



INFRA-2011-1-284432



## COLLABORATIVE EUROPEAN DIGITAL ARCHIVE INFRASTRUCTURE

**Project Acronym:** CENDARI  
**Project Grant No.:** 284432  
**Theme:** FP7-INFRASTRUCTURES-2011-1  
**Project Start Date:** 01 February 2012  
**Project End Date:** 31 January 2016

<b>Deliverable No. :</b>	D4.1
<b>Title of Deliverable:</b>	Report on Archival Practices
<b>Date of Posting to Basecamp/Confluence for Partner Review:</b>	February 2014
<b>Date of Finalised Deliverable:</b>	August 2014
<b>Revision No.:</b>	1
<b>WP No.:</b>	4
<b>Lead Beneficiary:</b>	University of Birmingham (UOB)
<b>Author (Name and email address):</b>	Deliverable developed by the CENDARI WP4 team
<b>Dissemination Level:</b>	PU = public
<b>Nature of Deliverable:</b>	R = report
<b>Abstract:</b>	<p>This report on archival research practices focuses on the “methodological challenges raised by the fragmentation of archives” (CENDARI Description of Works).</p> <p>The report is based on a literature survey and 30-45 min. long interviews conducted by the CENDARI team with 26 historians. The interviewees were from different countries, at different stages in their careers and included mainly (but not exclusively) historians from the two pilot areas of CENDARI – First World War and medieval European culture. The interviews consisted of three blocks: archival practices, challenges posed by transnational history, and the historians’ use of digital methods. The report is divided into two main chapters – one focusing on archival practices and transnational history, and the other focusing on practices of historians regarding the digital humanities.</p>



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	<p>The report provides a number of recommendations for CENDARI. Firstly, it suggests that CENDARI should pay special attention to catering to the needs of historians working on the preliminary stage of their research, where most benefit can be expected. Secondly, the report proposes to highlight communication and collaboration between historians and their peers and between historians and archivists.</p>
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**CENDARI**

**Report on Archival Research Practices**

**Work Package 4**

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25 June 2013





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## 1. Executive Summary

### Aim and Context

This report on archival research practices feeds into the deliverable D4.1 (“Report on archival research practice”), as defined in the Description of Work (DOW) of the project “Collaborative European Digital/Archival Infrastructure” (CENDARI). It focuses on the “methodological challenges raised by the fragmentation of archives” (DOW).

### Method

The report is based on a literature survey and 30-45 min. long interviews conducted with 26 historians. The interviewees were from different countries, at different stages in their careers and included mainly (but not exclusively) historians from the two core periods of CENDARI – First World War and medieval Europe. The interviews consisted of three blocks: archival practices, challenges posed by transnational history, and the historians’ use of digital methods.

### Structure of the Report

The report is divided into two main chapters – one focusing on archival practices and transnational history, and the other focusing on practices of historians regarding the digital humanities. Both chapters conclude with summaries. The report itself concludes with remarks on general trends found in the interviews and a list of recommendations and implications for CENDARI.

### Findings of the Interviews

The interviewees consider digitization of documents and finding aids particularly beneficial, with special implications for the planning of research trips. Nearly all historians interviewed make extensive use of photography in archives, while strategies to organize the collected sources are less uniform. There is agreement on the significant role of networking with peers



and communication with archivists. This is even more pronounced with regards to research on transnational history, where linguistic challenges and the fragmentation of archival holdings play a large role.

While First World War historians particularly see benefit in digitization of finding aids, medievalists – due to the source situation – make use of large digitized textual corpora. In general, however, historians make relatively little use of the range of digital tools offered and need to be convinced of their payoff. Historians acknowledge that digital developments have changed research practices, but they attribute higher significance to developments within historiography, such as interdisciplinarity, for this process. Historians continue to attach the highest meaning to reading, be it in the review of literature or to identify sources.

## Recommendations

The report provides a number of recommendations for CENDARI. Firstly, it suggests that CENDARI should pay special attention to catering to the needs of historians working on the preliminary stage of their research, where most benefit can be expected. Secondly, the report proposes to highlight communication and collaboration between historians and their peers and between historians and archivists.

Concrete recommendations are:

- the development of social-networking features, particularly for the identification of sources (esp. “hidden archives”) and to cope with problems posed by transnational questions (such as language problems),
- opening CENDARI up (to a limited extent) to an interdisciplinary audience,
- to deconstruct archival and national narratives through research guides,
- to pay particular attention to the development of tools of geographical visualization, source organization, note-taking, and cross-referencing,
- to maintain a high level of self-reflexivity to convince potential users of the benefits and practical implications of CENDARI.



## 2. Introduction

This draft report on archival research practices captures results of work on task 4.1 (“Review of Current Archive Research Practices”) conducted so far within the Work Package 4 (“Methodology and Archive User Requirements”). It represents the deliverable D4.1 (“Report on archival research practice”), as defined in the Description of Work (DOW) of the project “Collaborative European Digital/Archival Infrastructure” (CENDARI) (p. 15).

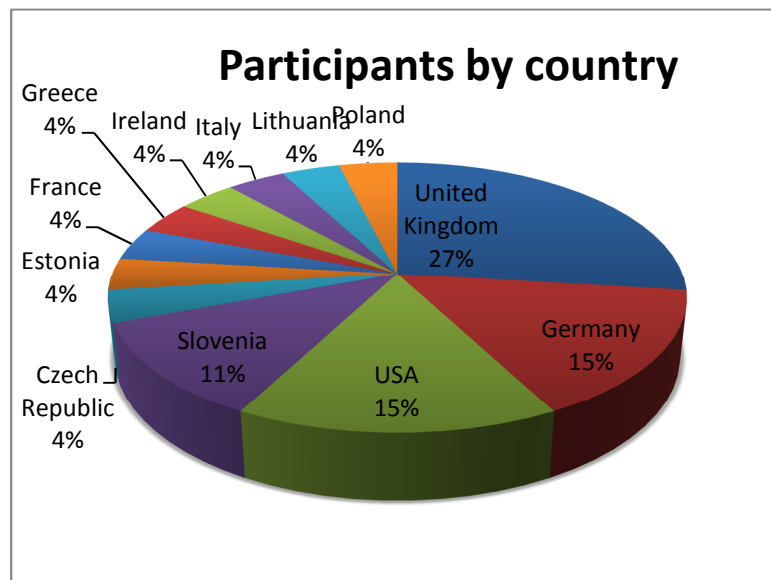
The basis for this report is a series of interviews conducted with historians at different career stages, coming from different European countries, and having different specialisations. Moreover, we used data from the questionnaire published on the CENDARI website. We use results from the desk research conducted within WP4 to contextualize findings within broader research on human information behaviour research, digital methodologies, and transnational history.

The results of this report are intended to inform other CENDARI-Work Packages, especially those concerned with the translation of archival practices into user requirements. As a base of users can only be established once a functioning version of CENDARI is put online, the evaluation of interviews and questionnaires is supposed to provide other WPs with “user surrogates” (Butterworth 2006) and thus shed light on user requirements and user behaviour.

As required by the DOW, we focus in this report on “methodological challenges raised by the fragmentation of archives”. The report thus specifically (but not exclusively) focuses on archival practices of and problems encountered by historians who conduct research on transnational issues and use archives or libraries across several countries. This reflects the historiographical core aspect of CENDARI – to facilitate “the writing of history from a long term, transnational perspective”.

## Interviews

For this preliminary report, we have conducted a series of interviews with historians of various specializations and career stages. The overall aim of the interviews was to systematically assess the various research practices with regards to those issues that form the core of the historiographical considerations of CENDARI: transnational research, the challenges posed by the fragmentation of archives, and the implementation of digital methodologies to master these challenges.



Altogether we have conducted 26 interviews, each of which lasted between 30 and 45 minutes. The duration depended on whether interviewees used digital methodologies for their research and/or were conducting research within one of the CENDARI domain cases (First World War and Medieval European Culture),

as these persons were asked additional questions.

Historians interviewed were from various European countries such as the United Kingdom (7), Germany (4), Slovenia (3), France (1), Italy (1), the Czech Republic (1), Estonia (1), Greece (1), Ireland (1), Poland (1), and Lithuania (1). Moreover, 4 historians from the United States were interviewed. They include PhD candidates (6), early career researchers holding a PhD/postdocs (6), advanced career researchers (10) and professors (4). 8 of them

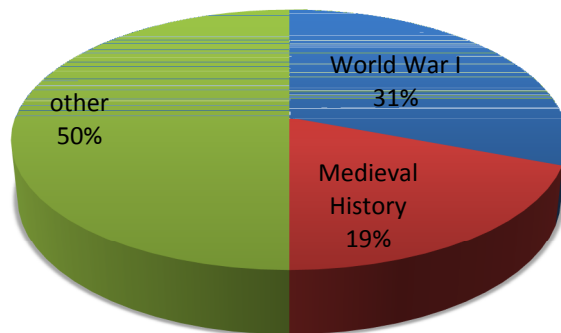




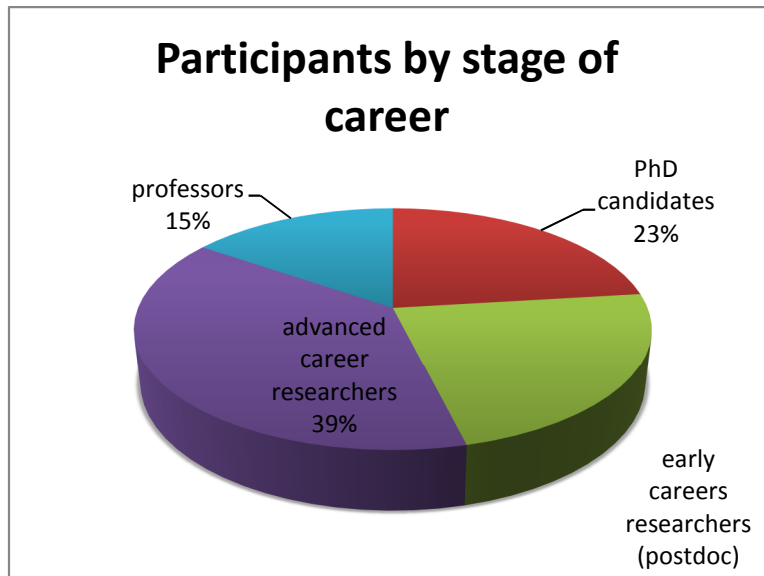
specialise in the history of First World War, 5 in medieval history, and 13 are working on other fields, ranging from Early Modern History to Contemporary History.

All persons interviewed are professional historians with university or research-institute affiliations. Findings suggest that for the second row of interviews (see below), a number of amateur historians may be included, at least for the World-War I domain-case. Interviewees were mainly selected according to three criteria: country of origin, special field, and affinity to digital methodologies.

### Participants by field of research



The questionnaire was made up of three main blocks, which touched on CENDARI core issues: the first on transnational research and fragmentation of archives, the second on archival practices and archival intelligence, and the third on digital methodologies. Additional smaller blocks concerned quantitative data on the interviewee, domain-specific questions, and changes in archival practice. Interview questions were formulated in a way that they could be answered with a limited set of controlled vocabulary for quantitative use, but required further elaborations for a qualitative analysis.



To substantiate the findings with special emphasis on the CENDARI domain cases, a second row of interviews will be conducted exclusively with domain specialists. The questionnaire for this interview series will be informed by insights gained over the course of the two CENDARI domain workshops, which will take place on 17-18 October 2013 in Berlin

(First World War) and on 14-15 November in Prague (Medieval Europe). The results of the questionnaire will be published as part of the Final Report on Archival Research Practices (M24, revised M27).

## The Report

The report integrates the three interview blocks into two main parts. The first and the second block of questions (transnational research and archival practices) are discussed in one chapter. The second chapter discusses research practices in the digital humanities and the results of the third interview block. Both chapters are preceded by introductions and conclude with short summaries and remarks. The whole report concludes with a summary, a section which integrates the findings of the interviews, highlighting the aspects of communication and collaboration as well as the stage of research most likely to benefit from CENDARI, and a list of recommendations for CENDARI.



### 3. Research Practices and the Fragmentation of Archives

#### 3.1 Introduction

Historians (as scholars of the humanities in general) as a group are extremely diverse. Less than two thirds of historians (data for the USA) work in institutions of higher education (Bender et al. 2003). There are thus a substantial number of trained historians working as teachers, journalists, editors, curators, consultants, or filmmakers in places such as schools, historical societies, law offices, libraries, government agencies, or in the private sector. This picture becomes even more diversified if we bear in mind that there are three different aspects to history: It is a discipline, a profession, and a career (Spiegel 2005).

This results in an abundance of historiographical practices that share a common interest in gaining historical insight, but differ significantly regarding the path to get there. History being a discipline that is traditionally in most countries (with significantly different gradations) rather embedded in the academic context of humanities or *Geisteswissenschaften* than in the empirical social sciences, it tends to favour epistemological education – or *understanding* – over the acquisition of practical skills.

Nonetheless, historians perceive their discipline as empirically grounded (Bender et al. 2003). It is a common experience of graduate students that they leave universities with the ability to identify significant research questions, but without sufficient knowledge on methodologies and research practice to enable them to answer these questions (Rutner/Schonfeld 2012). Oftentimes, young researchers are surprised and relieved to hear that other historians' research practices match their own and that they thus have not been working in a "frivolous" fashion.



Among the research strategies shared by all historians (as researchers in the humanities in general) are such elementary practices as reading and note taking, which researchers balance between computer-based and non-computer-based to varying degrees. In fact, not reading is perceived as a real danger among humanists (Brockman et al. 2001). As strategy to acquire sources of information (primary and secondary), historians tend to use methods of “chaining”, i.e. the systematic perusing of references in thematically related publications. Another access to information is based on collaborative networking, which is traditionally regarded as little pronounced among historians, but in fact constitutes a crucial academic strategy, as the academic “grapevine” provides historians with references that have not yet been published, indexed or cited (Brockman et al. 2001). This may occur as the circulation of drafts, presentation of papers, or the sharing of citations and ideas.

Anxiety among historians regarding the “correctness” of their research practices is further amplified by an increasing interdisciplinary receptiveness of the historical sciences and the ensuing broadening corpus of what are considered reliable and meaningful historical sources. While this openness and eclecticism is considered a strength of the historical discipline (Bender et al. 2003), especially the linguistic turn has led to the emergence of a number of primary sources with a strong narrative character, that had hitherto been neglected by historiography (Spiegel 2005), such as photographs, movies, memoirs, or oral testimonies. Taking into account that even “traditional” archival written sources may take very different shapes as manuscripts, facsimiles, microfilms, or scans, historians nowadays are faced with a multitude of different source genres, each of which requires an individual methodological access.

The increasing scepticism towards pre-structuring narratives (and national narratives in particular) has further complicated archival research, as historians turn to complementing chronological and institution-based approaches with spatial narratives, which aim at making research more comparative, thematic, and transnational (Bender et al. 2003). This makes research across various genres and repositories necessary – an approach complicated by the historical fragmentation of European archives. Other historiographical trends contributing



to this development are foci on communication, interaction, cultural transfer, and cultural exchange, all of which require a transnational access to research questions.

This first part of the report thus aims at identifying (a) archival research practices of historians: How do historians work in archives? How do they acquire knowledge on the archives, and what role does the archivist play? As a second step, we will identify (b) strategies of historians to cope with challenges posed by transnational questions against the background of the fragmentation of the topography of European archives.

### 3.2 Archival Practices and Archival Intelligence

The aim of the first set of interviews was to establish the range of research models, methods and techniques that historians employ in their work on primary sources in archives and libraries, as well as the impact of the environment and institutions on historians' research from concept to publication, and examine whether there exists a common research approach.

Historians “interact” with archives in order to “identify” the scope of sources within collections, to “access” relevant documents, and to “interpret” their content effectively (Gilliland and McKemmish 2006). Contemporaneous archival research is increasingly recognized for its “complexity, sophistication, and interdisciplinary value” (ibid.) to accommodate the breadth and width of transnational approach to historical investigation, although the material in question still tends to be (traditionally) identified and accessed through printed or published guides, finding aids, indexes, lists and catalogues.

An important goal of our survey was therefore to see whether there is any discernable transformation in the way historians trace as well as select particular primary documents that



essentially guide research questions and shape scholarly understanding of specific historical processes. The latter inherently relates to the changes that have been recently brought about by the digitisation of original documents and introduction of complex search engines that are “challenging fundamental approaches to archival research” (Cunningham 2008: 3). The interviews likewise give us an additional insight into the importance that researchers attach to their personal communication with archivists and other experts in the field, researchers’ own organization of archival material and the value that they attribute to specific institutional systems.

### **Do you know exactly what you are looking for before actually going to an archive?**

The vast majority of interviewees (20) replied that they more or less know what sources they are looking for before visiting an archive. Whereas they all essentially agree that every research trip demands some “preliminary preparations” (7) and planning on what archival collections they want to see, the latter also depends on “the level of particular research” (8, 24). As one modern historian put it, “if [research] is fairly advanced, I usually know very well what I am looking for. However, at the beginning of the respective research I tend to stay as open as possible to various sources and various information” (8). This is at the same instant congruent with a medievalist’s belief that it is “necessary to have a starting point”, but also “flexibility to pursue a lead” (11). It may be said that a researcher invariably follows the thread provided by the given material in some specific archive, in that “[o]nce you are there, you always find things you weren't aware of, for instance, material that the archivist suggests, and you think, that might be useful.”(4)



## **How do you prepare for your archival research trips? Are finding aids and/or archival guides available online?**

11 interviewees answered that finding aids were available online, 12 replied that they are available “more or less”, and 3 that they were not available at all.

In the opinion of the large majority of interviewees, online finding aids are very important for effectively conducting research and ascertaining “how much time” they would need to spend in an archive (2). Since the “physical and geographical” locations of the archives “matter” due to financial issues but also various work and family commitments, one First World War historian usually tries to see how much work he can actually do from home. In his experience, archive guides are “normally available online” and he always uses them (19). Moreover, a modern historian asserted that research preparation “depends on the quality of the finding aids: the more information they give, the more precise the preparation. Through good finding aids I can also get to know what I am looking for”(21). According to one First World War historian, it is essential to get as much knowledge as one can about the resources prior to the archival research trip and then narrow it down to specific papers also through searching the online catalogues (22). However, if these are not available, in reference to another First World War historian, he writes to the “corresponding authorities” to inform him whether the archive in question holds any relevant material for his research. “After I collect all this data,” he says, “I can see what sources are available and draw the research schedule. I also try to combine visits to several archives” (23). In addition, some historians employ alternative sources of information to make research more efficient: “It is simpler to research in the archive that you already know. Whenever I go to a new archive, I first contact people who have researched there and they help me with advice. Archives differ, and so do archivists as well as the possibility of reproduction. Various parameters make you think of how to approach particular archives and their material. Wherever applicable, I make use of the online guides. Otherwise I consult the archive's registers”(26).

**For how long do you usually plan visits to archives?**

The length of stay in the archives varies from one hour to several months and largely depends on the nature of research, quantity and quality of relevant material, geographical distance, available funds, and individual's work schedule.

From the perspective of a medieval historian, specific research can be done “on one day per archive, because I'm in each case looking for only one certain manuscript, and even with these manuscripts I know exactly what part or which page I need” (6). Another medievalist conducts “at least a week of intense work, maybe return for another week later on to pursue new questions”, while the first day is always just orientation (11). In most cases the length of stay is dictated by grant (3, 5, 6, 9, 15), which might, however, also enable researchers “not [to be] completely time limited” (20); schedule (1, 5, 19, 22); “the complexity of the project” (21), and the quantity of relevant material in specific archives (23, 24, 25, 26). The duration may depend not only on what sources one expects to find, but, in the words of a modern historian, on “how quickly [she] will be able to get there a second time”(2) to collect the required or missing fragments of information.

**How easy is it to pursue your research question within the current holdings/collections organization systems that you have encountered?**

Three medieval historians answered that it is easy (7), neutral (6), or difficult (11), in that one often needs to “read [one's] expectations against the grain” (11). Three First World War historians described their research in selected archives as easy (1, 22, 23). One asserted that the archives he is currently using are “well set up” for what he wants to achieve and that the “staff are very helpful” (22), although countries may in this respect differ “dramatically” (23). Five First World War historians answered that their experience is neutral (8, 16, 17, 19, 20).



Three modern historians find it difficult (2, 18, 21), which is related to the specific requirements of one's research topic (2) and also to the issue of "political decision-making of what sources are made available. Moreover, there may be legal obstacles dealing with data protection preventing the archivists from giving [the researcher] the information [he or she] needs" (21), which again largely varies from one country to another (21).

Five modern historians have a neutral experience (3, 9, 12, 14, 24). In addition, they believe that being able to use "finding aids online would be a huge step forward for research" (9). Although "some organization systems are baffling and unhelpful" (14), which is often the case in poorly organized archives with insufficient expert support, a historian's work recently became a lot easier due to "digitization of journals" that made work "much more efficient" (24).

Five modern historians stated that their work in the given archives was easy (4, 5, 10, 25, 26). According to one historian, the research experience is largely conditioned by one's close collaboration with the archivists: "Usually, [work] is easy, especially once the archivists acknowledge you as a serious researcher. One also needs to take into account certain academic restrictions required by the institution (e.g. in the Vatican Secret Archives) and bear in mind, that, for instance, the Vatican archives will not grant access to anyone without the academic reference or knowledge of Latin" (26).

### **How do you evaluate the possibility to take photographs or scans of sources in your archives of choice?**

Virtually all interviewed historians agreed that the possibility to take photographs of primary sources is of immense importance for their research. However, this may be problematic in specific archives and countries due to their regulations.

Two medieval historians referred to taking photography as very important (6, 7). One asserted that it would be ideal to be able to take photographs “everywhere” and “as many as you like” (6), especially since ordering scans in some archives can be “very expensive” (ibid.). The possibility of using pictures was “very valuable” for another researcher in her PhD, in that she was able to study them more thoroughly in her own workspace and at her own pace (7). Moreover, given that “a lot of the materials was written in a very complicated fashion, it was good to be able to read that in peace and quiet at home” (7).

The medieval historian who did not think that this possibility was important at all (11), explained that she very often deals with very limited amounts of sources and consequently works very intensely with them, or it's a “treasure hunt” tracing the problem through various parchments and parchment fragments. In this case, reproduction is more important. (11)

In contrast, 11 modern historians answered that the possibility was very important (2, 3, 4, 9, 10, 12, 18, 21, 24, 25, 26), whereas one replied that it was not important (5).

One historian believes it to be “essential, it would not be possible for me to research on that topic if I could not take photographs” (3), whereas another researcher “basically photograph[s] absolutely everything” (4). The third historian reads and takes notes *in situ* to “work out the logic of the archive” and “proceed[s] fairly slowly”; nonetheless, he at the same instance takes a lot of photos, “if only for back-up and to refer to” (10). “I rely on this extensively,” claims another researcher (12), the worst being the “cost involved in reproduction” (ibid.). One historian was particularly critical by exposing the disadvantages that researchers face in the archives in particular countries: “To me, it is incomprehensible that the German archival law still does not allow archive photography. [Furthermore], [t]his also stops me from sending out students, because of the linguistic barrier and because it's too time consuming” (21).

In the group of the First World War historians, one replied that the possibility is important (8) and 6 described it as very important (1, 16, 17, 20, 22, 23). A First World War historian pointed out that digital photography is normally not problematic in "the National Archives, but in smaller archives it is. I know that this is a problem in Latvian archives, too." (1) Another regrets that many of the archives he is using don't allow researchers to take photos (16), but when the research trips are short and the workload is great, photographing is "essential" (17), which becomes a problem in Vienna (ibid.) and in the German archives (20). The latter historian believes that "both photographing and scanning should be allowed" (20); digital photography is likewise appreciated for enormously shortening the amount of time one needs to spend in an archive. In this regard, "German archives are very problematic" (23).

### **How relevant is the archive's own narrative about its holdings for your research?**

The answers varied according to the stage of one's research and to specific conditions in the archives in question. Whereas most medievalists described it as important (7, 11), one (6) thought such narrative was negligible, because "[they] are highly unusual for early medieval times" (6). The former two interviewees, however, expounded that is "very important to be aware of the internal narrative, the guiding that the archive provides" (7), but also of "which narratives have survived from a particular period" (7). Moreover, this awareness is "fundamental", since only a global understanding of specific events in the past can tell you if "parchments are there or not or missing"; this is all the more significant in that WWII resulted in a lot of lost collections, too (11).

Four First World War historians believed the narrative is important (1, 19, 20, 22), whereas three found it unimportant (16, 17, 23). A First World War historian pointed out that this narrative is important at the beginning of one's research and that the importance slowly diminishes over time as one gets more insight in the field (1). Another First World War



historian believes it to be “generally useful, but always one needs to be working close with the archivist. It's very country-specific” (20).

In contrast, the remaining three find “the accessibility important, but not so much the narratives” (16); this element is insignificant because “most narratives are only of a general nature” (23), whereas another First World War historian does not think to “have encountered that much, because [he has] used only larger archives, no smaller ones” (17).

On the other hand, seven modern historians describe it as significant (3, 4, 10, 14, 21, 25, 26) and six as not important (2, 5, 9, 12, 18, 24). One historian explains that he finds it “important, especially if the archive is new to me. It allows me to see whether it's relevant to my research; it also shows the accessibility of sources” (21) and it is beneficial since “you need to know the essential information about the archive's history and its holdings in order to be able to efficiently locate their resources” (26). Following this line of argument, the archive's own narrative “is not unimportant” for a researcher “working a lot with diaries, which after the war have only in very few cases been researched on or published. Usually the archive purchases these holdings from the family after the death of the author. Sometimes the archive omits some information on these documents, or even some documents themselves, such as research notes made by these authors, which are very relevant for my project” (3). However, according to another historian, the narrative may be “useful to an extent,” but it may also be a “rather superficial gloss over the topic” (25) or should be treated with caution like any other source, but may still be valuable for getting an idea of “what's not there or what's missing” (10).

On the opposite spectrum, one historian asserted that “the narrative is not helpful at all, because the documents are ordered and presented in a fashion that made it difficult for me to judge whether they were important for my research or not.” (2). In the words of another researcher, “[a]rchives are all pretty glamour-less places [...] Do I care about when the archive was founded? No.” (9).

### **How important is the role of the archivist or librarian for your research?**

The large majority of medievalists described the archivists' role as very important (7, 11, 19). They acknowledged them as being "extremely helpful and useful in providing access to the material" (7) and "sometimes [they] knew the collections extremely well" (ibid.), which made them "very significant for [gaining access to] inside information" (11).

Similarly, four First World War historians (17, 19, 20, 22) thought the archivist's personal aid was very helpful and added that in one's research, "it's ultimately always the matter of making good contacts with individuals; archivists' local/expert knowledge can be extremely valuable" (20) for extracting key stories or information on particular people and places to enrich the narrative of one's research. Thus, when the archivist's work is done well, it "can be very important. In some cases it is crucial to talk to the archivist about the sources you are looking for" (22).

Two First World War historians did not find the archivist's part important (1, 23). As one historian put it, "if the online resources are good, the archivist's role lessens" (1) or becomes "unnecessary" (23). However, this contact can be valuable when a researcher works in an archive that is not well organized (23).

Eight modern historians (3, 4, 12, 18, 21, 24, 25, 26) described the archivist's role as very important or important (2, 5, 9, 10). The significance of the archivist increases if one deals with resources that have not been published or researched on (3). Their aid is also described as "crucial" (24) and "can greatly facilitate the research" (21); in addition, a historian expressed his belief that the archivists and historians ought to "engage with each other to see how sources should be retained, how they should be made accessible" (4).

**How important was information given by archivist directly to you for your research?**

The interviewees mostly maintained that this information is very significant. In line with the view of medievalists (7, 11), the majority of the First World War historians answered that the information received from the archivists was helping them substantially (8, 16, 17, 19, 20, 22). They unanimously agreed that an archivist's information is "always almost central" (8) for finding the relevant sources, which is particularly crucial in the later stages of the research (*ibid.*), and if the archivist is an expert in the period that one is working on (22).

In the selected group of modern historians one believed the information was not important (4), two described it as important (9, 21), while eight thought it was very important (2, 3, 10, 12, 18, 24, 25, 26).

An archivist's aid was believed to be indispensable when offering help with finding aids in a language that one historian could not read (2) and when they were able to assist with their knowledge about the contents in the unorganized materials (3). However, the level of necessary contact between researchers and archivists also depends on the quality of the online information. In the words of one researcher, "the better the finding aids, the less significant the impact." (21)

**In how far did you communicate with archivists before and after the research trip?**

Medieval historians (6, 7, 11) invariably communicated with them beforehand to order manuscripts and in some cases to obtain information on the ordered digital copies.



Modern historians (12, 18, 24, 26) likewise usually contacted them prior to their research trip with the purpose of learning about specific practical issues (12) or to enquire about sources and their accessibility (24). One historian asserted that he invariably communicates with archivists before and after the research trip; as he put it, archivists may become one's "valuable research assistants" by providing additional information on relevant material and by making further investigation about sources (26). In order to understand broader historical problems, researcher needs to be able to locate and gather such "hidden" bits and pieces of information; after all, it is "details that matter in interpretation" (26).

Those modern historians who only occasionally get in touch with the archivists (2, 3, 4, 9, 10, 14, 21, 25) prior to the visit nevertheless maintain that personal contact is sometimes necessary to ascertain "how important [the archival] holdings are" (2); they also pinpointed the importance of remaining in touch after their visit is over, because the archivists might be able to help one with further inquiries about holdings that are relevant for other research topics (2). Communication is sometimes required to order "documents in advance" (3) or to notify the archive that you are coming (9). It is less necessary in the "archive where they have an online system" (4), whereas it could be essential to gain information from an archivist about holdings in small and little known archives, which otherwise could not have been uncovered (21).

The majority of the First World War historians (8, 19, 20, 22) likewise agreed that it was important to communicate with the archivists before the research visit, especially with regard to "the first screening of the sources and their preparation for the study" (8); it also mattered to remain in contact with them (20, 22).

Those who contacted the archives irregularly (16, 17, 23) did so to "find out how large the collections are" (16) and to order the documents in advance, although the relevance of communication increased "if there are no online catalogues or finding aids" (23). Only one



First World War historian asserted that he communicated with archivists neither before nor after the research trip. (1)

### **What are your favourite archives and why?**

Most medieval historians asserted that the best archives are those with “highly competent” archivists (6), quality searching tools (7) and accessible sources online (13). Modern historians likewise enjoyed the most the archives in which they encountered helpful and friendly archivists (2, 8, 24), an ordering system that is “quick and easy to use” (4), and the archives where the information was presented in a “user-friendly format” (9). Furthermore, the researchers highly appreciated the possibility to take digital photos (18); accessibility of sources; amount of online resources; abundance of relevant and clearly organized material; convenient and comfortable working place. One historian mentioned that the Archive of the American Institute of Physics was excellent not only due to the “competence of the staff there,” but also because the Archive regularly held a workshop series, which added a special scientific and social value to the whole research environment (21).

### **How do you organize sources after an archival trip is over?**

The vast majority of the First World War and modern historians in this survey confirmed that they took photos of the archival material. The First World War historians organize their sources thematically (17, 20) and in accordance with the location of archival sources (17), the date of particular research trips (19), by the file (22) and research subtopics, which are “stored and used for further writing of scholarly texts” (8). One First World War historian admitted that he does not “really organize them”, but rather stores and exploits them in accordance to the topic that he is writing on (23). Similarly, modern historians explained that they make a selection of digital sources, which they then use or translate first, and thereafter take notes of the photographed files (2); other historians create folders for different





documents and sort them by the date of archival visit and store them on external hard drive (4); organize research "in the field" to avoid having a mess, and for every photo use Acrobat to make a pdf file with exact citation/archival reference (9); pdf software is also used along with its automatic text recognition (12); one historian acknowledges to keep a journal of every researched documents, and then files the sources by the archive where they are, and finally uses Dropbox for the created excel file for each document (14). Other historians create "some structure" and file the photos according to "typology and content" (24) or organize them by date of visit and by which papers were consulted (25) and by files and sub-files for each of the archives and their content (26).

### **To what extent have you made use of little known archives or libraries?**

Five First World War historians (1, 8, 17, 22, 23) have used to some extent local and smaller military archives; two of them (19, 20) visited the little known archives or libraries "a lot" in the hope that that their material "could add some significant richness to the research topic"; however, in the words of one researcher, "you never really know what you might find" (20).

Two modern historians have also exploited them significantly (3, 4); whereas the former claims to have used "a half or maybe even two thirds of the archives" that could be defined as small or little known (3), the latter exhausted specific family archives, "but they are probably not archives in the way that they are traditionally understood" (4).

Seven modern historians (2, 12, 14, 18, 21, 24, 26) answered that they have used little known archives "a bit" and that their choice was largely dictated by the nature of research. The advantage of working in smaller archives is that they (may) contain material with substantial "biographical elements" (21); although the archive that one researcher visited was rather peripheral, it ultimately proved "extremely valuable" for her the research (24). Church archives, on the other hand, nearly always give you the feel of "being hidden" or



"secret" due to the legally restricted access (26). Four modern historians (5, 9, 10, 25), on the other hand, have not used them at all.

In the group of medievalists, only one has used them "a lot" (11). In this case, the hidden archives were located in small churches and convents. Although the Napoleonic government "forced 80% of holdings into state institutions", many ecclesiastical institutions secretly kept some holdings that still remain in obscure places, where "you find proper gems" (11). Two medieval historians examined sources in little known archives negligibly (6, 7); one used a church archive, which was located in "the tower of a church with documents from 16th to 18th century" (6), whereas the second "would have liked to use them more often, but the material wasn't available" (7). One medievalist, however, has never used them at all (13).

### **Why did you choose these archives or libraries and what led you to them?**

Most historians were led in their quest for sources by personal advice and other experts' guidance, but also by tracing the reference(s) in literature.

The First World War historians answered that they discovered them with the help of "personal contacts and private First World War collectors" (19); the decision was also based upon the "recommendations" of colleagues (8, 20) and the "references [found] in the relevant literature" (8); researchers were driven to "these specific sources" to complement particular research topic (1).

Modern historians likewise followed the advice of other historians and personal contacts (2, 3, 12, 14, 18, 26) or were brought to them through investigation of various records (21). Specific nature of research in dispersed locations usually implies fragmented sources, which makes "networking and exchanging of information with other historians and researchers



crucial" (24). The experience of the medievalists was very similar: they discovered them through "personal contacts" (6, 11), which entailed work in "obscure places" but with "untapped sources" (11).

### **How are these archives or libraries organised?**

In the experience of the First World War historians, many of them are "more flexible when it comes to the time needed to prepare sources for study" (8), are more manageable and well organized (19), but with "big emphasis on local events" (20). One First World War historian claims that they are "not very well" organized and that such material (e.g. private papers) is normally scarce and the "categorization of their files rough" (23).

Modern historians found that the sources they employed are "very well indexed and the archivist knows the holdings very well" (2); another found the "signatures there less complex" (3) and were in some sense "better organized than larger archives, because the people who are looking after them know every detail" about the holdings and what may be interesting for someone's particular research subject (4). Moreover, these archives were described as "most friendly and open to unprepared outsiders" making inquiries about sources (12), but suffering due to lack of financial resources, number of expert archivists and research space (24). In contrast, one historian found them disorganized, whereas the provenance of their material is often unclear (26).

One medievalist asserted that they "basically don't have finding aids" (7), which inclined the researcher to document the finds extensively in the footnotes, so that "if others want to use the archive, they know where to start" (ibid.); in the experience of another medieval historian, there was "no organization whatsoever in these places" (11).

**To what extent does their organization differ from that of larger and better-known archives or libraries?**

Whereas one First World War historian (19) believed that the distinction was great in that “they are definitely not as well organized, don't have online resources and finding aids, and sometimes access is restricted,” the majority though that the difference was small (1, 8, 16, 17, 20, 23). The main difference was that “their source collections tend to be smaller but easier to search in” (8); the staff is less trained (17); they were “more intimate in terms of the feel and [since] you personally meet the archivist” (20); most of them have short opening hours and they normally don't allow you to take photos. Moreover, a researcher first needs to get to know the archivists and/or owners of the private papers and gain their trust. The disadvantage of this approach is that “the start of your work may be slow and less productive” (23).

Seven modern historians believed that they differ to a great extent (3, 4, 12, 18, 21, 24, 26). In their view, they may be more friendly (12) and more efficient in terms of work (21) and in some sense better organized than the larger archives. This was due to the fact that the archivists knew well their collections and that they were better indexed (2, 4).

**Once uncovered, were these archives or libraries easy to access?**

According to one First World War historian, it was “difficult, but possible” (1); four found the access easy (8, 16, 19, 20); one thought it was hard to get what was ordered, although there were no official restrictions (17), while one had a very mixed experience (23).

One modern historian replied with “no” in that “they never answered to e-mails” (2); three answered with “more or less” (3, 21, 24) and that the accessibility largely depended on the

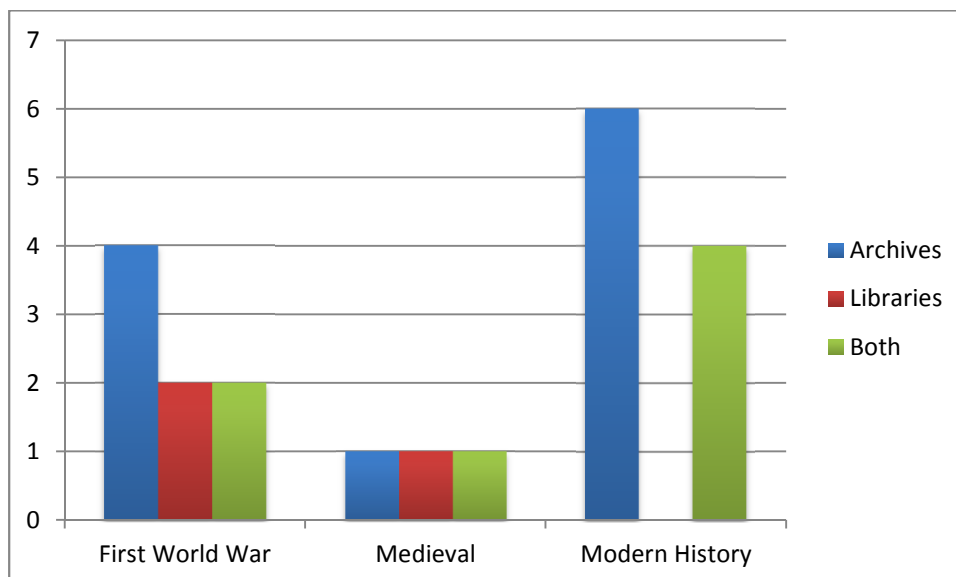


complexity of the bureaucracy (24) and helpfulness of the archivists; two, on the other hand, had no problem accessing them at all (4, 18), while adding that the archivists have all been “very forthcoming and open” (4). According to one historian, it might have been “difficult to find these archives, but it was easy to access them” (ibid.).

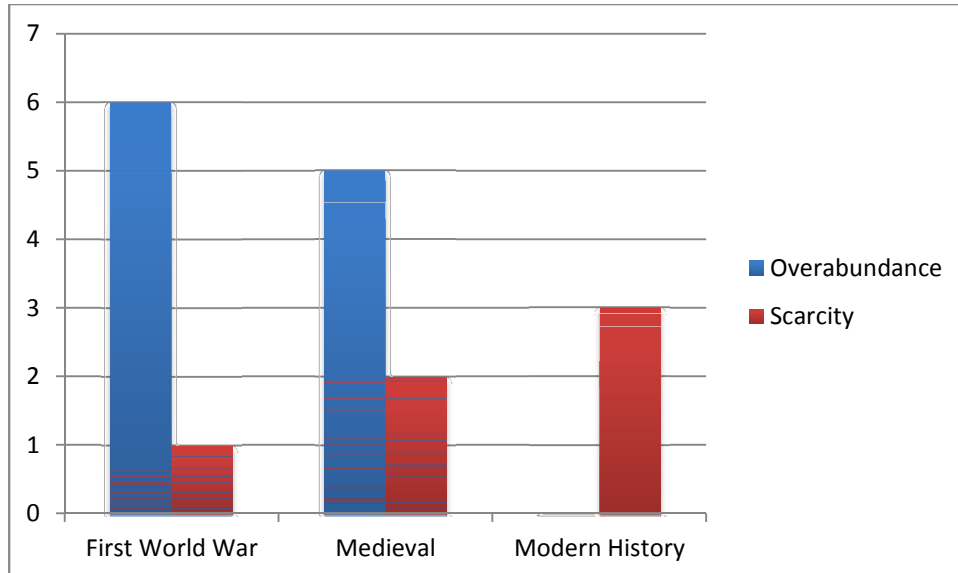
One medievalist had a different experience: the problem occurred due to difficult communication with various small archives. “For my magister thesis I sent out 20 letters to different municipal or church archives, and 10 of them did not even answer” (6).

#### IV. Domain Specific Questions

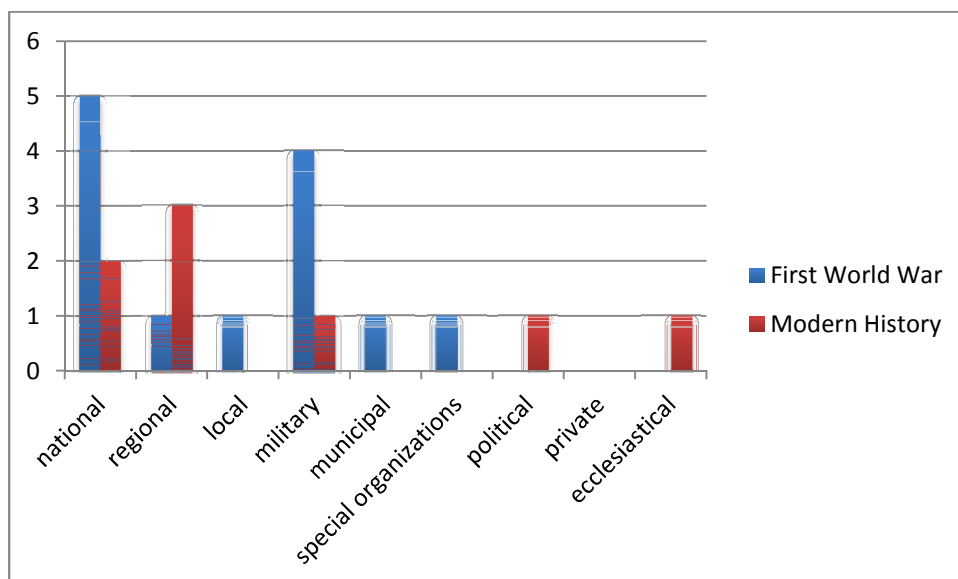
##### IV.1. Do you rather use libraries or archives to find primary sources?



**IV.2. In your field of research, what is a greater problem: selecting from an overabundance of sources, or scarcity of sources?**



**IV.3. What type of archive do you use most? (national, regional, municipal, military, ecclesiastical, etc.)**





### 3.3 Transnational History and the Fragmentation of Archives

This block of questions aimed at examining how historians conceptualize research projects, with special regards to “transnational aspects” in their work and the effects of the “fragmented” archival landscape in Europe. In this section, we paid particular attention to how the nature of access to sources across different archival contexts affects the conceptualization and realization of research projects, what problems researchers encounter in archives when working on transnational issues, and what strategies they develop to cope with them.

The specifics of transnational history have not been made object of human information behaviour research yet. The Ithaka S+R report, however, devotes a subsection to research in “international archives” (Rutner/Schonfeld 2012), stressing that locating these archives and coping with the scattered character of sources in them pose the largest challenge to historians – also because it severely impedes the thorough planning of research trips. The term “international archives” is, of course, problematic in itself, as it suggests that such archives work according to a different logic than “national archives”, and that the logics of – and thus problems faced in – “international archives” may be generalized. The underlying assumption of this block of questions is that these archives pose a challenge to researchers exactly because they are *not* international, but rather embedded in a national context that may significantly differ from the national context the respective historian is most firm in.

Due to the difficulties connected to conducting research trips, it seems likely that the use of online materials and the necessity to take photographs in archives is of even greater importance when using archives abroad. We thus paid special attention to the fact that a significant amount of “archival work” has been relocated to work at home or in the office, causing archivists to worry that *“in some cases historians’ archival skills are now focused*



*primarily upon mastering the technologies of their laptop and digital camera software in order to minimise the time they spend within search rooms.” (Cunningham 2012)*

For these interviews, we used the term “transnational” in a broad sense, rather deducting from the interviewees’ responses how they understood the term and what significance they attached to it. The reasons why they considered their research “transnational” cover the whole range of sometimes rather heuristic concepts of transnationalism discussed in contemporary historiographical theory. Some considered it “transnational”, because archives are located in more than one state or sources in more than one language. Others used comparative methods with a structural (roughly along the lines of Axtmann 1993; Bloch 1967; Haupt/Kocka 1996) or conceptual focus (e.g. Kier 2010; Leonhard 2001), sometimes with an emphasis on mutual dependencies, which may be roughly grouped together as comparative studies on a “relational basis” (Ther 2003; Cohen/O’Connor 2004; Eisenberg 2003; Espagne 1994) or *Histoire Croisée/Beziehungsgeschichte* (e.g. Osterhammel 2001; Werner/Zimmermann 2006). A number of respondents emphasized less the comparative aspect than interdependencies, cultural transfer, agents of cultural exchange, and networks, thus putting their projects in the tradition of a more recent school of theories of transnational history (e.g. Clavin 2010; Ther 2009).

### **How does the accessibility of archives affect your work?**

70% answered this question with “a lot”, 26% with “a bit”, and 4% with “not at all”. Almost all historians researching on First World War answered the question with “a lot”, while this is less an issue for Medievalists, who tend to work rather with published sources.

Most historians stated that the **geographical locations** of the archives were crucial for the conceptualization of their projects. Researchers stated that trips were costly and depended on their schedules, as they had to go from the UK to Poland, from Ireland to Lithuania, or from the USA to Estonia. This is a major problem for North America-based historians





working on European history (20). A formerly Canada-based historian recounts: *“I very much depended on what they had at the University library. Some of their sources were excellent, but there were also many limitations. Then I had to go to archives in Lithuania, and I couldn't do that too often”* (16). At the same time, having relevant archives in the city of residence or close by is considered a significant advantage (7).

The **number of archives** to be visited was also considered a problem. One PhD candidate based in the UK and France visits archives in Vienna and Prague; another needs to visit archives in five different countries (USA, UK, Poland, the Czech Republic, and Israel) and stresses the importance of getting fast and easy access to documents in the archives (17). *“The time and financial costs connected with the required archival travels to Austria, Slovakia, Poland and elsewhere make it fairly difficult to pursue transnational historical research”*, one historian said (8). For some historians, this is exacerbated by teaching responsibilities (11).

Many respondents deemed it important whether the documents were **exclusive to one individual archive**, or whether they could be accessed in other places (digital or physical), too. This may make a study dependent on one particular location, as one historians remarks: *“I would say that around 40% of the documents I need are in archives and to date unpublished, that means I can only access them when I am actually in the archive.”* (3) This is less of a problem for medieval historians, who state that their sources are mostly available **published** in printed or digital form (6, 13). However, a problem is that such publications are mostly text-based and thus do not help when it comes to analysing the visual elements of the sources, as one medievalist states: *“There are around 10 manuscripts that I still need to check in original, because I do climate history, and these manuscripts contain drawings such as suns or comets, which are not clearly visible in published form. I go to these archives then only for these drawings, and I don't know if and how well preserved these documents are.”* (6)



A serious problem, which is, however, not shared by all researchers, can be the overall **inaccessibility** of individual files or whole archives. This can be temporary, as in the case of one historian, who could not revise a manuscript for publication as an archive was closed for several months due to relocation. (4) Moreover, legal restrictions such as privacy laws were considered to have a significant impact (21), albeit to different degrees in different countries (12). This, however, applied mainly to researchers on contemporary history, and less to respondents who were working on the first half of the 20<sup>th</sup> century, as in the case of one PhD student: *“On spot I could access almost everything I needed. Only one holding was barred, until after 70 years after the death of the author.”* (3) A serious – and for the researcher usually unsolvable – obstacle is the inaccessibility of archives for political reasons, as a historian on the Middle East recounts (10). Accordingly, some respondents believe their easy access to documents was due to the fact that their research topics were politically uncontroversial (3, 4, 5).

The majority of interviewed historians thus placed high importance to convenient accessibility of documents: *„The choice of sources is guided by what's available.“* (9) One historian, however, stated the necessity to **adapt to problems** of source availability: *“The location of sources is of secondary importance; I always think of how significant and interesting is one particular research theme. I am flexible and always go where I feel I could obtain more material.”* (26)

Overall, the interviewed historians were positive about access to documents and listed several strategies to access archival materials. Problems of inaccessibility were seldom attributed to a deficit in archival organisation. The fact that this holds true for PhD candidates as well as for more experienced researchers softens concerns formulated by archivists that for *“those who have entered their careers with access to online catalogues and documents as a familiar basis for their research skills, the adjustment to paper indexes found only in archives, contemporary registry systems and layered arrangements of former references can be something of a shock.”* (Cunningham 2012)



### To what extent has your access to sources shaped your research topic?

We formulated this question to see how historians cope with a possible change in the accessibility to sources over the course of their research. 37% stated that access to sources shaped their research “a lot”, 46% responded “a bit”, and 17% said “not at all”. First World War-experts and medievalists shared this pattern. The extent to how access shaped a project ranges from *“My topic has become more focused because of the good accessibility of sources”* (6) to *“Without them I would not have written what I have.”* (23)

**Knowledge on the availability of sources** clearly differed among historians in the initial phase of a project. Early knowledge on availability and accessibility of holdings was considered beneficial. *“I had already been at the same archive for my master thesis, so I knew that the documents I needed were there, and that there were no restrictions to see them”* (17), one PhD student recounts. If that knowledge is not available, the possibility to make a preliminary research trip is considered an immense facilitator, as another PhD student experienced, who had received a half-year knock-on scholarship for this purpose: *“I needed to write a project draft within these six months. I was in Warsaw, London, Vilnius, Lviv and Wrocław, and visited archives where I hoped to find something important [...]. I had a cursory look at unpublished finding aids there, which was necessary particularly for Poland, as they had very little published, and their resources were available neither via JSTOR nor via other online services.”* (3) For this respondent, a preliminary archival trip to gain knowledge on holdings was essential both for successfully acquiring research funding as well as for framing the research topic: *“Only upon seeing these documents on the spot I could write up my project as I did. Had the documents not been there or not accessible, I would have written a completely different history, for example a study on memory, based on discourse analysis. But this way I could do it rather on a praxeological and ethnological basis.”* (3) A postdoc historian stated that she narrowed down her selection of sources because of their sheer number rather than because they were inaccessible, but conceded that more precise knowledge on the availability of sources at an early stage of research would have been beneficial: *“Initially I had also wanted to research on Pinsk, and if it had*



*been possible to see beforehand on the internet what was available in Belarusian archives, I might have abstained from that right away.” (2)*

Two respondents stated that a change of academic affiliation and of place of residence **altered their research topics at a later stage of the project**. One PhD student was mainly working with sources located in an Estonian archive, which became virtually inaccessible for her after she relocated to the USA, thus limiting her source base mainly to digitized documents (1). Another historian emphasized that due to the recently politically volatile situation in his region of expertise, he needed to modify his research topic accordingly, as the archives became increasingly inaccessible (10).

#### **How important is contact to other historians working in your field regarding the identification of sources?**

Regarding the discussed dispersal of project-relevant archival holdings over numerous archives in possibly several countries, this question aimed at determining to what extent and in what way historians use networks to identify archival materials. Altogether, 58% considered contact to other historians “very important”, 25% “important” and 17% “not important”. Both First World War-experts and Medievalists seem to put even higher-than-average significance to the networking element, but also harbour more scepticism towards it.

A number of respondents stated that historians working on similar topics might have a **different perspective on archival repositories** than archivists have. A postdoc historian recounts: *“The archivist could not help me that much with the holdings [...]; it was actually only through a fellow historian that I realized that some of these sources which seemed completely unrelated to my research might be really important.”* (4) According to a PhD student, this was mainly true for the early stages of his projects: *“It is possible to google quite a lot of holdings [...], but if you are not experienced yet or do not know the places well*



*enough, advice from fellow historians was very valuable.*" (3) He stated that he systematically contacted historians of whom he was certain that they knew these archives well. The importance of such contacts is confirmed by other respondents, who claim this helps to contextualize and broaden the scope of research (7), to get advice on other relevant sources (20), and to orientate in the archive (11, 17, 24). One historian stated that this could take place *"in formal or informal discussion"* (8), while another even established an interdisciplinary research network that explicitly aimed at identifying relevant sources (21). A British senior historian stressed his attempts to *"build academic networks and contacts in Germany."* (22) Accordingly, the lack of personal networks was considered a significant disadvantage (7). However, as has been stressed previously, historians seem mostly to look for support than for a mutual collaboration (Rutner/Schonfeld 2012).

A number of respondents limited these benefits to certain archival situations. One interviewee stated that in the case of well-indexed archives, the expertise of other historians was less required (9). Another said that he contacted other historians mainly when he was visiting archives out of his home country: *"There is an archival database in Poland called Sezam, which is extremely helpful, but nobody in Germany had ever told me about it, so I only learned about it through discussions with a historian in Poland."* (3) One senior researcher stated that help from other historians was *"very valuable"* (5), but hardly decisive. Most historians see it as inherent to the historian's job, not least because they *"enjoy networking."* (14)

Most respondents agreed that networking was secondary to a thorough **literature survey** regarding the identification of sources. *"For me it is more important to look at the studies of other historians, what sources they were using, what collections they were quoting"* (16), one postdoc researcher said. Another stated that *"the classic reading of books is still much more relevant."* (6) Only after having established this basis, precise inquiries to fellow historians could be useful (26). One lecturer stated that he benefitted more from the availability of digitized sources and literature than from contact to other historians (12).



Some respondents considered networking to be of minor significance for their research due to the **small number of specialists** on their fields: *“I was recently at a colloquium in Paris, which was attended by around 30 climate historians, and that gave me some input, but not more than that, because they were working on fundamentally different time periods”* (6), one medievalist said. A historian of First World War said she had placed high hopes on that other historians might help her identifying comparable materials across different countries, *“but as nobody was that much into the topic, this was not so decisive in the end.”* (2)

### How important is the transnational aspect of your work?

68% respondents stated that the transnational aspect was “very important” for their work, 27% said it was “important”, and only 5% considered it “not important” at all. For the historians of First World War and medievalists, this pattern is even more pronounced.

A large number of respondents stated they considered a transnational aspect **inherent to their field of research**, e.g. Jewish history (14), history of First World War (16), history of Empires (17), violence and civil wars (21), and military occupation (2, 3), early modern history (5), and the history of “borderlands” (1, 16, 26). Medievalists consider their field *“pretty obviously transnational”* (11). A historian of First World War emphasized the difficulty of writing *“a history of the war on the basis of sources from just one archive. You have to be flexible, go to archives based in different countries.”* (16) Another stressed the necessity to transcend historical narratives: *“to put the case of Estonia into the larger context of First World War and other histories”* (1), thus reflecting claims made in historiography that the history of small states and “borderlands” lends itself particularly to transnational contextualization in order to challenge national narratives (Paulmann 2004; Ther 2009). A historian of Slovenia stressed the dispersion of archives made the *“overall research topography extremely varied”* (26) due to the country’s past as part of more than one state: *“A researcher needs to know which part of the country belonged to where and when – politically and administratively.”* (26) These statements support Patricia Clavin’s observation



that European historians have established “a sensitivity to fragmentation and diversity.” (Clavin 2010)

The interviews indicate that a transnational aspect is not always born out of sheer necessity, but can be an **integral part of a project** from its very conceptualization on. One respondent said he considered himself “an explicitly transnational historian” (12). Another said “a transnational idea was really embedded in my research from the very beginning.” (7) A transnational approach is considered a tool for methodological safeguarding: “Having a transnational aspect in mind is important to make sure you avoid too much insularity.” (7) It also increases relevance for a larger audience: “The transnational aspect is important for every historian insofar as it helps you to answer the ‘so what’ question.” (9)

Interviewees researching on the 20<sup>th</sup> century apparently felt more at ease when talking about transnational aspects than medievalist and historians of the early modern period did. In line with theoretical concerns voiced in medieval historiography (Lantschner/Skoda 2012), the latter, although in the majority considering their work “transnational”, expressed **doubts whether the term was applicable for them** at all, because it projected 20<sup>th</sup> century concepts backwards in history. “Transnational doesn’t really apply in the pre-modern period, in my view” (13), one medievalist stated. Another even expressed doubts whether the term “transnational” should be used for medieval histories, unless they challenged the seemingly clearly-defined borders of a medieval Europe: “I have sources from Iceland as well as from today’s France and Spain, also from Belgium, the Netherlands, Germany, Poland, up to Novgorod, but also Italy, Byzantium, and sources from the Arabic regions, Moroccan, that is, the whole territory of the former Roman Empire plus the European regions that border to it in the north [...]. But this is, of course, all more or less within ‘old Europe’.” (6)





## What are the main obstacles and facilitators of transnational research that you encounter in holdings institutions?

Interviewed historians considered the **fragmentation** of the archival landscape and the sheer **number of archives or libraries** to be visited as the major impediments to transnational research. *“One of the main obstacles is that you need to do research in many different places, and you need to get funding for that”* (17), a PhD candidate stated. Only in few cases did historians conducting research on transnational history live and work close to an archive of significant relevance to their topic. Locating archives and sources remains a major obstacle, too, making a thorough planning of research trips difficult (19). Methods of comparative history are found to be difficult to apply due to the lack of material that lends itself to comparison: *“The biggest obstacle is finding parallel sources in various countries, for instance sources on a particular meeting between foreign ministers in both Poland and Czechoslovakia.”* (12) Some historians respond to this problem by starting from a national or local reference point and developing this into a transnational study only later on: *“Every historical story starts out as a local story.”* (9) This is also considered an appropriate strategy for preventing a project from getting out of hand, as a postdoc historian, who studied peace movements, states: *“There is a transnational element in researching peace movements and contacts between them. It's becoming increasingly important; however, I still go back to national question and consider these particular historical actions in localised environments.”* (25) Accordingly, another respondent emphasized the element of contingency connected to the difficult source situation: *“In my research, I am always led by fragments. Small bits grow into a larger picture.”* (24)

Other major obstacles again relate to **access to sources**, which differs substantially across different archives/libraries. In some cases, archives could not be accessed at all, as a medievalist stressed in the case of North Korea (13) and a 20<sup>th</sup> century historian on some Arab countries (10). A senior historian on the 20<sup>th</sup> century added that discriminating archival practices may pose an obstacle, too: *“Not in all countries researchers of different nationalities are treated equally. In some countries, for researchers of certain nationalities it*





*is near impossible to get the access to the material we want. This a big problem.*" (21) Intercultural misunderstandings (21), nationalistic archival narratives (10), and very limited opening hours (5) are considered problems.

Respondents also stated that the **accessibility of sources differed substantially across different countries**, which made profound knowledge on the institutional and structural history of the region a requirement. A British historian stressed that in Germany *"one has to be more creative when research First World War material and make use of the regional archives that often have better collections than the federal archive."* (22) A medievalist professor considered the *"layering"* (11) of archival structures a problem – for instance in the case of Italian archives, which were restructured significantly and repeatedly across history.

Moreover, **lack of equipment and prohibition of photographing in archives or libraries** is cited as a major obstacle to transnational research, as it made archival trips difficult to plan (8). A historian conducting research in Poland, the USA, and Israel states that *"this was important with regards to how much time I had to plan in to conduct research trips, in how far access on the spot was possible and in how far it was possible to take photographs of sources or even copy digitized sources onto my hard disk – all this was decisive for how quick I could proceed with my research."* (2) A historian of First World War adds that different rules of photocopying and scanning affected his work in the archives. (22)

Accordingly, the quality of **tools to identify and access sources** is considered decisive: *"A good indexing helps, detailed finding aid entries, helpful archivists, and the general access to reading devices."* (2) Nearly all respondents agreed that transnational research and the planning of trips was facilitated mainly by providing online access to catalogues and finding aids (medievalists also mentioned access to items), in order to make planning and conducting research trips easier, more efficient or even superfluous (e.g. 1, 2, 6, 7, 11, 16, 23. Moreover, the possibility to take photographs – valued by most respondents as *"essential"* (cf. chapter on archival practice) – is considered beneficial for transnational



research, as it allows to perform the theoretically and methodologically challenging task of systematically analysing the collected documents regarding their comparability and transnational relevance outside the confines of the archive. One historian recounted how an open and service-oriented approach of an archive immensely helped save time: *“For instance, in Washington they had microfiche readers with which you could instantly convert microfilms into PDFs and save them on the hard disk, and they offered that you could copy everything you liked from their hard disk, if they had already digitized it.”* (2)

A medievalist particularly stressed the advantage of library catalogues that linked **item entries** directly to other websites which include more elaborate descriptions and visual elements: *“I am using the National Library of Ireland catalogue, which links to Europeana, which allows you to really look at the material you are interested in.”* (7) Another medievalist emphasized that for transnational research in medieval history it would be useful if cross-referencing between catalogues was enhanced: *“for example, the researcher comes across the name of a particular notary a couple of times, and wants to follow up where else this notary appears – this is difficult if things aren't evenly digitized or if you're not on site.”* (11) One medievalist stressed the significance of digitization projects that are not necessarily linked to archives or libraries: *“for example the Monumenta Germaniae Historica, which has been digitized completely. Of course, you can find the two to three shelves of MGH in every research library, but you can use it so much better online with full text search. If you were looking for key words with the printed version, you could be searching for years or decades.”* (6)

A number of respondents stated that **archivists and librarians** were facilitators of transnational research: *“the human factor is enormous.”* (24) This first and foremost applied to archivists (but also to fellow historians), with respondents stating that *“the attitude of people who work in the archive, their inclination to help you and orientate in the archive”* (16) were crucial. A historian of First World War recounted: *“For example, in Estonia an archivist presented us with a list of collections in English that might be relevant for me, which was the only possibility to work there at all, because all the finding aids were in Estonian.”* (16)

Obstacles stressed by respondents were mainly of structural or linguistic nature and could – with the exception when archives were not accessible at all – mostly be coped with. No respondent mentioned that he needed more specialized training for work in international archive (as was suggested by Rutner/Schonfeld 2012). This may be attributed to the multifaceted nature of problems encountered in different archives, which makes it difficult to develop systematic strategies and requires a fair amount of improvisation, experience and learning-by-doing. On-spot archival strategies were mainly developed on the level of access to items, emphasizing the balance and comparability of sources. These findings may dispel worries formulated by archivists that *“historians’ reliance upon digital resources is mismatched to the completeness and dependability that those resources presently offer”* (Cunningham 2012).

### **How do established national narratives affect your research?**

70% of all interviewed historians of First World War stated that national narratives affected their research „a lot“, and 30% „a bit“. Understanding and explaining national narratives and then relating them to historical „facts“ was considered a crucial part of a historian’s job (21). As a result of the persistence of strong national narratives in the region, which may foil transnational research (Antohi et al. 2007), it comes as no surprise that particularly historians from and/or researching on „small countries“ in East Central and Eastern Europe experience this as a challenge, as a PhD student from Estonia recounts: *“I think, coming from a small country like Estonia, which has such a complicated history, the national narrative does affect my research, even if I hope that it does not affect it too much. I hope that the current academic discourse is more important than the national background. And also I think that the presence of the national narrative sometimes makes you want to break it rather than going along with it.”* (1) This is aggravated by the fact that First World War plays a minor role in the national narratives of these states, that until the end of the war were parts of multi-national empires: *“In the Czech Republic, First World War is a bit negated as a foreign war, fought by Austria-Hungary, so that affects my research a lot.”* (17) Most First



World War-historians stated that they explicitly contested these narratives by placing their studies in a transnational context (1, 6, 8, 16, 17, 19). One respondent was planning to make the narratives themselves object of research (16). Another historian stressed that particularly individual, personal narratives about the war were of interest to him: *“I belong to the generation that still knew some of the last WWI veterans. I have been affected by their narratives from my childhood. Nowadays I wish I recorded their wartime stories and experiences.”* (26)

### **How do established historical narratives affect your research?**

Two thirds of the medievalists stated that established historical narratives affected their research “a lot”, and one third “a bit”. Like First World War-experts, medievalists are conscious about narratives and try to avoid their pre-structuring nature. One medievalist identified narratives as a *“burning point”* (11) in contemporary research on medieval history; another stressed that narratives were *“what a lot of my research is pushing against.”* (13) However, one lecturer also noted that historical narratives can be useful, if they stress topics that are not being treated anymore in contemporary research, and if that reflects in archival or library catalogues: *“In the past there were people who were interested in famines, for example, or in earthquakes. I had one such catalogue that dated back to 1907. That was extremely helpful.”* (6)

### **Has your access to sources made your study more or less transnational?**

This question aimed at identifying how major facilitators and obstacles in archives affected work on transnational projects in practice. 81% stated that their work had become “more” transnational, 6% answered “less”, and 13% “neither/nor”.



Again, access to sources is the main factor for the development of studies in a more or less transnational direction. One historian discovered in an American archive **collections compiled from a range of different archives**, which helped to broaden the source basis and the transnational element: *“The fact that for instance in Washington so many sources from Polish archives were available allowed me to access sources from more geographical places than I had initially planned.”* (2) A PhD student working on intellectual networks in the early 20<sup>th</sup> century recounts how he broadened the transnational perspective of his project: *“I was aware of the transnational part of my project from the very beginning, but not on all levels. Only later, during the archival work, I realized how transnational some of the biographies of people I was researching on was, and how important the transnational component was in their interactions amongst each other.”* (3) Two PhD students working on First World War modified their selection of sources substantially due to a **change in academic affiliation** and ensuing relocation. One of them stated it made her study less transnational, because of the lack of online sources and the difficulty to do research trips (1), while the other said it helped make the project more transnational: *“Being based in England now, I also looked at British documents, which brought in a new perspective into my work.”* (17) Medievalists stated that their studies had been fully transnational from the conception phase on and did not change in these respects (6, 13).

### **In your view, how much have amateur historians contributed to the field?**

46% of First World War historians interviewed acknowledge that amateur historians have contributed “a lot” to the field, 46% “a bit” and 8% “nothing at all”. One British historian stressed the high quality of some books on First World War written by amateur historians, which he attributed to the high cultural importance of the Great War in the UK (22). The work of amateur historians was also valued when it comes to writing of *“a solid overview of a particular topic and synthetic ground that may be used for further research.”* (24) One researcher stated that within her special field, amateur historians *“have contributed enormously”* by conducting research on their own biographies. She thus made it part of her project to *“try to bridge the different requirements of the amateur historian with that of the*

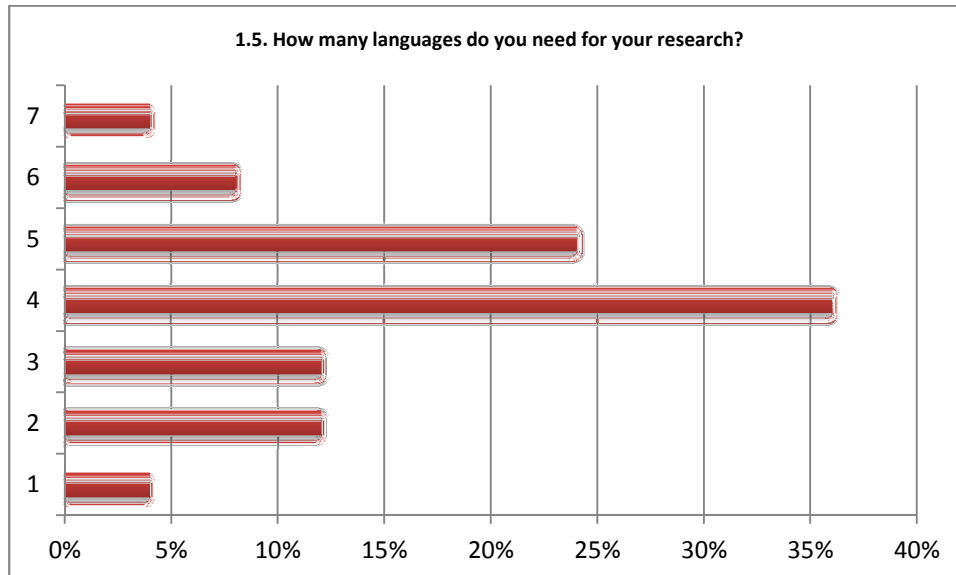


*professional historian.*” (21) Most respondents, however, emphasized the importance of contributions to local history, which made them – with reservations regarding the quality of their interpretations – useful when it comes to identifying sources or local historical constellations, which can then be put into a larger context (20, 26). Historians particularly valued contributions in the form of local or regional studies, local chronicles, and online forums: *“There are quite a lot of smaller regional studies, on a micro level, which are useful regarding the data included in them.”* (16)

### **To what extent do you make use of their work?**

The interviewees are slightly less enthusiastic when it comes to using the work of amateur historians. 36% answered they used their work “a lot”, the same share “a bit”, and 28% answered “not at all”. Most of the first group used the work of amateur historians rather as a source than as secondary literature (20, 25, 26), emphasizing the subjectivity of the work: *“In memory studies they have written a lot of bad stuff. And that's what I am in part looking at. However, you can also get very valuable insight into the local level knowledge.”* (20) One historian stated he used amateur historians’ accounts to *“enrich my own historical and interpretative narrative. Historia non est tantum scientia sed ars.”* (26) Most respondents, however, were rather uncertain whether to use studies of amateur historians, even if they were connected to their field of research (1, 16, 17).

## How many languages do you need for your research?



**Figure 1 – all respondents**

As has already been established by the results of the questionnaire on the CENDARI website, nearly all interviewees require more than one language for their research projects. All interviewed historians required English. The set of languages was – obviously – determined by the area and topic of research, but general trends are visible. Many respondents have command over the major languages of their field (e.g. English, German, French, Russian in the case of First World War-experts, and Latin in the case of Medieval history) and often additionally one “smaller” language (e.g. Estonian or Serbo-Croatian with First World War-experts and Old Nordic or Byzantine with medievalists). Some historians distinguished between languages they need for working with sources and languages needed for secondary literature. Most respondents considered knowledge of foreign languages a **prerequisite for transnational research**. One postdoc historian recounts: *“I would have had a broader PhD topic, had I more language ability. I would have tried to incorporate some other archives in Europe.”* (25)





## How do you work with documents in other languages (transcription, summaries, translating, skimming?)

Accordingly **linguistic problems** were stated by a number of respondents as major obstacles to transnational research. Lack of equipment and restrictions regarding photographing in the view of these historians aggravate linguistic challenges: *“Another obstacle was that if language skills are limited, then it is difficult to work with the sources if microfiche readers or computers in archives are scarce.”* (2) In general, the number of languages needed for transnational research can be frustrating, as a First World War-researcher recounts: *“I need Czech and German, but I have also seen letters in the archive in Polish by refugees that could be interesting, but I couldn't read them.”* (17, also 20, 21) For medievalists, who work mainly with published sources, the lack of translations is considered a main problem for transnational research: *“It is crucial how much is translated at all from the original languages. A main obstacle is rather when sources are accessible but haven't been translated yet. I can use Greek sources only if they have been translated into German, English or French.”* (6, also 7)

**Reading strategies** for foreign-language sources differ with regards to proficiency in the language, thus most respondents employed more than one strategy. A senior historian on First World War states: *“I can skim through English documents, French more slowly, German papers are more demanding. The fear is always in missing out something important.”* (22) A factor is also that linguistic skills in a particular language may evolve over the course of a project, as a researcher on Jewish history stressed: *“I always transcribed Yiddish, and when my Polish improved, I translated those parts of the sources that seemed the most relevant to me.”* (2)

Generally, respondents would skim through texts written in languages they know very well and make notes and references and write excerpts (1, 3, 5, 8, 16, 23). Some interviewees would skim through texts in languages they were less proficient in, look for special keywords





and write summaries of relevant passages or translate them (1, 19). With texts in languages respondents had only little proficiency in, they would as a first step *“work mostly with finding aids to identify the most relevant documents”* (2), then *“translate roughly”* (3), or transcribe if they were in different scripts (2). With difficult texts or sources considered relevant but written in a language the respondent was not proficient in, assistance was sought among professional translators (2) or among colleagues: *“I have some colleagues here who can help me with Italian and Old Nordic, and we even have two people around here who have helped me with Cimbrian sources.”* (6) Translation tools such as Google Translate are being used (25). Medievalists, who work extensively with published translations of sources, check the originals after reading the translations: *“If I have a translation, I read that with regards to certain keywords. I have around 50 keywords that are relevant for me, for instance, ‘flooding’, ‘locusts’, or ‘solar eclipse’. I mark the places where these keywords occur. Then I look at the original sources in these special places and check if these paragraphs have been translated accurately.”* (6)

Due to the time-consuming nature of such strategies, most interviewees stressed the necessity to take photographs or make scans in order to work with the documents outside of the archive (13, 16, 17, 20, 21, 24): *“I would try to make copies, because I simply do not have enough time to read documents in foreign languages thoroughly in the archive.”* (16) Not being able to take photographs is accordingly seen as a major obstacle: *“I would try to make copies, because I simply do not have enough time to read documents in foreign languages thoroughly in the archive.”* (17) It seems that the use of digital cameras, which the Ithaka S+R report stressed as *“the most notable development in capturing primary sources”* (Rutner/Schonfeld 2012; also Cunningham 2012), and the ensuing possibility to move the source-analysis process from the archive to home or the office seems to have even stronger implications for research on transnational history.

### 3.4 Concluding Remarks

The first part of this report highlights a number of issues that are crucial for the conceptualization of CENDARI on the basis of archival research practices and user requirements. These findings will be summed up in this section and used to substantiate recommendations for CENDARI in the “Conclusions and Recommendations” section at the end of this report.

- Digitisation of archival sources is recognised as immensely important. The online finding aids are almost invariably claimed to be extremely useful for identifying archival material and for effectively conducting research. This has particular and very practical implications for the planning of research trips, the duration of which can be better estimated the more material is available online.
- Moreover, the possibility to take photographs of archival documents is considered to be crucial in that it significantly accelerates research productivity and lessens the time (as well as financial means) that one needs to spend in a particular locality. At the same time, the extensive use of photography requires historians to develop meaningful systems to ex post organize large amounts of sources.
- The large majority of researchers likewise acknowledged the importance of personal guidance that they received from the archivists, which, however, largely rested upon the archivists’ own competence in a particular historical field, and on the clarity - or effectiveness - of the available finding aids.
- Personal contacts and expert advice that historians received from other scholars while doing their research have been likewise recognised as key to successfully determine the “hidden” archives. These together have formed an important ground for overcoming the dilemma posed by the fragmentation of sources.
- These implications are even stronger when it comes to historians working on transnational topics. Interviewees stated that easy access to sources on spot and online determined the degree of “transnationality” of their studies or even if their research would be transnational at all. For these cases, communicating with archivists even before a research trip, as well as an extensive network with



colleagues who can help identify sources relevant for the topic, are considered crucial.

- The language factor is crucial in research on transnational history, as it structures access to sources on several levels. While the historian may be able to read the sources themselves, the archive and the finding aids might work in a language different from the sources. Again, historians regard working closely with archivists and networking with fellow historians the most important strategies to tackle this problem.



## 4. Research Practices in the Digital Humanities

### 4.1 Introduction

This part of the report discusses scientific methods developed in the digital humanities and the extent to which the research community—as represented by the interviewees—makes use of them. The first substantive section offers a broad overview of the digital humanities, a discussion of the theory behind the development of digital methods and tools, and a survey of some of the most important methods and tools. The second substantive section looks at the proliferation of these methods and tools among the research community. Based on the data gathered in interviews, we aimed to determine broad patterns of usage. We also looked at what researchers expect from, or hope to see in, the digital humanities. Our approach thus reflects the recent consensus in digital humanities scholarship that calls for a shift to more user-centred approaches (Warwick in Warwick et al, 2012; Gibbs and Owens 2012) in the development of digital tools and resources. The foregoing overview of the digital humanities and their purchase among the research community are intended to inform considerations on the digital toolkit and research environment that CENDARI will provide. Preliminary findings are summarized in this section's concluding remarks.

### 4.2 Overview of Methods in the Digital Humanities

The Digital Humanities are an interdisciplinary movement, based in traditional humanities disciplines and practices, which involve the use of computer-supported techniques and digital approaches, often collaborative in nature, in research. There are many open questions about the nature of the Digital Humanities: for example, should they be considered a discipline in their own right, a field inside other disciplines, or should they be considered the future of humanities scholarship in general?<sup>1</sup> A precise definition of the Digital

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<sup>1</sup> See, for example, the debates highlighted in the CUNY Digital Humanities Resource Guide: “Hot Topics” ([http://commons.gc.cuny.edu/wiki/index.php/Hot\\_Topics](http://commons.gc.cuny.edu/wiki/index.php/Hot_Topics)).



Humanities is also elusive: do Digital Humanities refer to research itself, or to the technical skills needed to ask and answer research questions using digital means? If the collaborative tendencies of the Digital Humanities, which are in stark contrast to many traditional research processes in humanities disciplines that focus on the primacy of one single author, make it more difficult to evaluate the contribution and skills of individual participants, how can scholars working in Digital Humanities topics be evaluated and recognized individually for their achievements? There is also a great deal of discussion about the purpose and overall goals of the Digital Humanities within the Digital Humanities community itself, such as whether the Digital Humanities as a movement represents a break with traditional humanities scholarship or an extension of traditional working practices.<sup>2</sup> As a movement, the Digital Humanities are currently in the process of self-identification and establishment.<sup>3</sup>

Since the individual disciplines in the arts and humanities vary widely, it is correspondingly difficult to make decisive statements about one single Digital Humanities approach or methodology; however, certain practices and tendencies can be described. One main priority in the Digital Humanities remains the need for appropriate, targeted tools and services for dealing with research questions. While the Digital Humanities is sometimes criticized as a tool-driven field,<sup>4</sup> it is precisely the use of technological approaches and practices that offer the potential for innovation and new work.<sup>5</sup> Broadly speaking, the Digital Humanities can be

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<sup>2</sup> As Matthew Gold describes, “fault lines have emerged within the DH community between those who use new digital tools to aid relatively traditional scholarly projects and those who believe DH is most powerful as a disruptive political force that has the potential to reshape fundamental aspects of academic practice”; Matthew K. Gold, “The Digital Humanities Movement,” *Debates in the Digital Humanities*, ed. Matthew K. Gold (Minneapolis, MN: University of Minnesota Press, 2012) (<http://dhdebates.gc.cuny.edu/>).

<sup>3</sup> For the background to the Digital Humanities, two seminal reference works are Susan Schreibman, Ray Siemens, and John Unsworth, eds., *Companion to Digital Humanities* (Malden, MA: Blackwell, 2004) (<http://digitalhumanities.org/companion/>), and Ray Siemens and Susan Schreibman, eds., *Companion to Digital Literary Studies* (Malden, MA: Blackwell, 2007) (<http://digitalhumanities.org/companionDLS/>).

<sup>4</sup> For example, the literary scholar Stanley Fish claimed in a widely-read, controversial blog post in 2012, research in the traditional humanities, or at least in textual scholarship, begins with an “interpretive hypothesis and then the formal pattern” is discovered. Fish claims that in the Digital Humanities, “first you run the numbers, and then you see if they prompt an interpretive hypothesis” and therefore work and methodological approaches in DH are “dictated by the capability of the tool”

(<http://opinionator.blogs.nytimes.com/2012/01/23/mind-your-ps-and-bs-the-digital-humanities-and-interpretation/>).

<sup>5</sup> Manfred Thaller describes this situation in his recent discussion of the most pressing issues facing the Digital Humanities: Thaller, Manfred (2012): Controversies around the Digital Humanities: An Agenda. In: *Historical Social Research* 37.3: *Controversies around the Digital Humanities*. P. 7-24.



described as dependent on three interrelated, digitally-supported factors related to how researchers deal with information: they must have access to the data, be able to analyse it, and be able to disseminate and publish their findings.<sup>6</sup> However, the issues of providing access to information and supporting publication, while important and ongoing, are much further developed than the development of analytical tools that specifically reflect the needs of researchers and their work in disciplinary contexts.<sup>7</sup> For this reason, it is important to develop tools and services that are linked closely to actual and specific research questions and contexts, and that reflect and react to traditional methodologies in the disciplines of the arts and humanities.

### **Digital Humanities Research Practices: Common Features in Large-Data Projects**

In order to explore specific use cases of research methods within the Digital Humanities, this section provides an overview of two recent, comprehensive reports analysing their use in practice. While these reports both reviewed existing projects, the focus of investigation and the scope of the projects survey differed. The CLIR report “One Culture: Computational Intensive Research in the Humanities and Social Sciences” surveyed in-depth the experiences of eight projects that were funded through the CLIR Digging into Data Challenge.<sup>8</sup> All of the projects surveyed were relatively homogeneous in the sense that their explicit purpose was to deal with large amounts of data, which was a requirement for receiving funding support, but they varied widely in subject, disciplinary affiliation, and other characteristics. Since their work processes were dependent on different tools and

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<sup>6</sup> Thaller’s definition states that “eHumanities describes the concept of performing Humanities research in a distributed digital working environment, which supports equally well: (1) access to the information needed to tackle a research question, (2) the analysis of that information by tools reflecting the methodological requirements of the specific discipline and research problem and (3) the publication of the new information gained by the analytical process”; Thaller, p. 11.

<sup>7</sup> Manfred Thaller describes this situation in his recent discussion of the most pressing issues facing the Digital Humanities: Thaller, Manfred (2012): Controversies around the Digital Humanities: An Agenda. In: *Historical Social Research* 37.3: *Controversies around the Digital Humanities*. P. 7-24.

<sup>8</sup> Christa Williford and Charles Henry, One Culture: Computational Intensive Research in the Humanities and Social Sciences. A Report on the Experiences of First Respondents to the Digging into Data Challenge. Council on Library and Information Resources, June 2012. Available at <http://www.clir.org/pubs/reports/pub151>



disciplinary approaches but all shared certain common features, these projects can be used as initial case studies for investigating research practices in the Digital Humanities in general. This report included a list of “Structural Commonalities and Notable Differences” among these eight projects that can serve as a starting point for information about Digital Humanities practices. All eight projects featured:

1. The use of **large data corpora** that could not be handled by one individual researcher alone;
2. The use of **computerized analytical methods** in dealing with this data;
3. Continuous updates and adjustments to both the tools and the data, requiring **communication and collaboration** among multiple project members;
4. A **research process** that more or less moved in a linear progression and followed similar steps (Beginning with “hypothesis and/or question formation; selection of a corpus or corpora; exploration of a corpus or corpora; querying and correcting, modifying, or amending the data as needed; pulling together subsets of data relevant to a given question; making observations about those data; and drawing conclusions from and/or interpreting those data”).<sup>9</sup>

One important aspect is precisely the analysis and exploration of each project’s methodological approach, which the authors note is not as common in many of the traditional humanities fields. Examining these eight projects “suggest[s] that a dependency on digital tools and resources requires more explicit documentation and communication about methodology than has typically been the case in the humanities and qualitative social sciences” (p. 12). While these projects were doubtless shaped and influenced by their status as participants in the same funding initiative, there appear to be common requirements and practices for creating and dealing with the tools and technology necessary for performing research using large amounts of data.

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<sup>9</sup> Williford and Henry, p. 19-20.



## Digital Humanities Research Practices: Core Activities in Humanities Disciplines

The DARIAH-DE “Erster Bericht über die Verwendung von Verfahren der Digital Humanities in den Geistes- und Kulturwissenschaften” follows a different approach to studying research methods and practices in Digital Humanities projects.<sup>10</sup> This report surveys a wide variety of practices and approaches in the disciplines of philology/literary studies, history, art history, archeology, musicology, theology, philosophy, and Jewish studies in order to gather information about computer-supported research practices. While the heterogeneity of approaches within these disciplines and their methodologies makes it difficult to draw comparisons between Digital Humanities activities in these areas, this initial report lists five main categories of overall core activities that seem to be common to all disciplines:<sup>11</sup>

**1) The creation and mark-up of editions:** This category contains various aspects of working with texts and objects, such as transcription, annotation, collation, providing context, linking to reference works such as dictionaries and encyclopaedias, html encoding, and making an object or text available. One of the most prevalent uses of computer-supported working methods is found in the practice of creating an edition of a text, often with a scholarly apparatus. Text collections such as Project Gutenberg (<http://www.gutenberg.org/>) began early on to make texts available for researchers to use; digitized volumes with a scholarly apparatus also fall into this category, since works that are not physically accessible can find a new audience online.

**2) Computer-aided analytical methods such as visualization, pattern recognition, modelling, etc.:** This category includes text mining, pattern recognition (stylometrics and

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<sup>10</sup> This report excludes digitalization and preservation activities, defining Digital Humanities activities as those that move beyond a transfer of analogue practices to digital environments and instead open new research perspectives (zunehmend über einen Transfer analoger in digitale Verfahren hinaus [gehen] und eröffnen neue Forschungsperspektiven,“ p. 4).

<sup>11</sup> Erster Bericht über die Verwendung von Verfahren der Digital Humanities in den Geistes- und Kulturwissenschaften (R 2.2.3), Version 1.0, from DARIAH-DE. We would like to thank Stefan Schmunk and his colleagues at DARIAH for allowing us access to the unpublished draft version of this report.





topic modelling), network analysis, mapping, reconstruction of objects through 3D modelling and visualizing relationships among marked-up data. One of the benefits of this practice is the way in which visualization can represent massive amounts of data in ways that individual researchers could never investigate or realize.

**3) The use of authority files and named entity recognition, semantic annotation and encoding:** These functions that add value and enrichment to data are uniquely accessible in a digital environment. They are especially important for interdisciplinary and international/multi-lingual work and when dealing with heterogeneous sources and data.

**4) Collaborative working methods:** The humanities have a tradition of single authorship that is the highest among the academic disciplines; however, co-authorship is becoming more prevalent among digital humanities projects. Since publication is still the standard by which scholars and research are evaluated, this means that there is less incentive to explore uncertain avenues of research and to undertake activities such as data management that do not result in publishable outcomes

**5) New approaches to publication and communication that in many ways may redefine these processes, such as in the creation and development of hypertext editions and online hybrid editions:** The humanities in general rely on literature that remains useful long after it has been printed, in contrast to many natural science fields, and as such are most likely to benefit from expanded digitization efforts to make out-of-copyright and out of print works available.<sup>12</sup> Similarly, the distinction between data and literature about the data is more permeable than in other areas, since unlike studies such as in climate research or medical research, the humanities researcher can use any document or artifact as an object

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<sup>12</sup> The use of articles and monographs, digital communication and publication methods, and access and information-seeking behaviors varies among humanities disciplines, but certain tendencies set the humanities apart from the sciences and social sciences; for a discussion and comparison of these three areas, see "Chapter 8: Disciplines, Documents, and Data" in Borgman, Christine L., *Scholarship in the Digital Age: Information, Infrastructure, and the Internet* (Cambridge, MA: MIT Press, 2007), pp. 179-226.

of research.<sup>13</sup> While peer-reviewed publication will continue to remain important in the arts and humanities, there is considerable debate about whether the traditional emphasis on the scholarly monograph as the gold standard for evaluation will remain, particularly in the face of expanded opportunities for hybrid editions and critical editions that are interlinked with other resources. The DARIAH report (p. 39) points out that first when digital publications achieve the same degree of recognition and acknowledgement that print publications currently receive will there be a lasting change in the systems of publication and communication.

An addition category not covered in the DARIAH-DE report is the use of Digital Humanities in **pedagogy**. While the above practices are all used and integrated to varying extents in research within the disciplines, there are also initiatives to create online open platforms for instruction that involve aspects of Digital Humanities approaches, frequently on a multidisciplinary level. These aspects range from sharing course plans and materials to interlinking instruction in various locations. The CUNY Digital Humanities Resource Guide ([http://commons.gc.cuny.edu/wiki/index.php/The\\_CUNY\\_Digital\\_Humanities\\_Resource\\_Guide](http://commons.gc.cuny.edu/wiki/index.php/The_CUNY_Digital_Humanities_Resource_Guide))

is one example of a working group founded to support collaboration and specifically pedagogy, and one of the most frequently cited examples of Digital Humanities pedagogical innovations is the project Looking for Whitman (<http://lookingforwhitman.org/>), which created a platform for multiple courses at different university campuses to interact with the resources and with each other.

## Further Resources

Since there are at present many initiatives and projects being carried out on an individual level, another main priority in the Digital Humanities is to support collaboration between projects and to promote the best use of resources by discouraging repetition or overlap. The

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<sup>13</sup> Borgman, 216.



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resources listed below are intended to serve as gateways for more information about current projects, tools, and organizations.

## Registries of Individual Projects and Tools

*The resources listed here provide information and links to individual tools and projects in the Digital Humanities.*

**Bamboo DIRT:** <http://dirt.projectbamboo.org/>

A “tool, service, and collection registry of digital research tools for scholarly use” for functions from data analysis to collaborative writing, DIRT provides a list of tools as submitted by users, with comments, links to technical documentation, and is working on adding a tool review function.

Patrick Sahle, **A Catalog of Digital Scholarly Editions:** <http://www.digitale-edition.de/>

Extensive list, with descriptions, of 296 scholarly projects, organized by subject area, material, language, epoch, and other categories.

**DH Commons:** <http://dhcommons.org/>

centerNet’s database of projects seeking collaboration; provides an overview of projects by academic field and collaboration type; users can search for projects based on the type of task projects are seeking (such as proofreading, programming, beta testing, and so on) or the type of collaborator sought (graduate student, general public, librarian, and so on).



INFRA-2011-1-284432

Daniel Powell, with Constance Crompton and Ray Siemens, “**Glossary of Terms, Tools, and Methods**” in the MLA Commons: *Literary Studies in the Digital Age: An Evolving Anthology* available at <http://dlsanthology.commons.mla.org/glossary-of-terms/>

This hybrid edition lists 196 websites, tools, and definitions for technical terms that are prevalent in Digital Humanities topics.

### Infrastructure Frameworks and Digital Humanities Organizations

*The development of overarching infrastructures supports research in the Digital Humanities so that individual projects can build on a common framework and make efficient and effective use of resources. Below are a few of the major infrastructure initiatives and Digital Humanities organizations.*

- Alliance of Digital Humanities Organizations (ADHO): [www.adho.org](http://www.adho.org)
- Arts and Humanities.net: Coalition of Humanities and Arts Infrastructures and Networks (CHAIN)
  - <http://www.arts-humanities.net/chain/>
- Common Language Resources and Technology Infrastructure (CLARIN): [www.clarin.eu](http://www.clarin.eu)
- Digital Research Infrastructure for the Arts and Humanities (DARIAH): [Dariah.eu](http://dariah.eu)
- Joint Information Systems Committee (JISC): <http://www.jisc.ac.uk/>

#### *Registries of Digital Humanities Centers:*

- centerNet (creator of the DH Commons): <http://digitalhumanities.org/centernet/>
- The European Association for Digital Humanities: Digital Humanities Centres: <http://www.allc.org/education/digital-humanities-centres>





### 4.3 Use of Digital Humanities in the Research Community

The final block of interview questions addressed interviewees' engagement with digital tools and methodologies, as outlined in the previous section and in recent literature (e.g. Gold 2012, Berry 2012). We queried not only the extent to which researchers use digital tools and methods, but also how researchers perceive them in terms of their potential contribution to the historical discipline.

We also asked specific questions about use, relevance, and potential of digitized sources. Digitization and the digital surrogates that it produces are but one facet of digital humanities practices and, arguably, this facet is far from being an unquestionable boon to humanities scholars (Terras in Warwick et al, 2012). Moreover, the disciplinary implications of large amounts of digitized materials remain open to debate (Rosenzweig 2003). Yet digitization and its results features most prominently in researchers' experience of, and expectations from, digital humanities. We therefore found it appropriate to document interviewees' thoughts on these matters. This contributes to recent efforts at taking stock of how often, and in which specific ways, researchers are using digital resources (compare Sinn 2012).

The following analysis examines responses to the questions posed in order to determine broad patterns of usage. It also aims to determine the correlation, if any, between types of usage and expectations on the one hand, and researchers' fields of specialization on the other. It should be noted that we queried interviewees as to their academic position and career stage, but we observed no significant correlation between age and willingness to use (or proficiency in) digital tools and methodologies. While one respondent attributed their introduction to digital methodologies as a function of belonging to the "internet generation" (interview 18 [henceforth "18"]), recent research suggests that the information literacy of the 'Google generation' is no more advanced than that of academics whose training predates the internet age (Warwick in Warwick et al, 2012; Kolowich 2011; works by Jones et al, 2011). Indeed, the traditional training of academics—often only fully complete in the case of tenured or senior academic faculty, who also, incidentally, have more freedom to

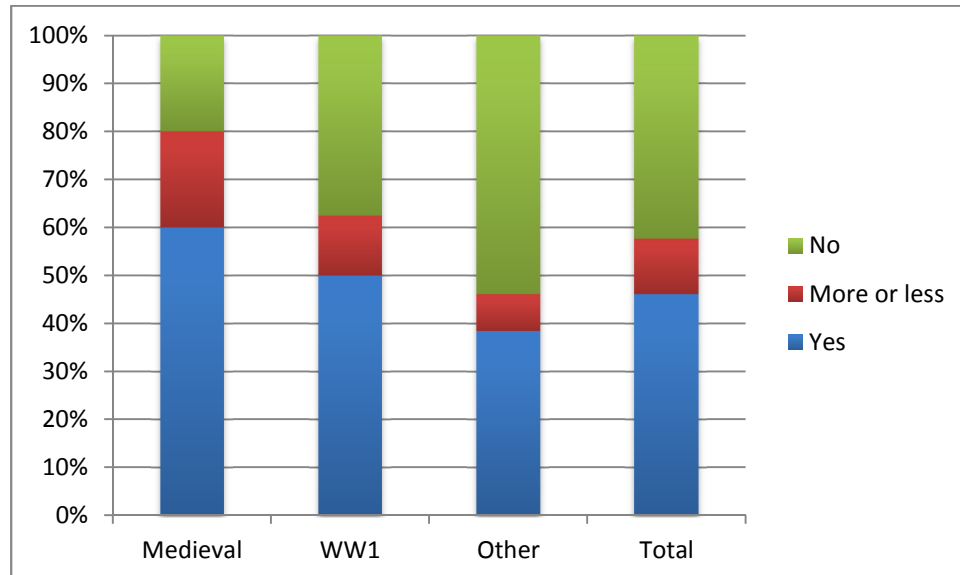


experiment—gives them a sophisticated interpretive toolkit, which can then be mobilized in different ways (Warwick in Warwick et al, 2012).

### **Researchers' experience with digital methodologies**

Researchers who claimed to use digital methodologies [question 5.1] slightly outnumbered those who did not in our survey—"yes" 12, "more or less" 3, "no" 11 (see chart 3.1). However, interpretations of what this meant differed widely among respondents. Some identified the use of their digital camera, a scanner, or finding aids as digital methods. Others, particularly medieval scholars, identified sophisticated research methods. One researcher who studies Medieval China uses databases to construct prosopographies and GIS to visualize the data (13). A senior researcher specializing in English medieval manuscripts has been heavily involved in the design and construction of online digital resources for medievalists, including an online repository of sources, a project that federates those resources and allows searching within cognate resources, and editions of major manuscripts (15). Likewise, medievalists who have not yet used these methods clearly see their potential and hope to start using them soon. As one historian of medieval Ireland stated, digital methods "are becoming more important with the work that I'm doing now. I started to learn more or less on the job, but I'm planning to do a more structured engagement with digital methodologies now...I'm looking forward to assessing the methodologies regarding the users and regarding the sources"(29). First World War specialists had a looser understanding of digital methods than their medievalist counterparts and none of those interviewed had experience with advanced methodologies.

Chart 3.1.



Those interviewees who are using digital methods did not arrive at them through any formal training [question 5.1.1]. Typical was the response of a medievalist who said that introduction to these methods proceeded “in an ad hoc way, because I haven’t had any training in digital humanities....I began the job and just started reading and looking at other projects.” (7). Three interviewees cited the importance of colleagues in introducing them to such methods. One remarked that the university’s choices in providing software to staff determined the sort of methods used (12). The importance of colleagues and established institutions in the dissemination of digital methodologies speaks to the trust that researchers must have in a digital method or resource before they invest time in using it (see also Warwick and Ross in Warwick et al, 2012). This is particularly the case among historians, who, as a discipline, have already faced one epochal disillusionment with computational and computer-based methods (Thomas in Schreibmann et al, 2004).



Researchers who participated in the interviews were generally optimistic about the potential of digital methodologies [question 5.1.2.], even if they were not making use of them. Interviewees across areas of specialization cited the practical benefits of digitization, above in lessening the need for lengthy and costly research trips (7, 8, 12, 18, 19, 26). An entailment of the practical benefits was the broadening of transnational and comparative horizons (6, 7, 25). Several researchers also mentioned how digital methodologies enable the manipulation of vastly increased amounts of data, from reconstructing past corpora, like the medieval manuscript collection of an entire monastery (15), through the recognition of patterns and text mining in sources (22), and the integration of far-flung databases (24). One medievalist also cited the potential of “large-scale European-wide projects that make large amounts of data accessible for comparative historical research” (6).

When asked to identify the potential of digital methodologies for interviewees’ specific fields of research [question 5.1.3], responses ranged from general practical benefits rehearsed in the preceding question—above all, accessibility of relevant literature (8) and primary sources (19, 20, 22, 23)—to more specific benefits in the pursuit of certain research questions. Thinking in terms of the latter was more pronounced among medievalists. One medieval historian enthused about “an increased processing of natural scientific data for historians. For instance that in Europe, dendrochronological data be systematically assembled and then processed and presented in a way that all possible kinds of persons, and also historians can use them..[or] in America they have the North American Drought Atlas, which assembles all dendrochronological data from 500 places, and mapped them onto North America, so you can click on each place and it tells you how warm it was in what place at what point of time. Such a thing would be possible for Europe as well, but it doesn't exist yet” (6). Another medievalist hoped that digital methods would open up comparative horizons in Irish medieval history and foster international discussions (7). Yet a third cited the enhanced abilities to “visualize geographical spreads... [and be] able to connect people up” (12).





## Researchers' use of digital tools

In terms of the digital tools researchers used [question 5.2.], few differences appeared across fields of specialization, with the exception that the only scholars using visualization software—here Pajek and GIS (13)—and XML encoding software—here Oxygen (15)—were both senior-level medievalists. Otherwise, researchers were united in their use of online catalogues of books, archival search engines, specialized source search engines (e.g. the League of Nations search engine), Worldcat, journal databases such as Jstor, and online publishing projects like Google books and Ebrary. Alongside basic Microsoft programs such as Word and Excel, many interviewees used Adobe programs (Photoshop, Reader, Acrobat) to process and manipulate digital images that they created with a digital camera. For image processing, one researcher used DJVU instead of Adobe because of the compatibility with digital sources in relevant repositories (3). Digital cameras and smart phones were a commonly cited tool, especially among historians of the modern era who face dauntingly large archival collections. Several historians mentioned using reference-management programs Zotero and Endnote and cloud applications, such as Dropbox and Skydrive, for storage. One historian of the modern era was contemplating using some tools—the reference-management program Citavi and the statistical analysis programs SPSS and MaxQDA—simply because their home university provided it (12). None of the interviewees mentioned collaborative or social media tools that have attracted much attention in the digital humanities field (Causer and Wallace 2012; Ross in Warwick et al, 2012; for a counterpoint, see Bradley 2012).

Researchers seem to use digital tools mostly for searching and locating sources or evidence within the sources [question 5.2.1.]. They also highly valued the functions that allowed them to save and store documents in various formats. One scholar—a medievalist using sophisticated methods and tools—cited new organization and visualization techniques, which opened new questions as well as presenting results (13). In general, this corroborates the results of the first CENDARI questionnaire, particularly the responses to the question “What tools would you like to use in a digital archival research environment?” The



overwhelming majority—21 respondents—identified “search and retrieval” as their top priority. The second most desirable category (with 12 votes) was organizational tools in the form of “resource and metadata management.” Following this, with 10 votes each, were “visualization and analysis tools” and “relational databases,” reflecting considerable interest in more sophisticated tools, though far behind search and retrieval mechanisms.

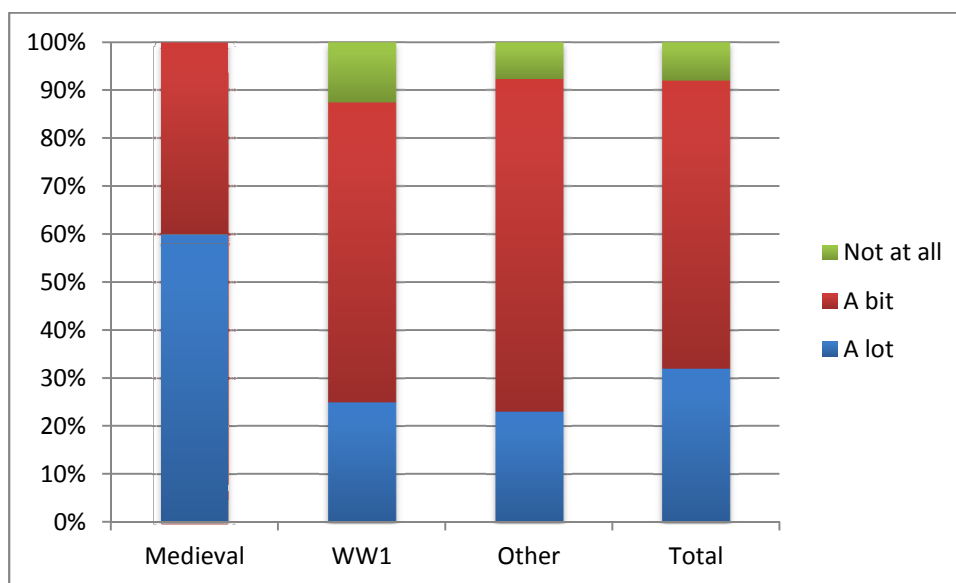
As far as tool functions that researchers found missing or lacking [question 5.2.2.], the few interviewees who addressed this question gave a variety of answers. Two researchers wanted full-text search functions that their current toolkit did not permit. Two others (7, 25) lamented that they lacked sufficient knowledge to answer the question fully, though they would like to explore the potentialities of these tools more, to visualize data for example (7). One medievalist singled out image searching as a desideratum (15). Another remarked that “it would be nice if these things would run on a Mac!” (13), highlighting challenges of interoperability that software users (and designers) face.

### **Researchers’ use of digitized sources**

The vast majority of interviewees (22) make at least some use of digitized sources [question 5.3.], while only two historians—one of the early modern period and one of First World War (5, 23)—made no use of them at all, citing a lack of relevant digitized sources in their specific subfields (see chart 3.2). Nonetheless, the extent to which researchers made use of digitized sources varied widely. Among the pool of interviewees, this did not correlate strongly with fields of specialization. Of the seven respondents who said they used digital sources “a lot”, one medievalist said “I could not imagine working without them” (6) and one First World War historian stated that “at the moment 100% I think, because all of my sources have been digitized by the National Archives” (1). One modern historian remarked that they used digital sources “more and more...the fact that something is digitized means that I'll use it more” (12), suggesting that researchers were adjusting their research queries based on what is available in digital format. On the other hand, one medievalist working mostly with archival

materials from small and obscure repositories cited only using “databanks and bibliographies” for orientation in the initial stages of research (11). Limited use of digital sources cropped up in answers from a variety of modern historians. One First World War historian said “there is a lot online, but I didn’t find that much that was interesting for my research” (17). Another complained that little relevant material is online, and the materials that are often cannot be efficiently searched because of their poor quality (22). Interviewed historians outside of Medieval and First World War domains generally made very little use of digital sources (2, 4, 12, 10, 14, 21).

Chart 3.2.



Medieval historians—who deal with a large, though not unfathomably large, corpus of extant sources—have a far larger proportion of relevant sources available to them in digital online format than modern historians [question 5.3.1.]. Responses based on researchers’ experiences gave an indication of how wide this disparity is. The roughly estimated proportions that interviewees provided are arguably less important than the varying



perceptions of plenty or dearth in these fields, which doubtless structure methodological and historiographical approaches. The medievalists who responded to this question both gave very high percentages: “I would say 50% to two thirds” (6); “I would say half” (7). Two First World War historians also said “a lot”, but gave considerably lower figures, such as “probably roughly 20%” (16). Furthermore, five said only “a bit” was available, citing some legal sources (8) and newspapers (20). Historians in other modern fields generally echoed one First World War historian who commented that the amount of relevant digitized sources amounted to “really very, very little” (17).

Interviewees were also asked what they would digitize if they had the choice [question 5.4]. With such a goal within the realm of possibility for medieval historians, one researcher made the case for digitizing “everything. In my opinion, the old practice of publishing the most important sources should be continued, but everything should be photographed.” (6) Another wanted to see “parchments” in general online, along with ways to search them by date, provenance, etc. (11) Two other medievalists stated less ambitious aims of digitizing relevant scholarly journals and secondary sources, but also imagined fruitful areas for DH resources, including a Franciscan archive and a thematically oriented online collection bringing together materials from diverse places (7, 13).

First World War historians, by contrast, were much more selective and cautious in defining their wish lists, tending to privilege bodies of sources that could be easily delimited and potentially used by the widest number of researchers in the field. These included government documents (1, 20); records of associational life in Estonia (1); ministerial records from Austria Hungary that “would be great, for me, but probably also for many other historians who work on totally different topics” (17); photos of landscapes, armies and military records (19); newspapers (20); diaries and private papers (8, 20); films and records of warships (23); and documents useful for teaching (20). Yet several of them were also daunted by the question or expressed pessimism about the feasibility of any large-scale digitization. One said “hard to tell” (8) while another said “In general, it would be great to



have access to documents in Russia, but I'm afraid that will not happen over the next years" (1).

This rather more specific and qualified approach also characterized responses from other modern historians, who were interested in privileging the digitization of things like "the Ringelblum holdings of the Jewish Historical Institute in Warsaw" (2); the "documents from the Polska Akademia Nauk" (3); "the Board of Trade search registrar, which are at the National Archives, that would be very useful" (4); foreign relations office proceedings, publications, debates (10); ministerial debates (14); the most widely used sources, such as cabinet papers, and finding aids (21); microfilms, "Personenstandsbücher" and charters (26). Modern historians also expressed concerns about the legal ramifications of digitization and questioned the extent to which online access to important sources is possible (12, 18, 21). One respondent wanted to digitize "all of my archival documents", on the model of the Parallel Archive, while casting doubt on the legality of such activity (12).

### **Changes in research practice over the past 5-10 years**

As a final question, we asked more experienced researchers—i.e. those with at least a postdoctoral position and five years of research behind them—about changes in their research practices in the past 5-10 years [question 6.1]. While we did not specifically query changes with regards to digital practices, nine of the eleven respondents (81%) identified the digital at the centre of fundamental changes they have observed in the discipline or made in their own research. Only one respondent said that research practices had not changed (5) and one said that they had, but not towards digital practice, instead pointing to more interdisciplinary work (21). The fact that interviewees had just been asked about their experience with digital humanities along with their awareness that CENDARI is a digital humanities project certainly heightened their propensity to single out digital shifts. Nonetheless, the patterns of these responses indicate that researchers' understanding of the contours of these shifts is broadly shared.

A number of interviewees spoke about their own individual practices, citing increased ease of research due to online digitized sources, full-text searching within them, digital cameras, as well as note-taking and organization on laptop computers (6, 8, 13, 16, 20, 22, 23, 26). Two researchers also observed that, facilitated by digitization and digital methods, their research had shifted away from text-based sources to more material culture (13) and visual sources (22). Digital breakthroughs have also encouraged and enhanced networking with other scholars, in the view of two respondents (20, 26). Yet there also remains a disjuncture between the possibilities and the extent to which researchers use them. One interviewee felt overwhelmed by the amount of information now available (20). Another remarked that “research possibilities are absolutely transformed, but practice varies enormously...there are some areas that haven’t really lined up to a digital agenda yet” (15). Medievalists showed more awareness of markedly new research possibilities, while First World War historians generally commented on the increased ease of existing research practices.

#### 4.4 Concluding Remarks

The preceding pages highlight a number of issues that should inform the development of CENDARI’s methodological priorities and the embedding of those priorities in the enquiry environment. As such, it contributes directly to the realization of deliverables 4.1 and 4.2 as well as indirectly to deliverables 8.1, 8.2, and 8.3. The main preliminary findings of this section include:

- The heterogeneous, diffuse nature of the digital humanities makes their meaning for the research community equally varied and difficult to pinpoint.
- Where a concentration of activity in the digital humanities is perceptible, it is in the development of tools and methods to study large digitized textual corpora. Among researchers, this has understandably resonated more among medieval historians, who find a greater proportion of their sources digitized (or at least anticipate this) than do modern historians, including First World War specialists.



- Traditional research approaches predominate among many tool developers and nearly all historians who might make use of digital methods and tools. Such approaches include defining topics on the basis of a conventional review of published literature, identifying (mostly unpublished) sources upon which to concentrate research, individual study of those sources, individual description and analysis of results in conventional publications.
- Thus, historians must usually be convinced of the payoff of digital tools and methods within this traditional research framework in order to make use of them. This has concentrated historians' digital 'activity' on basic search and retrieval functionalities, and on new technologies for data storage (esp. digital cameras). It has also made historians less prone to explore more sophisticated methods and tools as well as more collaborative and social research possibilities, beyond emailing colleagues.
- Historians who are using more sophisticated digital methods, or are at least aware of them, gravitate toward tools that enable geographical visualization, database manipulation, and annotation of digitized corpora.
- There is a noticeable disjuncture between the possibilities afforded by new digital humanities tools and methods on the one hand and researchers' propensity to take advantage of these possibilities on the other. The disjuncture is more noticeable for modern and First World War historians than for medievalists.
- Researchers in all subfields of history tend to be excited and optimistic about the potential of digital methods and tools—above all, access to digitized content—and have, by and large, witnessed significant disciplinary changes in the past 5-10 years because of them. But some see heightening interdisciplinarity and collaboration, not necessarily connected to digital humanities, as the essence of recent changes in the discipline.



## 5. Conclusions and Recommendations

### Changes in Research Practices

With regards to the target groups of CENDARI (historians of World War I and medieval history who are working on projects with a transnational outlook), we come to the conclusion that archival practices have changed (and keep changing) significantly as a result of digital innovations. Historians across all periods and topics of research consider the digitization of online finding aids and of documents, the possibility of full-text search, and the availability of online catalogues a great asset.

While recent reports on archival research practices of historians almost exclusively focus on changes against the background of the development of digital tools and wide-scale digitization of sources, our report also takes into account that developments within the historiographical field have altered the way historians work, as the end of the Cold War made archives in most European countries accessible and thus increased the possibilities for comparative and transnational research, while at the same time the linguistic turn and ensuing calls for interdisciplinary approaches significantly broadened the source base for historiographical studies.

### Innovation and Tradition

In general, we detected pronounced optimism among historians regarding innovations and potentials in the digital field, especially regarding finding, viewing, and organizing of sources. Between the two target groups, however, we detected a difference when it comes to digital “literacy”. On average, medievalists were more familiar with advanced digital methods and more ambitious in terms of what they expected from digital humanities, which is at least partially a result of the fact that they had a significantly larger proportion of sources available





in digital format and thus much less relied on physical archives. Medievalists were also more enthusiastic when it explicitly comes to the use of digital methods.

For experts of World War I, who conduct studies in archives across several countries, the “outsourcing” of classical archival practices to home or the office – both when it comes to identifying sources before a research trip and evaluating sources afterwards – seems the most pressing issue. As a result of existing possibilities of accessing collections online and photographing archival documents, historians mainly see potential in making costly and time-consuming research trips more efficient and to estimate the feasibility of a project at an earlier stage.

However, there are spheres of research where historians almost exclusively need to rely on “classical” archival practices. This particularly applies to “hidden” archives or libraries, information on which is virtually non-existent online. Potential of digital innovation seems to be mainly in the facilitation of those strategies which historians use to cope with such problems, first and foremost personal contacts and networking with other historians and collection experts. Moreover, classical reading strategies to cope with linguistic problems are still at the centre of transnational research, although translation tools are being used to a limited extent.

### **Special Implications for Preliminary Research**

While CENDARI should facilitate research on all project stages, it transpires from this study that current digital developments in archives are especially beneficial for the stage of preliminary research, in which historians sketch out their projects. This is in many respects the crucial phase of a project and should receive special attention from CENDARI. In this phase, which may take from a few months to well over a year, the researcher poses a research question, draws up a methodological framework, and reviews secondary literature



to contextualize his research. To ascertain the feasibility of his project, the researcher needs get a sufficiently clear picture of what and how many sources he can expect to find to answer his research question.

Knowing the state of source material and being able to convincingly present how this material can be used to answer a research question has a very practical significance, as in most European countries ever more historians work on their studies in project-based environments, which requires them to present a feasible project *before* they are being employed – be it in the shape of an extensive application for funding or of a shorter project sketch at a job interview. This trend towards project-based employment is expected to become even more distinct in the future, with the feasibility of projects and knowledge on the relevant sources becoming decisive factors regarding the granting or rejection of funding.

For this phase, which is time-consuming as well as expensive (due to shorter preliminary research trips), CENDARI should be immensely beneficial. The interviews have shown that historians consider the availability of finding aids and advice given by archivists and fellow historians as decisive at this stage. Detailed information on archives and the availability of digital finding aids allow for an assessment of the availability and scope of sources. This saves historians substantial amounts of time and money. CENDARI can facilitate this even more by providing a platform of communication between historians and archivists to identify accessible and relevant sources. Possibilities to network with fellow historians further help identify sources relevant for answering the research question. Apart from being highly useful on a practical level for historians, this would also – as the interviews show – help to encourage opening up studies for comparative and transnational research questions.

## Communication and Collaboration

Another major find of the interviews is the significance of networks and communication for all



stages of research (although, again, this seems particularly important for the preliminary stage). CENDARI should not restrict itself to providing access to finding aids and sources, but serve as a genuine base for communication, taking into account the specific characteristics of cooperation and communication between historians and their peers and historians and archivists.

The interviews confirm what studies of historical research practice have shown: Historians rather seek advice than opportunities for genuine collaboration. This should not be seen as evidence for the solitariness of historical research, but rather as an expression of the specific requirements of historiography and its emphasis on the identification of sources. The historical sciences are endowed with an elaborate tradition of altruistic counselling from senior to early-career researchers. The majority of historians interviewed deemed large networks as relevant to the success of their research. In fact, the interviews implicitly show that most historians do not regard it a bare necessity, but rather an inherent – and very pleasurable – part of a historian's job. Although they consider it not decisive, they enjoy contact to peers and archivists beyond the mere “harvesting” of information, which suggests that they would embrace social functions provided by CENDARI.

## **Recommendations for CENDARI**

- CENDARI should provide social networking features that take the specific characteristics of communication between historians and archivists into account. These should particularly allow historians to help each other identify relevant sources. This can have different shapes which can complement each other – e.g. in the form of user generated content (Archival Research Guides, but also simple notes and tags applied by users to documents on CENDARI), but also in the form of forums that enable genuine communication between historians and their peers, archivists and librarians (“Ask an archivist”).
- The special significance historians attach to communication with peers and with



archivists has special implications for identifying and accessing “hidden archives”, which seem particularly important to First World War historians. CENDARI should not restrict itself to providing access points to these “hidden archives”, but also facilitate networking, which is deemed crucial for the identification of their repositories. The eclectic nature of “hidden archives” (organized vs. unorganized, accessible vs. inaccessible) makes them a particularly interesting object for crowdsourcing. By facilitating this, CENDARI might become the digital equivalent to extensive footnoting and referencing, which forms the basis for elementary research practices, such as chaining. Again, this may take the form of Archival Research Guides and of information tagged directly to CENDARI provided archival descriptions (EAG).

- As current trends within the historical sciences emphasize the necessity for interdisciplinary research, CENDARI should be open to users from other disciplines and offer means of communication to bring disciplines together. This should reflect in the CENDARI website itself, but also in CENDARI activities. While workshops and summer schools should continue to focus on the target audience as described in the DOW, CENDARI should try to reach out to other disciplines such as the literary studies or human geography.
- Similarly, it should be worthwhile (as has already been begun) to discuss to what extent CENDARI should cater to the needs of amateur historians. The conceptual work involved in this, however, should not be underestimated, as studies of human information behaviour research have shown that research practices of amateur historians differ substantially from those of professional historians (Darby/Clough 2013; Duff/Johnson 2003). It might be a good solution that CENDARI provides means for communication between amateur and professional historians, without striving to reflect research practices of amateur historians in the infrastructure.
- Particularly First World War historians emphasized the influence of archival and national narratives on the identification of sources. CENDARI should take this into account by highlighting the construed character of such narratives and by providing transnational and comparative approaches to archives in the Archival Research Guides within WP5.
- The enormous role of taking photographs in archives leads to the necessity to organize these materials afterwards in a meaningful way. The number of files can



range between hundreds and many thousands (particularly with historians of the 20<sup>th</sup> century). Historians use strategies ranging from the simple storage in meaningfully titled folders to tools such as Zotero or Citavi to organize sources with regards to content and typology. CENDARI should allow users to link sources or references they find in CENDARI to the tools they are using, or to organize the sources meaningfully within the CENDARI interface. This corresponds to user requirements highlighted in those epics/user stories authored by the CENDARI contributors at the University of Birmingham.

- This again highlights the necessity to provide users with means of note-taking and extensive cross-linking, i.e. to bibliographies, individual sources, particular references within finding aids, maps, photographs, etc.
- The language issue is crucial for transnational historical studies. This applies both to First World War historians and medievalists. CENDARI should provide the possibility to discuss foreign-language documents with peers and archivists, e.g. to check if translations are accurate or to provide basic information on the content of a document. Moreover, due to the centrality of this question to the envisioned users of CENDARI, it should be discussed if CENDARI can afford to exclude translation tools, which are being used extensively, but critically, by many historians.
- Regarding tools deemed useful by historians, CENDARI should pay special attention to mapping tools, i.e. geographical visualization, tools to organize sources and data, and tools to annotate digitized corpora. Of special value for research on the First World War would be a complex and thorough visualization of historic maps and border shifts in order to comprehend the logics of the topography of archival holdings.
- As historians on average seem less enthusiastic to embrace digital innovations and methods (with a significant gradient from medievalists to First World War historians), CENDARI should pay particular attention that it makes the benefit of the tools and data provided clear to potential users. This particularly applies to the “invisible” parts of the project, such as the ontologies designed for the First World War and medieval history. Special attention should also be paid to highlighting the practical implications, such as the identification of sources, the possibility to save money on preliminary research trips, the benefit to the writing of grant proposals, etc.



## 6. Bibliographic references

### 6.1 Cited sources

Angelis, Stavros et al., *Researcher Practices and User Requirements. Deliverable D.16.4 of the European Holocaust Research Infrastructure (EHRI)*, unpublished report, 2013.

Antohi, Sorin, Balázs Trencsényi and Péter Apor (eds.), *Narratives Unbound. Historical studies in post-communist Eastern Europe*, Budapest: Central European University Press, 2007.

Axtmann, Roland. *Society, Globalization and the Comparative Method*, New York 1993.

Bender, Thomas. *The Education of Historians for the Twenty-first Century*, Chicago 2003.

Berry, David M. *Understanding Digital Humanities*. Basingstoke: Palgrave Macmillan, 2012.

Bloch, Marc. "A Problem in Contemporary History. The Administrative Classes in France and in Germany", in: *Land and Work in Medieval Europe*, edited by Marc Block, Berkeley: University of California Press, 1967, pp. 82-123.

Butterworth, Richard. *Gathering User Requirements When You Don't Know Who the Users Are. A Case Study of Digital Library Development*, 2006  
<<http://www.eis.mdx.ac.uk/research/idc/papers/IDC-TR-2006-002.pdf>>

Brockman, William S., Laura Neumann, Carole L. Palmer and Tonyia J. Tidline. "Scholarly Work in the Humanities and the Evolving Information Environment", December 2001 [<http://www.clir.org/pubs/reports/pub104/pub104.pdf>]

Causer, Tim, and Valerie Wallace, "Building a Volunteer Community: Results and Findings from *Transcribe Bentham*" *Digital Humanities Quarterly*, 2012, Vol. 6, No. 12.

Clavin, Patricia. "Time, Manner, Place. Writing Modern European History in Global, Transnational and International Contexts", *European History Quarterly*, 40, 4 (2010), pp. 624-640.

Cohen, Deborah and Maura O'Connor. "Comparative History, Cross-National History, Transnational History. Definitions", in: *Comparison and History. Europe in Cross-National Perspective*, edited by Deborah Cohen and Maura O'Connor, Abingdon: Routledge, 2004, pp. ix-xxiv.



- Cunningham, Sean. Archive skills and tools for historians, Making History, 2012, <[http://www.history.ac.uk/makinghistory/resources/articles/archive\\_skills\\_and\\_tools\\_for\\_historians.html](http://www.history.ac.uk/makinghistory/resources/articles/archive_skills_and_tools_for_historians.html)>
- Darby, Paul and Paul Clough. "Investigating the information-seeking behaviour of genealogists and family historians", *Journal of Information Science* 39 (2013), 1, pp. 73-84.
- Duff, Wendy M. and Catherine A. Johnson. "Where is the list with all names? Information-seeking behaviour of genealogists", *The American Archivist* 2003, p. 79-95.
- Eisenberg, Christiane. "Kulturtransfer als historischer Prozess. Ein Beitrag zur Komparatistik", in: *Vergleich und Transfer. Komparatistik in den Sozial-, Geschichts- und Kulturwissenschaften*, edited by Jürgen Schriewer, Frankfurt/Main: Campus, 2003, pp. 399-417.
- Espagne, Michel, "Sur les limites du comparatisme en histoire culturelle", in: *Genèse* 17 (1994), 1, pp. 112-121.
- Gibbs, Fred, and Trevor Owens, "Building Better Digital Humanities Tools: Toward broader audiences and user-user centered design" *Digital Humanities Quarterly*, 2012, Vol. 6, No. 12.
- Gold, Matthew K., ed. *Debates in the Digital Humanities*. Minneapolis: University of Minnesota Press, 2012.
- Haupt, Gerhard and Jürgen Kocka, Historischer Vergleich. Methoden, Aufgaben, Probleme, in: *Geschichte und Vergleich. Ansätze und Ergebnisse international vergleichender Geschichtsschreibung*, edited by Gerhard Haupt and Jürgen Kocka, Frankfurt/Main: Campus, pp. 9-45.
- Jones, Chris, Ruslan Ramanau, Simon Cross, and Graham Healing. "Net Generation or Digital Natives: Is There a Distinct New Generation Entering University?" *Computers & Education* 54, no. 3 (April 2010): 722–732.
- Jones, Chris, and Binhui Shao. *The Net Generation and Digital Natives: Implications for Higher Education*. York: Higher Education Academy, June 26, 2011.
- Jones, Chris. "Students, the Net Generation and Digital Natives: Accounting for Educational Change." In *Deconstructing Digital Natives: Young People, Technology and the New Literacies*, edited by Michael Thomas, 220. London & New York: Routledge, 2011.
- Kier, Elizabeth and Ronald R. Krebs. "War and Democracy in Comparative Perspective", in: *In War's Wake. International Conflict and the Fate of Liberal Democracy*, edited by





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Elizabeth Kier and Roland R. Krebs, Cambridge: Cambridge University Press, 2010, pp. 1-22.

Kolowich, Steve. "What Students Don't Know." *Inside Higher Education*, August 2011.

Lantschner, Patrick/Hannah Skoda, "Introduction", in: *Contact and Exchange in Later Medieval Europe. Essays in Honour of Malcolm Vale*, edited by Hannah Skoda, Patrick Lantschner and R.L.J. Shaw, Woodbridge: Boydell & Brewer, 2012, pp. 1-24.

Leonhard, Jörg. *Liberalismus. Zur historischen Semantik eines europäischen Deutungsmusters*, München: Oldenbourg, 2001.

Osterhammel, Jürgen. *Geschichtswissenschaft jenseits des Nationalstaats. Studien zu Beziehungsgeschichte und Zivilisationsvergleich*, Göttingen 2001.

Rosenzweig, Roy, "Scarcity or Abundance? Preserving the Past in a Digital Era." *The American Historical Review* 108 (June 2003): 735–762.

Rutner, Jennifer and Roger C. Schonfeld. *Supporting the Changing Research Practices of Historians*, 2010. < <http://www.sr.ithaka.org/research-publications/supporting-changing-research-practices-historians> >

Schreibmann, Susan, Ray Siemens, and John Unsworth. *A Companion to Digital Humanities*. Oxford: Blackwell, 2004.

Sinn, Donghee, "The Impact of Digital Archival Collections on Historical Research," *Journal of the American Society for Information Science and Technology*, 63(8) 2012, 1521–1537.

Ther, Philipp. "Beyond Nation. The Relational Basis of a Comparative History of Germany and Europe", *Central European History*, 36 (2003), 1, pp. 45-73.

Ther, Philipp. "The Transnational Paradigm of Historiography and its Potential for Ukrainian History", in: *A Laboratory of Transnational History. Ukraine and Recent Ukrainian Historiography*, edited by Heorhiy Volodymyrovych Kasianov and Philipp Ther, Budapest: Central European University Press, 2009, p. 81-115.

Warwick, Claire, Melissa Terras, and Julianne Nyhan, eds., *Digital Humanities in Practice*. London: Facet, 2012.

Werner, Michael and Bénédicte Zimmermann. "Beyond Comparison. Histoire Croisée and the Challenge of Reflexivity", *History and Theory*, 45 (2006), pp. 30-50.





## 6.2 Further reading

### 6.2.1 Digital Humanities

Anderson, Deborah Lines. "Benchmarks: Defining Digital History." *Journal of the Association for History & Computing* 5, no. 1 (2002).

Bradley, John, "Toward a Richer Sense of Digital Annotation: Moving Beyond a "Media" Orientation of the Annotation of Digital Objects" *Digital Humanities Quarterly*, 2012, Vol. 6, No. 12.

Burdick, Anne, Johanna Drucker, Peter Lunenfeld, Todd Presner, Jeffrey Schnapp, *Digital Humanities*. Cambridge, MA: MIT Press, 2012.

Ceruzzi, Paul E. *A History of Modern Computing*. 2nd ed. Cambridge, Mass. & London: The MIT Press, 2003.

Cohen, Daniel. "Digital History: The Raw and the Cooked 1." *Rethinking History* 8, no. 2 (June 2004): 337–340.

Cohen, Daniel J., William Frisch, Patrick Gallagher, Steven Mintz, Kirsten Sword, Amy Murrell Taylor, William G. Thomas III, and William J. Turkel. "Interchange: The Promise of Digital History." *The Journal of American History* 95, no. 2 (September 2008): 452–491.

Ewing, E. Thomas, and Robert P. Stephens. "The Digital History Reader: Teaching Resources for United States and European History." *Perspectives* 45, no. 5 (2007): 16–19.

Fogu, Claudio. "Digitalizing Historical Consciousness." *History and Theory* 48, no. 2 (May 2009): 103–121.

McCarty, Willard. *Humanities Computing*. New York: Palgrave, 2005.

Rosenzweig, Roy. "Can History Be Open Source ? Wikipedia and the Future of the Past." *The Journal of American History* 93, no. 1 (June 1, 2006): 117 –146.

*Clio Wired. The Future of the Past in the Digital Age*. New York: Columbia University Press, 2010.

*Digital History. A Guide to Gathering, Preserving, and Presenting the Past on the Web*. Philadelphia: Univ. of Pennsylvania Press, 2006.

Siemens, Ray, and Susan Schreibmann, eds. *A Companion to Digital Literary Studies*. Oxford: Blackwell, 2008.



Stephens, Paul, "From the Personal to the Proprietary: Conceptual Writing's Critique of Metadata" *Digital Humanities Quarterly*, 2012, Vol. 6, No. 12.

Svensson, Patrick. "The Landscape of Digital Humanities." *Digital Humanities Quarterly* 4, no. 1 (2010).

"Humanities Computing as Digital Humanities." *Digital Humanities Quarterly* 3, no. 3 (2009).

Toms, Elaine G., and Heather O'Brien. "Understanding the Information and Communication Technology Needs of the E-humanist." *Journal of Documentation* 64, no. 1 (2008).

Williams, George. "Starting Points in the Digital Humanities." *ProfHacker. Tips About Teaching, Technology, and Productivity*, August 2011.

### 6.2.2 Transnational History

Clavin, Patricia. "Defining Transnationalism." *Contemporary European History* 14, no. 04 (November 2005): 421–439.

Conrad, Sebastian, Andreas Eckert, and Ulrike Freitag (eds). *Globalgeschichte: Theorien, Ansätze, Themen*. Frankfurt: Campus, 2007.

Cooper, Frederick, and Ann Laura Stoler. "Between Metropole and Colony. Rethinking a Research Agenda." In *Tensions of Empire: Colonial Cultures in a Bourgeois World*, edited by Frederick Cooper and Ann Laura Stoler, Berkeley: University of California Press, 1997, pp. 1–56.

Frederickson, George M. "Giving a Comparative Dimension to American History. Problems and Opportunities." *Journal of Interdisciplinary History*, 15 (1985), 1, pp. 107–110.

Haupt, Heinz-Gerhard, and Jürgen Kocka (eds.). *Comparative and Transnational History. Central European Approaches and New Perspectives*. New York: Berghahn Books, 2009.

Hoffmann, Stefan-Ludwig. "Democracy and Associations in the Long Nineteenth Century: Toward a Transnational Perspective." *The Journal of Modern History* 75 (2003), pp. 269–299.

Iriye, Akita and Pierre-Yves Saurier (eds). *The Palgrave Dictionary of Transnational History*. London: Palgrave MacMillan, 2009.

Jones, Heather. "International or Transnational? Humanitarian Action during the First World War", *European Review of History*, 16 (2009), 5, pp. 697-713.



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- Kaelble, Hartmut. *Der historische Vergleich. Eine Einführung zum 19. und 20. Jahrhundert*. Frankfurt/Main: Campus Verlag, 1999.
- Kasza, G. J. "War and Comparative Politics." *Comparative Politics*, 28 (1996), 3, pp. 355–373.
- Kirk, Neville and Donald MacRaild, "Introduction. Transnational Ideas, Activities, and Organizations in Labour History 1860s to 1920s", *Labour History Review*, 74 (2009), 3, pp. 221-232.
- Laqua, Daniel. *Internationalism Reconfigured. Transnational Ideas and Movements Between the World Wars*. London: I.B. Tauris, 2011.
- Middell, Matthias. "Kulturtransfer und historische Komparatistik." *Comparativ* 10 (2000), pp. 7–41.
- Paulmann, Johannes. "Internationaler Vergleich und Interkultureller Transfer." *Historische Zeitschrift* 3 (1998), pp. 649–685.
- Spiegel, Gabrielle M.: *Practicing History. New Directions in Historical Writing after the Linguistic Turn*, New York 2005.
- Strayer, Robert W. *The Making of the Modern World. Connected Histories, Divergent Paths. 1500 to the Present*. New York: St. Martin's Press, 1989.
- Struck, Bernhard, Kate Ferris, and Jacques Revel. "Space and Scale in Transnational History." *The International History Review*, 33 (2011), 4, pp. 573–584.



## **Appendix I. Interview questionnaire**

### **1. GENERAL QUESTIONS**

- 1.1. What is your current academic position?
- 1.2. How would you define your general field of research?

### **2. TRANSNATIONAL RESEARCH AND FRAGMENTATION OF ARCHIVES**

- 2.1. How does the accessibility of archives affect your work?
- 2.2. To what extent has your access to sources shaped your research topic?
- 2.3. How important is contact to other historians working in your field regarding the identification of sources?
- 2.4. How important is the transnational aspect of your work?
  - 2.4.1. What are the main obstacles and facilitators of transnational research that you encounter in holdings institutions (i.e. archives and libraries)?
  - 2.4.2. Has your access to sources made your study more or less transnational?
- 2.5. How many languages do you need for your research?
  - 2.5.1. How do you work with documents in other languages (transcription, summaries, translating, skimming?)

### **3. ARCHIVAL PRACTICE AND ARCHIVAL INTELLIGENCE**

- 3.1. Do you know exactly what you are looking for before actually going to an archive?



- 3.1.1. How do you prepare for your archival research trips? Are finding aids and/or archival guides available online?
- 3.2. For how long do you usually plan visits to archives?
- 3.3. How easy is it to pursue your research question within the current holdings/collections organization systems that you have encountered?
  - 3.3.1. How do you evaluate the possibility to take photographs or scans of sources in your archives of choice?
- 3.4. How relevant is the archive's own narrative about its holdings for your research?
- 3.5. How important is the role of the archivist or librarian for your research?
  - 3.5.1. How important was information given by archivists directly to you for your research?
  - 3.5.2. In how far did you communicate with archivists before and after the research trip?
- 3.6. What are your favourite archives and why?
- 3.7. How do you organize sources after an archival trip is over?
- 3.8. To what extent have you made use of little known archives or libraries?
  - 3.8.1. Why did you chose these archives or libraries and what led you to them?
  - 3.8.2. How are these archives or libraries organized?
  - 3.8.3. To what extent does their organization differ from that of larger and better-known archives or libraries?
  - 3.8.4. Once uncovered, were these archives or libraries easy to access?



#### **4. DOMAIN SPECIFIC QUESTIONS**

- 4.1. Do you rather use libraries or archives to find primary sources?
- 4.2. In your field of research, what is a greater problem: selecting from an overabundance of sources, or scarcity of sources?
- 4.3. [WW1 Domain] What type of archive do you use most? (National, regional, municipal, military, ecclesiastical, etc.?)
- 4.4. [WW1 Domain] In your view, how much have amateur historians contributed to the field?
  - 4.4.1. To what extent do you make use of their work?
- 4.5. [WW1 Domain] How do established national narratives about WW1 affect your research?
- 4.6. [Medieval Domain] How do established historical narratives (national, religious, whatever) affect your research?

#### **5. USE OF DIGITAL TOOLS AND METHODOLOGIES**

- 5.1. Are you using digital methodologies for your research?
  - 5.1.1. How were you introduced to digital methodologies?
  - 5.1.2. What do you consider the greatest potentials of digital methodologies?
  - 5.1.3. What is the greatest potential of digital methodologies for your specific field of research?
- 5.2. What digital tools do you use for your research?
  - 5.2.1. What functions of these tools do you mostly use?
  - 5.2.2. What functions do you miss?



5.3. How much use do you make of digitized sources?

5.3.1. How many of the sources of importance to your research are actually available in digital format online?

5.4. What would you digitize if you had the choice?

## **6. QUESTIONS FOR ADVANCED RESEARCHERS**

6.1. How much has your research practice changed over the past five (ten) years?



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## **Appendix II. Interview excerpts**

See Excel Sheet (sent to Project Officer by email)





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### **Appendix III. Feedback to CENDARI website questionnaire**

See Excel Sheet (sent to Project Officer by email)

