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Information competencies of historians as archive users: A Slovenia/UK comparison

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Abstract. This paper reports a study of the characteristics, skills and competencies of historians, both amateur and professional, as users of archives. It makes two main comparisons: between professional historians and amateurs, typically genealogists and family historians; and between participants in Slovenia and in the United Kingdom. The study is in two parts. First, a detailed and comprehensive literature analysis, including information competencies of archivists where relevant, as well as those of users, to identify the main issues to be examined. Second, a Delphi study with a small panel of archivists from both countries, to establish consensus or divergence of opinion, and to explore the differences, if any, between amateur and professional historians, and will also investigate any national differences. The results show a high degree of consensus, and point to common issues in the skills and competencies needed by both groups, which should be explored in a larger study.

Keywords: Archives, archivists, historians, information competencies, Delphi method

1 Introduction

Better understanding of the characteristics, skills and competencies of archives users is particularly important at a time when archives are increasingly becoming digital, are providing services to remote users, and also as they begin to store data collections as well as more familiar archival documents. In this paper we focus on historians, both amateur and professional, as users of archives.

2 Literature review and synthesis

Historians (professional and amateur) are the most investigated among users of archives [1]. Studies have generally focused on professionals, while sometimes including amateurs; for example, a recent study by Washburn, Eckert, and Proffitt [2] on how archives users adopt social media included faculty, students and genealogists.

Studies often aim at finding out the information practices of historians, their preferences regarding types and formats of materials, their attitude towards archivists and archives, and the varied purposes and impacts of archival research. As Case [3] put it, "Historical research in the archives is a multistage, iterative process. Historians may use a broad, "path-breaking" approach to research, proposing new ways of looking at old problems, or they may opt for a narrow, "microhistoric" approach, examining or documenting a specific community of interest or problem." Huvila [4] found that the empirical approach to studying archival users, in many cases historians, has strengthened in the new millennium, coincident with an increase in digital material in archives. These studies have generally used mixed qualitative and quantitative methods, including paper-based and web-based surveys, interviews, focus groups, observations, diaries, log analysis, and experiments [5, 6, 7, 8].

Such studies have fallen into three groups [9]: materials/institution centred, focusing on materials used; product-centred, focusing on archival research results; and user-centred. This last group of studies, considering the characteristics, behaviour, competencies, etc. of archives users is of most relevance to our study. There are relatively few such studies, and these were the focus of this literature review, which resulted in a qualitative synthesis [10], identifying the themes for our subsequent empirical study.

Poole, in a major review of the literature of the area [5], gave an overview of studies of the interaction between historians and archivists over eight decades. Although studies show historians increasingly adopting digital tools, there is still a reliance on traditional means of following footnotes and references. Both primary and secondary materials are widely used: for all types of materials extent of use and perceived usefulness are not necessarily correlated. Several studies indicated that historians' information seeking strategies were less than optimal, and that it would be helpful if archivists were consulted to a greater extent, and earlier in the process. Poole concluded that the influence of digital technology, together with a better understanding of historians' information practices, will allow for more effective collaboration between historians and archivists in the future. He cited several studies calling for increased archival training and archival literacy, in the context of education of professional historians; see, in particular, Morris, Mykytiuk and Weiner [11]. More recently, Carini has proposed a framework for standards of information literacy in archives and special collections [12]. Poole's review also noted the significance for the future of the amateur historian and the citizen archivist.

Early studies found that historians use informal and personal sources, as well as formal sources to locate and retrieve information [13, 14, 15, 16]. Beattie found that predominant sources used by Canadian historians for locating information were archivists, footnotes, and colleagues, not formal tools [17]. However, though informal sources were more frequently *used* by these historians "they are not more *useful* than the formal descriptive tools available." Cole found that history doctoral students had different ways of processing information which affect their knowledge formulation: holistic and serialistic [18]. Another finding of Cole's study is that besides using textual materials these historians were increasingly using non-textual forms such as photographs and oral histories. A study by Stieg Dalton and Charnigo found that some information practices of historians have remained the same, such as finding information in book reviews, browsing, and carrying out comprehensive searches

[19]. Although there was still a preference for printed sources, historians had begun to use digital databases, catalogues and indexes.

These patterns appear not to have changed much in a decade, as Sinn & Soares noted that historians show similar information behaviors with digital collections [9]. Chassanoff claimed that it is not possible to identify from the literature which would be historians' preferred search and retrieval strategies in archival settings [8], However, she also found that historians' preferred ways of locating primary sources are finding aids, archivists and citation linking; the methods deemed most useful are not necessarily the most frequently used, due to experience, availability, etc. She also argued that "rather than focusing solely on frequency of use, or facilitating better search and retrieval methods, archivists should consider how information needs adapt and change as new knowledge is acquired."

Duff identified patterns of user behaviour from the literature, finding that too little information was provided for effective archival reference service, and that finding aids were heavily consulted and highly valued, as were system help features [20], which substituted for the help of an archivist. Duff and Johnson explored the information behaviour of professional genealogists, finding researchers predominantly searching for personal names, sometimes place names, dates, and genres, only occasionally seeking advice from archivists and colleagues, and rarely consulting formal sources such as finding aids [21]. They identified barriers in the search process: the provenance-based organization of finding aids is not user friendly, especially to novice researchers, while distributed systems without a central search portal, and time constraints, were problematic. Freund and Toms carried out a lab-based study of ways in which historians and genealogists used printed and digital archive finding aids [22]. The participants used a variety of strategies for interacting with the finding aids; although they were generally successful in completing the tasks, there was some evidence that they were confused by an "archival world view" instantiated in the finding aids; see also [23] on findings aids as a distinct genre of document.

Lybeck found that in digital archives researchers are beginning to show non-traditional behaviours which has probably to do with their general experiences with using online databases, digital libraries, etc. [24]. Digital archives are increasingly seen as just another digital library [5]. Seadle made the point that the most basic information activity of historians - reading and scanning - is considerably altered as visits to physical libraries and archives are increasingly replaced by remote engagement with digital texts [25].

Tibbo found that US historians utilized a wide range of primary materials and also of sources and tools, from paper materials to online databases, web searching and repositories, but lacked knowledge of the content of digital sources, and even of the existence of electronic finding aids [26]. Recommendations were that archivists should become more proactive in user education and that they should dedicate more attention to archival finding aids tailoring them to the users' needs; more recently Cook made a similar call for greater attention to the relative characteristics, knowledge and skills of historians and archivists, which would reflect in an enriched archival practice [27]. A similar study in the UK found that although historians work in different ways, there are still some common patterns of behavior and preferences; the main factor explaining historians' information-retrieval behaviour is the type, or genre, of the information source [28].

Duff, Craig & Cherry carried out questionnaire studies of Canadian academic historians, finding that historians use what is available to them, but wish for more sources, particularly digital, use a variety of document types and formats, want a better and faster access to finding aids, and value archives for the completeness of their collections [29, 30]. Among the most valued sources were finding aids, footnotes, and archivists; most preferred to use the original format of materials, but also valued electronic access and digital reproduction. Chasanoff also investigated academic historians, using a web survey, finding an awareness of, and interest in, new technological developments, the quality of digitized materials, and recognition of the archivists' expertise in the digital environment [8]. Sinn and Soares found that historians' sources of information about the existence of digital archival collections were mainly informal and personal [9].

Sinn surveyed historians' experience and perception of digital archives, finding that they behave similarly to other users of digital libraries, generally finding about databases through informal means, and, if interested in the content, being prepared to learn to make best use of even an unfriendly interface [31]. They saw drawbacks and benefits in technology: drawbacks are mentioned in connection to poor quality of images, lack of diversity, non-searchability; benefits mainly in easing searching and access, saving time, and having items universally available. This, and other studies, show an increasing reliance on general web search engines, to find resources, rather than archive-specific systems [9, 26, 33, 34, 35]. Sinn and Soares (2014) therefore conclude that digital project developers should try to make their entire collection database indexable by search engines [9].

Some studies also show that perceptions of historians towards digital materials is that they are not as reliable as traditional sources [36, 37, 38], and that digital technologies change patterns of behaviour [39]. Elena et al. found that historians exhibit quite sophisticated retrieval competences, concluding that the perceptions of historians that digital resources are less useful and less reliable may be related to the limitations in the functionalities of archival information retrieval systems [37].

From this literature synthesis, the following themes emerge as needing further investigation with respect to historians' use of archives: the differences between amateurs and professionals; the changing relation between use of physical and digital materials; the user skills and competences needed, particularly in the digital environment; and the changing role of the archivist in supporting historians, as archives become increasingly digital.

3   Research

3.1   Research problem and research questions

That there are significantly different issues in information literacies and competencies in the archival context is well established [40], and is confirmed by the literature analysis. This study made two comparisons of specific user groups: between professional historian and amateurs, the latter often skilled and sophisticated in their 'serious leisure' information practices; and between participants in Slovenia and the United Kingdom, variations here perhaps resulting from differing national histories,

cultures and political systems. The research questions were:

1. What are the main types of archival materials used by historians?; are there differences between professionals and amateurs?
2. What are the attitudes of historians towards physical archive materials, compared to digital materials?; are there differences between professionals and amateurs?
3. What are the main skills and competences needed for effective use of archives?; are these competences and skills changing, and if so, how?
4. Are there notable differences in skills and competences of archives use between amateur and professional users?; if so, how do these manifest?
5. How, if at all, does the role of the archivist differ in supporting amateur and professional users?

3.2 Methodology

A Delphi study was used in this phase, being particularly valuable in identifying consensus or divergence of opinion, and increasingly used in information behaviour research [41]. The expert participants were archivists; the validity of using expert opinion of this sort to investigate archive users behaviour has been demonstrated (Vilar and Šauperl 2014, 2015). In Slovenia there were five participants, in the UK four, in both cases coming from national and regional archives. Although this number is relatively small for a Delphi study, it was sufficient to provide the necessary information for this initial study. The Slovenian participants were all professional archivists, with qualifications in history, and also had experience of working with users. In fact, the majority of archivists in Slovenia are historians, although in most Slovenian archives the reading room staff are not professional archivists, but rather "technical staff", usually with only high school qualifications. Data was gathered in April and May 2016 using email for communication.

There were two rounds, identical in both countries. In the first round the participants provided answers to five research questions above. In the second round the participants were shown a summary of answers from both countries, grouped around the same five thematic units, and invited to add or revise opinions, additional thoughts, and comments. Although the number of participants was small, there seemed to be a distinct difference in the second round responses, in that Slovenian participants were less comfortable expressing dissent or criticism. This may be due to a difference in the cultural traditions of the two countries, and may raise methodological issues; namely, it would be worth investigating further for its effect on use of Delphi and similar methods in culturally mixed settings.

4 Results and discussion

4.1 The main archival sources used by historians

There was consensus in both countries that a very wide variety of sources are used which confirms findings of most older and newer studies.UK participants felt that archivists are not necessarily aware of those which are most important for, and used

by, particular user group. Some Slovenian archivists mentioned "more popular" fonds, some of them specific for the particular archive.

There was a lack of consensus in both countries as to whether this applied equally to all users. Some respondents felt it did, others thought it reasonable to distinguish professionals (likely to be more aware of the background to the documents being examined, and potentially prefer to focus on less well known sources) and amateurs (who may prefer well-known 'easy'-to-use sources, e.g. printed rather than handwritten (which may be difficult to read), and rely on secondary sources for background).

4.2 Attitudes of historians to physical and digital materials

There was consensus in the UK, and general though not unanimous consensus in Slovenia, that there was no distinction between professionals and amateurs in this respect; but no consensus as to the nature of the preference. When asking this question we did not differentiate between digitized and born digital material. Neither did these differences appear from the participant's responses. One viewpoint, more pronounced in Slovenia, was that both groups preferred digital materials for convenience and ease of use; a UK participant was surprised by this, and speculated that it might reflect different national practices in respect of digitisation, indexing and metadata. It should be noted that in Slovenia there are few digital collections of archival material or finding aids available online. It is possible that such user preference may be more pronounced when users do not realize exactly what 'online availability' means. This finding is also interesting in the light of other studies [36, 37, 38] which found some user reluctance towards digital materials. An alternative viewpoint, more pronounced in the UK, and later agreed with by one Slovenian participant, was that both groups preferred physical materials; although this situation is changing. Those Slovenian participants who believed that there was a difference in the preferences of professional and amateur users did not agree which preferred the digital and which the physical. UK participants, and one Slovenian, noted that amateurs sometimes had problems with interpretation of digital materials, not fully understanding the context of the page they were viewing. One participant noted high user expectations regarding technology ("They are looking forward to digitization."). Another saw the value of digitisation of materials and metadata to facilitate access, while one also noted that digital surrogates are useful from preservation point of view.

There was no consensus about the influence of age on this preference: while there was a residual liking for physical material among older users, and typically an automatic enthusiasm for digital among younger users, there was also an excitement among some younger users in accessing original physical items.

4.3 Skills and competences of historians for the use of archives

There was consensus in both countries that traditional archival skills and competencies had not lost their importance, but that they had been complemented by requirements for newer technology-related competencies. This is consistent with earlier findings [5, 24, 25, 26.

In both countries, archival skills (e.g. understanding archive structure and processes, descriptions and finding aids, dealing with archivists, paleography, ability to read relevant old languages and scripts) and technical skills (e.g. understanding metadata, searching, handling digital images) were identified as important. One UK

participant noted that the decline in knowledge of Latin, among archivists as well as researchers of both kinds, "renders vast sections of medieval and early modern archives increasingly inaccessible". This point does not seem to have been recognised before, and has implications for education and training of archivists.

UK participants also identified general research skills (e.g. time management, note-taking, reference citing), and the need of some users (both amateur and professional) for very basic help in computer use, information searching, reading documents, and making photographic records. Some Slovenian archivists could not identify with these points, while some agreed.

Slovenian participants identified as important a background knowledge of the geographical area, and of the social structure, significant individuals, administration history, and organisation of administration in general. One UK participant also identified with this need, as respects the complexities of the evolution of the Greater London area.

4.4 The differences between professional and amateur historians

For UK participants, there was a general, though not universal, consensus, that experience in archival research matters more than the professional/amateur distinction in all aspects, including technical skills, archive materials and structure, search techniques, dealing with archivists. This view was also expressed by a minority of Slovenian participants. Another view was that there may be differences between UK and Slovenian users as a consequence of different archives structures in each country, and also as a consequence of cultural differences which causes Slovenian users to come with very vague research ideas – the latter may be due to being less trained for higher-order thinking (such as critical attitude, creativity) during schooling and in everyday life (but this rather sociological view would certainly need further – thorough and interdisciplinary – investigation).

For the Slovenian participants, there was no consensus as to whether there was any significant difference between amateurs and professionals; those who identified differences focused on the nature of the queries put to the archivist, professionals stating their needs more precisely and understanding better what is likely to be found. One participant remarked that the two groups generally address different kinds of research topics; similarly, one UK participant noted that the purpose and scope of the research outweighed other considerations. Two Slovenian participants noted that even among amateurs there are big differences: some are very skilled and thorough, but some are not.

There was a general consensus in both countries that amateurs needed, and accepted, more assistance with selection and use of sources, with research process, and with specific skills such as reading old languages and difficult handwriting. However, there was also consensus that professionals, even if experienced, would sometimes benefit from the advice of an archivist, while some amateurs had considerable research skills. This is similar to earlier findings [5, 21].

4.5 The role of the archivist in supporting historians

There was consensus that there is a need to support both groups of users, and to have the same general attitude toward them.

There was consensus in Slovenia, and near consensus in the UK, that there should be an explicit recognition that different types of user need different support: for example, amateurs may ask for more assistance and explanation throughout the whole process, but professionals, especially if inexperienced, may believe themselves more competent than they are, and not ask for archivists' help when they need it. A minority viewpoint, from the UK, is that there is not, and should not be, any difference in the assistance offered to different user groups; rather archivists should respond to individual needs.

There was also some indication of consensus that archivists felt differently towards different types of user. UK participants commented that professional historians can be intimidating for archive staff, particularly because historians assume that all archivists have a high level of knowledge of all the collections. Since Slovenian archivists are typically historians, this issue does not arise to the same extent, although it was recognised by one Slovenian participant. As noted earlier, Slovenian reading room staff are typically neither archivists nor historians, and when help is needed, users have to address their questions not to them but to the archivists in charge of the specific collections or fonds.

Another issue raised by one Slovenian participant was that archivists' help is not acknowledged when historians use parts of information from descriptions (e.g. element 3.2.2 Administrative/Biographical history from ISAD(g) prepared by archivists) and include them into their work without proper citing; this finding is in contrast to other studies [8, 29, 30], which all noted that the archivist's help was appreciated.

It was also said that work with users is often gratifying and that archivists learn a lot from them. The Slovenian participants agreed that working with amateurs was particularly satisfying, perhaps because they appreciate archivist assistance more than professionals: "Working with an amateur historian is gratifying, since I can help 'the enthusiastic swimmer in the ocean'".

5   Conclusions

The main findings of our pilot Delphi study regarding archivists' opinions on amateur and professional historians can be summarised as follows:
- There was high degree of consensus between the archivists in both countries in virtually all topics, with differing opinions only in detail.
- The archivists believe that the two users groups are generally similar, and outweighed by personal characteristics and research needs. Differences are due to the historical and geographical context, legislative background and availability of material.
- Both user groups need assistance, but in rather different ways. The needs of the amateur are more evident, perhaps because they are more readily expressed, but are not necessarily greater.
- Both user groups use a wide variety of sources, professionals focusing more on primary sources for which specialized knowledge and skills are needed.

- Traditional skills are still needed; some are being lost. New digital skills are needed; basic computer/information literacy skills are sometimes lacking regardless of user group.
- The archivist/historian relation may be difficult for various reasons.

Certain methodological issues regarding conduction of the Delphi study were also raised, stemming from cultural differences of the participants from the two countries. In case of working with respondents who are reluctant to share critical opinions, one should carefully consider the methods of eliciting these. We are also aware that users should not be studied indirectly via opinions of practitioners who work with them. However, due to archival community not being used to doing user studies, the Delphi study was chosen as a starting point.

These findings suggest points for further investigation, since this Delphi study was only an initial step in our research, and as such does not allow generalizations. A detailed study of archival information practices in the two groups – if indeed it is valid to think of these groups, rather than individual practitioners – is necessary, focusing particularly on generational changes in attitudes, and on the changing role of the digital and the physical. In terms of competencies, further study is needed on how best to impart both archival and research skills including basic computer/information literacy, and background knowledge, including language knowledge (especially of the languages needed for study of older materials), and the historical/geographical context necessary for adequate interpretation of the materials. There is also the issue of how best to support archivists in their role of supporting users.

References

[1] Pugh, M. J.: Providing reference services for archives and manuscripts (Archival Fundamentals Series II). Society of American Archivists, Chicago (2005)

[2] Washburn, B., Eckert, E., Proffitt, M.: Social media and archives: A survey of archive users. OCLC Research, Dublin, Ohio, http://www.oclc.org/content/dam/research/publications/library/2013/2013-06.pdf/ (2013)[3] Case, D.: The Collection and Use of Information by Some American Historians: A Study of Motives and Methods. The Library Quarterly 61(1), 61-82 (1991)

[4] Huvila, I.: Participatory archive: Towards decentralised curation, radicaluser orientation and broader contextualisation of records management. Archival Science, 8(1), 15–36 (2008)

[5] Poole, A.H.: Archival divides and foreign countries. Historians, archivists, information-seeking, and technology: retrospect and prospect. The American Archivist, 78(2), 375-433 (2015)

[6] Toms, E., Duff, W.: I spent 1 1/2 hours sifting through one large box..: Diaries as information behavior of the archives user: Lessons learned. J of the American Society for Information Science and Technology, 53(14),1232–1238 (2002)

[7] Anderson, J.E.: Using professional forums to assess historians'e-resource needs. Collection Building, 28(1), 4–8 (2009)

[8] Chassanoff, A.: Historians and the Use of Primary Source Materials in the Digital Age. The American Archivist, 76(2), 458–480 (2013)

[9] Sinn, D., Soares, N.: Historians' use of digital archival collections: the web historical scholarship, and archival research. J of the Association for Information Science and Technology, 65 (9), 1794-1809 (2014)

[10] Bawden, D.: On the gaining of understanding; syntheses, themes and information analysis. *Library and Information Research*, 36 (no. 112), 147-162, http://www.lirgjournal.org.uk/lir/ojs/index.php/lir/article/view/483 (2012)

[11] Morris, S., Mykytiuk, L.J., Weiner, S.A.: Archival literacy for history students: identifying faculty expectations of archival research skills. The American Archivist, 77(2), 395-398 (2014).

[12] Carini, P.: Information literacy for archives and special collections: defining outcomes. *portal: Libraries and the academy*, 16(1), 191-206 (2016)

[13] Conway, P.: Research in presidential libraries: A user survey. Midwestern Archivist, 11(1), 33–56 (1986)

[14] Maher, W.J.: The use of user studies. Midwestern Archivist, 11(1), 15–26 (1986)

[15] Stevens, M.: The historian and archival finding aids. Georgia Archives, 5, 64–74 (1977)

[16] Uva, P.A.: *Information Gathering Habits of Academic Historians: Report of the Pilot Study* (Syracuse) (1997)

[17] Beattie, D.L.: An Archival User Study: Researchers in the Field of Women's History. Archivaria, 29, 33–50 (1990)

[18] Cole, C.: Information Acquisition in History PhD Students: Inferencing and the Formation of Knowledge Structures. The Library Quarterly 68(1), 42 (1998)

[19] Stieg Dalton, M., Charnigo, L.: Historians and their Information Sources. College and Research Libraries 65(5), 400–425 (2004)

[20] Duff, W.: Understanding the information-seeking behaviour of archival researchers in a digital age. In: Proceedings of the DLM-Forum 2002: @ccess and preservation of electronic information : best practices and solutions : Barcelona, 6-8 May 2002, pp. 331-335. Office for Official Publications of the European Communities, Luxembourg (2002)

[21] Duff, W., Johnson, C.A.: Accidentally found on purpose: information seeking behavior of historians in archives. Library Quarterly 72(4), 472-496, http://www.jstor.org/stable/40039793 (2002)

[22] Fruend, L., Toms, E.G.: Interacting with archival finding aids. J of the Amer Ass for Information Science and Technology, 67(4), 994-1008 (2016)

[23] Trace, C.B., Dillon, A.: The evolution of the FA in the Unites States: from physical to digital document genre. Archival Science, 12(4), 501-519 (2012)

[24] Lybeck, J.: Archival education in Scandinavia. Archival Science, 3(2), 97–116 (2003)

[25] Seadle, M.: Managing and mining historical research data. Library Hi Tech, 34(1), 172-179 (2016)

[26] Tibbo, H. R.: Primarily history: historians and the search for primary source materials. In: JCDL 02: Proceedings of the 2nd ACM/IEEE-CS joint conference on digital libraries. Pp. 1-10. ACM, New York (2002)

[27] Cook, T.: The Archive(s) Is a Foreign Country: Historians, Archivists, and the Changing Archival Landscape. The American Archivist 74, 600-632 (2011)

[28] Anderson, I.G.: Are you being served? Historians and the search for primary sources. Archivaria, 58, 81–129 (2004)

[29] Duff, W., Craig, B., Cherry, J.: Finding and using archival resources: A cross-Canada survey of historians studying Canadian history. Archivaria, 58, 51–80 (2004)

[30] Duff, W., Craig, B., Cherry, J.: Historians' Use of Archival Sources: Promises and Pitfalls of the Digital Age. Public Historian 26(2), 9–22 (2004)

[31] Sinn, D.: The use context of digital archival collections: Mapping with historical research topics and the content of digital archival collections. Preservation, Digital Technology & Culture, 42(2), 73–86 (2013)

[32] Jordanova, L.: History in practice. Hodder Arnold, London (2006)

[33] Southwell, K.L.: How researchers learn of manuscript resources at the Western History Collections. Archival Issues, 26(2), 91–109 (2002)

[34 Hill, A.: Serving the invisible researcher: Meeting the needs of online users. Journal of the Society of Archivists, 25(2), 139–148 (2004)

[35] Prom, C.J.: User interactions with electronic finding aids in a controlled setting. The American Archivist, 67(2), 234–268 (2004).

[36] Maxwell, A.: Digital archives and history research: feedback from an end-user. Library Review, 59(1), 24–39 (2010)

[37] Elena, T., Katifori, A., Vassilakis, C., Lepouras, G., Halatsis, C.: Historical research in archives: User methodology and supporting tools. J of Digital Library, 11, 25–36 (2010)[38] Graham, S.: Historians and electronic resources: Patterns and use. Journal of the Association for History and Computing, 5(2), `http://hdl.handle.net/2027/spo.3310410.0005.201` (2002)

[39] Rumer J., Schonfeld, R.C.: Supporting the Changing Research Practices of Historians: Final Report from ITHAKA S+R. 11, `http://www.sr.ithaka.org/sites/default/files/reports/supporting-the-changing-research-practices-of-historians.pdf` (2012)

[40] Vilar, P., Šauperl, A.: Archival literacy: different users, different information needs, behaviour and skills. In: Kurbanoglu, S. (Ed.), *Information literacy: Lifelong learning and digital citizenship in the 21st Century : Second European Conference, ECIL 2014*, Dubrovnik, Croatia, October 20-23, 2014 : Proceedings, (Communications in Computer and Information Science, Vol. 492), pp. 149-159. Springer, Berlin (2014)

[41] Poirier, E. and Robinson, L.: Slow Delphi: an investigation into information behaviour and the Slow Movement. J of Information Science, 40(1), 88-96 (2014)

[42] Vilar, P., Šauperl, A. Archives, *Quo Vadis et Cum Quibus?:* Archivists' Self-Perceptions and Perceptions of Users of Contemporary Archives. Int J of Information Management 35(5), 551-560 (2015)