19]

iv. Publishing

One last important aspect to discuss is the place of the library in the academic publishing chain, and how this translates in the activities conducted by affiliated Digital Scholarship Organizations. Library staff have always been involved in scholarly communication, through the creation and publication of catalogues, bibliographies, journals, professional papers, and

[15] https://teaching.temple.edu/about/news/innovative-teaching-makerspace-technology-grant-sponsored-digital-scholarship
[16] Massive Open Online Courses.
[17] https://www.ub.uio.no/english/courses-events/events/umed/2020/search-aid-zoom-2020-05-20.html. Interestingly, as this thesis is written during the Corona crisis, this workshop was organized on the videoconference platform Zoom: https://zoom.us/.
[18] https://www.bodleian.ox.ac.uk/digitalscholarship/training
[19] https://www.bibliotheek.universiteitleiden.nl/onderzoekers/open-access

reviews, etc. (Jelušić & Stričević, 2011a; Stricevic & Jelusic, 2011). University library staff cater to the scholarly needs of their readers, and thus adapt publications to their students and researchers (Jelušić & Stričević, 2011b). To engage in scholarly publishing, library staff buy scholarly literature from academic publishers and incorporate these resources into searchable online catalogues (Stricevic & Jelusic, 2011). In some cases, university library staff have additionally implemented their own publishing programs in which they are in charge of all steps in the publishing cycle, including peer review and publication (Park & Shim, 2011; Kim Wu & McCullough, 2015).

The rise of digital resources has heavily influenced all aspects of the traditional publishing cycle (Jelušić & Stričević, 2011a). Scholarly outputs such as digital scholarly editions, digital collections of cultural heritage materials, blogs, data sets, pre-prints of digital journal articles, eBooks, and software have increasingly accompanied the use of physical books and journals, and library staff are instrumental in the digitization, preservation, and dissemination of these sources (Walters, 2012; Martinez, 2019; Fruin, 2020). Library staff are creating digital repositories to preserve and disseminate scholarship produced by their institution's faculty and students (Fruin, 2020). Digital repositories can be disciplinary in nature, such as Humanities Commons,[20] arXiv,[21] or CiteSeerX,[22] or they can be institutional, a digital repository model adopted by an institution and "connected closely with Open Access" (Fang, 2013).[23]

The availability and accessibility of information on the internet has led to critiques of the traditional scholarly communication cycle, as academic publishers continue charging exhorbitant prices for access to scholarly content, despite universities' budgetary limitations, thus leading to an access gap in specialized literature (Suber, 2012; Fuchs & Sandoval, 2013; Gorman & Rowley, 2015). Consequently, university libraries are increasingly looking in the direction of an Open Access model for scholarly publishing (Roh, 2016; Ferguson, 2017), defined by Peter Suber (2012, p.4) as "literature that is digital, online, free of charge and free of most copyright and licensing restrictions." A general critique on this approach however is that it would "lead to the traditional peer review process being abandoned, with scientific papers simply thrown on to the Web without being subjected to any quality control or independent assessment" (Poynder, 2006, n.p.) and the danger of predatory publishers, who abuse the OA model for profit (Dadkhah & Borchardt, 2016). These arguments are often refuted by the fact that a lack of quality control standards and editorial policies is also found in traditional journals (Shamseer et al., 2017; Olivarez et al., 2018).

Not only do staff at DSOs organize training sessions and workshops on aspects of publishing such as Open Access, but they are also "developing a whole suite of digital publishing and digital scholarship services that include publishing, author rights, management education, the creation of collections and increased engagement with the local community through partnerships" (Emeritus et al., 2016, p.111). The DSO at the university of Buffalo for example guides researchers through copyright, research impact through citation metrics, Open Access publishing and long-time preservation.[24] Similarly, the University of Maryland's DSO offers

[20] https://hcommons.org/

[21] https://arxiv.org/

[22] https://citeseerx.ist.psu.edu/index;jsessionid=86F78CDAACCF4B3CAE5F362280831FF3

[23] At KU Leuven, this is present in the form of LIRIAS. https://www.kuleuven.be/english/research/scholcomm/lirias

[24] Retrieved from https://library.buffalo.edu/scholarly/scholarly-publishing/

guidance on open journal systems, copyright, author rights and data curation.[25] In another case, the university of Delaware helps people "think through publishing and platform choices" and leaves users the option to request a workshop.[26]

v. Setting the scene for service

It is clear that the Digital Scholarship Organization is a fluid concept, variable in size, staffing, infrastructure and services offered. Consequently, there are no set guidelines on the evaluation of digital scholarship organizatinons or the roles of their collaborators (Keener, 2015; Lingstadt, 2018). One area where collaborators'roles are particularly fraught is in the often unbalanced dynamic between faculty and library staff.

The role of the library in academia has been subject to constant evolution (Coker et al., 2010; Perini, 2016). As described by Coker et al. (2010), library staff simultaneously take on the roles of university employees, teachers, professionals, clerical workers, support staff, professors, and administrators, but also public servants. Due to long-standing historical roles and despite their intellectual efforts, the additional role of library staff as collaborative partners has thus far not been widely accepted (Coker et al., 2010; Morgan, 2016; Perini, 2016).

The introduction of DH work in libraries has further complicated this tension. As described by Posner (2013, p.4), library staff have more to offer with regard to digital scholarship: "Many of the problems we have faced "supporting" digital humanities work may stem from the fact that digital humanities projects in general do not need *supporters* — they need *collaborators*." The emphasis on service in library settings, pointed out by Muñoz (2012) and described by Posner (2013) as the service-and-support-model, has fueled the debate on whether the work done by library staff should be regarded as equal in status to that of faculty staff (Coker et al., 2010; Nowviskie, 2011; Muñoz, 2012; Perini, 2016; Gold & Klein, 2019) . Despite library staff often having academic bona fides in their own right, and making a valuable contribution to DH work, the service-and-support-model eclipses the intellectual labor provided by library staff (Nowviskie, 2011; Muñoz, 2012). Adding another dimension to this discussion is Morgan (2016, para.14), who calls attention to the pejorative views of DH work in the library as merely emotional labor and hand-holding, and frames this as a reason for the unbalanced relationship between faculty and library staff: "If emotional labor is ongoing, and acknowledged as work that deals with risk-focused, administrative, and scholarly decisions, then it can contribute to reframing the relationship between scholars and librarians as one of more equal partnership, rather than mere service provision." Posner (2013, p.7) further illustrates this point by noting that "the flaw in this relationship becomes clear a few weeks into the collaboration, when the librarian really needs that dataset, decision, or brainstorming time in order to make progress on the project, but does not feel entitled to make demands from an unresponsive professor. There is no one to appeal to and no one who can help, and so the request languishes. The project will suffer if the relationship is not truly equitable." This ongoing tension between faculty and library staff could thus limit the possibilities of collaborative digital work performed in the context of Digital Scholarship Organizations done in Digital Scholarship Organizations.

[25] Retrieved from https://www.lib.umd.edu/publish
[26] Retrieved from https://library.udel.edu/digitalscholarship/about/

III. Methodology

As the concept of a Digital Scholarship Organization is fluid, it is clear that a flexible and holistic research framework is necessary. A flexible research approach is found in the realm of case studies, described by Stake (1995, p.7) as a set of "naturalistic, holistic, ethnographic, phenomenological and biographic research methods." According to the ideas set out by Yin (2003), a case study approach should be considered when: a) the focus of the study is to answer "how" and "why" questions; b) you cannot manipulate the behaviour of those involved in the study; c) you want to cover contextual conditions because you believe they are relevant to the phenomenon under study; or d) the boundaries are not clear between the phenomenon and the context." Crowe et al. (2011, p.1) go on to describe this framework as "a research approach that is used to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context."

The research design functions as a general plan of how the research question will be answered (Bahaudin et al., 2007). In order to construct such design, delineating the object of study is a first important step. Both Stake (1995) and Yin (2003) suggest that placing boundaries on a case can prevent researchers from answering a question that is too broad. While DSOs encompass a myriad of elements, this thesis will focus on the result of the collaboration fostered in these organizations: the project. While the research question has been introduced in the Introduction, it is restated here for the sake of clarity:

- How are projects published on a Digital Scholarship Organization website?

There are several actors present in the research question. Following the terminology used by Yin (2003), the context is the Digital Scholarship Organization website, while the phenomena researched in each of these contexts are the projects posted on the DSO website. After delineating the context and phenomena under scrutiny, I began to gather a sample of units to study. According to Miles & Huberman (1994, p.27): "Sampling is crucial for later analysis. As much as you might want to, you cannot study everyone everywhere doing everything." Although the development of Digital Scholarship Organizations is an international phenomenon (Klein, 2015), I chose to focus on North America as a region. I made a deliberate effort to choose public universities over private universities, as their funding model is comparable to that of the DH Commons at KU Leuven Libraries. While KU Leuven receives income from multiple streams of revenue, the DH Commons does not have any specifically-designated funding. The more established DSOs under scrutiny are thus a way to show what we, as a budding DSO, could accomplish in the future. Additionally, as the DH Commons is embedded in the KU Leuven Libraries Artes, the institutions under review in my corpus also needed to have a demonstrable affiliation with the university library. Lastly, as the focus of this research is on one segment of Digital Scholarship Organization websites (namely, the projects conducted with the help of the organization), it was necessary that the websites under review contained such a page.

The corpus consisting of established Digital Scholarship Organizations is thus collected based on the following criteria:

- The Digital Scholarship Organization is based in North-America.
- The affiliated university is a public university, and thus subject to state funding.
- The Digital Scholarship Organization is affiliated with the university library.
- The Digital Scholarship Organization is involved in digital projects within the Humanities.
- Projects developed with the support of the organization are posted on their website.

After researching the different Digital Scholarship Organizations in existence online and using CenterNet as the primary database to find information about those centers, [27] I gathered a corpus of DSO websites was gathered and narrowed down to the ones that fit the criteria. The websites were also chosen based on their differences in functionalities, structure and lay-outs. Finally, I focused on the alphabetically-listed institutions and associated Digital Scholarship Organizations displayed in **Table *1***.

Table 1. *Overview of the Digital Scholarship Organization website corpus*

University	Name of Center	Library	Year Founded
University of Alabama (UA)	Digital Humanities Center	Amelia Gayle Gorgas Library	2011 (9 years)
Indiana University – Purdue University (IUPUI)	Center for Digital Scholarship	IUPUI University Library	2013 (7 years)
University of Nebraska-Lincoln (UNL)	Center for Digital Research in the Humanities	University of Nebraska-Lincoln Libraries	2005 (15 years)
University of Oregon (UO)	Digital Scholarship Center	University of Oregon Libraries	2013 (7 years)
University of Washington (UW)	Digital Scholarship Center	University of Washington Libraries	2015 (5 years)

It is important to note that in designing my research methodology, I took into account that the way these organizations are structured may differ and therefore affect the way projects are posted. Additionally, websites are not a one-sided phenomenon, and can be further broken down in several units, such as overall design, text, visual material and online interaction (Bickman & Rog, 2009; Kim & Kuljis, 2010). For this thesis, the primary focus will be on the information these units communicate to the users of the website.

[27] https://dhcenternet.org/

The case study approach was useful in this context, as it was malleable to my needs as a researcher and grounded in "lived reality" (Hodkinson & Hodkinson, 2001). It also allowed for me to take an exploratory research approach, while still relying heavily on my observation of the phenomena I was investigating (Mills et al., 2010; Yin, 2003). However Babbie (2010, p.116) notes that "the best study design uses more than one research method, taking advantage of their different strengths." Triangulation, according to Mills et al. (2010, p.434), allows researchers to move closer to obtaining a more nuanced picture through "the use of multiple methods and measures of an empirical phenomenon in order to reduce bias and improve convergent validity."

To investigate web-based content in this study, I performed content analysis, an approach that Kim & Kuljis (2010) suggest to structure the disorganized content on a website. Messages and symbols play an important role in this respect, as they "reveal some properties of their distant producers or carriers, and they have cognitive consequences for their senders, receivers and the institutions in which their exchange is embedded" (Krippendorff, 2004, p.403). The way a project is posted on a DSO website will thus cognitively influence the users of the website – and reveal more about the attitudes of its producers. While Krippendorff (2004) mainly discusses the messages and symbols incorporated in printed text, Neuendorf (2017, p.212) applies this idea to the analysis of web-based content, and states that "tags and other 'meta' content on a page can be useful tools for content analysis." Meta content (or, more commonly, metadata) that is posted alongside a project reveals a lot about the underlying strategies that were applied when posting a project, and I used this content to develop coding units to answer my research question about how projects are published on a DSO website.

I have broken the metadata provided on digital scholarship project webpages down into the following categories: the first is **information about the people**, which consists of the names of the people who contributed to the project. These are often (though not always) prominently displayed on an "About" or "Credits" page or similar. Likewise, these pages often provide contact information for relevant contributors if a user needs more data about the project. The second category is **information about the subject**, and includes (among others), the title of the project, a description of the (historical) background of the project, and subject tags or keywords used to navigate around different subject-specific modules of the project. The third category is **information about the money**, including a list of the funding organization(s) who provided monetary support (if any) for the project's inception and/or continuation, as well as the duration of the project, from its inception to completion. The fourth category is **information about the technology,** such as the soft- and hardware tools that were used or developed to complete the project. The fifth and final category is **information about dissemination**, including the output type that the user can expect in terms of scholarly communication about the project, e.g. in an academic journal, a digital archive, or as a downloadable dataset in a repository or a link to a separate project website. The projects on the websites in the sample set were tabulated according to these codifying units, which allowed me to structure a quantitative map for a qualitative interpretation of the data. Furthermore, I paid attention to where the projects are posted on the website, and how they are highlighted.

One potential downside to analyzing web-based content is highlighted by Kim & Kuljis (2010), who note that websites posted on the Web 2.0. are in continuous development. This may lead to problems in replicating the results of this study with the same DSOs. For that reason, I have added screenshots of the webpages for each of these DSOs to the Internet Archive's Wayback

Machine, so that they can be viewed as they were when I was analyzing them. Further, the primary focus of this study is to provide concrete examples and formulate recommendations for the DH Commons, which makes exact replication an unlikely scenario. A similar difficulty can be discerned when considering the position of the author: apart from the DH Commons at KU Leuven Libraries Artes, I do not possess an emic perspective of the other Digital Scholarship Organizations under review (Pike, 1967). The findings in this thesis are thus solely derived from an etic perspective based on the information encountered on the respective webpages. Lastly, it must be acknowledged that the sample under review is limited and does not reflect the DH landscape as a whole. However, as the aim of the study is to look into the complexity of DSO organizations and their web-based representation and organization rather than providing generalizations that can be applied across all possible variables, this approach allowed me to perform an in-depth analysis of these organizations, thus leading to more nuanced findings.

IV. Data analysis

In this chapter, each Digital Scholarship Organization in the corpus is given a short introduction, including a survey of the center's staff, services, physical location and website. Following that, the strategies used to post projects on their website are described according to available metadata and their location on the website. Features that I deemed interesting and unique are also mentioned. In the following chapter, I aggregate the information collected from the corpus and formulate recommendations that are then applied to the DH Commons website within the constraints of the style guide for KU Leuven webpages.

i. The University of Alabama

The University of Alabama (UA) is a public research university in Tuscaloosa, Alabama. The Alabama Digital Humanities Center (ADHC) is situated in the Alabama University Libraries, and is the product of collaboration between over 90 faculty, staff, and students from across disciplines. Since its foundation in 2011, staff associated with the Center have offered interested parties the resources they need to explore digital humanities, including the provision of training in technical skills as well as equipment and collaborative opportunities to researchers at all levels of expertise and interest in the field.

The Center is currently led by a Digital Humanities Librarian and supported by an appointed IT Technical specialist, and these staff work in close collaboration with myriad subject librarians, technologists, library assistants and project managers affiliated with the Alabama University Libraries. The Digital Humanities Center at UA has its own website which provides more information on the Center's mission, available equipment, events, a consultation form, resources in Digital Humanities, and more information on Digitorum, a yearly Digital Humanities Conference hosted by the Alabama University Libraries and the ADHC.[28] Additionally, users can schedule consultations, find contact details, the Center's location, and more information about the projects conducted with the help of the Center's staff. The featured project is highlighted on the main page, and is posted in the same way projects are posted under the "Projects" header, including a title, content description, link to an external website, image and a content tag.

[28] Retrieved from: **https://adhc.lib.ua.edu/digitorium/**

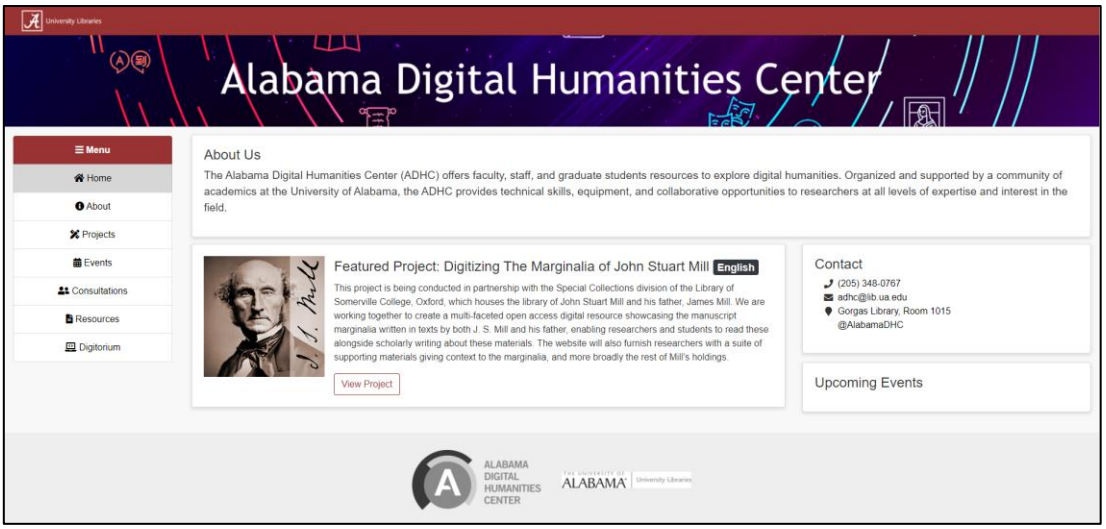


Figure 1. *The Digital Humanities Center (UA) website main page.*

As shown in **Figure *1***, the University of Alabama's Digital Humanities Center has a website of its own, where users can find information about the Center, the events it organizes, interesting resources in DH and information on the Digitorum event. Additionally, users can schedule consultations, find contact details, the Center's location and more information about the projects conducted with the help of the Center's staff.

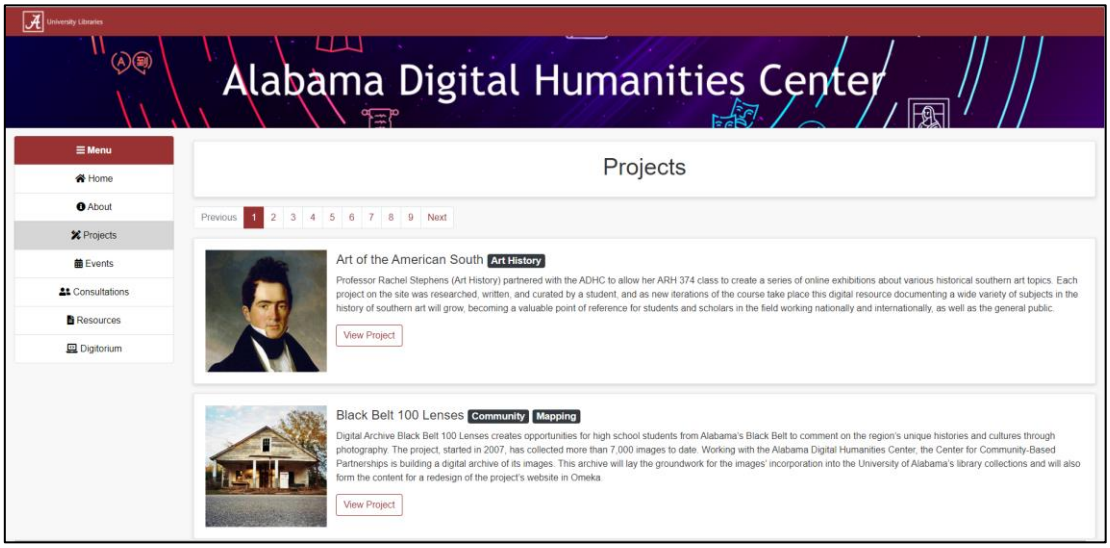


Figure 2. *The Digital Humanities Center (UA) website Projects page.*

When the user clicks on the Projects button in choice menu on the left of the main page, s/he is redirected to the projects page shown in **Figure *2***, where all projects are posted as cards and stacked on top of each other. The projects are alphabetically ordered by their titles, and each page features five projects.

Table 2. *Quantitative analysis of the metadata of the projects posted on the Digital Humanities Center (UA) website.*

Percentages associated with projects on UA website	
Total number of projects	**42**
Projects that used tags	100%
Projects that provided a description of the dissemination and output type	73.80%
Projects that provided information about the duration of the project	9.52%
Projects that provided names of people involved	50.0%
Projects that provided image(s)	97.62%
Projects that provided a title	100.0%
Projects that provided funding information	0.0%
Projects that provided information on partner(s)	23.80%
Projects that provided information on the tools used	7.14%
Projects that provided a description of the project content	100.0%
Projects that provided a link to project website	100.0%
Projects that provided contact details	0.0%

The quantitative analysis of the projects displayed above in **Table *2*** shows that at the time of writing, staff of the Digital Humanities Center at UA have collected 42 projects, each posted with a short content description, a link to an external project website in the form of a "View Project" button, a title, and subject tags such as "art history", "community", "blog", "food", "mapping", and "English" among others.

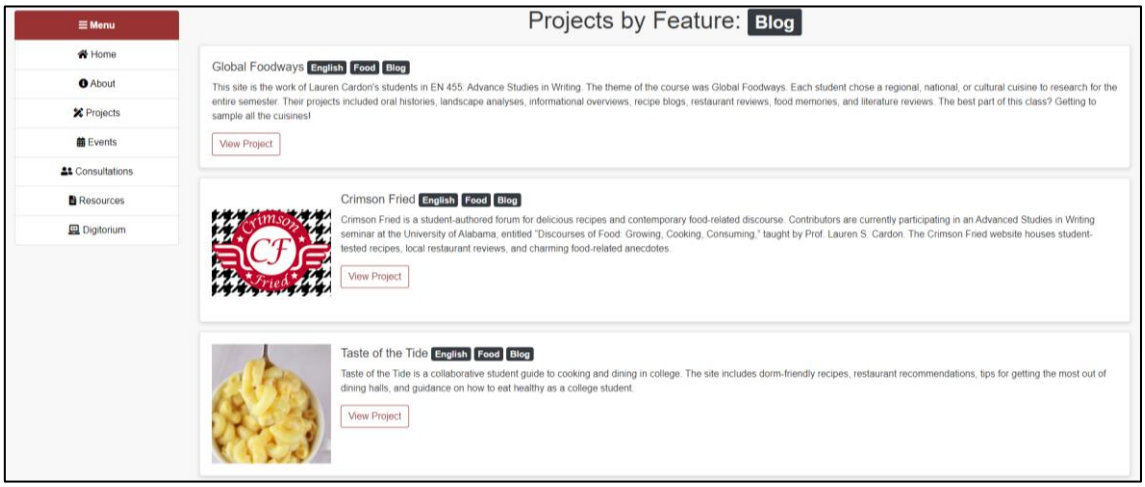


Figure 3. *Projects posted on the Digital Humanities Center (UA) website filtered by feature.*

When the user clicks on a subject tag, the website returns projects containing that tag, as shown in **Figure *3***. The images are related to the projects, and could take the shape of a website logo, a digital image, or the logo of a tool that was used, e.g.: a digital mapping project that used Google's Maps software used the organization's respective logo, shown in **Figure *6***. As an exception to the rule, one project did not feature an image. In contrast, funding organizations are never mentioned in the project postings. Likewise, separate contact details are also never mentioned, which implies that all communication concerning the projects is funneled through the Digital Humanities Center at UA team whose contact details are mentioned on the main page. The output type that can be expected from the project is mentioned in 73.80% of the cases, or becomes clear through the subject tags, such as "Blog" shown in **Figure *4***, or "Mapping" shown in **Figure *5***.

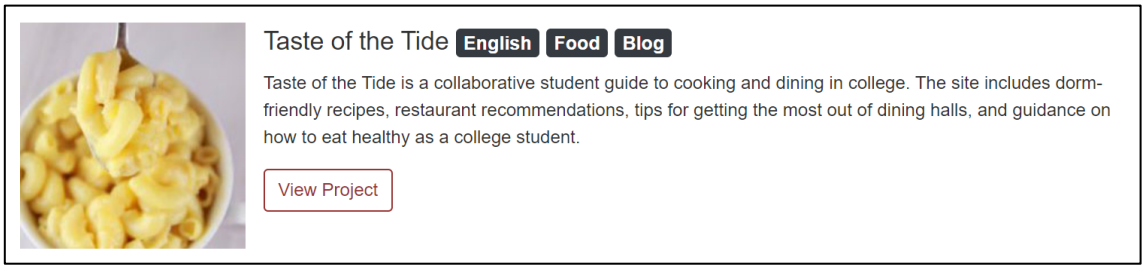


Figure 4. *Taste of the Tide, a project posted on the Digital Humanities Center (UA) website featuring subject tags.*

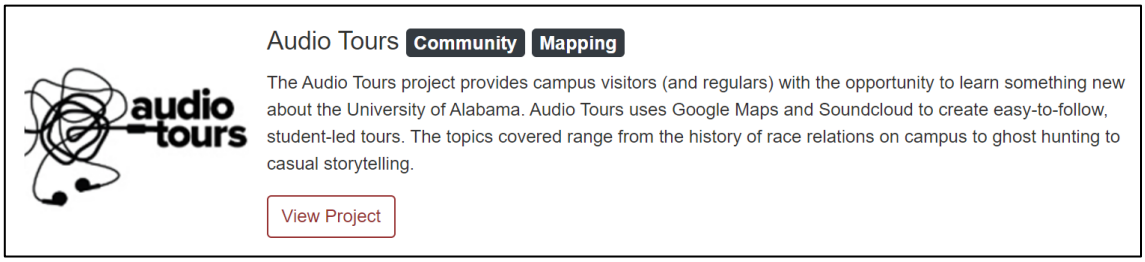


Figure 5. *Audio Tours, a project posted on the Digital Humanities Center (UA) website featuring tools used.*

The content description – while always present – was often quite concise, and metadata such as the tools used, the partners with whom they collaborated, and the duration of the project were hardly mentioned. For example, the description of the *Audio Tours* project denotes that software such as Google Maps and Soundcloud were used to complete the project, which is illustrated above in **Figure *5***.

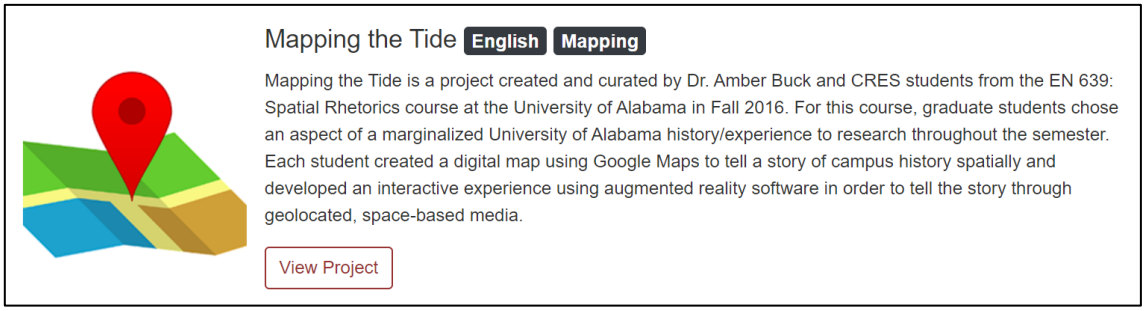


Figure 6. *Mapping the Tide, a project posted on the Digital Humanities Center (UA) website featuring students.*

In half of the projects posted on the website, the names of the academic staff who participated in the projects are mentioned. Projects posted by the ADHC are often the digital product of a specific class assignment related to Digital Humanities. The example in **Figure *6*** shows that the names of the students are not explicitly mentioned, but often described according to the class in which they were enrolled.

ii. Indiana-Purdue University

The Center for Digital Scholarship (CDS) at the Indiana and Purdue University (IUPUI) campus is located in Indianapolis, Indiana. The Center was founded in 2013, and embedded in the IUPUI University Library. The Center is currently led by a Metadata and Special Collections Librarian. Also working at the Center are librarians specializing in data support, impact metrics, UX design, digitization, journal publishing and Open Access. Additionally, the Center staff includes an IT specialist who helps people with their programming needs and a Digital Scholarship Outreach Librarian to assist people throughout the funding and digital publishing processes.

Staff at the Center for Digital Scholarship offer services related to digital scholarship, data, author's rights, Open Access, artifacts, digital tools and teaches digital literacy through workshops and consultancy sessions. They also provide a Digital Scholarship Fund to encourage innovative digital research projects across faculties. The Center's staff collaborate with IUPUI faculty members and Indianapolis community organizations to realize projects.

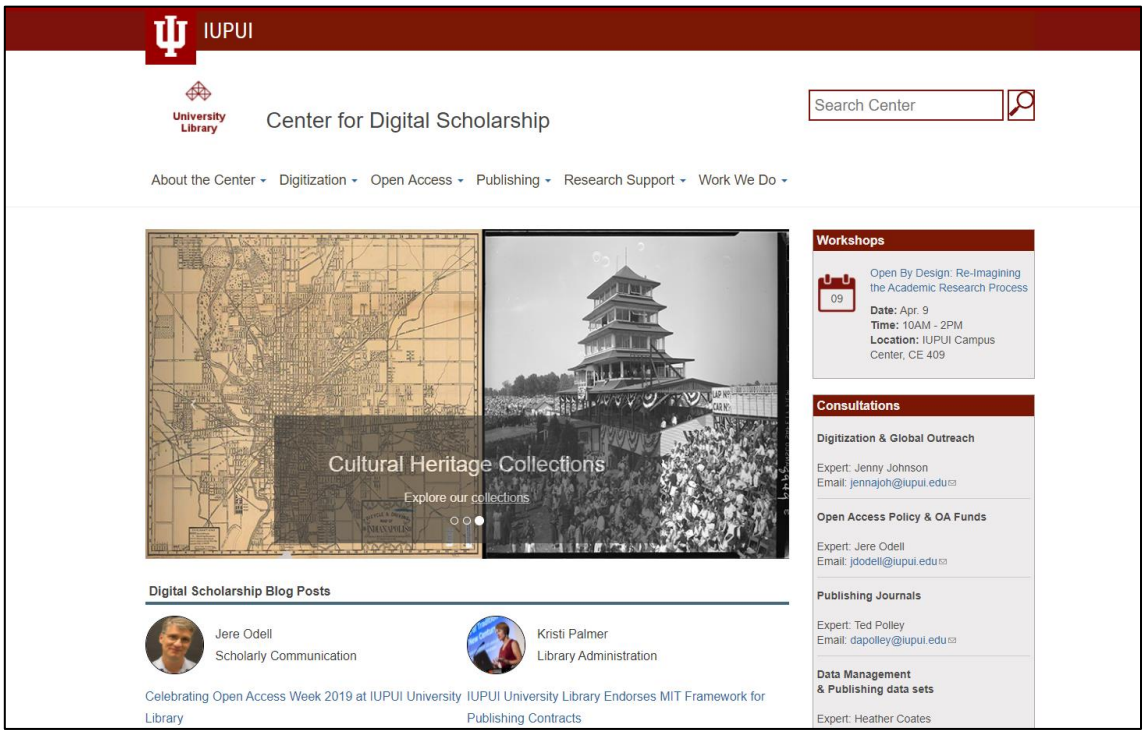


Figure 7. *The Center for Digital Scholarship (IUPUI) website main page.*

The Center's website details the services provided and the digital projects the Center conducts, as shown in **Figure *7***. The projects conducted by staff associated with the Center are highlighted with a large carousel element on the main page, which clicks through to the project page shown in **Figure *8*** and **Figure *9***.

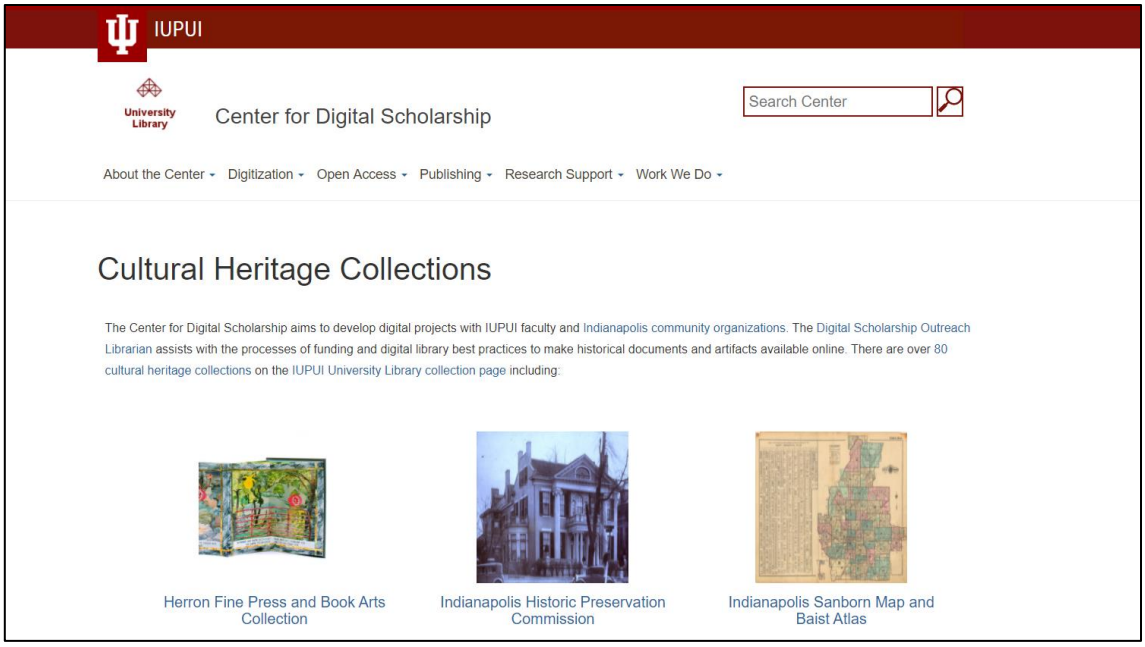


Figure 8. *The Center for Digital Scholarship (IUPUI) website Cultural Heritage Collections page.*

Figure 9. *The Center for Digital Scholarship (IUPUI) website Cultural Heritage Collections page.*

Figure 10. *The Center for Digital Scholarship (IUPUI) website Digital Collections page.*

The projects, both finished and ongoing, are published on the website of the UA Digital Scholarship Center under the header "Cultural Heritage Collections" and contains a short introduction, the title of the project, and an image related to the project content. When users want to learn more about the projects, they can click on "More Collections" shown in **Figure *9***, which redirects them to the "Digital Collections" page where all the affiliated projects are posted with extra metadata, shown in **Figure *10***. All the projects posted on the UA website include information about which organization(s) supported the project. While 85 projects are primarily supported by the Digital Scholarship Center, the rest were backed in whole or in part by the IUPUI Special Collections department, or the IUPUI Herron Art Library; in these cases the role of the Digital Scholarship Center remains unclear. Despite this, all of the DH-related projects at these university's institutions are posted on the same website.

The main focus of the projects on this website is digitization of historical content such as texts, images, maps or fabrics. A first quantitative analysis of the 119 projects on the website shown in **Table *3*** llustrates that every project has a title and an image related to the project. Similarly, all projects contain a subject tag (e.g.: "Art," "American History," "Geography," "Irish Studies," …) and an output type tag (e.g.: "Annual Report", "Audio", "Index", "Map", …). While these tags are not explicitly mentioned as metadata, they can be used as filters so the user can quickly access the project(s) s/he is interested in. In addition, users can filter the projects by typing their own input in the "Title" field, which can be seen above in **Figure *10***.

Table 3. *Quantitative analysis of the metadata of projects posted on the Center for Digital Scholarship (IUPUI) website.*

Percentages associated with projects on IUPUI website	
Total number of projects	**119**
Projects that used tags	100.0%
Projects that provided a description of the dissemination and output type	100.0%
Projects that provided information about the duration of the project	0.84%
Projects that provided names of people involved	6.72%
Projects that provided image(s)	100.0%
Projects that provided a title	100.0%
Projects that provided funding information	26.89%
Projects that provided information on partner(s)	50.42%
Projects that provided information on the tools used	3.36%
Projects that provided a description of the project content	78.15%
Projects that provided a link to project website	98.32%
Projects that provided contact details	9.24%

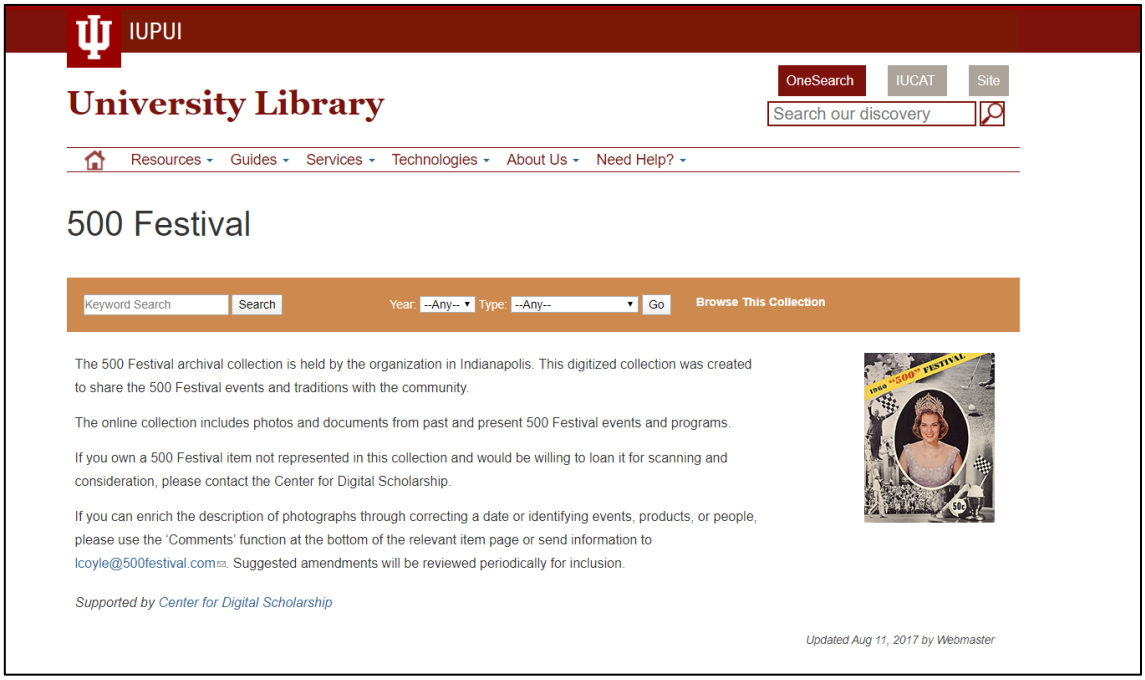


Figure 11. *500 Festival, a project on the Center for Digital Scholarship (IUPUI) website.*

Figure 12. *Screenshot of a project posted on the Center for Digital Scholarship (IUPUI) website without a content description*

When clicking on a project title, users can read the whole description of the project written by an unnamed webmaster. This layout is shown in **Figure *11***. While 78.15% of the projects on the IUPUI website have a description of their content, some projects are not further described and only feature a title, an image, and a link to an external project website. An example of this is seen in **Figure *12***. Usually, this link is featured in the navigation bar and called "Browse This Collection" which can be seen in **Figure *11*** and **Figure *12***. One project does not feature a link to the project website, and another project's access was restricted.

The description of the projects' content is variable, and there is no clearly discernable template or standard order by which projects are posted on the website. Some projects come with a lengthy description of their historical background, while others are described in a sentence or two. This could be an indication that multiple staff members in the Center are responsible for updating information about the projects, or that the staff members solicit the project leaders to write descriptions of the projects, and those project leaders are given significant scope to write their abstracts, thus resulting in this variation.

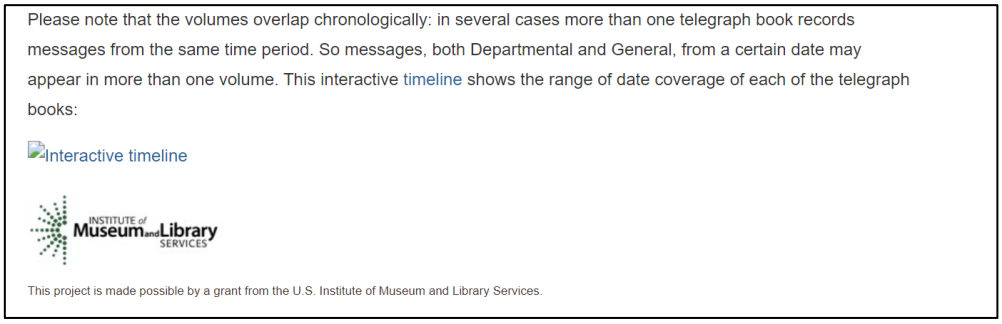


Figure 13. *A project posted on the Center for Digital Scholarship (IUPUI) website featuring the funding organization.*

Figure 14. *A project posted on the Center for Digital Scholarship (IUPUI) website featuring the funding organization.*

Figure 15. *A project posted on the Center for Digital Scholarship (IUPUI) website featuring a partner, in this case the Indiana State Archives.*

Funding organizations are mentioned in 26.89% of the cases, and are posted underneath the project description with the logo of the organization as shown in **Figure *13***, or in the project's content description as shown in **Figure *14***. Partnerships are mentioned in a similar fashion, as they are sometimes mentioned in the project content description itself, and in other cases under a separate clickable header called "Partner", where more information can be found about the partner in question. This separate header can be seen in **Figure *15***.

The duration of the project, the tools that were used to complete it, and the names of the people involved are hardly mentioned. When collaborators on the project are mentioned, they are usually described with an umbrella term such as students, researchers, or the library. Names are only explicitly mentioned when they refer to contact details for people to inquire about the specific project. Contact details are often arbitrarily placed in the text, and could be in the form of phone numbers or email addresses.

Figure 16. *A press release related to a project posted on the Center for Digital Scholarship (IUPUI) website.*

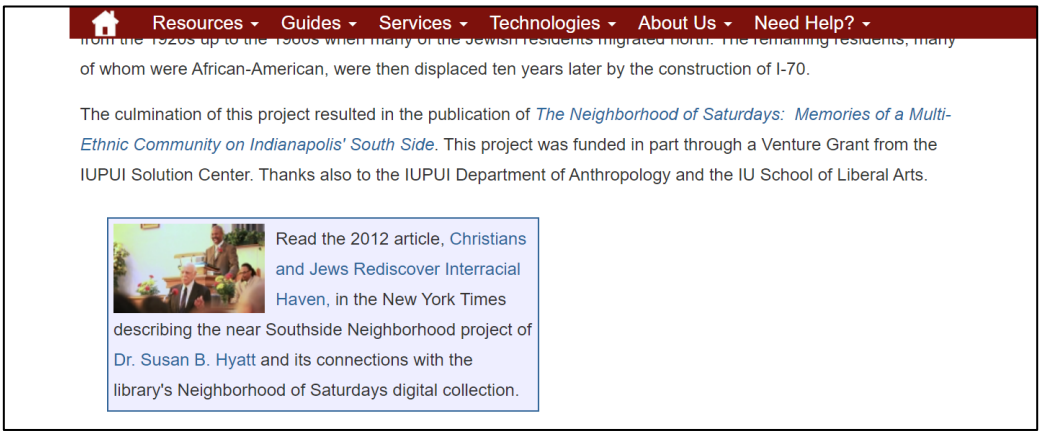


Figure 17. *A press article related to a project posted on the Center for Digital Scholarship (IUPUI) website.*

A unique feature of this website as compared to the others in the corpus is the fact that press releases, if available, are mentioned under a separate header called "Press" as can be seen in **Figure *16*** or somewhere in the project description as shown in **Figure *17***. Additionally, projects are often focused on local Indiana history, particularly the geographic area immediately around the university. At times, the content description of the project contains a call for people to bring in missing historical material to complete the collection. An example of a call for help can be seen in **Figure *18***.

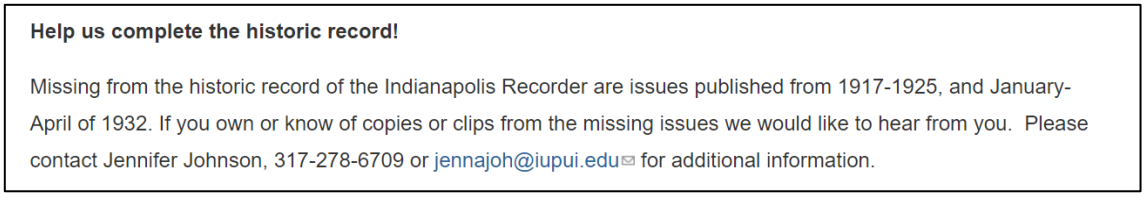


Figure 18. *A request for help associated with a project posted on the Center for Digital Scholarship (IUPUI) website.*

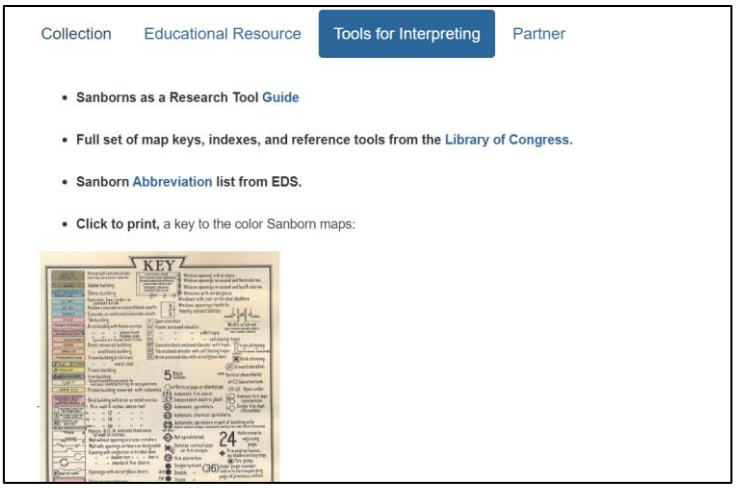


Figure 19. *A user guide associated with a project posted on the Center for Digital Scholarship (IUPUI) website.*

A last notable feature was the addition of a user guide such as the one in **Figure *19*** to facilitate researching the digital content, so people can interpret the historical content as it was intended. This could mean that the people who posted the project assumed that the projects will be explored by a larger public, or that the project data may be too obscure for users to understand.

iii. The University of Nebraska-Lincoln

The University of Nebraska-Lincoln is a public research university located in Lincoln, Nebraska. Its Center for Digital Research in the Humanities was founded in 2005 as a joint initiative of the University of Nebraska-Lincoln Libraries and the College of Arts and Sciences, and is currently managed by a professor in English and American Literature, and a Digital Initiatives and Special Collections Librarian. Additionally, the Center is staffed with faculty fellows specialized in metadata, English, History, Geography, Anthropology, Archival Science, Women's and Gender Studies, Ethnic Studies, Programming and Information and Library Science among other disciplines. Also working at the Center are three adjuncts who provide IT services such as programming and system administration, two emeriti, six graduate students and 17 undergraduate students across disciplines in the humanities and beyond.

Staff at the Center promote collaborative research, and provides assistance on grants, data management, publication, copyright, and referencing to researchers, faculty, and staff by organizing workshops and consultation sessions. Applications for new projects and grants are considered three times per year, and selected based on merit and availability of specialized staff and resources. Additionally, the Center hosts the annual Nebraska Forum on Digital Humanities, which includes a public lecture or panel and a day of activities highlighting the work of early career scholars.

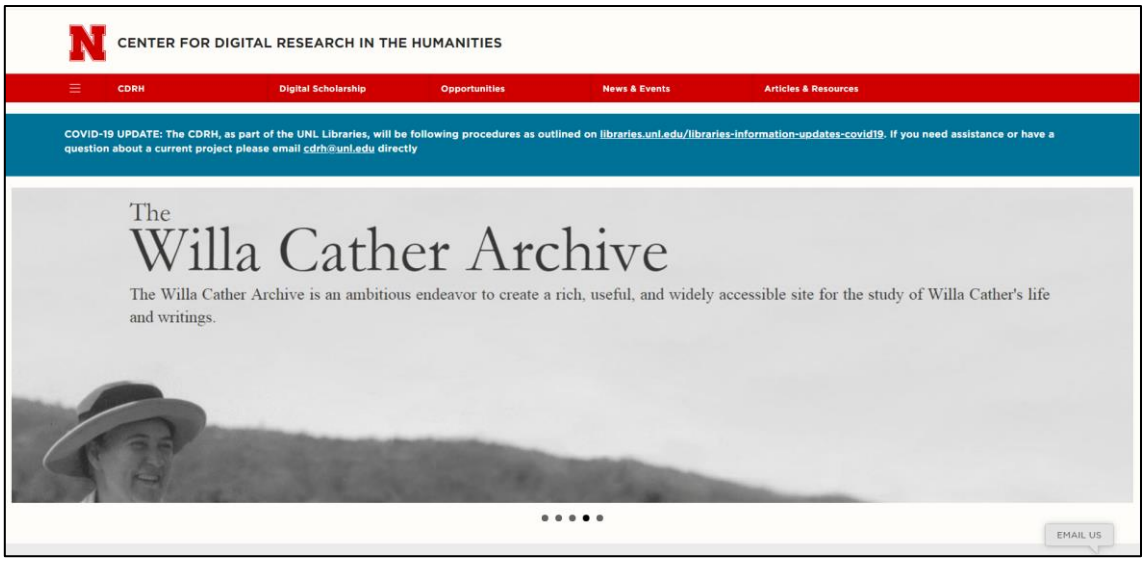


Figure 20. *The Center for Digital Research in the Humanities (UNL) website main page.*

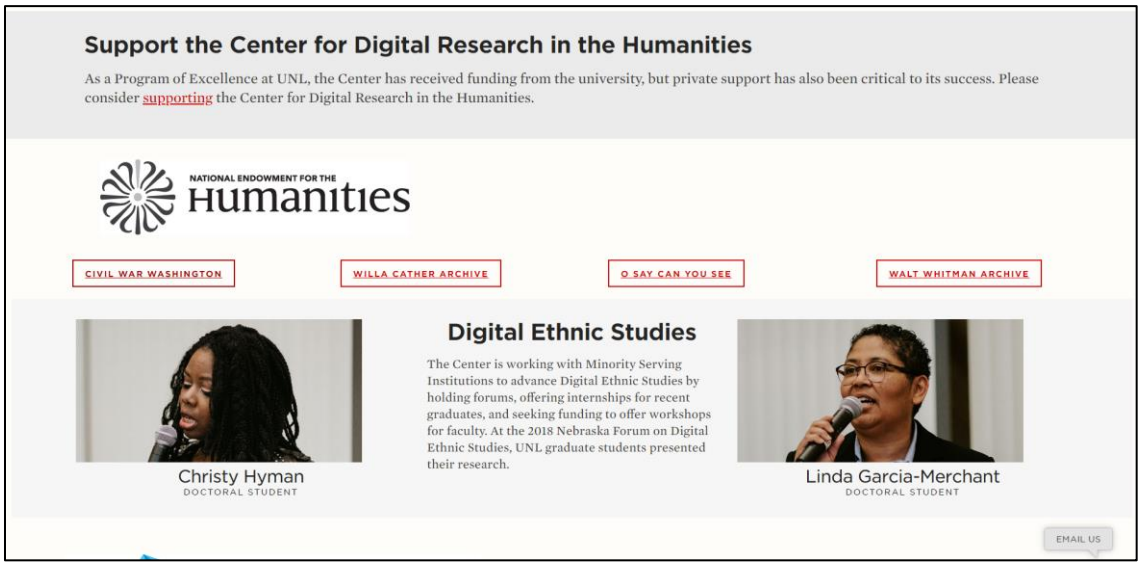


Figure 21. *The Center for Digital Research in the Humanities (UNL) website main page.*

The website of the NL Center for Digital Research in the Humanities allows users to gather more information on the goals and the creation of the Center, events organized by and news about the CDRH and DH-related articles and resources. Projects take a central spot on the main page, with a carousel element that features some of the projects currently in the spotlight, which can be seen in **Figure *20***. A call for support and more information on a Digital Ethnic Studies project the Center is working on can be seen in **Figure *21***. In the navigation bar shown in **Figure *22***, users can find more information on the projects. Notably, the CDRH at the University of Nebraska-Lincoln differentiates between Tools & Metadata Projects, and Projects & Publications.

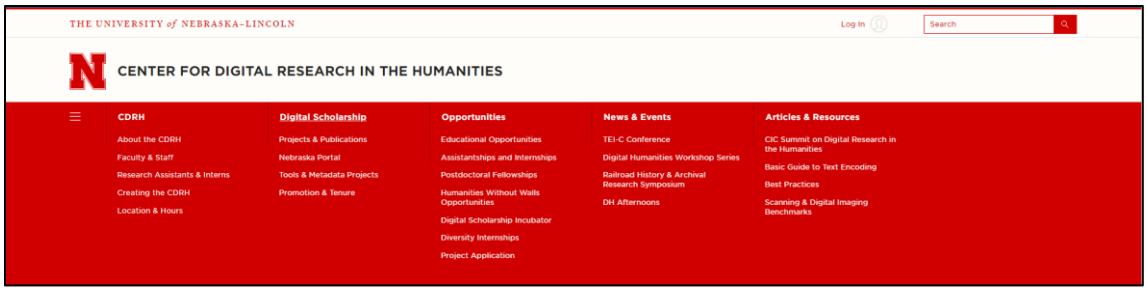


Figure 22. *The Center for Digital Research in the Humanities (UNL) website navigation bar.*

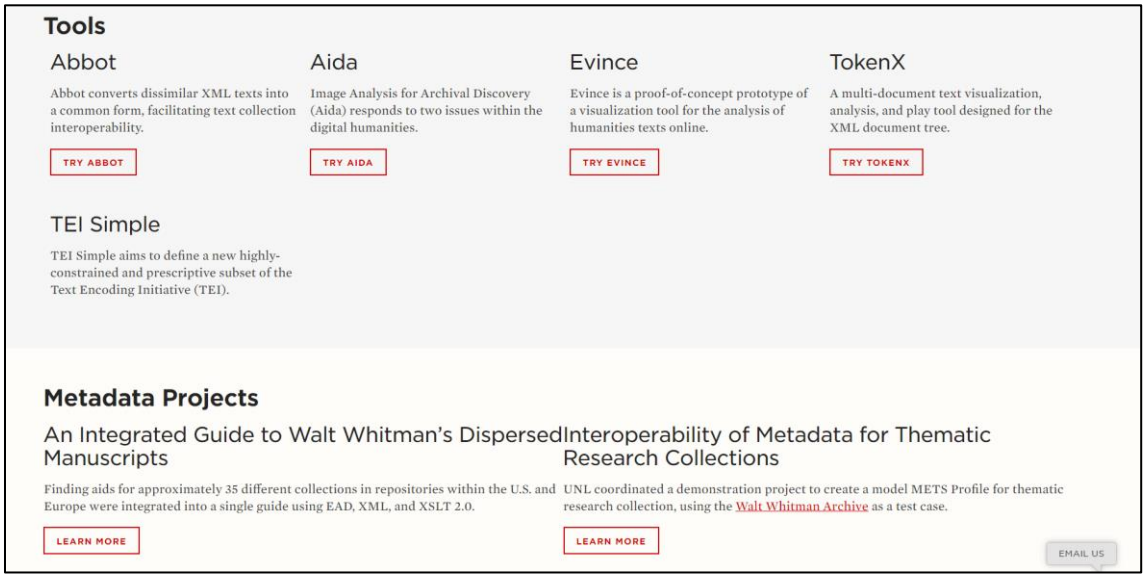


Figure 23. *The Center for Digital Research in the Humanities (UNL) website* Tools & Metadata Projects *page.*

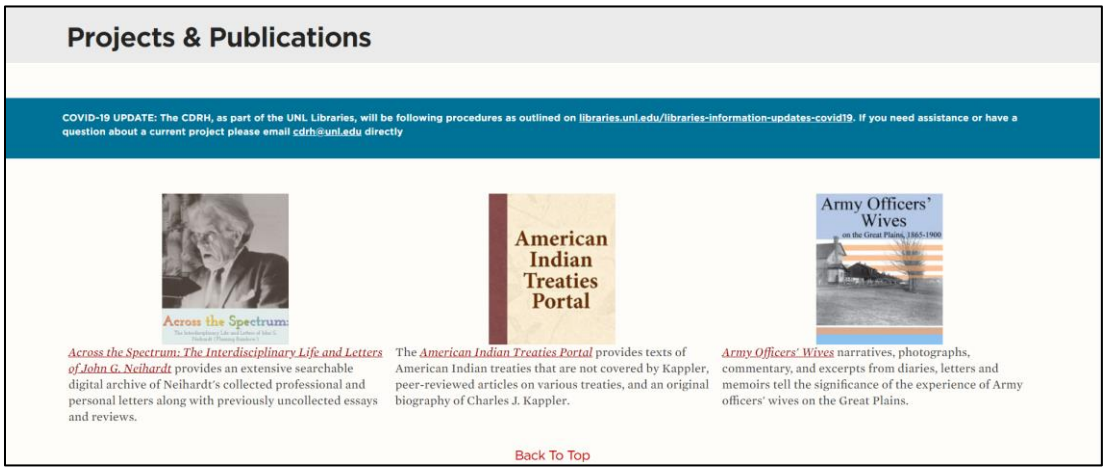


Figure 24. *The Center for Digital Research in the Humanities (UNL) website* Projects & Publications *page.*

The “Tools & Metadata” page depicted in **Figure *23*** redirects users to a page which lets users freely use some of the software tools that were developed in the Center. For example, TokenX is a tool developed to facilitate text visualization analysis designed for XML document tree files. Additionally, the staff at the Center have developed metadata guides for the Walt Whitman Archive, one of the Center’s flagship archiving and editorial projects. While interesting to point out as it was a unique feature in the corpus data, the Tools & Metadata page was not included in the quantitative analysis as the coding units cannot be applied.

The quantitative analysis in **Table *4*** of the “Projects & Publications” page shown in **Figure *24*** shows that the Center has currently posted 46 collaborative DH projects. Projects are posted in rows containing three projects and are alphabetically ordered. Below each row of three, there is a “Back To Top” button which takes the user back to the top of the Projects & Publication page. All projects have a title which is a link to an external project website, an image related to the project in the form of a logo, a print screen of the project output, or a picture of a person related to the project of which an example is shown in **Figure *25***. Additionally, every project features a short description of the project content.

Table 4. *Quantitative analysis of the metadata of the projects posted on the Center for Digital Research in the Humanities (UNL) website.*

Percentages associated with projects on UNL website	
Total number of projects	**46**
Projects that used tags	0.0%
Projects that provided a description of the dissemination and output type	54.35%
Projects that provided information about the duration of the project	0.0%
Projects that provided names of people involved	0.0%
Projects that provided image(s)	100.0%
Projects that provided a title	100.0%
Projects that provided funding information	0.0%
Projects that provided information on partner(s)	6.52%
Projects that provided information on the tools used	2.17%
Projects that provided a description of the project content	100.0%
Projects that provided a link to project website	100.0%
Projects that provided contact details	0.0%

Figure 25. *Screenshot of a project on the Center for Digital Research in the Humanities (UNL) website featuring an image of the person related to the project.*

The description of the project content is always very concise, and intended to give a general idea of what the project is about. No additional information is given about the storyline or the duration of the project. The output of the projects is sometimes unclear. In the case of the *Latin Work of John Wyclif* project shown in **Figure *26***, the information on the CDRH website is limited to a few sentences that describe the protagonist of the project, but does not mention anything about the goal of the project or the output type.

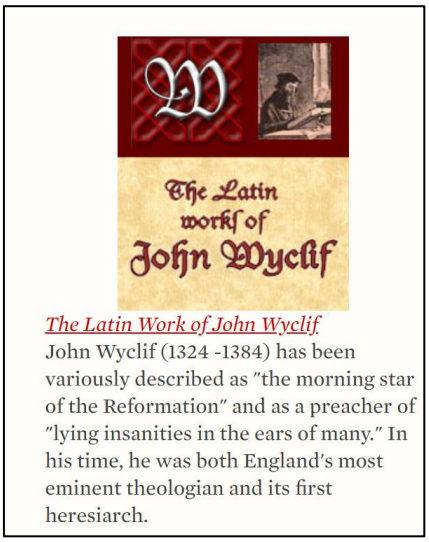


Figure 26. *description of a person related to the* Latin Work of John Wyclif *project on the Center for Digital Research in the Humanities (UNL) website.*

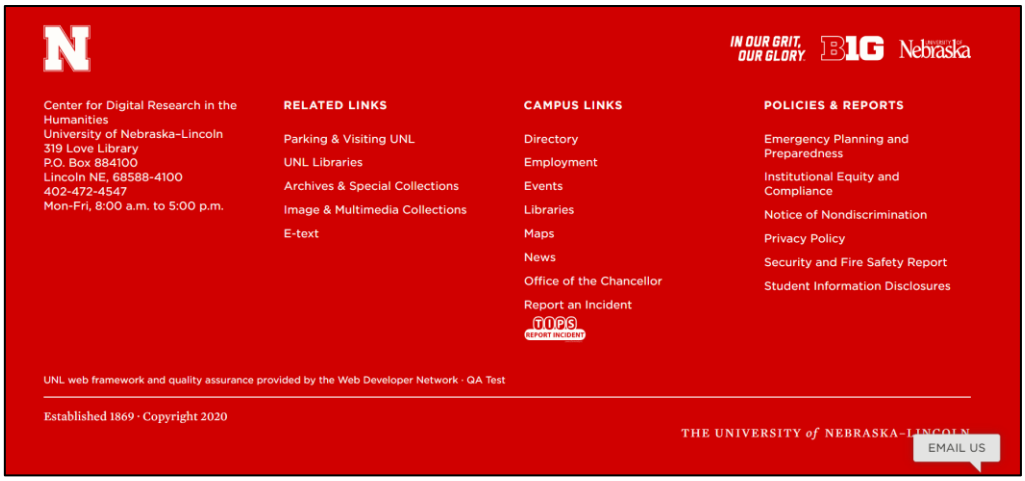


Figure 27. *The Center for Digital Research in the Humanities (UNL) website footer.*

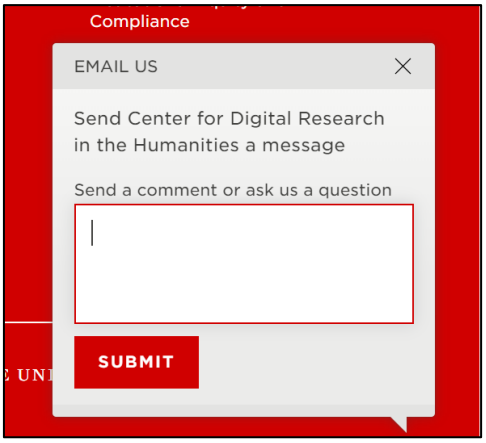


Figure 28. *The Center for Digital Research in the Humanities (UNL) email functionality.*

The people involved in the project, the funding organizations or contact details are not mentioned in the project descriptions. However, the website footer depicted in **Figure *27*** consistently features the Center's contact details, and there is a convenient "Email Us" pop-up window depicted in **Figure *28*** which appears in the lower right corner of the webpage, which can be used to inquire about projects and ask other questions. The user can click on the title link to get more details about the project in question, and the website just serves as a short introduction to what is available. While there are no filter options available, there is a general search bar depicted in **Figure *22*** that can be used to look for specific projects. In 54.35% of cases, the output type is mentioned in the content description, an example of which can be seen in **Figure *29***. The tools used to create the project output are only mentioned for one project.

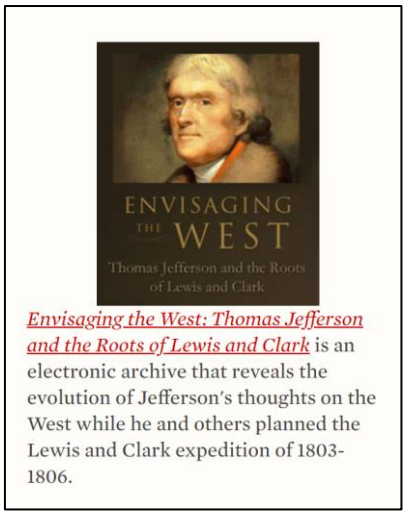


Figure 29. *A project posted on the Center for Digital Research in the Humanities (UNL) website featuring output type.*

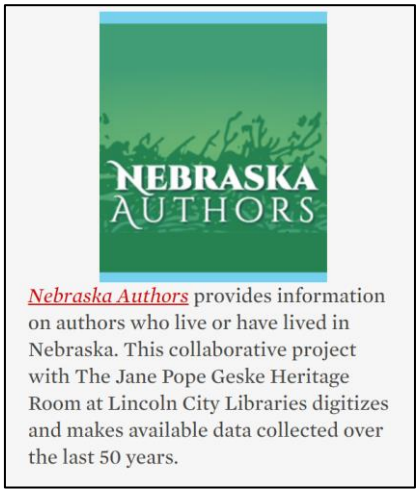


Figure 30. *A project posted on the Center for Digital Research in the Humanities (UNL) website featuring a partner organization.*

Partner organizations are mentioned by only twelve of the fourty-six projects, but as can be deduced from **Figure *30***, users cannot click on their names to get additional information. As with Indiana University, projects featured on the Center's website often feature local history, particularly the history of the Omaha and Ponca Midwestern Native American tribes, as well as the history of colonial settlers in Nebraska.

iv. The University of Oregon

The University of Oregon is a public research university located in Eugene, Oregon. The university's Digital Scholarship Center was established in 2013 to advance the university's teaching and research in the field of Digital Humanities, and is currently managed by two faculty fellows in the humanities and social sciences.[29] The Center is supported by the

[29] Retrieved from: https://www.arl.org/digital-scholarship-profile-university-of-oregon/

University of Oregon's Libraries' Digital Scholarship Services (DSS) department, which serves as an umbrella department for the DSC and provides digital asset management, preservation, training, consultations, tools and methods for digital scholarship, teaching and learning. Consequently, the graduate and undergraduate students working at the DSS also work in close collaboration with the DSC.

The goals of the DSC at the University of Oregon, as explained elaborately on their website, are to fuel innovation and interdisciplinary inquiry by providing access to experts in DH, enhancing dissemination of humanistic teaching through new forms of Open Access, sustainable publishing and production of digital media, developing training programs, networking opportunities and outreach events, and establishing a central gateway for DH research. To reach these goals, staff of the Center provide help with project management, scholarly communication, educational technology, digital production services, collection and metadata standards, data services, visualization services and publishing services among others.

Figure 31. *The Digital Scholarship Center (UO) website main page with header image.*

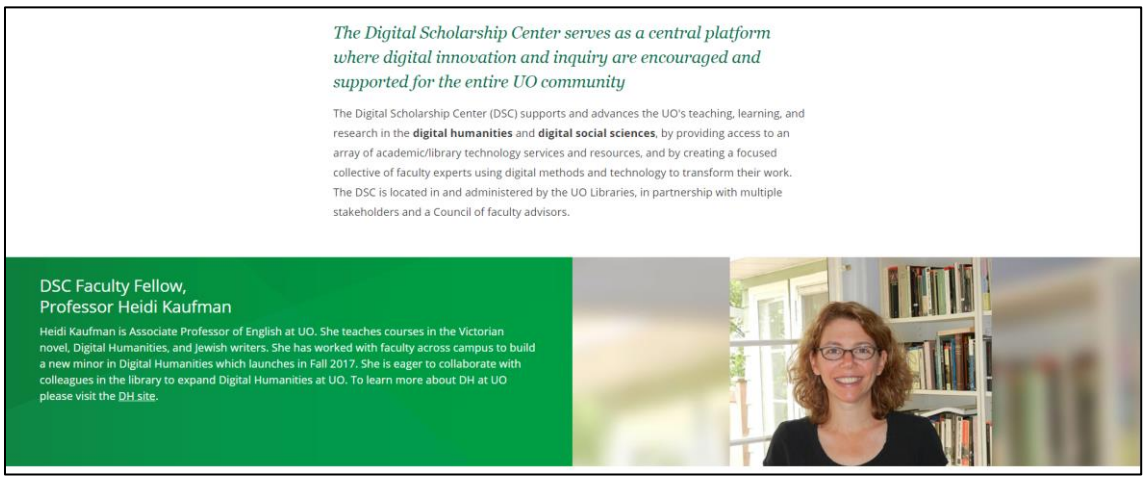


Figure 32. *The Digital Scholarship Center (UO) website main page with description of the DSC and a Faculty Fellow*

Figure 33. *The Digital Scholarship Center (UO) website main page showing a Faculty Fellow and a quote about DH.*

Figure 34. *The Digital Scholarship Center (UO) website main page featuring events and workshops.*

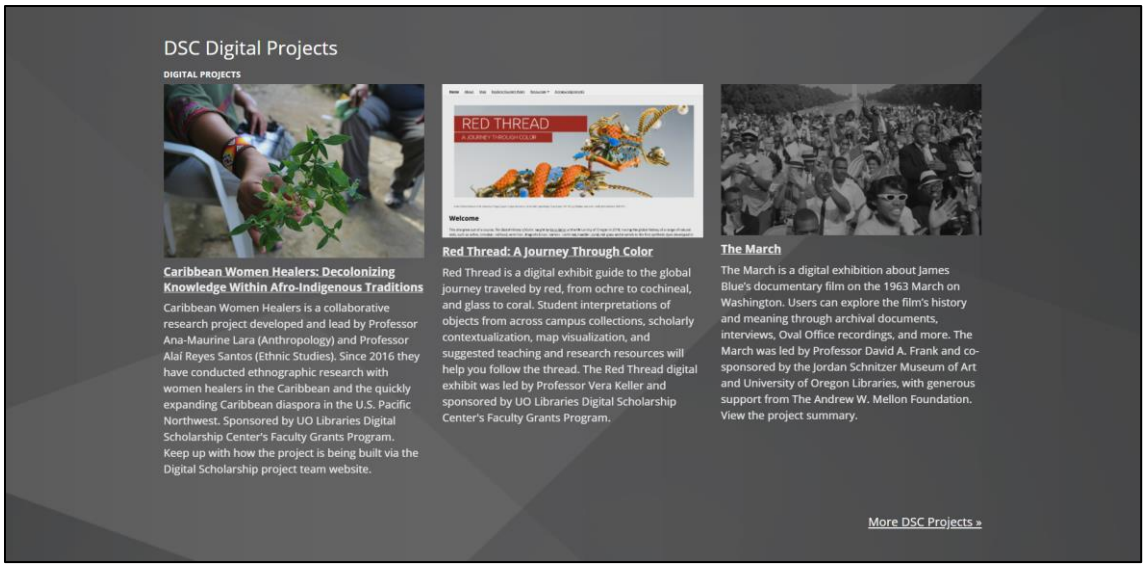


Figure 35. *The Digital Scholarship Center (UO) website main page showing three most recent projects.*

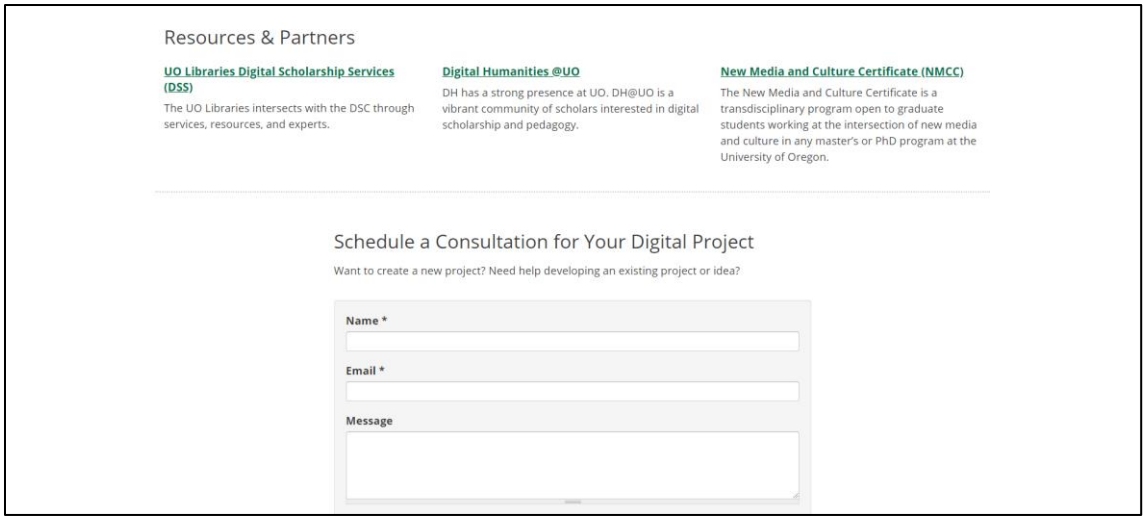


Figure 36. *The Digital Scholarship Center (UO) website main page showing resources, partners and a contact form.*

The website of the University of Oregon's Digital Scholarship Center contains information about the Center itself, the funding, events and workshops organized by the Center and the Center's contact details, as can be seen in **Figure *31***, **Figure *32***, **Figure *33*** and **Figure *34***. The three most recent projects are posted at the bottom of the main page in **Figure *35***. Additionally, **Figure *36*** shows the website's consultation form which can be used to inquire about help for future projects. More information on the projects associated with the Center can be found when the user clicks on "Digital Projects" in the navigation bar in **Figure *31***, which redirects the user to the "Digital Projects" webpage in **Figure *37***.

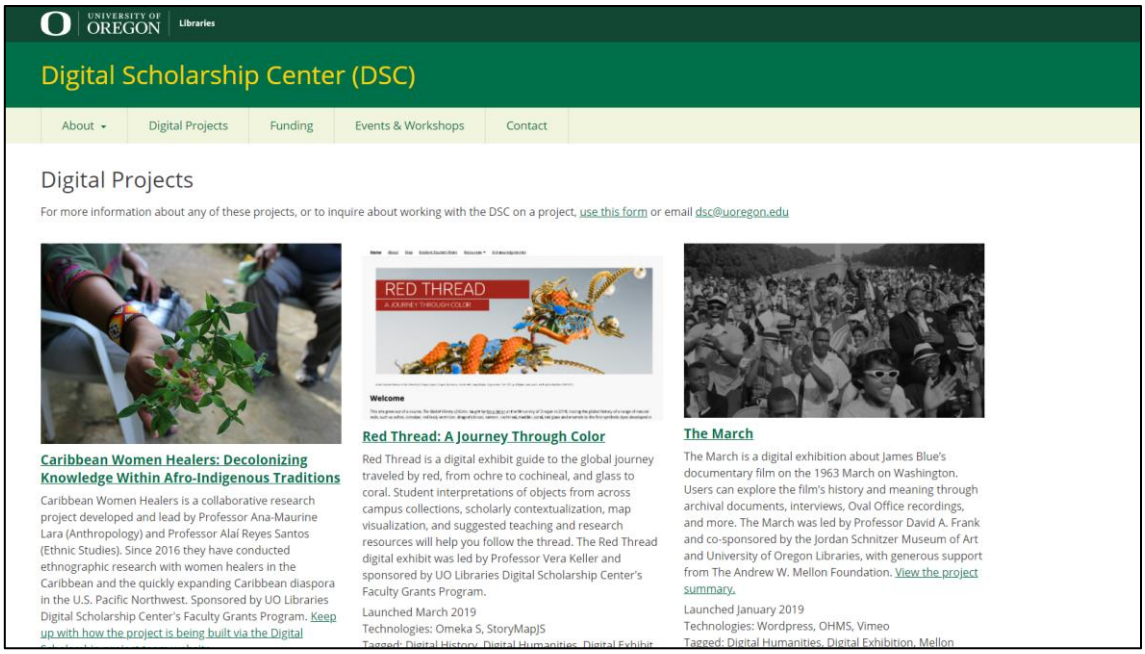


Figure 37. *The Digital Scholarship Center (UO) website Digital Projects page.*

Currently, the staff of the UO Digital Scholarship Center have posted 15 digital projects on their website. As can be deduced from the quantitative analysis in **Table 5**, all of the projects posted on the website feature the names of the people involved in the project, the title which is posted as a link to the external project website, and an image in the form of a print screen of the project website or an image related to the project content. The people who are mentioned in the project description are usually the academic staff who manage the project. Students and library staff are not mentioned by name.

Table 5. *Quantitative analysis of the metadata of the projects posted on the Digital Scholarship Center (UO) website*

Percentages associated with projects on UO website	
Total number of projects	**15**
Projects that used tags	53.33%
Projects that provided a description of the dissemination and output type	53.33%
Projects that provided information about the duration of the project	0.0%
Projects that provided names of people involved	100.0%
Projects that provided image(s)	100.0%
Projects that provided a title	100.0%
Projects that provided funding information	33.33%
Projects that provided information on partner(s)	0.0%
Projects that provided information on the tools used	46.66%
Projects that provided a description of the project content	46.66%
Projects that provided a link to project website	100.0%
Projects that provided contact details	0.0%

Figure 38. *The projects on the Digital Scholarship Center (UO) website featuring limited metadata.*

There is a clear evolution as to how the projects are posted on the site. Early projects were posted with limited metadata, as the ones depicted in **Figure *38***. In the case of the *Time's Pencil* project, the only information on the website is a concise description of the project, output type and tool used. The *Corazon de Dixie: Mexicanos in the U.S. South Since 1910* project only gives a short description of the output and the manager of the project. A similar pattern can be seen when surveying the *Paul Revere Williams Career Mapper* project, which also features an additional output tag. More recent projects, like the ones depicted in **Figure *39*** are described in elaborate detail, with additional historical background, a launch date, the tools used, and additional subject and output type tags.

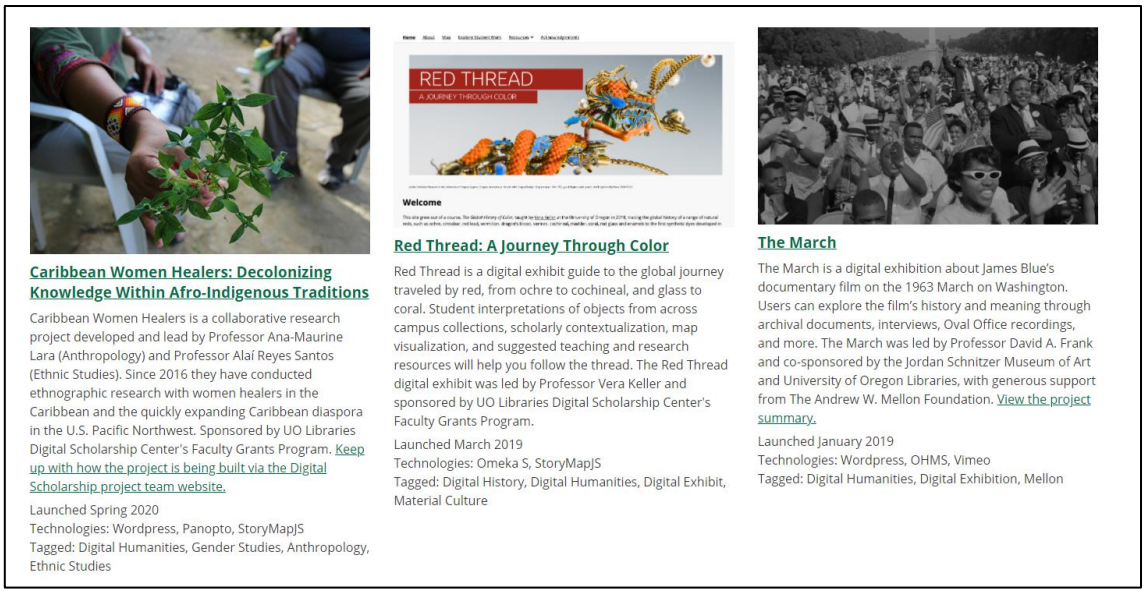


Figure 39. *Projects on the Digital Scholarship Center (UO) website featuring elaborate metadata.*

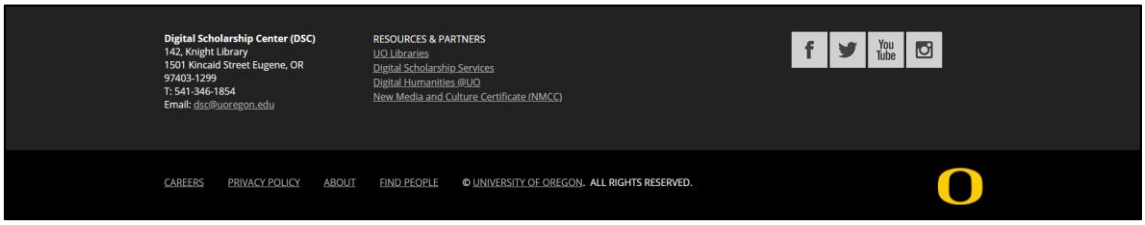


Figure 40. *The Digital Scholarship Center (UO) website footer.*

Partner organizations, the duration of the project, and contact details were left unmentioned. However, eight projects out of fifteen did include mention of a launch date. As can be seen in **Figure *39***, the funding organizations (e.g.: the Andrew W. Mellon Foundation and the UO Libraries Digital Scholarship Center's Faculty Grants Program) are mentioned in the description of the project in 33.33% of the cases. Users are also expected to inquire about the projects by using the contact tab in the navigation bar in **Figure *31***, or to scroll down to the footer shown in **Figure *40***, as both feature the contact details of the Center. The contact details of the people involved in the project are not mentioned.

v. The University of Washington

The University of Washington (UW) is a public research university in Seattle, Washington, with two additional campuses to the south in Tacoma and Bothell. The Digital Scholarship Center was founded in 2015 as an initiative from UW libraries, and is thus the most recently-founded Center analyzed in this corpus. The people working at the Center include subject librarians in digital scholarship, preservation, archival science, metadata and cataloging, history, data curriculum and communications, geospatial data and maps, Chinese studies, Japanese studies and Korean studies. Also working at the Center is an IT specialist who assists in metadata management and programming.

Figure 41. *The Digital Scholarship Center (UW) Makerspaces & Tools page.*

Digital projects and activities conducted at the UW are not confined to one physical Center. Each of the three campuses features a unique set of skilled people, available equipment, and tools available for affiliated students, staff, and other interested parties who want to conduct digital research. The UW also has two makerspaces, where students can collaborate in a wood shop, a machine shop, computer stations, and work spaces. Researchers can visit the "Makerspaces & Tools" page shown in **Figure *41*** to get more information on the possibilities.

The services provided across these campuses are collected on a single DSC website, and include separate webpages on metadata services, help with preservation, research data, scholarly publishing, special collections and consultancy on subject matter. While the UW campus in Bothell specializes in digital collections, the UW Tacoma campus features a Digital Commons that collects, preserves, and provides access to an image repository with scholarly and creative work of the UW Tacoma campus and affiliated educational partners. Digital Humanities projects take place across these different campuses and the different services they offer.

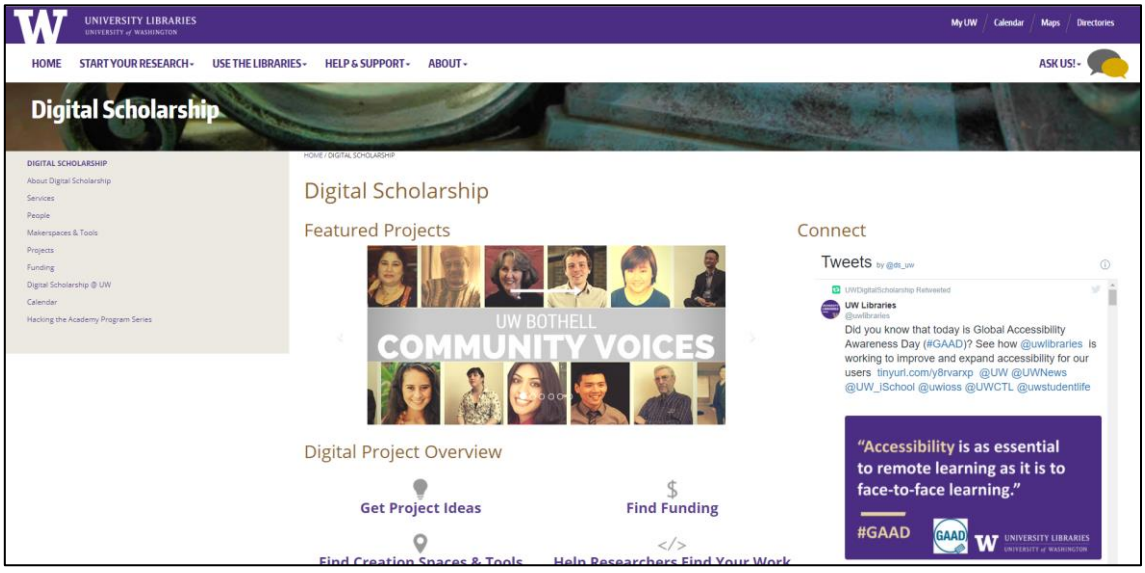


Figure 42. *The Digital Scholarship Center (UW) website main page.*

As shown in **Figure *42***, the DSC website at the University of Washington provides information about the staff of the Center, the activities conducted and services provided, the available makerspaces and tools, funding, digital scholarship in general and specific activities across the UW campuses, a calendar with all the events planned by the DSC, and their "Hacking the Academy Program Series": an initiative that highlights how digital scholarship is continuously evolving through a series of showcases, discussions, and lectures. The main page also features a carousel element with featured projects made with the help of the DSC. When clicking on "Projects" in the choice menu on the left, the user is redirected to the "Projects" webpage shown in **Figure *43***, where the project titles and their descriptions are published in a list format.

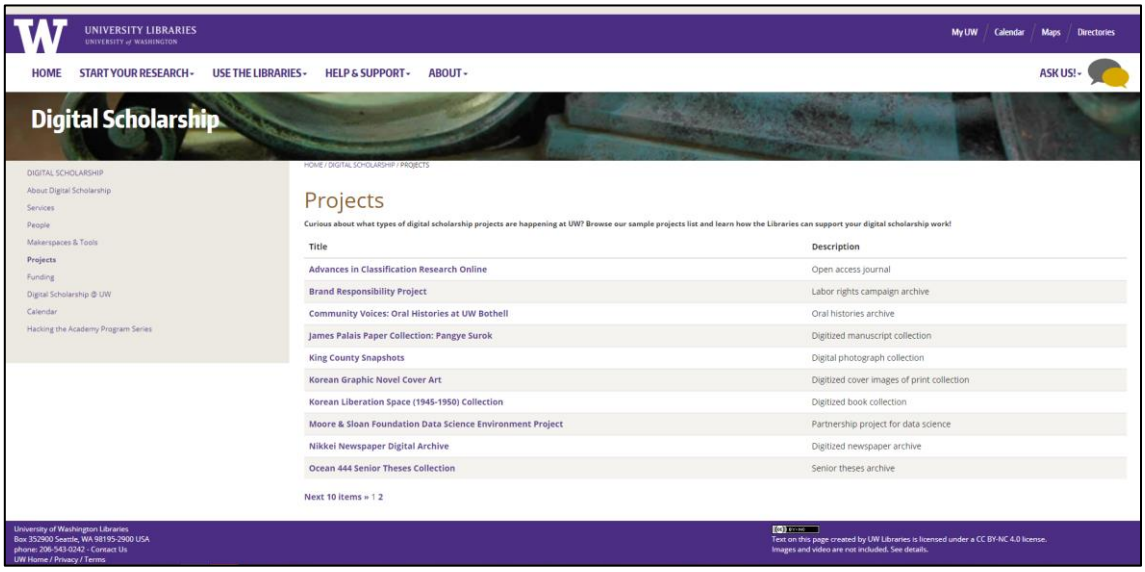


Figure 43. *Screenshot of the Digital Scholarship Center (UO) website Projects page.*

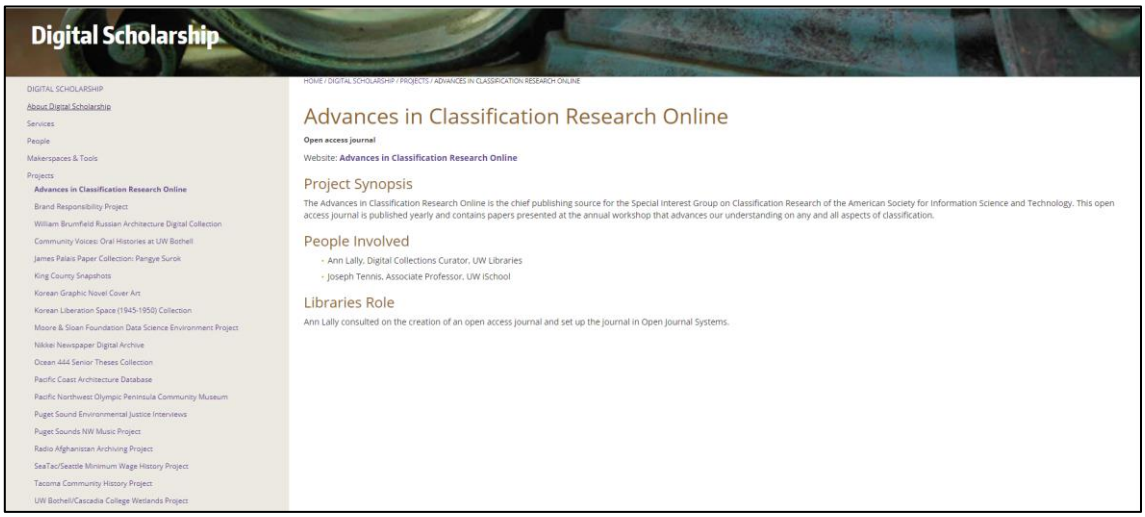


Figure 44. Advances in Classification Research Online*, a project on the Digital Scholarship Center (UW) website.*

***Table 6**. Quantitative analysis of the metadata of the projects posted on the Digital Scholarship Center (UW) website.*

Percentages associated with projects on UW website	
Total number of projects	**20**
Projects that used tags	0.0%
Projects that provided a description of the dissemination and output type	100.0%
Projects that provided information about the duration of the project	0.0%
Projects that provided names of people involved	95.0%
Projects that provided image(s)	0.0%
Projects that provided a title	100.0%
Projects that provided funding information	5.0%
Projects that provided information on partner(s)	25.0%
Projects that provided information on the tools used	0.0%
Projects that provided a description of the project content	100.0%
Projects that provided a link to project website	100.0%
Projects that provided contact details	0.0%

After clicking on a given project title, the user is redirected to a webpage that contains more information about the project: the title, the output type, a link to the project website, a short synopsis, the people involved and, uniquely, the role of the library is explicitly mentioned. This ordered format is consistently used for all the projects posted on the website. Other projects can quickly be found and clicked on by using the expanded choice menu on the left, as shown in **Figure *44***.

The consistency of the format is reflected in the projects' quantitative analysis in **Table *6*** as all 20 projects include their output type, title, description of the project content, and a link to the project website. I regarded the description element that comes with the title on the Project page as an output type tag and not as a subject tag, which is the reason why all projects have an output type tag and none of the projects have a subject tag. The duration of the project and the tools used are not mentioned, nor are the contact details. Users can inquire about projects and other subjects by clicking the "Ask Us" button in the upper right corner illustrated in **Figure *43***. The projects' synopsis sections always feature a concise block of information about the historical background of the project. Furthermore, the synopsis section can contain more information about the output type, funding organizations and partners involved in the project.

Figure 45. *The role of the library staff in* the Advances in Classification Research Online *from the Digital Scholarship Center (UW) website.*

Notably, the names of the people involved and some information on their career and the institution they work for is mentioned in 95.0% of the cases. Additionally, a unique feature on this website as opposed to the other Centers in the corpus is the fact that the role of the library staff is also mentioned and concisely described, which can be seen in **Figure *45***, **Figure *46***, **Figure *47*** and **Figure *48***. In the case of the *Community Voices: Oral Histories at UW Bothell* project depicted in **Figure *46*** the students are also mentioned by the class they enrolled in, but not by their names. This could be due to Washington State data privacy laws, which shield students from the use of their names in digital and print formats without their explicit consent.

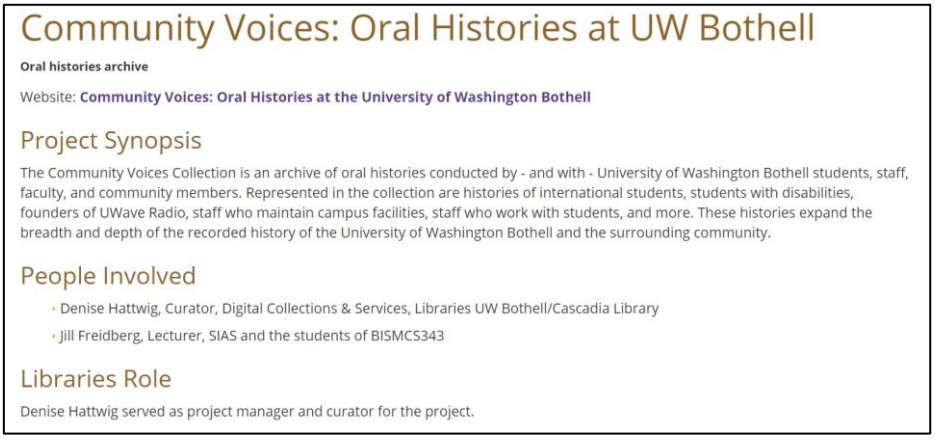
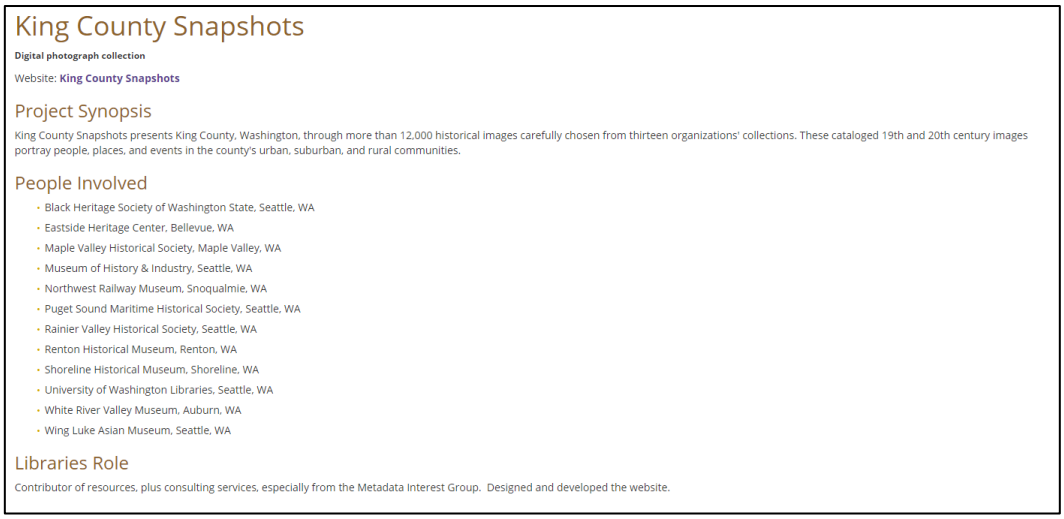


Figure 46. *The role of students in* Community Voices: Oral Histories at UW Bothell*, a project at the Digital Scholarship Center (UW).*



King County Snapshots

Digital photograph collection

Website: **King County Snapshots**

Project Synopsis

King County Snapshots presents King County, Washington, through more than 12,000 historical images carefully chosen from thirteen organizations' collections. These cataloged 19th and 20th century images portray people, places, and events in the county's urban, suburban, and rural communities.

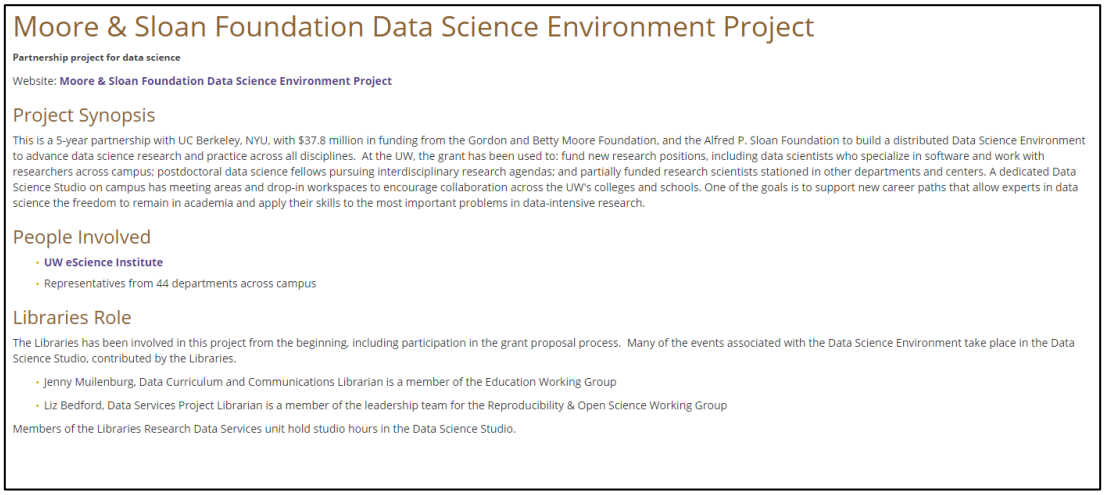
People Involved

- Black Heritage Society of Washington State, Seattle, WA
- Eastside Heritage Center, Bellevue, WA
- Maple Valley Historical Society, Maple Valley, WA
- Museum of History & Industry, Seattle, WA
- Northwest Railway Museum, Snoqualmie, WA
- Puget Sound Maritime Historical Society, Seattle, WA
- Rainier Valley Historical Society, Seattle, WA
- Renton Historical Museum, Renton, WA
- Shoreline Historical Museum, Shoreline, WA
- University of Washington Libraries, Seattle, WA
- White River Valley Museum, Auburn, WA
- Wing Luke Asian Museum, Seattle, WA

Libraries Role

Contributor of resources, plus consulting services, especially from the Metadata Interest Group. Designed and developed the website.

Figure 47. *Organizations instead of names features on* King County Snapshots*, a project posted on the Digital Scholarship Center (UW).*



Moore & Sloan Foundation Data Science Environment Project

Partnership project for data science

Website: **Moore & Sloan Foundation Data Science Environment Project**

Project Synopsis

This is a 5-year partnership with UC Berkeley, NYU, with $37.8 million in funding from the Gordon and Betty Moore Foundation, and the Alfred P. Sloan Foundation to build a distributed Data Science Environment to advance data science research and practice across all disciplines. At the UW, the grant has been used to: fund new research positions, including data scientists who specialize in software and work with researchers across campus; postdoctoral data science fellows pursuing interdisciplinary research agendas; and partially funded research scientists stationed in other departments and centers. A dedicated Data Science Studio on campus has meeting areas and drop-in workspaces to encourage collaboration across the UW's colleges and schools. One of the goals is to support new career paths that allow experts in data science the freedom to remain in academia and apply their skills to the most important problems in data-intensive research.

People Involved

- **UW eScience Institute**
- Representatives from 44 departments across campus

Libraries Role

The Libraries has been involved in this project from the beginning, including participation in the grant proposal process. Many of the events associated with the Data Science Environment take place in the Data Science Studio, contributed by the Libraries.

- Jenny Muilenburg, Data Curriculum and Communications Librarian is a member of the Education Working Group
- Liz Bedford, Data Services Project Librarian is a member of the leadership team for the Reproducibility & Open Science Working Group

Members of the Libraries Research Data Services unit hold studio hours in the Data Science Studio.

Figure 48. *The funding organizations take center stage in a Data Science project posted on the Digital Scholarship Center (UW) website.*

The *King County Snapshots* project in **Figure *47*** is the one of the projects on the website where names are not explicitly mentioned, but replaced by the names of organizations that provided their collections for the project's purposes. Funding partners are mentioned in 25.0% of the cases and integrated in the project synopsis, as can be seen in the *Moore & Sloan Foundation Data Science Environment Project* in **Figure *48***, with additional mention of the funding organization and their financial contribution to the project. Interestingly, in this case the role of the library staff is mentioned in a more elaborate fashion than the role of the other people involved.

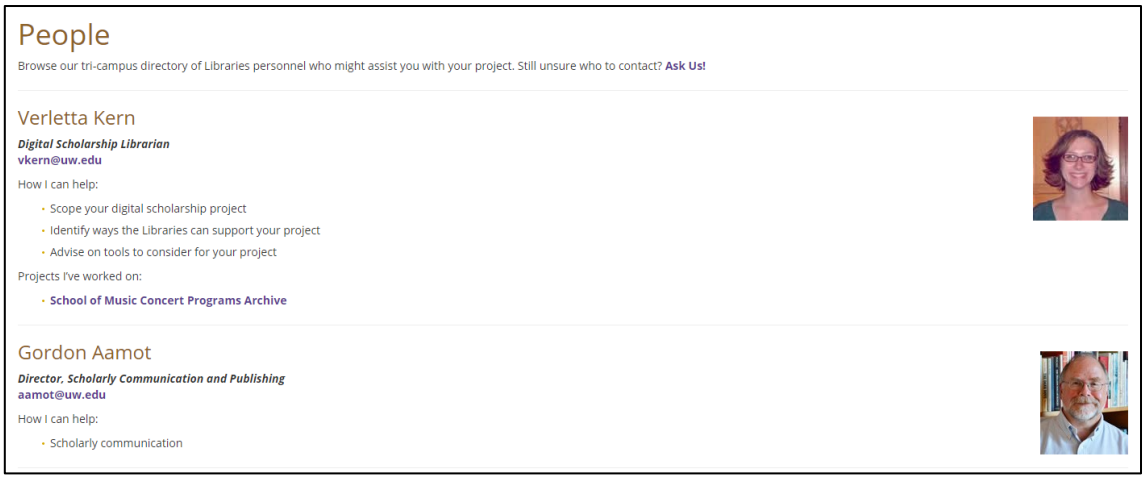


Figure 49. *The Digital Scholarship Center (UW) website staff page.*

A notable feature on this website is that no images are used, which gives the website less expressive appearance. Another unique feature as opposed to the corpus can be seen when looking at the DSC staff page in **Figure *49***, as the projects that library staff worked on are linked on their profile descriptions. This clarifies the past experience of these staff for the user, and is an additional acknowledgement of their contribution to past and ongoing projects.

V. Results

As shown in the previous chapter, each DSO website showcases different techniques to express the identity of the university, the Center and the people behind it. The DSO landscape is complex and variable, and this is clearly reflected in the corpus data.

Table 7. *Full names of the corpus' DSOs*

UA	IUPUI	UNL	UO	UW
Digital Humanities Center	Center for Digital Scholarship	Center for Digital Research in the Humanities	Digital Scholarship Center	Digital Scholarship Center

This separate identity is reflected in the variety of the centers' names, as depicted in **Table *7***. The layout of the websites is constructed in the university's house style, and each website has a unique set of webpages and structure.

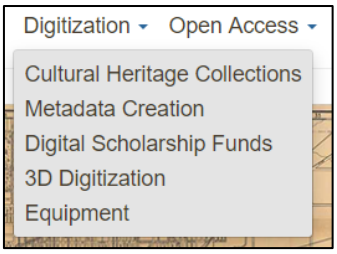


Figure 50. *Center for Digital Scholarship (IUPUI) link to the Cultural Heritage Collections page.*

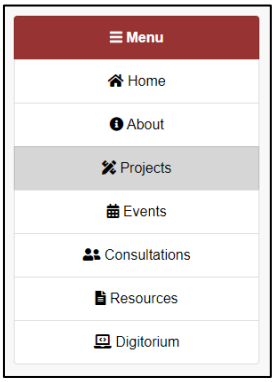


Figure 51. *Digital Humanities Center (UA) link to the Projects page.*

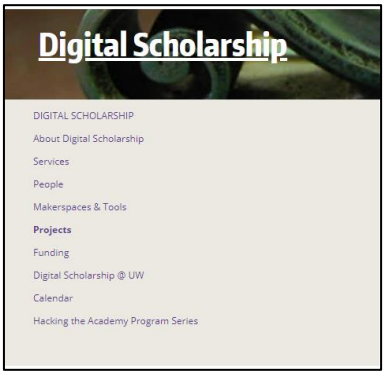


Figure 52. *Digital Scholarship Center (UW) link to the Projects page.*

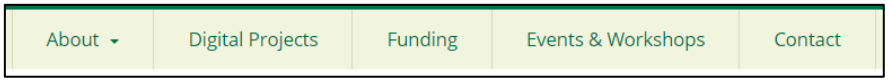


Figure 53. *Digital Scholarship Center (UO)link to the Digital Projects page.*

While Purdue (IUPUI) has posted a link to their projects page under a button called "Digitization" in the navigation bar as shown in **Figure *50***, Alabama (UA), Oregon (UO) and Washington (UW) have opted for choice menus with a clear reference button to projects, as can be seen in **Figure *51***, **Figure *52*** and **Figure *53***.

The staff at the Center for Digital Research in the Humanities at Nebraska-Lincoln (UNL) on the other hand chose to distinguish between the tools and metadata projects created in their center, and their other projects and publications. Both options were placed under a header called "Digital Scholarship" in the navigation bar as shown in **Figure *54***.

Figure 54. *Center for Digital Research in the Humanities (UNL)link to the Projects & Publications and Tools & Metadata Projects pages.*

Table 8*. Names of the DSO's project pages.*

UA	IUPUI	UNL	UO	UW
Projects	Cultural Heritage Collections	Projects & publications	Digital Projects	Projects

In addition, all the webpages on which the projects were posted have different denominations, as shown in **Table *8***. In the case of Purdue, this made the projects page a bit harder to find. Implementing different pages for the tools and metadata projects on the one hand and projects and publications on the other hand as done by the Center for Digital Research in the Humanities at Nebraska-Lincoln could be a useful distinction for users who have specific needs, but may also make it less likely that they discover the other projects on the website.

Table 9. *Table showing where projects are featured across DSOs.*

	UA	**IUPUI**	**UNL**	**UO**	**UW**
Main page	Yes	Yes	Yes	Yes	Yes
Staff page	No	No	No	No	Yes

While the structure of the website in the case of the Center for Digital Research in the Humanities at Nebraska-Lincoln and the Center for Digital Scholarship at Purdue may make their respective projects pages relatively harder to find, the fact that projects are featured on both organizations' main pages ensures that the projects are at least discoverable. As can be deduced from **Table *9***, all of the organizations promoted their projects on their main page. While the Center for Digital Scholarship at Purdue, the Center for Digital Research in the Humanities at Nebraska-Lincoln and the Digital Scholarship Center at Washington implemented a notable interactive carousel element with images to attract users' attention to their projects, Digital Humanities Center at Alabama decided to extend the lay-out of their projects page to the main page, with a button to view the project website in the spotlight. Digital Scholarship Center at Oregon made a similar decision by posting the three most recent projects on their main page. Also depicted in **Table *9*** is the fact that the Digital Scholarship Center at

Washington featured a link to the projects on their staff page. This way, users can immediately get a clear idea of what type of expertise they can expect from the different people that work at the center, and who is the right person to contact if they want to initiate a digital project with the help of the services provided by the Digital Scholarship Organization. Additionally, linking the project to the person who helped created it emphasizes their role in the project, and the fact that a digital project is a collaborative effort across disciplinary and institutional boundaries.

While most centers ordered their projects alphabetically, staff at Digital Scholarship Center at the University of Oregon ordered their projects chronologically, with the newest projects appearing at the top of the page. The project page at the Center for Digital Scholarship at Purdue features a filter option and a title field where users can specify an input of their interest, and the Digital Humanities Center at the University of Alabama lets users filter their projects by clicking a subject tag, after which the website returns all the projects with that same subject tag. However practical, the latter was not an obvious functionality, and it was noticed by accident. The remaining centers did not have a filter option and require the user to scroll through all the projects if they want to find something specific.

In general, all projects across all DSOs in the corpus featured a given title and a link to an external project website. Clearly, the main resource of information on digital projects is not the website of the DSOs, but the website of the projects themselves. In this regard, the DSO websites serve as a searchable catalogue that points users to the project and to link the project to the DSO staff, rather than a way to give an extensive amount of detailed information about the project. In the case of the Center for Digital Scholarship at Purdue, the links were integrated in a button integrated in a header element called “Browse This Collection,” while the staff at the Digital Humanities Center at Alabama consistently integrated a “View Project,” button below every project’s description. Staff at the Center for Digital Research in the Humanities at Nebraska and the Digital Scholarship Center at Oregon integrated the link to the project website into the title. The Digital Scholarship Center staff at the University of Washington made a subtitle called “Website,” after which the project link is featured.

Subject tags are an interesting feature visibly added to the projects of the Digital Scholarship Center at Oregon and the Digital Humanities Center at Alabama. While the Center for Digital Scholarship at Purdue does not explicitly mention the tags, they are added to each project and can be used as a filter. Subject tags can give the user some quick information of the subject of the project (e.g.: food), but can also serve to specify the output type (e.g.: blog), as was the case at the Digital Humanities Center at Alabama. While tags are useful to get a general idea of the project content without having to read the entire content description, they might paint an incomplete or divergent picture of project’s scope. Digital Humanities projects can be complex and nuanced, and having key words as subject tags may not always convey this complexity.

A description of the project proved to be a useful feature to not only catch users’ attention, but mainly to communicate the project’s content and goal to the public. Every project, with the exception of some projects at the Digital Scholarship Center at Oregon and the Center for Digital Scholarship at Purdue, had some form of a content description. While in the case of the Center for Digital Scholarship at Purdue the content description sometimes contained a lengthy text about the historical background of the project, in the case of the Center for Digital Research in the Humanities at Nebraska, the description was often not longer than a few sentences, and could contain a short description of the historical period the project revolves around, a historical

figure the project focuses on or some information on the partner organization. The Digital Scholarship Center at Oregon posted some projects with information about the people who collaborated on the project, but without additional information about the project's content. While the short descriptions at the Center for Digital Research in the Humanities at Nebraska and Digital Scholarship Center at Oregon were often not sufficient to grasp the entire project content, the projects at the Center for Digital Scholarship at Purdue often featured extremely long texts with peripheral information that only a very specific group of users will read in their entirety.

The output type of the projects was also often specified across the projects of the DSOs in the corpus. Both the Digital Scholarship Center at Washington and the Center for Digital Scholarship at Purdue included information about the output type for all projects. While the Digital Scholarship Center at Washington described the output type in the project synopsis text, the Center for Digital Scholarship at Purdue incorporated output type information as an invisible tag that projects could be filtered on. The Digital Humanities Center at Alabama also included information on the output type in their key word tags, which could also be used as a filter.

The duration of the projects was not often explicitly mentioned. The projects at the Digital Scholarship Center at Oregon sometimes featured a launch date, but an end date or a set period was not mentioned. The staff of the Digital Humanities Center at Alabama mentioned the duration of the project by specifying that a project was made by students during a specific semester. Only one project in the Center for Digital Scholarship at Purdue project database contained a starting year and an end year. At the Digital Scholarship Center at Washington and the Center for Digital Research in the Humanities at Nebraska, the project duration was always left unmentioned.

A similar pattern can be discerned regarding the tools used to complete the projects. While the more recent projects at the Digital Scholarship Center at Oregon consistently featured the names of the soft- and hardware tools used, the websites of other DSOs only sporadically featured information about tools. Contact details from the people who collaborated on the projects were only featured at the Center for Digital Scholarship at Purdue. The other DSOs' websites only specified the contact details from the center staff, which points to a centralized communication model where communication is funneled through the DSO staff team.

At the University of Alabama and the University of Nebraska-Lincoln, funding organizations were never mentioned. The reason for this is not clearly stated on the DSO websites. As shown in the data analysis, staff at the Center for Digital Scholarship at Purdue sometimes used a separate paragraph in the project description to talk about their funding organization, or it was mentioned below the text with the logo of the organization and a description containing information about the budget and support received. Staff at Digital Scholarship Center at Oregon and the Digital Scholarship Center at Washington integrated information about the funding organizations and their financial contribution in the description of the projects.

Some interesting remarks can be made about the strategies the staff at the different DSOs applied to mention the names of the people who collaborated on the projects. The Center for Digital Scholarship at Purdue hardly mentioned the names of the people who were involved in

the project and collaborators were usually described with an umbrella term. The only times the names of people were specified is when the description included contact details. As the descriptions of the projects on the Center for Digital Research in the Humanities at Nebraska website are limited to a few sentences, the people involved are not mentioned once. The websites of the Digital Humanities Center at Alabama and the Digital Scholarship Center at Oregon regularly mention the full names of the professors who managed the projects, but students were described by the class they enrolled in and library staff who may have contributed to the projects were left unmentioned. In this respect, the website of the Digital Scholarship Center at Washington was an exception in the corpus, as the names of both library staff and other collaborators was consistently mentioned and elaborated with their respective fields of expertise and their employing institutions. The role of the library staff was also specified, with explicit mention of their names and contribution to the project. The names of students however remained unmentioned, and they are described by the classes in which they are enrolled.

VI. Discussion

A content analysis of the different elements under scrutiny has uncovered some of the different factors and strategies at play when posting projects on a DSO website. A next step is to frame these results in the wider discussions and literature within Digital Humanities in order to extract recommendations for the DH Commons website at KU Leuven. It is important to note that not every recommendation is realistic in the Commons' website nascent state, and application is constrained by the style guide of the KU Leuven website, which uses a content management system called Plone. However, my recommendations could serve as an impetus for future application and discussion.

In general, the websites of the DSOs that I researched in this thesis are not the main source of information when a user wants to inquire about a project, but rather serve as access points for projects across faculties and institutions. The DSOs' websites indeed provide an introduction to the projects, but always refer to the projects' external websites if users want additional and detailed information. In line with the findings by B.Sinclair (2014), Mackenzie & Martin (2016) and Prescott (2016) and the fact that the website of the DSO accumulates these projects reflect the position of the DSO as a central entity fostering collaboration by offering a common ground for researchers across faculties and institutions, not only to establish a network for interested parties to find one another and work on projects, but also for users to learn more about the ongoing digital project efforts of the entire institution. By centralizing the projects on their websites, the DSOs position themselves as the colloquium of researchers, students, and other staff. However, a DSO is not just a passage or a meeting room, nor a passive umbrella institution, as it is populated by library staff who often play a role in the DH projects posted on their website. Additionally, staff at a DSO could also foster their own projects and post them on the website. Following the ideas by Muñoz (2012), helping librarians lead and post about their own DH initiatives and projects alongside the support services they provide for other projects may make the position of DH in the respective institution stronger, and could help people understand better the kind of intellectual labour performed by library staff.

The staff at the DH Commons at KU Leuven does not yet have a portfolio of their own projects, as the initiative was launched very recently. However, its website could follow the example of the DSOs' websites in my corpus, and start its journey as a DSO by providing an access point for digital projects across KU Leuven and beyond. In the meanwhile, the Commons can build

a reputation as the place people can turn to if they want to find collaborators to help with DH-related projects and ideas, "without cloistering them within the walls of the center" (Martinez & Verbeke, 2019).

While the position of a DSO as a colloquium is largely accepted in the literature, the role of people involved in the projects posted on the websites is often obscured by lack of access to traditional forms of acknowledgment found in academic faculties. The issue concerning the service mentality in libraries, the lack of acknowledgement of their intellectual labour, and views of their work as emotional labour discussed by Nowviskie (2011) Muñoz (2012), Morgan (2016) and Whearty (2018) is reflected in the results of my analysis, wherein the names and role of library staff often remained unmentioned described using an umbrella term. Also, students who collaborated on the projects at the DSOs in my corpus were not mentioned by their names, but often described by the class in which they were enrolled. Following Whearty's (2018) arguments that valuing library staff as interlocutors and intellectual equals is an important part of ethical digital scholarship, naming all the collaborators and specifying their roles in a project should be the standard for fostering equitable collaborative working environments. This thesis does not attempt to solve the issue; rather, to suggest that as a new initiative, the DH Commons could assuage the tensions expressed in academic literature about the service mentality expected by faculty and performed by library staff. This could be accomplished by recognizing acknowledgement as an important area of discussion that should not be overlooked when posting projects on behalf of the DH Commons. The Digital Scholarship Center at the University of Washington provides an excellent example of this: as well as posting information in the project descriptions or their database about which library staff were involved in the projects, this information is also available directly from the "Staff" page of their website. Not only do people then get a better overview of who they can turn to for the expertise they are looking for, but performing this act of acknowledgement also emphasizes the active role of library staff in DH projects, by providing two ways of accessing this information. This could be an idea for the DH Commons to apply in the future, when the library staff become more actively involved in the creation of DH projects both within the library and across KU Leuven.

A description of the (historical) background of the projects was an important element across the DSO websites in my corpus. These descriptions served as an introduction to the project, and helped users like myself understand the project content, and in some cases the project goal. Having to delineate the goal of a project calls to the idea of a university as a vocational training ground (Lewin, 2013), where conducting projects for the sake of intellectual exploration is deemed less valid. While it is important to acknowledge that some text is predetermined by funding agencies, it will be important in the future to make room for organic innovation in Digital Humanities projects that responds both to the experetise of the staff and students involved as well as how the data develops over time, revealing new avenues of research. Settling on a prefixed goal may not be the right approach, and is preferably left open unless the goal of the project is extremely specific by nature. However, a general description of the project content and (historical) background is necessary.

Subject tags proved convenient and simple at first sight, especially when they could be used as a project filter. However, as collaborative projects are a complex interplay of tools and insights across knowledge borders, subject tags may paint an incomplete picture of the project's scope. Projects in DH are complex and difficult to with a few key words, which would be limiting to

their actual meaning. Instead of attempting to gather a set of detailed tags, be they about the project's subject or about the project's output (e.g.: food, blog, etc), the DH Commons could tag projects with the faculties and institutions that collaborated on the project. Tagging a project with "economy" or "arts" encompasses a bulwark of knowledge and practice on its own, and emphasizes the cross-pollination of knowledge that brought the project to life.

Specifying the output of a project is an interesting way to let people know what output they can expect from a project. Project outputs can be portrayed in the form of a tag, or could be specified in the text. However, as a layman visiting the site, it may be difficult to comprehend the meaning of e.g. a digital archive. There is a pattern of staff at DSOs teaching digital literacy as posited by Morgan (2016) and a notable tendency across the DSOs to provide educational workshops and consultation sessions. Consequently, it could be interesting to mention the project output type, and also provide a relevant link to an informative post on the DH Commons blog explaining more about the project outputs of DSO centers (e.g.: "What is a digital archive?"). By providing these interlinking projects and posts, users with less background in DH can learn more about the possibilities and terminology surrounding DH projects, and the DSO can further its potential as a source of digital literacy training.[30] Additionally, it brings attention to the work of my colleague Laura Ulens, who, together with our supervisor Merisa Martinez and myself, set up the blog for the DH Commons using the platform *Hypotheses*.

Images were featured throughout the corpus, with the exception of the Digital Scholarship Center at the University of Washington. Images could be an appealing and visually pleasing way to attract users' attention, and illustrate the project output (e.g.: when the project output is a digital archive, a picture from this archive could arouse people's interest). While a screen shot of the output or a part of the project's process (e.g.: an image of a .csv file) may be a bit abstract for users, it could be interesting to consider using an image related to the subject of the project (e.g.: Louis XIV), or a picture of the project's logo (if imagery is not a part of the project). Additionally, images were also important to feature and highlight projects on the main page of the website, and feature a link to the project page. This approach would be a beneficial addition to the Digital Humanities webpage of KU Leuven Libraries Artes, and/or on the DH Commons webpage (which is nested just beneath the Digital Humanities page).

While keeping in mind the current popularity of Digital Humanities and acknowledging the point made by Gold & Klein (2019), who warn for a possible future bust in the popularity and thus funding in the field; information about funding and partners should be mentioned visibly in the form of a logo or the acknowledgement of a financial contribution. This is important because it is standard practice to advertise a project's patron, and also because it can provide users with more information about potential funding organizations for their own digital research. Additionally, it posits DH work as an economically viable orientation within the humanities, which may attract more DH-students in a STEM-oriented society.

[30] A lexicon with digital editing terms has already been developed in the form of a *Lexicon of Scholarly Editing*, but it would also be useful to create a similar resource with other terms more broadly associated with Digital Humanities research. See https://lexiconse.uantwerpen.be/

VII. Implementation at KU Leuven

Where possible, the recommendations made in the previous chapter have been put into practice on the KU Leuven Libraries website. The digital projects conducted at or with the support of KU Leuven were aggregated into an Excel file (see Appendix [1]) and includes the project's title, output type, relevant fields of research, and associated departments, faculties, and/or research groups. This file will be the basis for an interactive database of DH projects that will be integrated in the Digital Humanities page within the KU Leuven Libraries webpages.[31]

As a practical output for this thesis and internship, I worked on both the "Digital Humanities" and the "DH Commons" webpages within the structure of the KU Leuven Libraries series of webpages.[32] For the DH webpage, I picked six projects from the DH projects list and posted them according to the recommendations made in the previous chapter. The projects were picked based on their variety. Additionally, I added a header image with a featured project shown in **Figure *58***, which was chosen because the project was coincidentally featured on the KU Leuven main page. The image was fetched from the digital archive in question called *the Kaleidoscope- The 1950s in Europe*.[33] The projects on the "Digital Humanities" webpage were posted both in Dutch (the working language of KU Leuven), and in English (the working language of the DH Commons). As I had to work within the confines of the KU Leuven web documentation style guide, the colour palette of the website is displayed in various shades of blue and gray, and the content was posted in blocks preprogrammed in a CSS stylesheet. An example of a HTML excerpt with a predefined card class is depicted in **Figure *55*.**

```
<div class="kul-card-image card card-secondary">
<div class="card-block">
<h2>The Digital Humanities Commons </h2>
```

Figure 55. *Predefined card class on the KU Leuven website source code interface.*

[31] While I aggregated the DH projects and created the Excel file, the implementation of the interactive database falls outside of the scope of this thesis, and will be conducted by Merisa Martinez together with future DH Master's students.
[32] Source: https://bib.kuleuven.be/english/artes/ub
[33] Source: https://fifties.withculture.eu/home/

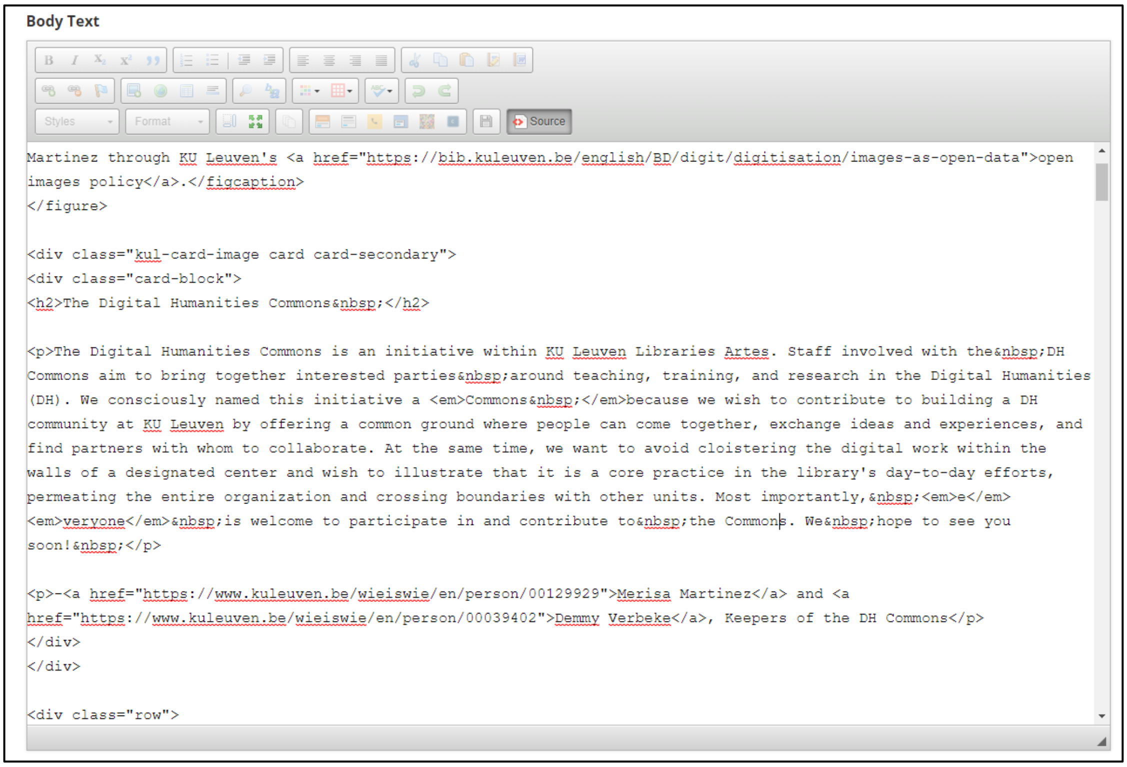


Figure 56. *KU Leuven website HTML source code interface.*

To work on the webpages, I used both the HTML source code interface depicted in **Figure *56*** as well as the visual interface depicted in **Figure *57*.** While the visual editing interface was accessible and an easy way to edit text and e.g. add translations, it did not allow for specific adjustments such as hover effects or accordion dropdown menus, which is why I preferred the source code environment.

A screen shot of the projects can be seen in **Figure *59*** and **Figure *60*.** Each project post is accompanied by an image pertaining to the project content, or a logo if an image was less relevant to the project content. The titles of the projects redirect the user to the website of the project, as does the "More Info" button. The KU Leuven style guide distinguishes three different types of blue in its CSS classes, primary (light blue), secondary (medium light blue) and tertiary (dark blue). The "More Info" buttonwas formatted in the primary blue colour to attract attention. The fields of research relevant to the project were added as **Tags,** which can be used as filters in a later stage of the database development. The description of the projects contains introductory information about the project and its historical context, and mentions the tools used, where this information was available. I dedicated special attention to the way the people working on the projects were referenced; this was managed by adding a subtitle called **Team**. The list of contributors was often quite lengthy, and would have distracted attention from the project itself. Because of this, I made the choice to add a link to the project's staff page called "discover the people behind this project." This wording was explicitly chosen to emphasize the DH project as a collaborative effort by people rather than an institution.

I also added an extra subtitle called **Funding**, with a link entitled "Discover how this project is funded." The projects were often funded by a myriad of different organizations over the duration of the project, and adding them all would distract attention, giving the webpage a

chaotic outlook. To combat this, the link redirects users to an overview of the project's funding organizations, which were usually documented on the website of the projects. In a future stage of the database development, and as described in the previous chapter, it would be helpful to interlink the output types to related posts on the DH Commons blog made by Laura Ulens and Merisa Martinez. By doing so, the user can find all the relevant information within the KU Leuven environment and discover additional aspects of the DH Commons organization, such as the blog made on the Hypotheses platform depicted in **Figure *61***.

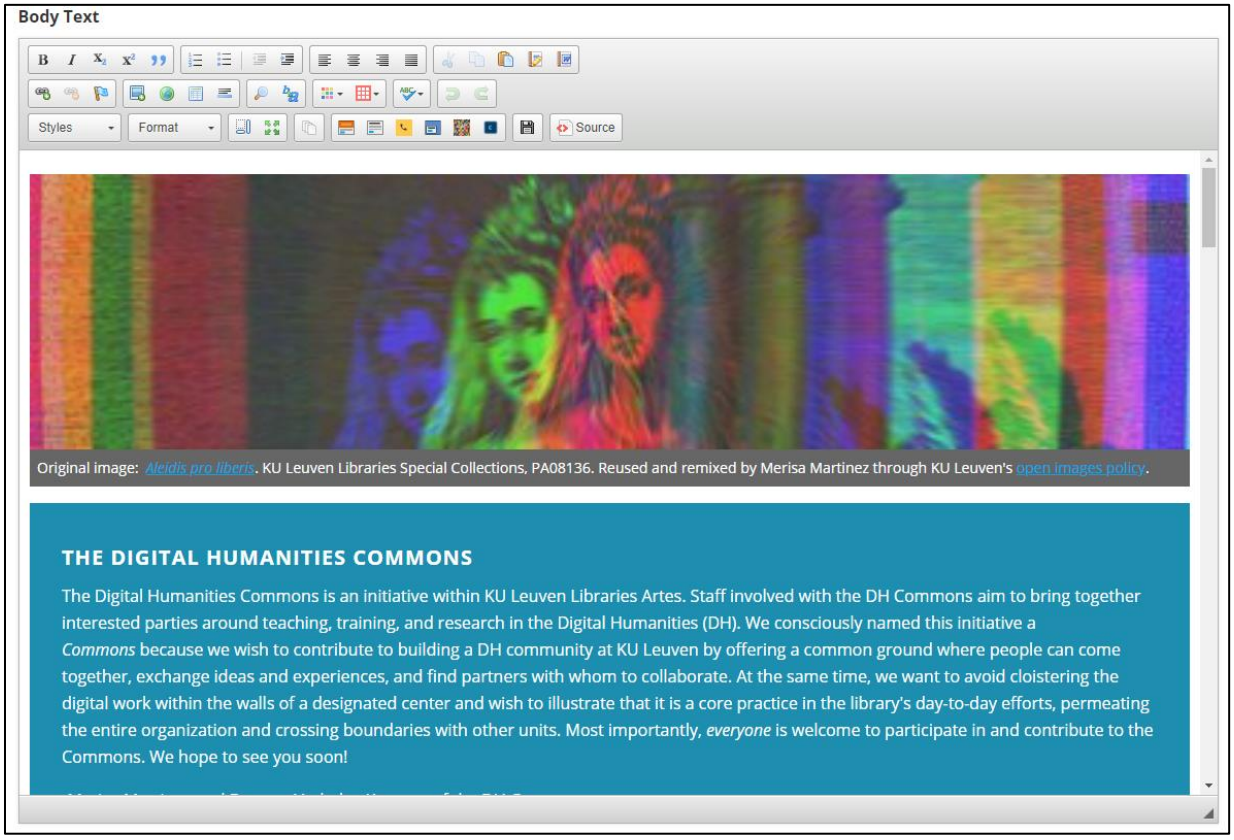


Figure 57. *KU Leuven website Plone visual editor interface.*

Figure 58. *Header image of the KU Leuven DH webpage featuring the* Fifties in Europe - Kaleidoscope *project.*

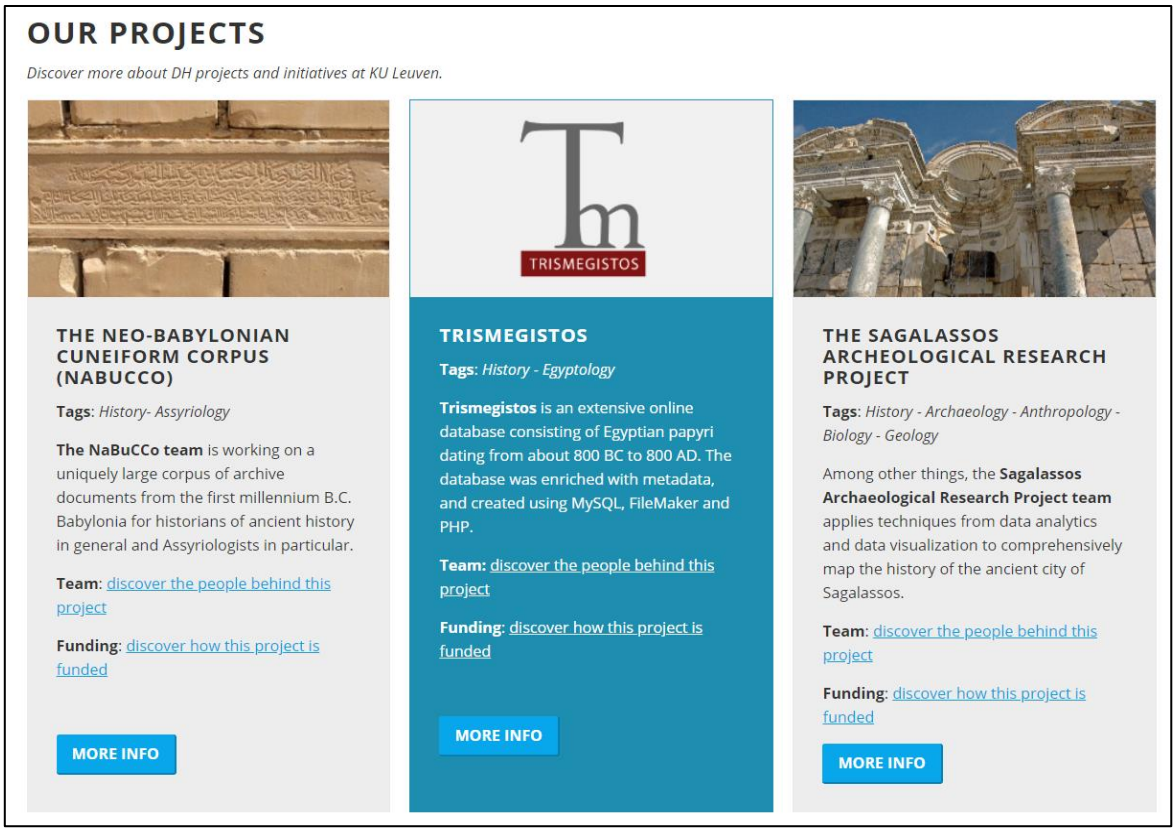


Figure 59. *Projects posted on the KU Leuven DH webpage featuring* NaBuCCo, Trismegistos *and* The Sagalassos Archaeological Research Project.

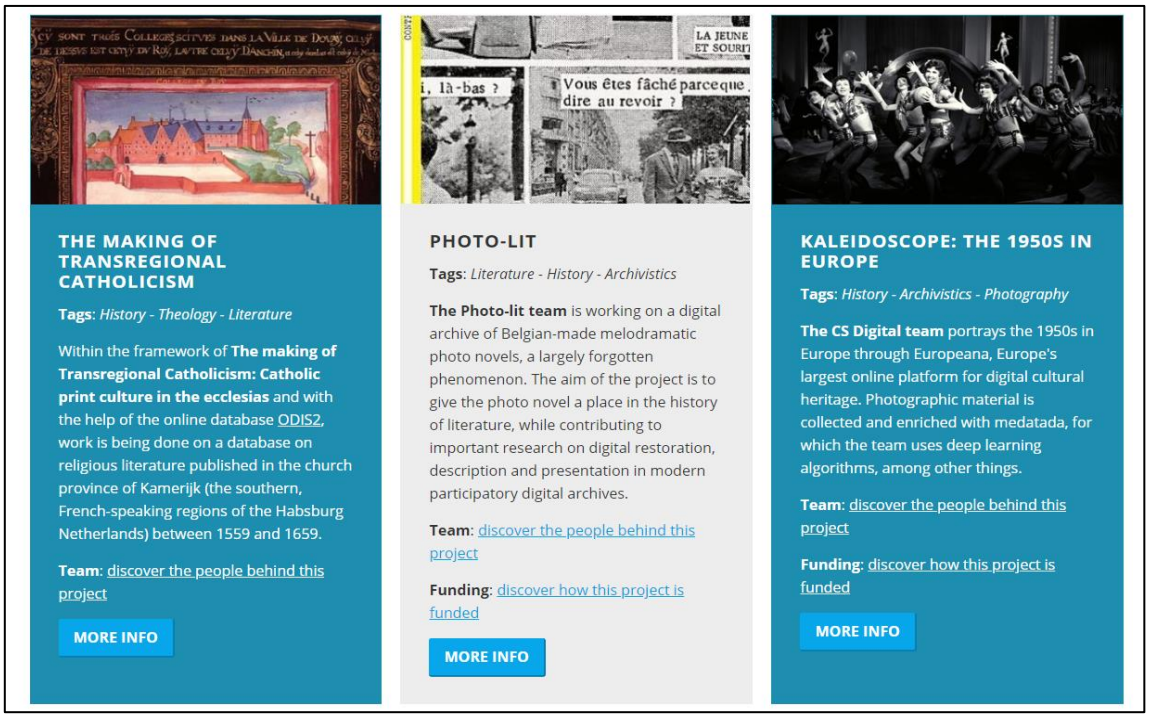


Figure 60. *Projects posted on the KU Leuven DH webpage featuring* The Making of Transregional Catholicism, Photo-Lit, *and* Kaleidoscope: The 1950s in Europe *project*.

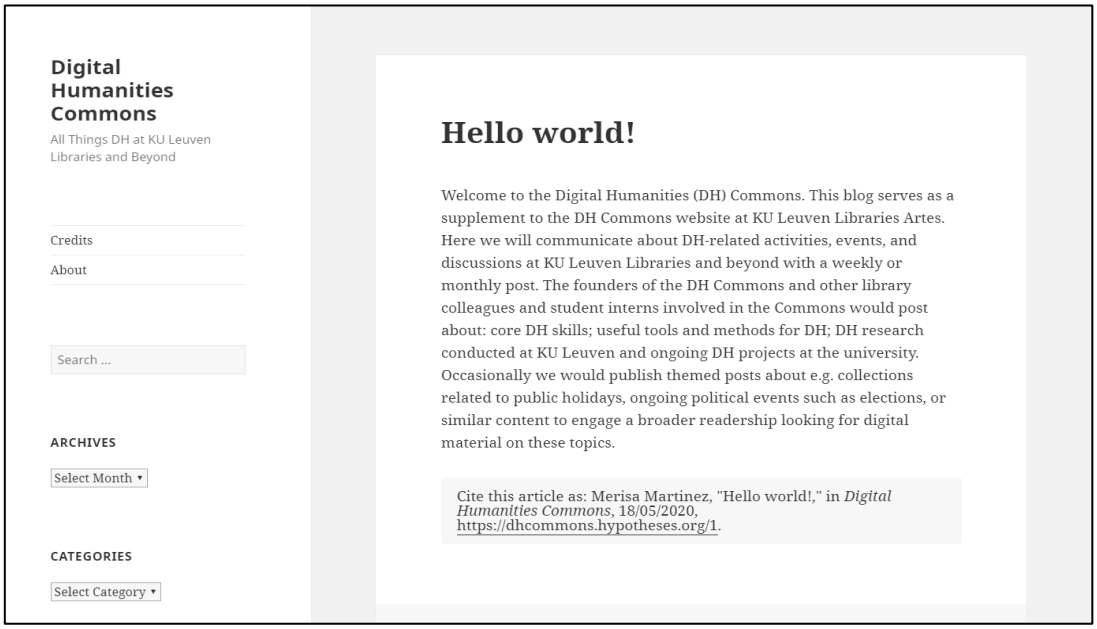


Figure 61. *The DH Commons blog on the* Hypotheses *platform, set up by Laura Ulens, Merisa Martinez, and myself.*

The "Digital Humanites" page links through to the "DH Commons" page, which was a collaborative effort between Merisa Martinez, Laura Ulens and myself. The header image of the DH Commons site was chosen, remixed, and added by Merisa Martinez (see **Figure *62)*.** This image and the resultin process was also performed to highlight KU Leuven Libraries' new "Open Images Policy."[34] Together with Demmy Verbeke, Merisa also wrote the texts of the "Digital Humanities Commons," the "Mission Statement," and the "What Do We Do" sections (***see* Figures *62*** and ***66*).**[35] Over Skype and Skype For Business, the three of us worked on the "About" section shown in **Figure *64,*** and integrated an interactive accordion effect on the names of the DH Commons staff.[36] When a name is clicked, additional information about the staff member appears, as depicted in **Figure *65*.** The icons in **Figure *63*** were taken from the website www.material.io using a element in the HTML code, which fetches the icons from an open-source Github repository containing style elements for websites. This method was also applied to the blog section in **Figure *64***, which was put in the middle and featured in a light blue colour to attract users' attention. Laura Ulens and I then translated both the "Digital Humanities" and "DH Commons" webpages in Dutch.

[34] See https://bib.kuleuven.be/english/BD/digit/digitisation/images-as-open-data
[35] These texts were written in September of 2019 before the launch of the DH Commons, and were slightly adapted by Merisa Martinez and Demmy Verbeke for the website.
[36] We had to switch between both Skype and Skype for Business, because Skype for Business did not allow KU Leuven students without a Skype for Business account to share screens, which was problematic when we were developing the websites and working collaboratively.

Figure 62. *DH Commons webpage featuring a header image from the KU Leuven special collections and remixed by Merisa Martinez, and a description, including reference to KU Leuven Libraries' open image policy.*

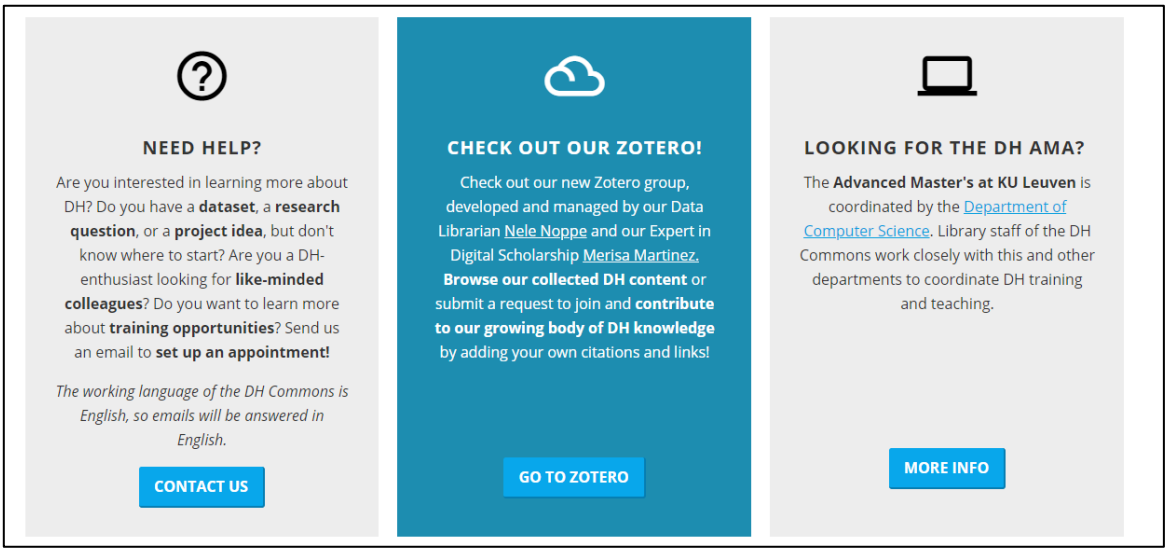


Figure 63. *DH Commons webpage featuring a help section, a reference to Zotero, and a reference to information on the DH Master's.*

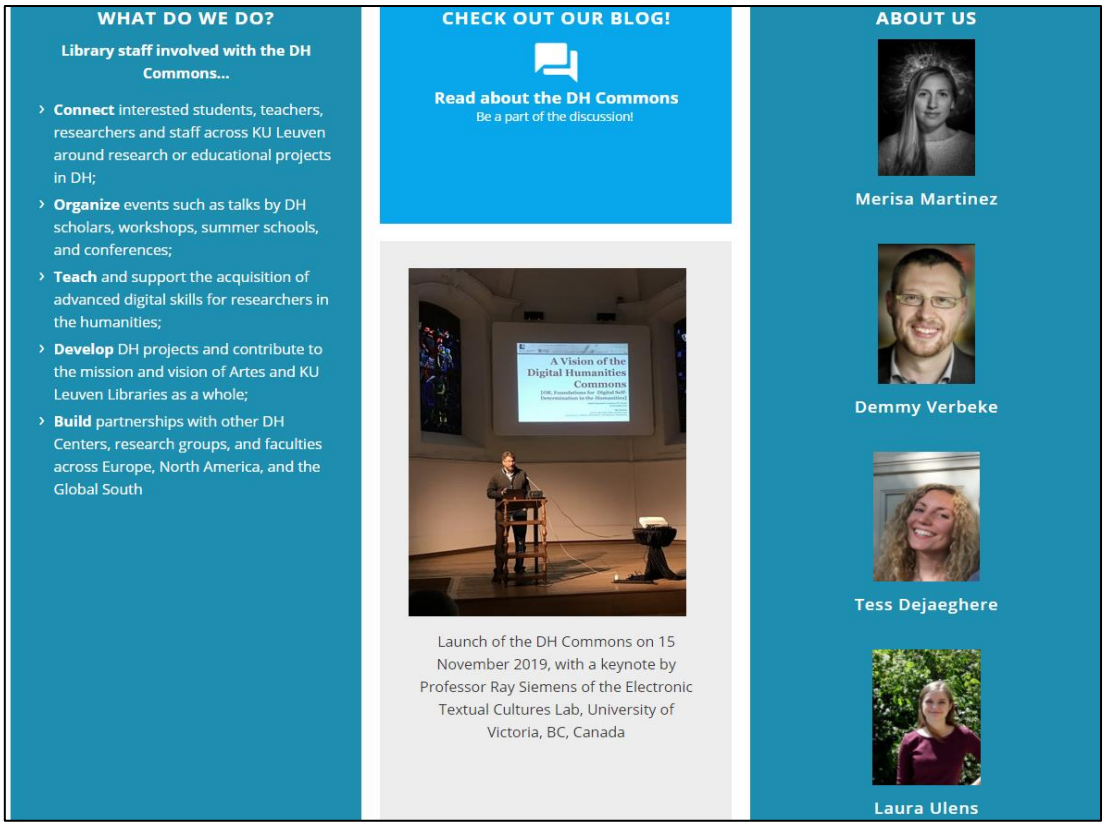


Figure 64. *DH Commons webpage featuring the staff, the DH Commons blog, and a section called "What do we do".*

Figure 65. *DH Commons webpage detail of staff information.*

Figure 66. *DH Commons webpage Mission Statement and footer image.*

vi. Hurdles

Collecting the projects across the KU Leuven website was a time-consuming process, and project information was often hard to find or not present. The KU Leuven website interface is quite comprehensive and easy to use, so technical issues were limited. Whenever we had questions when developing the website, we could address Dominique Coene, a Conservation and Management Process Manager at KU Leuven Libraries, who is also an experienced and developer of the KU Leuven Libraries webpages. The real difficulty of the internship was in coordinating collaborative digital work during the Corona crisis. While the original internship would have been performed *in situ* at KU Leuven Libraries Artes, Laura, Merisa, and I suddenly had to rethink what we were going to do while still integrating a practical aspect. While an in-person internship would have been less complex, we were able to work on the DH Commons website from home and coordinate our actions using Skype or Skype For Business. Despite challenges, this required an increased focus on clear communication about our objectives, and was an agile learning experience that was more redolent of collaborative Digital Humanities work performed in similar circumstances, such as international projects.

VIII. Conclusion

The DH Commons at KU Leuven was launched in the fall of 2019, and Laura Ulens and myself have worked together on the Common's web presence within the framework of a three-month internship coordinated by Merisa Martinez. In essence, we sought to make the DH Commons website fit into the online DSO landscape by learning from the techniques applied in similar initiatives. While Laura Ulens focused on the scholarly communication techniques applied by DSO staff, I focused on providing a structure for how future collaborative projects developed by and with the DH Commons could be displayed on the DH Commons website.

The research was conducted by analysing a corpus of five digital scholarship center websites across North America: the Digital Humanities Center in the University of Alabama, the Center for Digital Scholarship at Indiana University-Purdue University, the Center for Digital Research in the Humanities at the University of Nebraska-Lincoln, the Digital Scholarship Center at the University of Oregon and the Digital Scholarship Center at the University of Washington. The projects posted on the websites of these DSOs were subjected to content analysis, and were analysed according to the metadata provided on the digital scholarship project webpages. The metadata included information about the people who contributed to the project, information about the subject matter, information about funding, information about the technology used to complete the project, and information about dissemination techniques, such as scholarly outputs like a journal article, a dataset, a digital archive, or similar.

The landscape of Digital Scholarship Organizations is complex and variable, in name, physical manifestation, services offered, and activities performed by the associated staff (Lewis et al., 2015; Mitchem & Rice, 2017; Li et al., 2020). However, a general trend can be discerned where DSO staff collaborate with faculty-based researchers through the provision of data services (such as data visualization, data encoding, data management and data curation), infrastructure (staff, space, hard- and software), consultation and teaching, and publishing services (Goldenberg-Hart, 2016; Mitchem & Rice, 2017; Montoya, 2017; Zhou et al., 2019). Digital Humanities projects are generally the result of an intense collaboration across knowledge borders between researchers, (under)graduate students, academic staff, and library staff. However, the role of library staff is often undervalued and regarded as emotional labour rather than intellectual contribution, a "service-and-support-model" which has led to a tension between faculty staff and library staff working at a DSO (Coker et al., 2010; Nowviskie, 2011; Muñoz, 2012; Posner, 2013; Morgan, 2016; Perini, 2016; Gold & Klein, 2019). The staff of the DH Commons acknowledge this issue by introducing the following pillar on their website: "DH activities are interdisciplinary and team-based, and all team members should be valued and credited for their contribution," (Martinez & Verbeke, 2019). The issue was addressed in this thesis with the intention of opening it up as a subject of discussion during all the evolutionary stages of the DH Commons.

The complex ecosystem of Digital Scholarship Organizations was reflected in the webpages in my corpus, each of which had a unique structure and style. My analysis provided insights in the strategies applied by the staff of the DSOs when posting about collaborative projects. Data was gathered about the information they posted about the people who contributed to the project, the subject of the project, the funding organizations, the technology used to complete the project and the project's output type and dissemination strategies.

These observations were molded into recommendations for the DH Commons website: 1) as the DH Commons does not yet have a portfolio of their own projects, the website could follow the example of the DSOs' websites in the cospus and provide an access point for digital projects across KU Leuven and beyond. This way, the Commons can build a reputation as a place researchers can turn to if they want to find collaborators for a DH project. 2) In order to avoid the frustration surrounding acknowledgement of contributions, it is important that the Commons assuages these tensions by recognizing acknowledgement as an important area of discussion that should not be overlooked when posting projects on behalf of the Commons. 3) Adding a description is an important way to introduce people to the project, but a project goal should not necessarily be specified, as this may limit the possibilities of conducting a DH project for the sake of intellectual exploration rather than a set purpose. 4) While tags are convenient, they have to be carefully chosen as they do not always capture the project's scope. Tagging a project with fields of research rather than a subject (e.g.: food) or a project output (e.g.: blog) shows the cross-pollination of knowledge that brought the project to life and emphasizes the complexity of the collaboration efforts. 5) When specifying the output of the project, I suggest to link this to relate blog posts on the DH Commons blog where people can learn more about this specific output (e.g.: a digital archive) and the activities of the center. 6) Featuring images is important in making the website attractive and engaging. I suggest adding an image of the project's logo, an image related to the project, the protagonist of the project or an image from the project's archive. Additionally, adding a header image with a project in the spotlight is a good way to attract attention. 7) Mention funding partners visibly in the project description to posit DH work as an economically viable orientation within the Humanities.

Implementing these recommendations was not always possible. I had to work within the KU Leuven website management system called Plone and a predefined style guide with a set colour palette and structure. Digital projects across KU Leuven were collected in an Excel file, and six projects were selected and posted on the DH website according to the recommendations made in the discussion section, featuring an image, a title, a description of the project's scrope, a link to the project website, more information on the people who collaborated on the project and more information on the funding organizations behind the project.

While the DH Commons still has a long journey ahead, the posts now present on the "Digital Humanites" and "DH Commons" webpages within the KU Leuven Libraries web presences can serve as an impetus and a format for how future projects across KU Leuven can be posted and linked to other facets of the DH Commons, such as the blog. This way, the DH Commons could strengthen the presence of Digital Humanites at KU Leuven, and foster a collaborative work ethic across faculties and institutions at KU Leuven and beyond.

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X. Annex

***Annex 1**: A collection of Digital Humanities projects at the KU Leuven*

Name of the Project	Output Type	Tags (Fields of research)	Research group Department Faculty
3PI: Diagnosis of Papyrus-Parchment-Paper Manuscripts Through Advanced Imaging	digital archive	Theology, History, Literature, Archival Science, Electrical Engineering, Cultural Studies, Art History	Faculty of Theology and Religious Studies, Faculty of Arts, ESAT, the University Library
AKUL/15/05 Hercules Foundation: Remote sensing, digital documentation strategies, time/space analysis and interpretation in Archaeology	GIS-based IT system, database	Archaeology, History, Geography	Sagalassos Archaeological Research Project
Alamire Digital Lab	digital archive	Musicology, History, Archival Science	Musicology Research Group
An electronic research environment and edition of the Estoria de Espanna of Alfonso X, King of Castile and Leon	virtual research environment	Literature, History	Faculty of Arts
ARTGARDEN: Art Technical Research and Preservation of Historical Mixed-Media Ensembles: 'Enclosed Gardens'	matrix	Art History, History, Archival Science	Illuminaire Research Group, PSI Research Group
ASSIST: Assistive Speech Interface for Smart Technologies	language technology tool	Translation, Artificial Intelligence, Computational Linguistics	PSI Research Group
CAMETRON: Towards a Virtual Director	audiovisual technology tool	Media Studies, Artificial Intelligence	PSI Research Group, EAVISE Research Group
CantApp	web application	Literature, History	Faculty of Arts
College Dictaten	digital archive	Literature, History, Archival Science	Faculty of Arts
CORNELIA	database, data retrieval tool, data visualization tool	Art History, History	CS Digital Research Group
Cove	pedagogy technology tool, digital archive, electronic edition	Art History, History, Pedagogy	Faculty of Theology and Religious Studies
DETECT	academic research	Film, Literature, History	CS Digital Research Group

E-SLP: European Short Learning Programmes (SLPs)	policy	Pedagogy	CS Digital Research Group
Europeana Photography	digital archive	Photography, History, Archival Science	CS Digital Research Group
FINGERPRINT: Innovative Visual Data Management for Drawings and Prints Collections	data visualization tool, web plug-in	Art History, History	PSI Digital Research Group, Illuminaire Research Group, CS Digital Research Group
Flandrica	digital archive	Literature, History, Archival Science, Theology	KU Leuven Libraries
FWO G.0883.19N: Back to basics, with a twist. Applying visual and data analytics to constructing typology and chronology of material culture at ancient Sagalassos and for the discipline of Archaeology.	data visualization	Archaeology, History, Geography	Sagalassos Archaeological Research Project
FWO Scientific Network Grant (W001220N): Network for Agent-based modelling of Socio-ecological systems in Archaeology (NASA)	digital tool	Archaeology, History, Geography	Sagalassos Archaeological Research Project
I Love E-Poetry	blog	Literature, History	Faculty of Arts
INDICES	policy	Cultural Studies, Economics, Archival Science	CS Digital Research Group
IN / BETWEEN PLACES	virtual exhibition, physical exhibition	Art History, History	Faculty of Arts
Integrated Database for Early Music	online database	Musicology, History	Musicology Research Group, Alamire Digital Lab
Kaleidoscope	digital archive	Photography, History, Archival Science	CS Digital Research Group
LECTURE+: Effective Learning In Remote Classrooms Through Technology-Enhanced User Engagement	pedagogy technology tool	Pedagogy, Artificial Intelligence	PSI Digital Research Group, ITEC Research Group, DistriNet Research Group
NaBuCco: The Neo-Babylonian Cuneiform Corpus	corpus	Assyriology, History	Faculty of Arts
Photo-Lit	digital archive	Literature, History, Archival Science	CS Digital Research Group
PIXEL+: Universal Web Interface For Interactive Pixel-Based File Formats	web browser plug-in	Photography, History, Archival Science	PSI Digital Research Group, Art History Research Group
Quarries from the Amarna period in Dayr Abu Hinnis	3D reconstructions	Egyptology, History, Geology, Geography	Egyptology Research Group

RICH: Reflectance Imaging for Cultural Heritage	3D reconstructions, visualization hardware, online web viewer	Archival Science, Electrical Engineering, Cultural Studies, History, Art History	PSI Research Group, Illuminaire Research Group, CS Digital Research Group, KU Leuven Libraries
SCATE: Smart Computer-Aided Translation Environment	language technology tool	Translation, Interpreting Studies, Artificial Intelligence, Computational Linguistics	PSI Research Group, CCL Research Group, LIIR Research Group
SPOTT: Tomorrow's Scalable And Personalised Advertising Technology, Today	web application	Communication Science, Artificial Intelligence	PSI Research Group, Stadius Research Group
STON: Dutch Subtitling Based on Speech and Language Technology	language technology tool	Translation, Artificial Intelligence, Computational Linguistics	PSI Research Group
Textual Communities	digital archive	Literature, History, Archival Science	Faculty of Arts, Faculty of Science
The making of transregional Catholicism. Catholic print culture in the ecclesiastical province of Cambrai	online database	Theology, Literature, History	Early Modern History Research Group
Tomb of Djehoetihotep in Dayr al-Barsha	3D reconstructions	Egyptology, History, Geology, Geography	Egyptology Research Group
Trismegistos	online database	Egyptology, History	Faculty of Arts, Ancient History Research Group
Vatican Digitization Project	digital archive	Musicology, History, Archival Science	Musicology Research Group
VERIFLIX: Location Based Sourcing Solution for Verified User Generated (Live) Videos	data tool	Artificial Intelligence, Journalism, Communication Studies	PSI Research Group, CS (LIIR) Research Group
WEARE#EUROPEFORCULTURE	physical exhibition	History, Cultural Studies, Archival Science	CS Digital Research Group