

Approaching the digital humanities

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Approaching the digital humanities

A report on the present and future potential of digital humanities collaboration at Maastricht University

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1 | Introduction

Digital librarianship [...] is librarianship that concerns itself with enabling and empowering faculty, students, and staff to discover, engage with, create, and preserve quality content whose properties extend beyond mechanical reproduction into areas that include duplication, manipulation, and remix. (Dietrich & Sanders, 2016, para. 9)

Stop asking if the library has a role, or what it is, and start getting involved in digital projects that are already happening. (Vandegrift, 2012, para. 1)

The LIBER Conference (Ligue des Bibliothèques Européennes de Recherche) in Helsinki, June 2016, may be seen as an important impulse-giving moment and trigger for the University Library of Maastricht's (UB) wish to become more involved with digital humanities work. At this conference with the theme 'Libraries Opening Paths to Knowledge', Ingrid Wijk and Henk van den Hoogen were inspired to seek out the avenues of cooperation that might exist between the library and the faculties to advance research in the digital humanities (DH).² Here, also the idea to become more involved in already ongoing developments and to assume a more active role as a library was strengthened.

Thus, the previous quotations should be read with the University Library of Maastricht's already active role in DH at Maastricht in mind – but also with the question of how this potential might be increased and translated into even more effective projects and outcomes. For this, also the UB's involvement with e.g. the 'Sharing Cultures' course, also through the work of Odin Essers, and the Wikimedia cooperation with the Faculty of Arts and Social Sciences (FASoS), and other DH-initiatives are relevant.3 When determining how collaboration between the UB and the faculties of Maastricht University (UM) can be improved concerning researching and teaching in DH, not only terminology needs to be clarified. Also the respective responsibilities and roles of the involved institutions are analysed in this report: next to the UB, the faculty in question here is most centrally FASoS.

¹ For more information, please see: https://twitter.com/LIBERconference.

² This choice in terminology is not aimed at excluding disciplines in the social or natural sciences; rather, emphasis is placed on the historical development and the origins of the term by acknowledging how DH initially "was meant to signal the field had emerged from the low-prestige status of a support service into a genuinely intellectual endeavour with its own professional practices, rigorous standards, and exciting theoretical explorations" (Hayles, 2012, p. 43). The cooperative and transformative potential of the methods and approaches proposed by DH for other disciplines is not to be underestimated - cooperation and exchange of experiences and expertise is what the suggestions in this report aim to enable. As this report's title announces, the goal is digital humanities collaboration. As the analysis of the potential issues and obstacles in the following shows, an integrated, interdisciplinary, and innovative use of digital media and technology will be necessary to understand, analyse, and influence ongoing and future cultural and academic processes. As such, many different disciplines are involved quite explicitly: among many others, for instance, informatics, history, media studies, philosophy, statistics, and library and information sciences. Future cooperative potential might be clarified and terminological changes might be undertaken (see e.g. Wyatt & Millen, 2014, p. 13); but for now, this report refers to 'DH' in the inclusive manner just outlined.

³ For a more detailed discussion of these projects, please refer to chapter 4.

However, before zooming into Maastricht, the bigger picture needs to be addressed: ever since Father Roberto Busa's (1951) pioneering work in computational analysis and concordancing, the idea came into being that humanities research could be able to utilize techniques beyond the traditional methodological means at its disposal (Flanders, 2009). These kinds of practices can be seen in notable research carried out by, for example, Franco Moretti, who coined the term "distant reading" as a complementary reading practice to the traditional "close reading" (as cited in Meyer & Schroeder, 2015, p. 153). By going beyond the details immediately accessible to the reader of a single or a few texts, digital research can look at overarching patterns and connections between hundreds or thousands of texts. DH analyses thereby reach a level of comprehension that is impossible to achieve for a 'solely' human reader. The core sentiment of DH work is that it broadens the scope of resources researchers can study and enhances the types of questions they can ask (Meyer & Schroeder, 2015, p. 152; Moretti, 2000). These changes lead to the possibility of studying 'world literature' for instance. As a comprehensive study of international and allencompassing cultural output, world literature (or 'Weltliteratur' as Johann Wolfgang von Goethe investigated as early as 1827) might be taken beyond what a single researcher or even a team of researchers can discover in their life-times with traditional means. Through computational means, comparative studies of wider scope and new type are made possible (Moretti, 2000).

Within the humanities, it seems to be rather clear that scholars are enthusiastic about and interested in the possibilities that DH research offers to them, as Meyer and Schroeder report in their review of influential surveys on how researchers view DH (2015). One might ask whether DH deserves such an enthusiastic reception and whether it can keep its 'promise' to "expand and revolutionize the humanities" (Sacco, Richmond, Parme, & Wilkes, 2015, p. 234). And further, it is worth investigating how exactly researchers might proceed in this, and how they can be supported by libraries and research and heritage institutions. As the LIBER conference, for example, has shown, libraries are equally enthusiastic about DH as faculties. However, it seems that the crucial point is to ask how willing the faculties and the library are in cooperating with each other to facilitate this development and to make possible a more successful and fruitful research landscape for DH at UM.

One connected question that comes up in this context is whether DH should be seen as an upcoming, separate new field in the humanities or computational research, or whether work in DH might be treated as a more integral renewal of the general research approaches in the humanities. Thus, are there only some researchers who are becoming DH researchers, 4 or is a more fundamental change taking place and are all humanities researchers involved in DH to some extent? Where does DH end? Where do other disciplines begin, and can one even draw a clear line? The answers to these questions will inform how libraries and faculties can successfully adapt their workflows for fruitful DH environments.

Considering that several DH related research processes are already occurring within and in cooperation with the UM, the central question here really is to what extent there is willingness between the faculties and the library to cooperate and how much the different parties want to invest time-wise, resource-wise, and staff-wise. This report thus addresses measures that may be taken to include DH in the UM and especially at the UB more closely. To accomplish this, the present report considers case studies, best practices, and potential problems that have been encountered in other institutions.

⁴ This report refers to 'DH researchers' rather than 'Digital Humanists' because of underlying terminological implications that go beyond the scope of this present text; for a discussion of this see Rundle (2014).

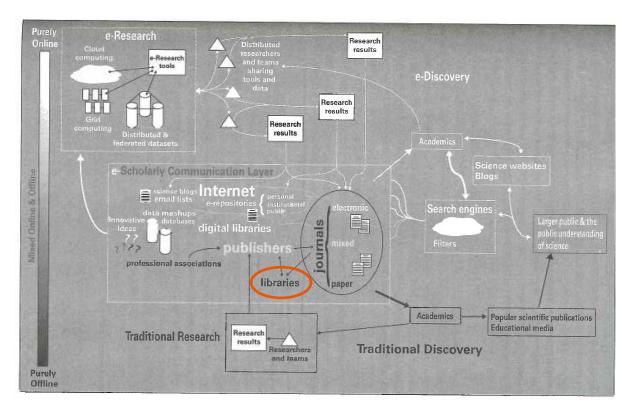


Fig. 1: e-Research in the scholarly communication ecosystem (as presented in Meyer & Schroeder, 2015, p. 159, my emphasis).

While in Fig. 1, the library can be seen as moving slightly more towards the periphery of academic research in comparison to its formerly more central role in knowledge dissemination, this reports seeks to outline how a central and integrated role of the library might be achieved within DH. The question whether the library is located in the centre or the periphery of DH work also has farther reaching implications for the nature of cooperation and collaborative partnerships between libraries and faculties. There seems to be a deep-seated uncertainty about whether the library should be seen as a (more passive) service provider to researchers or whether librarians can be seen as active research partners. Ramsay (2010a), in his lecture 'Care of the Soul', provocatively phrases his answer to this question by stating that librarians should be seen as equal to researchers rather than their 'servants' or even 'slaves'. In turn, the question arises however, whether researchers are *seeking* active research collaborators or whether they want to be treated as 'customers' who are purchasing a service.

In this report, the (future) possibilities for cooperation between faculties and libraries in DH research at the UM will be outlined and several degrees within and between the previously mentioned options are addressed. The purpose of the report is to take stock of (inter-)national DH initiatives in academic and heritage institutes to determine the UB's potential role in this area. In order to achieve this, DH will be 'defined' (in as far as one concise definition of such a vast development can be given before the UM's concrete DH strategy has been decided upon) and located within existing academic disciplines and frameworks. By looking at how DH is already integrated into workflows of the UM in general and the UB in particular, some insights can be gained about the status quo. In also considering limitations of DH, at the UM and elsewhere and both, inherent and procedural, a better feel for the tensions in current discussions on DH can be gained. Through comparing these approaches and processes to theoretical approaches in DH management and to best practices of libraries and similar institutions, this report will highlight

potential future steps for the UM. These recommendations will address both the side of the faculties (most importantly FASoS),⁵ as well as the UB.

2 | Defining DH

Contemporary research in the humanities has expanded beyond anything that could be considered traditional. Historians are building interactive digital maps, literary scholars are using computers to look for patterns across millions of books, and scholars in all disciplines are taking advantage of the internet to make their work more dynamic and visually engaging. (Varner & Hswe, 2016, para. 1)

In the case of textual analysis, the concern should not be with the purity of literary studies or the superficiality of word counts for cultural analysis. Instead, we should ask how quantitative approaches complement and add to more interpretive ones: the latter will not be displaced because literary and cultural studies will continue to be pluralistic (...), but they will need to make peace with complementary quantitative approaches, which will continue to be taken because they are cumulative and constitute a distinctive niche within literary studies. Put differently, even if these quantitative approaches contribute new questions and insights, they need to become integrated within the humanities disciplines (history, literary studies, and others) of which they are a part. (Meyer & Schroeder, 2015, p. 154)

Most generally speaking, one could say that DH means carrying out humanities research using digital means. However, DH also is "an enquiry into how we know things and how we present them to ourselves for study, realized through a variety of tools which make the consequences of that inquiry palpable" and as such inherently includes a meta-reflective dimension on what it means to do research in this particular field (Flanders, 2009, para. 10). In connection, Stewart Varner and Patricia Hswe (2016) highlight that DH "is neither a field, a discipline, nor a methodology (...) [but rather] the result of a dynamic dialogue between emerging technology and humanistic enquiry" (para. 2). But what then really is the difference between traditional and new research in the humanities? And how can the library assume its role more assertively within these emerging dialogues as a research partner and as a facilitator of exchange?

Julia Flanders (2009) highlights how the fact that the digital humanities broke off terminologically and perhaps also methodologically from the core practice of the traditional humanities might be seen as an indicator for the "non-progressiveness of the humanities disciplines more general and [that this] also reveals what may be a fundamental tension at its heart" (para. 8). This does not mean that the humanities in general are not progressive, but that there is a core tension at work. And in this line or argument, might it not also be the case that the split occurred the other way round and that DH is sometimes seeking to stray away from its 'traditional confines'?

⁵ This report will look into digital humanities in the sense that potential collaboration with other faculties and disciplines such as research into e.g. law or medicine is, of course, not discouraged but also is not in the centre of this investigation. The humanities (and the social sciences) will thus be mostly targeted. However, as highlighted by Sally Wyatt, it might be useful to take a more embracing approach to DH at the UM in the future and also include historians and researchers from law, economics, medicine, and researchers form other disciplines that are interested in advancing computational research methods. Further, while political scientists working with 'big data' and linguists analysing language with digital tools and means might not officially refer to their work as DH, due to the methodological similarities, one might see these research methods as closely related (S. Wyatt, personal communication, 9th November 2016). Future efforts in the context of the UM should thus also be directed at finding a clear and inclusive terminology.

In Flanders' (2009) view, only few DH researchers are actually engaging in something that is worthy of the title 'Digital Humanities' for their work uses computational means to support an argument that creates 'real' knowledge. For her, the humanities are only present when there is 'serious' questioning taking place and there are problems, frictions, and tensions that point to a meta-level of enquiry and insight (Flanders, 2009). In this, the clear-cut division between librarians and DH researchers is something she views very critically, for it means that DH scholars might become "alienated" from the tools they are using for their analyses and also that librarians might be distanced from the academic work they are engaged in (Flanders, 2009, para. 24). In fact, she sees the work of librarians and researchers as very closely integrated and advocates for a more open acknowledgement of this connection.

It is important to reach a clear (if perhaps not completely uncontroversial) definition of DH so that there is a good basis for the further discussion of the upcoming questions within this report. The political responsibility of the library, the technological possibilities, and the extent to which DH should be part of libraries' and faculties' agendas can only be discussed fruitfully when a point of reference has been established. However, it also looks like this 'clear' reference point and definition is difficult to attain (Guiliano, 2013): the decisions about what to include in the UM's particular definition of DH need to be taken as a basic step towards paving the way for successful future developments.

Perhaps the previously depicted diagram can help shed some more light on where DH research, especially within the library, might be headed: Fig. 1 shows Meyer and Schroeder's (2015) schematic presentation of research conducted in offline and online environments. Current online environments, more or less the top two-thirds of the diagram, are also referred to as Web 2.0,6 i.e. "various novel forms of electronic informal scientific information, such as blogs, personal web pages, podcasts, YouTube videos, and wikis" that enable fast information exchange between researchers, the public, etc. (Nentwich and König as cited in Meyer & Schroeder, 2015, p. 163). The lower third of the diagram displays the traditional and mostly offline feedback loop of academic research and work. Here, the inclusion of the public is rather minimal and basically only flows through educational media and popular scientific texts; libraries, publishers, and journals are in the centre of the process of knowledge creation and dissemination in an offline environment. As can be seen in the upper two-thirds of the diagram, with increasing online developments and possibilities, several new and faster-moving feedback loops develop outside of the previously known and established circles (Meyer & Schroeder, 2015). The library is still involved in these processes but it has become somewhat more marginal than before the digital age.

As an important safe-guarding institution knowledge and education, it is in the interest of the library to maintain its central position and perhaps assume it with more decisiveness (see also: Mission Statement of Maastricht University Library, n.d.b). An important aspect of this might be the involvement of the public: "[f]or formal and informal academic materials to have impact, they must be visible to their potential audiences. This is one area where the Internet offers much greater potential than the library-based paper publishing system ever did" (Meyer & Schroeder, 2015, p. 165). So, on the one hand the digital developments just discussed might be beneficial for libraries' overall missions.

On the other hand, these developments also create new challenges for libraries in contemporary academic culture: concerning the accessibility of information to the public, there is

⁶ An interesting example of such work is done by Leiden-based medieval book historian Erik Kwakkel on his blog: https://medievalbooks.nl/ and through his Twitter account: https://twitter.com/erik kwakkel?lang=nl. Kwakkel here shares his DH-related insights with a wide audience in a combination of playful presentation and truly innovative research.

also the problem of incorrect and partial knowledge that might do more harm than good when being passed on; and further, the problems that result from the "winner-take-all system (the 'Matthew effect')" rather than democratic sharing of and access to information (Meyer & Schroeder, 2015, p. 166). It is crucial to realise that "[d]igital settings do not mean that the social dynamics surrounding disputes about what counts as authoritative knowledge disappear, nor do they render knowledge and its production in completely transparent ways" (Wouters, Beaulieu, Scharnhorst, & Wyatt, 2013, p. 19). In this context, the idea of the 'myth' of digital democracy as outlined by Matthew Hindman (2008) in his eponymous book should also be considered. The power structures implied and enabled by the digital world are not always or entirely beneficial: new gate-keepers are establishing today and their motives are often informed by commercial considerations (Hindman, 2008).

Underlying might be the question whether research has really changed online and through digital means or whether instead researchers' expectations towards the tools and sources they use have changed. Taking into consideration that algorithms are man-made and thereby neither objective nor necessarily complete and therefore cannot foresee unexpected eventualities, and that the outcomes derived from their calculations need to be interpreted by humans, the question might be asked in how far DH constitutes a new concept or a new discipline (Gold, 2012). Also, are we living in times of a greater information overload than previous generations or are we stuck with the same old conundrum that information needs to be structured somehow, and that this is a difficult and sometimes even painful process (Blair, 2011)? In how far do digital texts have different affordances than analogue texts and does this mean that studying them will render different results than studying printed books (Van der Weel, 2011)? While these questions are too complex to be answered in this report, they highlight the complexity of both the theory and the tools of DH research.

In light of these questions, it remains to be seen how the 'traditional' humanities and DH will negotiate their relationship in the future. In any case, there seem to be different conceptions about the commensurability of these areas of investigation as well as the possibilities that DH grants to researchers. From these options, the UM will need to determine which approach is most applicable and how it will negotiate this wide field (see chapter 6 and appendix b). When looking at these ongoing debates and trying to determine how they can best be met, one also needs to consider the limitations of DH.

| Limitations of DH

While the reality of the limitations that DH work currently faces are very complex, there seem to be three main categories into which they may fall in ongoing discussions: perceived, practical, and contextual. In the following, these different types of limitations will be scrutinised in detail.

Concerning perceived limitations, there seems to be a general 'productive unease' in DH work that might arise from the discipline's position at the intersection of different types of enquiry and research: quantitative and qualitative, numerical and ideological, traditional and digital (and these types of research by no means always need to be in binary opposition) (Flanders, 2009). One origin of this unease can be the mismatch between expectation and 'reality': "it has become expected that things scholars want to read or learn will be more or less easily available from anywhere, at any hour, electronically" (Flanders, 2009, para. 2). In order to counter this, the

⁷ In how far this is actually different for academic publishers and libraries might also be critically discussed, of course (for an interesting article on this see Peekhaus, 2012).

library could be involved in research itself as an institution and engage actively in influencing and interpreting disciplinary borders and possibilities.

It might be seen as a problem that tools for computational analysis are over-estimated and the role of human cognition and reception is downplayed by some overly enthusiastic or shortsighted advocates of 'DH', which is why it is good to realise that "it is not the technical tools per se that are most interesting but the ways in which new technologies stimulate reflection about objects, methods, and practices of research" (Wouters, Beaulieu, Scharnhorst, & Wyatt, 2013, p. 9). And as highlighted by a student on the HASTAC (Humanities, Arts, Science, and Technology Alliance and Collaboratory) website, it might be impossible for all interested researchers to have a complete understanding of programming and some "trouble understanding these large pieces of software of the web that could be used for some amazing Digital Humanities projects" might (sometimes) persist (Grantglass, 2015, para. 1). However, as was already discussed previously, digital humanities also critically analyses its own methods on a meta-level, just as other (humanities-related) research fields do, and therefore, this meta-level analysis should not be underestimated.

Continuing then to some of the more practical limitations, it needs to be pointed out that there is a great gap for source materials that were created (solely) in analogue form and are still under copyright and thus hardly accessible in the digital realm. Adding to this problem are limitations of OCR and the low quality of some early scans. Not all materials, especially when going beyond 'traditional' text and including images, film, and music for instance, exist digitally or are (freely) accessible for researchers. Similarly, "linkrot", i.e. the breaking of links and thereby the loss of access to digital information, needs to be seen as a serious limitation to the reproducibility of DH work (Meyer & Schroeder, 2015, p. 156). This restricted access to certain sources might lead to bias in the types of resources researchers turn to, which can negatively influence how insightful or representative certain findings are.

It also remains controversial whether topics such as gender dichotomy or similar issues of (seemingly) clear-cut definitional categorisation are inherently complicated by the 'dialectics of DH' (Wyatt, 2015). Important here is the question whether the material and technological methods used for an analysis prescribe which questions and thoughts can be asked by the researcher (this is also known as technological determinism). Or rather, while technological affordances make certain uses more likely than others but in principle do not prescribe the limits of investigation, whether sociological constructivism presents a more helpful approach to DH research (Van der Weel, 2011).8

Remaining then are the contextual or procedural limitations that might arise during the performance of DH research: many so-called 'problems' with DH work are not so much connected to the actual core discipline but rather its framework, setting, and context. In this, especially the reasons for pursuing DH research are relevant.

As provocatively put by Jennifer Guiliano (2013): "[d]igital humanities isn't a fall back discipline. It is a complex undertaking that can be alternately rewarding and frustrating" (para. 11). Guiliano (2013) here alludes to the often misguided reasons for adopting DH research such as claiming more prestige or improved funding for one's institution. Her claim is that there can only be success in DH research if it is pursued by researchers genuinely out of academic curiosity and passion for gaining insights and not for purely strategic or institutionally imposed reasons (Guiliano, 2013). Guiliano (2013) also highlights the necessity for continuous funding, updating, and work on every DH project that is meant to make a lasting impact. As she claims, "[t]he

⁸ In this context, the work by Bijker, Hughes, and Pinch (2012) might also be referred to, especially in the context of Science and Technology Studies (STS) at Maastricht.

lifespan of most digital project[s] is short" (Guiliano, 2013, para. 8). This can be due to several reasons: project internal reasons or more external reasons such as preservation, access, file migration, funding constraints or researchers leaving the project or the university. One should especially not underestimate the harsh competition for funding support in the field: it is this funding that the future (accessibility) of the projects often depends on (Terras, 2014). DH has come a long way from being a marginal occupation of researchers to being in the (core) focus in research of entire departments and centres, but this does not mean that DH work has become easy (Terras, 2014). This is vital for considering how any (academic) institution wishes to insert itself into ongoing and already well-established processes of DH work worldwide.

In a sense, some limitations of DH work and traditional humanities are similar, such as deciphering corroded engravings and deteriorated manuscripts or reading micro-fiche renderings of newspaper articles and other information retrieval procedures (Meyer & Schroeder, 2015, p. 148). Also, the tediousness that some research projects might entail is not new to humanities researchers. However, DH techniques and tools bring their own inherent issues that are perhaps not intuitively graspable for all researchers. While the idea that DH presents a completely new approach with entirely novel problems is somewhat exaggerated, the potential methodological difficulties do need to be taken seriously (Meyer & Schroeder, 2015).

Interesting online classes, such as e.g. 'Corpus Linguistics: Method, Analysis, Interpretation' by FutureLearn can teach students and teaching staff the basics of software to be used for DH analyses. However, one also needs to be critical with massive open online course (MOOCs)⁹ and their efficacy in this context. Firstly, the skills taught in these classes are often not specific to the context and questions that the particular students and researchers have (Posner, 2013). Secondly, the success rate of the classes is very low because they lack this clear integration into a meaningful framework (Konnikova, 2014).

Based on these limitations then, how can the UM and the UB (perhaps increasingly as a research partner) look into opportunities and possibilities to solve these questions? Before delving into these future possibilities deeper, a short overview of ongoing initiatives, projects, and processes at the UM needs to be considered.

4 | DH at UM

There is very interesting work being followed at the UM currently that branches out to DH and can be seen as connected to this field of enquiry, but among some researchers there seems to be a hesitation to embrace the terminology of DH when referring to this work. This might be for underlying ideological reasons, such as scepticism towards digital and computational research methods that can be seen as challenging more traditional means of research (particularly in the humanities). However, this might also be due to the terminological diversity that was already highlighted in the difficulties of defining DH as a term and its corresponding practice(s) and the perceived exclusivity of the term. When creating an infrastructure to support DH work more at the UM in general, these terminological issues need to be clarified in order to have a clearer basis for discussing future cooperation; an expert panel could help establish the frame and margins for

⁹ While the library, especially through the development of online learning tools as conducted by Odin Essers and colleagues has made positive experiences with the developments of such and similar e-learning courses, DH online teaching at the UM requires new skills sets and fields of experiences which might be incorporated in the future (Verstegen et al., 2016). See chapter 5 for a more in-depth evaluations of MOOCs and similar e-learning methods for DH.

the terminology the UM might like to adopt and also a probing into possibilities for furthering critical digital research at the UM (see chapters 5 and 6 for more details).

A specialist in DH work at the UM is Sally Wyatt, who is Professor of Digital Cultures in Development at Maastricht University, former Programme Leader of the eHumanities group of the Koninklijke Nederlandse Akademie van Wetenschappen (KNAW), and currently WTMC (Wetenschap, Technologie en Moderne Cultuur) Scientific Director at the Netherlands Graduate Research School of Science, Technology and Modern Culture, and member of the Executive Committee of the eHumanities network. Her publications (see Wyatt, 2012) present many interesting insights into STS and especially on "the relationship between technological and social change, focusing particularly on issues of social exclusion and inequality" (eHumanities NL, 2016, para. 2). Her work highlights the political potential and importance of DH work and presents a great opportunity for the UB to encompass these further-reaching dimensions of DH within their envisioned strategy towards integrating DH more into their workflows. Connectedly, seeking further cooperation with Wyatt within the eHumanities network might present fruitful future opportunities for the UM. Generally, support for enhancing the cooperation between researchers and librarians concerning DH at Maastricht might be gained from investigating possibilities with the following researchers and their departments:

Leonie Cornips, as Chair of 'Language Culture in Limburg' and as researcher and Professor at the Faculty of Arts and Social Sciences at Maastricht University, for example studies the bilingual acquisition of Dutch by young children; she investigates local identity construction in Limburg under the prism of multilingualism. Her analyses are strongly data-driven and connect to text and data mining contexts that are central within DH work.

Neill Wylie, English Language Tutor and Course Coordinator for Digital Learning at the Language Centre of Maastricht University and Denise McAllister, English Language Tutor at the Language Centre, as well, are working with corpus linguistic tools and providing training programmes and courses for MA students and PhD candidates. As "a method for finding out about language use which involves the interrogation of large, electronically-stored and rapidlysearchable collections of texts", corpus linguistics is a strong field for DH analyses and research (Wylie & McAllister, 2016, slide 6). Corpus linguistics analyses allow for enhanced and comprehensive approaches to language and language use, as well as providing teaching opportunities in matter of language, but also for more literary and stylistic analyses.

Not only linguistics provide the opportunity for a close cooperation with the library in terms of DH work, but also historical research at the Faculty of Arts and Social Sciences at Maastricht University, such as the visualisation of historical social network relations as conducted by Nico Randeraad and Chris Leonards, might offer a potential avenue for more DH collaboration in the future.

Further, the work of Karin Wenz, Assistant professor in Letteren en Kunst, Faculty of Arts and Social Sciences and Coordinator of the NWO funded project 'Narrative Fan Practices' (2010-2015) and the NWO KIEM project 'Hacking Heritage' (2014-2015) as well as the work of Annika Richterich, Assistant Professor in Digital Culture Letteren en Kunst, Faculty of Arts and Social Sciences, present interesting cooperation potential. Their investigations into digital literacy and its connection to civic and political engagement can be seen as fruitful opportunities for the library to connect to the academic as well as ideological potential of DH work. Opportunities for DH education and certainly DH infrastructure (see chapter 5) might also be discussed in this context.

Similarly, the FASoS Master Media Culture might offer new possibilities for UB involvement and DH connections, especially pertaining to the work of Vivian van Saaze, Managing director of MACCH, Assistant Professor at the Faculty of Arts and Social Sciences at Maastricht University, and coordinator of the course 'Sharing Cultures', in which a cooperation with Wikimedia NL, has been institutionalised mediated through the UB and the work by Odin Essers. Students and teachers from this Master Program and who are involved with the 'Sharing Cultures' course might especially be interested in cooperating with the library concerning digitisation, DH education, and the possibilities of archiving and sharing research data as well as output.

In general, the Maastricht Centre for Arts and Culture, Conservation and Heritage (MACCH) provides the opportunity for a collaboration concerning conservation and heritage that also connects to the DH infrastructure and that might be further expanded:

The Maastricht Centre for Arts and Culture, Conservation and Heritage (MACCH) is an interdisciplinary research centre that brings together economic, legal, historic, philosophical, and practical expertise to the context of arts and heritage. In response to the demands of the increasingly complex challenges facing the fields of arts and heritage today, MACCH initiates collaborative research projects with researchers, professionals, and students from diverse backgrounds. MACCH is a joint effort of the Faculty of Arts and Social Sciences, the Faculty of Law, the School of Business and Economics, the Faculty of Humanities and Sciences, and the Sociaal Historisch Centrum voor Limburg (SHCL) and the Stichting Restauratie Atelier Limburg (SRAL). (Maastricht University, n.d.a)

A further and more general area connected to DH that researchers of the UM expressed would be of interest to them is speech transcription software and also the possibility to store research outputs and relevant files in an enhanced and widened digital repository (L. Cornips, personal communication, 17th November 2016). Also, as past projects and previous cooperation show, there is interest for digitisation, metadata enhancement for improved accessibility, as well as the potential for increased research opportunities through more extensive digital mark-up of resources to facilitate more in-depth DH enquiries. Further enquiries into these needs and wishes of UM researchers might thus prove to be fruitful.

With these fields of research and ongoing developments in mind, it is interesting to now turn to developments in DH at other institutions and libraries to see in how far possibilities exist at UM to follow these developments.

5 | DH at universities and libraries: evaluating theory and

best practices

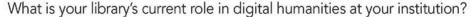




Fig. 2: Overview of DH possibilities in the library (Survey results of Cengage Learning and American Libraries as cited in Varner & Hswe, 2016).

Fig. 2 gives an overview of library activities in DH as found in survey results by Cengage Learning and American Libraries (2015) who asked 339 US American librarians and their institutions for their views and ideas of how DH work may find its place in the library. The aforementioned desired digital repository for DH research data and output can be seen as a common role in more than half of the included institutions. Fig. 2 also raises awareness that there are several activities that might not be perceived as direct or core practices of DH but that nevertheless can be counted as contributing to or facilitating DH research, as e.g. the (co-) sponsoring of grant applications and cultural heritage preservation developments. As is stressed by Varner and Hswe (2006):

from the earliest days, librarians were eager partners on collaborative digitization projects, and now they can be found negotiating text mining rights with researchers and vendors, hosting open access journals, and making room for makerspaces within their buildings. (para. 3)

Therefore, this section further investigates which different types of cooperation are possible for universities and libraries in a DH context.

DH infrastructures

Infrastructures cannot be built; they can only evolve. [...] In the best case, they coevolve with the research practices they aim to support. (Wouters, Beaulieu, Scharnhorst, & Wyatt, 2013, p. 12)

In line with this statement, infrastructures in DH might be seen as the context in which DH can occur at a university, within the different faculties, and the library of a university. This chapter discusses several opportunities that exist in this context. Fig. 3 offers an interesting overview of domains in which the library may become active and shows that infrastructure seems to be quite high up on the agenda of most consulted institutions:

Which of the following types of services does your library offer users who are engaged in digital humanities projects?



Fig. 3: Types of library services offered for DH projects (Survey results of Cengage Learning and American Libraries as cited in Varner & Hswe, 2016).

One may start with an interesting side effect that may arise when the library makes archival information digitally available to researchers: it thereby contributes to DH infrastructures by enabling research on previously undisclosed sources and connections within those sources. In the context of historical archives, when "reading through archival gaps, and by shifting from a single author perspective to a network of authors and contexts, we can use the archive to critique its subject ([e.g.] Kipling) in an attempt to recover what was not originally collected" (Lach, Rosenblum, Élika, & Gamble, 2016 Special Issue, para. 7). Thus, decisions taken at the library concerning the digitisation or the enabling of access to metadata records may have profound impacts on what researchers can investigate.

This also links with the intense debate on open access that many libraries and publishers are currently engaged in, and which role the library wants to take in this as an important actor of promoting and granting access (Maastricht University Library, n.d.b). Charlotte Roh's (2006) article on "Library publishing and diversity values" outlines the responsibilities libraries carry in providing access to otherwise excluded sources and academic output (p. 82); granting access to research outcomes and articles is also part of the library's role and as such interesting (Meyer & Schroeder, 2015). Also Isabel Brouwer (2015), 10 Subject Librarian for Latin America (including Spanish and Portuguese), Caribbean, and Film at the University Library Leiden, stresses the importance of the library to become involved in open access initiatives to facilitate access and research possibilities for DH-interested researchers; however, while this is an interesting and relevant aspect of academic communication, it does not lie within the scope of the present report.

To return to the aforementioned topics of metadata, if a library cannot hold or give access to the source documents, they may still keep track of their existence and of the availability of potential sources and they may play a role in facilitating access. As T-Kay Sangwang (2016) outlines, sometimes such "post-custodial digital archiving" has a more positive effect on the political tensions derivative of cultural hegemony (in Lach, Rosenblum, Élika, & Gamble, para. 6): storing metadata and facilitating access might sometimes be seen as less intrusive and imperialistic as taking over the sources entirely in particular social contexts. The extensive online catalogue of the UB is fulfilling this already in many ways. However, more heritage related sources that are unique (to Maastricht) might still be included.

Also, one needs to consider the importance of Research Data Management (RDM) in facilitating access and sharing of research data and output. As aforementioned, this could occur in potentially updated and enhanced repositories and through other archiving means. As a result, the

¹⁰ For a closer discussion of her work and findings, please see p. 21.

line between what constitutes 'hard-core' DH work and what might be seen as peripheral, but nonetheless important underlying activities connected to DH, becomes partly blurred (S. Claevssens and Lotte Wilms, personal communication, 19th October 2016).

Returning to the opening quotation of the evolution of DH infrastructures then, it is important to highlight that researchers from the respective fields and faculties need to be present and involved in this process. What the main realisation here comes down to is that these infrastructures cannot be imposed but must organically connect to the ongoing research developments within the faculties and the library's possibilities; the best results will be achieved when the respective librarians become part of this research themselves and are thus supporting the infrastructure from the inside and from use and application (see also Kemman, 2015).

DH centres¹¹

In this section, the creation of a central location at the university – be it a DH centre or lab, located in the library or another university location - where DH work may be conducted is discussed. A DH centre demonstrates the decision to purposefully create a space for DH, and to decide as an institution to invest resources and staff into it, is an important starting point for a DH environment.

Establishing a new DH centre can strengthen the idea of libraries and faculties as partners in their work, rather than the library as a mere service provider. By embracing this fruitful and constructive relationship, the quality of research can be improved (Monroe-Gulick, O'Brien, & White, 2013). There are several advantages to this approach: with the creation of a centre, the library can make use of its central and interdisciplinary location within the university landscape to connect different scholars, experts, and students (this will be discussed further in the following section on becoming a DH hub within the university). The creation of a DH centre can also be conceptualised as a movement that leads 'back to the roots' so to speak, as DH started in the library originally, with e.g. the Text Encoding Initiative (TEI) and other computational developments, especially concerning metadata and access (Posner, 2013).

However, there are also disadvantages that might result from the creation of a DH lab: through creating a DH lab and offering to support researchers when they run into questions and issues with their work, the library might also be seen as furthering the 'service-mentality' approach that is often seen as problematic in guiding libraries. As Miriam Posner (2013) outlines, for DH in the library and the involved faculties to have a chance at being great rather than just good, librarians need to be seen as research partners and academic input providers rather than as mere service providers. Her point here is to avoid too quickly improvised and therefore only partial solutions to problems. She would like universities and libraries to rather strive for more methodologically sound and fundamentally researched approaches for academic cooperation between faculty members and librarians in DH (Posner, 2013). Understaffing and overworking DH centres will lead to ad-hoc solutions that often are neither revolutionary nor conducive to fruitful cooperation: "[t]he result is that the success of library DH efforts often depends on the energy, creativity, and goodwill of a few overextended library professionals and the services they can cobble together" (Posner, 2013, p. 44). Posner (2013) points to the inherent messy nature of DH that needs to be acknowledged by administrators in order to create a feasible environment for research to take place within:

¹¹ Not all of the existing DH Centres are run by or from libraries per se: also other institutions within or connected to the university can be responsible and there is a great diversity in how this is organised at different universities.

Digital humanities scholarship, by definition, is eccentric, unpredictable, highly customized, and prone to failure. It will not match up neatly with a library's existing workflows, and it may well negatively affect existing measures of productivity. So a canny administrator may well ask: Is the library prepared to take on a beast like this? (p. 50)

Stephen Ramsay (2010a) presents some interesting thoughts on this in his lecture at Emory University where he outlines that the creation of a DH Centre can also be a kind of 'outsourcing' that might contribute to a weakening of the collaborative ties between researchers and librarians. Controversially put, such a "centre [will never be] more than another service point in the library for scholars interested in setting up blogs or creating web sites" (Ramsay, 2010a, para. 14). Therefore, what Ramsay (2010a) advocates in turn is "a space in which the conventional separations among faculty, librarians, students, and staff become malleable" and the focus lies on flexible cooperation and not the (mere and potentially rigid) provision of a service (para. 16).

There seem to be some worries and perhaps also hesitations by libraries as institutions to embrace the messy business that DH can be(come). This then also connects to "whether we are ready to accept surfing and stumbling - screwing around, broadly understood - as a research methodology" (Ramsay, 2010b, p. 7). This again links back to the above discussed relationship between DH and the traditional humanities: have researchers ever done anything else than 'screwing around'? Is this not a fundamental aspect of all research activities? This also alludes to postmodern approaches to truth and knowledge in more fundamental and philosophical terms (Vandegrift, 2012, para. 10). And it also raises the meta-role of discussing research methodologies and frameworks; in this, the library might also participate.

Connectedly, Posner (2013) calls for libraries to position themselves clearly: while she offers interesting positive examples of DH work in conjunction with libraries, her main argument remains that half-committed initiatives (as indicated by the title of her article: 'no half measures') are bound to fail. Her claim thus creates the unmistakable message for libraries to decide whether or not they are ready to be 'all in' concerning DH (Posner, 2013). In this context, the White Paper published by the KNAW on the potential creation of 'The Center for Humanities and Technology' (CHAT) – proposed by the KNAW, the Universiteit van Amsterdam (UvA), the Vrije Universiteit Amsterdam (VU), and International Business Machines Corporation (IBM) – might be considered (Wyatt & Millen, 2014): it outlines interesting and promising approaches for research and innovation possibilities within DH developments. Unfortunately, the actual centre was never established, but it may serve as inspiration for future endeavours nonetheless. For instance, Wyatt and Millen's (2014) discussion of "technical architecture, including repositories for data and instruments, and interoperability between datasets; social infrastructure to support collaboration across time, distance and discipline; and, education and learning for current and new generations of researchers" (p. 33) closely aligns with the expressed needs and ideas of the researchers at the UM who were consulted for this report. Building on Wyatt's and Millen's (2014) ideas and research could be a fruitful step into increasing DH possibilities at the UM.

When returning to the abovementioned controversy about the origins of DH and its connections to the 'traditional' humanities, one might begin to wonder whether one should accept this 'all or nothing' approach to performing DH work as the only viable option, or might there also be transitory stages towards achieving a well-functioning DH centre? How can researchers who are not used to working with digital means but want to incorporate such methods into their own work be brought to enhancing their repertoire to include DH analyses?

An interesting example of a DH centre that allows for such a transition stage can be found in the Scholars' Lab of the University of Virginia: by "welcoming anyone, regardless of knowledge or background, to come into our lab and learn how to do digital work" (Lindblad, Miller, & Boggs, 2016, para. 6), the organisers of the lab acknowledge the fact that there might be some very inexperienced researchers who want to enter the world of DH and require help in doing so. This approach of careful guidance and detailed support requires intense amounts of work and might at many times lead to rather basic research outcomes only: "[w]hile we prioritize empowering project owners, we also aim to remove technical or process barriers to digital scholarship. Even if that requires a significant investment of time from our staff' (Lindblad, Miller, & Boggs, 2016, para. 7). The Scholars' Lab is made up of many different staff members and experts; there are almost 20 involved permanent staff members (Scholars' Lab - University of Virginia Library, 2016). As such, it might not be feasible for all libraries to mobilise these resources and high numbers of available staff positions to create such an elaborate DH research infrastructure. However, the position of the Scholars' Lab also epitomises the collaborative and supportive role of the library and ensures access to information and knowledge about DH research to a variety of different researchers, members of staff, and students. This approach "gives the Scholars' Lab the freedom to experiment in a space set apart from the productivity demands of the larger library system" and to dedicate their work to a genuine and fruitful academic pursuit of research (Posner, 2013, p. 50). Additionally, this willingness to engage with all sorts of questions surrounding DH may also be beneficial when trying to "tease out potential intersections with other units in the Library – from subject knowledge and metadata creation to scholarly communication and digital preservation" (Lindblad, Miller, & Boggs, 2016, para. 12). The Scholars' Lab thus presents an interesting approach to the creation of a DH Centre which, however, might not be available to all institutions pursuing a more in-depth involvement in DH work for organisational and financial reasons.

Depending on how exactly the library decides to implement the prospective DH centre, several other factors arise that need to be taken into consideration. One option would be the so-called 'one (wo-)man show' or the 'service-and-support model' (as discussed by Trevor Muñoz in Posner, 2013). While the number of staff and the type of support are two different points actually, they often appear in conjunction: there might be an underlying connection concerning few available resources in the first place leading to a low investment in terms of staff as well as scholarly agency. The general idea of this 'service-and-support model' is that the library decides to hire one (or two) PhD candidates or Post-docs to run the centre as experts based in the library with potential and sporadic cooperation from other members of staff. A clear advantage of this approach is that researchers who are working on projects can turn to a central place for advice and support and hopefully be 'served' promptly. For this approach, the library does not have to mobilise unmanageable resources and staff but can begin with a somewhat small-scale approach to DH. Therefore, this 'light' or perhaps rather 'medium' DH involvement might be a popular choice for institutions starting out on the DH path (see appendix b).

There are, however, serious disadvantages connected to this approach that need to be considered. The small DH centre staff might soon be overwhelmed with work and will need to rely on the goodwill of their colleagues from the library who are responsible for IT, metadata, digitising, etc. in assisting them when there are issues that go beyond the core staff's expertise or time frame (Posner, 2013). Seeing as these other, regular library staff members will probably not formally be part of the DH centre, their interest and possibilities for active cooperation are limited because of being busy with other workflows in the library. Further, the DH centre staff will mostly be busy catering to the needs of the researchers and servicing them without being able to develop more systematic approaches to the underlying questions and issues at hand. This might lead to many ad-hoc solutions rather than innovative and fundamentally researched

approaches. The library cannot really be an active research partner in this scenario (Posner, 2013): it will be the 'servant' of the faculties (Ramsay, 2010a). Of course, one might argue that pure support is almost impossible, for librarians always have to think along to support their clients and to answer their questions. And also ad-hoc solutions can be very innovative and interesting. However, it seems that better and more sustainable results may be achieved through a more open cooperation that is also meant to be equal and lead to research partnerships rather than mere assistance.

This leads to the second potential option which may be described as 'the team effort' or the library as 'research partner' (Posner, 2013). The underlying main idea of this is that the library aims at creating a comprehensive workgroup of researchers at the library and from the faculties that cooperate and see each other as research partners rather than as service providers and consumers. As Posner (2013) argues, this will be more successful because:

digital humanities projects in general do not need supporters - they need collaborators. Libraries need to provide infrastructure (access to digitization tools and servers, for example) to support digital humanities work, but they need thoughtful, skilled, knowledgably humanists to actually work on it. (p. 45)

Librarians who are actively participating in research, knowledgeable about new developments, and personally invested in research and its outcomes might also make for more interesting an helpful 'advisors'. A potential example of this might be seen in the Library Lab of the University of Harvard:

While not devoted to digital humanities initiatives, the Library Lab has adopted a model that seems promising for DH projects. Faculty, students, and staff can all suggest projects, which, if supported, receive funding and support for three months or longer, depending on how successfully the project appears to be developing. The Library Lab has given rise to projects such as the Highbrow Textual Annotation Browser and Spectacle, a library collections slideshow generator. (Posner, 2013, p. 51)

While such a model entails great competition amongst applicants for the funding and might also lead to many projects being started but not finished because they run out of funding, it does present a promising manner in creating true research partnerships. Positive effects on diversity of research might occur, because the "Library Lab [is] an internal competitive grant program [that is] open to students, faculty, and staff, [and it supports] innovative projects at Harvard that are entrepreneurial, scalable, open, and experimental, and characterized by a strong emphasis on collaboration" (Harvard University, n.d., para. 2). So, in light of these possibilities and in order to get a better overview and sense of the applicability of similar initiatives in the Netherlands and its surrounding, the following presents a short overview of different types of DH endeavours.

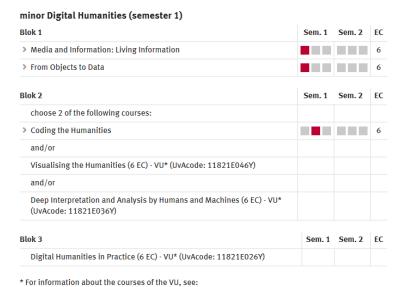
DH centres in and surrounding the Netherlands

The Centre for Digital Humanities in Amsterdam brings together DH experts from VU, UvA, the KNAW, and the Netherlands eScience Center.

The Centre for Digital Humanities facilitates so-called embedded research projects, in which research questions from the humanities are approached by using techniques and concepts out of the fields of Digital Humanities. In these short and intensive projects, which last between 6 and 12 months, researchers collaborate with private partners and deliver proof-of-concepts. The centre preferably initiates embedded research projects in the context of larger projects in which expertise from the humanities and industry is brought together. (Centre for Digital Humanities, n.d.)

In 2014, the UvA and the VU jointly, and through the collaboration within the Centre for Digital Humanities began offering a minor in DH (Centre for Digital Humanities, n.d.): the aim of this minor is to familiarise students with the practicalities of text and data mining as well as underlying theoretical and philosophical discussions surrounding these themes and issues. The minor contains five courses that together count for 30 ECTS; the targeted students are students from the humanities, as well as from informatics and computer science students (Centre for Digital Humanities, n.d.). The minor is coordinated and led by Rens Bod, who is i.a. professor of Digital Humanities and director of the Center for Digital Humanities. The respective courses include fields such as historic and philosophical developments in media and technology, as well as conceptual and practical skills concerning text and data mining. When taken as part of a study program at the UvA, the course choice looks as follows:

Minor Digital Humanities



http://www.fgw.vu.nl/nl/opleidingen/minoren/minor-digital-humanities/index.aspx.

Fig. 4: Minor Digital Humanities course choice at UvA (Universiteit van Amsterdam, 2014).

The integration of practical and applied skills together with theoretical and philosophical discussions provides a strong basis for staff and students to engage meaningfully within DH projects. This can be seen as vital for creating a common understanding of DH and the involved institutions' particular roles within it.

To achieve similar clarity, and as preparatory work for the new DH Centre that is being planned for the University Library of Leiden, several subject librarians here took charge in researching particular fields of DH work in advance and reported back about their findings to the library and university (S. Claeyssens and Lotte Wilms, personal communication, 19th October 2016). Isabel Brouwer, Subject Librarian at the University Library Leiden, was project manager of the project on text and data mining (TDM). It was the aim of this project to determine which the researchers of Leiden University were actually using TDM within their research, and to what extent they would like to make use of the library's collections concerning born digital, as well as digitized content, and also what supporting research services the library could develop in connection to TDM (I. Brouwer, personal communication, 28th October 2016). The preliminary research included conducting interviews with researchers from the faculties and fields that the library wanted to become involved with and also the organisation of symposia and workshops to

exchange ideas and knowledge on TDM (Brouwer, 2015). The outcomes of this project inform Brouwer's current work on a pilot on making two of Leiden's digitised collections suitable and accessible for research in TDM. The main findings were that text and data mining in Leiden is primarily performed by researchers in computational linguistics, history, area studies, and book and digital media studies, and further, that researchers were performing digitisation themselves and might require skilled assistance and more support in this from the library (Brouwer, 2015). As was highlighted in chapter 4, most of these research areas are also applicable for DH intensification at the UM, so efforts might perhaps be concentrated on these areas.

These developments can be seen as being part of the overarching developments towards more engagement within DH and the creation of a DH Centre in Leiden, namely the Centre for Digital Scholarship (CDS):

The CDS will be service-oriented, innovative and interactive. It will connect experts from all disciplines and will make innovations available to researchers and students in new technology, digital research methods, research infrastructure, open access, data management and social networking. (Leiden University, 2015)

Such a preliminary development can test and probe ideas and techniques to fine-tune the vision that the library might have for its contribution to DH research; smaller trial rounds of DH involvement can also lead to achieving a better understanding of the necessary investments as well as practical considerations when endeavouring to create a fully-developed DH Centre for instance.

As such a centre, the Digital Humanities Lab in Utrecht for example organises colloquia to facilitate interdisciplinary exchanges in the field of DH. The centre furthermore is involved in projects creating tools for DH work, as well as teaching courses for Bachelor's and Master's students. In this, the approach of the lab is very broad and general and ranges from including game studies to artificial intelligence and neuroscience, on top of more 'classical' DH-related topics such as (new) media and information science and computational analysis (Utrecht University, 2016). This interdisciplinary is very inclusive and beneficial for diversity of research but can also be very time- and resource-consuming.

Also, Groningen's Centre for Digital Humanities Centre highlights the valuable interdisciplinary connections that need to be taken into consideration when conducting work in DH:

While new methods will be developed to analyze newly established big data sets, ranging from text corpora to digitized archives, audiovisual media and social media content, theoretical reflection is necessary to give findings meaning in historical and cultural contexts. (Rijksuniversiteit Groningen, 2016)

Since September 2016, the Centre for Digital Humanities in Groningen is also involved in a Master's program on Digital Humanities. The focus here lies in combining the teaching of traditional humanities methods and research techniques while also including programming skills and computational research methods (Rijksuniversiteit Groningen, 2016). By also offering the possibility of following an internship¹² to its students, the program allows for more applied and practical studies. While this also necessitates more administrative and organisational efforts, it allows the students to actively apply their skills in diverse fields and gain interesting practical experiences.

overview of the internship possibilities for MA students at Groningen: http://www.rug.nl/let/organization/diensten-en-voorzieningen/career-strategy/testimonials/

With over 20 affiliated members of staff and more cooperation partners, the DH Centre in Ghent pursues a very ambitious and large-scale approach to DH work:

The Ghent Centre for Digital Humanities (GhentCDH) engages in the field of 'Digital Humanities' at Ghent University, ranging from archaeology and geography to linguistics and cultural studies. (GhentCDH, n.d.)

The GhentCDH (n.d.) promotes "DH collaboration and supports research projects, teaching activities and infrastructure projects across the faculties" at Ghent University. The centre's Steering Committee is comprised of faculty and department members, as well as librarians and thereby benefits from a strong integration of the different participating institutions (GhentCDH, n.d.). Sally Chambers, coordinator of the centre for instance, also was the Programme Chair for the DH Benelux 2016 conference in Luxembourg. Conferences and meetings such as this are interesting for this report because they signify different types and possibilities of engagement with DH work.

Also and as aforementioned, the Netherlands eScience Center is an important institution to be considered in this context as it prominently funds digital humanities research.¹³ Especially, the goal of the centre to "explore intersections where we can learn across disciplines" is interesting for the idea of collaboration within DH work (Wyatt, n.d., para. 2). The possibilities for researchers and institutions from all over the Netherlands to come together to combine efforts and ideas, as well as work together to achieve funding opportunities and (sharable) resources, also presents an important prospective avenue for DH efforts at the UM, which the eScience Center could also support and facilitate.

DH hubs

The present section investigates how the creation of a central DH space – permanently or also temporarily – also forms a hub for DH work and how this brings together different researchers, experts, and interested students. Especially in the Harvard Library Lab, this sense of cooperation between library staff, faculty staff, and university students is fostered (Harvard University, n.d.). This creates a densely interconnected web of researchers and thereby also adds to the overall infrastructure enabling successful DH work. And as Vandegrift (2012) argues, "the library already functions as a[n] interdisciplinary agent in the university, it is the central place where DH work can, should be[,] and is done" (para. 5).

In addition to these previous movements towards the library as becoming a hub for DH related work, several other strategies may be pursued, one of them being e.g. the organisation of symposia, lecture series, lunch lectures, and meetings for information exchange in formal and more informal settings. Examples of such networking events are the following symposium on 'Digital Scholarship' at Leiden, the conference DH Benelux, and, for instance, the KNAW project 'The Riddle of Literary Quality'. 14

By organizing the symposium 'Digital Scholarship and the Role of the Library' on September 22, University Libraries Leiden will demonstrate how the library can support digital scholarship. Moreover, this symposium aims to connect scholars, both practicing and interested in e-research. (Leiden University, 2014, para. 1)

¹³ For more information, see: <u>https://www.esciencecenter.nl/</u>.

^{14 &#}x27;The Riddle of Literary Quality' is one of four projects funded by the KNAW that were begun in 2011. It is referred to as an example for potential DH involvement within this paper.

During this symposium, the talks and presentations on how the library and DH researchers may successfully work together ranged from 'Computational criticism: Using Quantitative Methods for the Interpretation of Poetry' by Peter Verhaar, Book & Digital Media Studies, Leiden University to 'It's All About Location: Present-day and Future Digital Cataloguing of Maps' by Martijn Storms, PhD, Leiden University Libraries (Leiden University, 2014). The different guest speakers and expert researchers demonstrated overlap between their disciplines by joining together in active conversations. Moreover, there was practical cooperation in the form of workshops to experience different DH techniques first-hand, as e.g. the workshop 'Wmatrix: a Corpus Linguistics Analysis and Comparison Tool' taught by Morana Lukac, Leiden University Centre for Linguistics, Leiden University (Leiden University, 2014). The symposium, together with its workshops, allowed for an interactive atmosphere and the exchange of ideas that can be seen as beneficial for fostering DH research in one's own institution, elsewhere, and most importantly between institutions and researchers.

In contrast to this one-time event, the DH Benelux conference takes place once a year. It was organised for the first time in 2014 in Den Haag and allows scholars, librarians, and students from an international context to exchange ideas and research in DH fields. It takes place in different cities around the Benelux and will take place in Utrecht in July 2017. As a platform it gives rise to interdisciplinary and interinstitutionary cooperation in DH research. As Melissa Terras, keynote speaker of the conference in 2014 in Den Haag, highlights, DH has come a long way from being the occupation of merely about 100 researchers 15 years ago to being an innovative and busy field within (humanities) research today. In her keynote, she addresses the fascinating findings and interpretations that enrich researchers understanding of historical sources nowadays (Terras, 2014). She also points out how DH can become more accessible to a broader public, e.g. through the tool 'Textal' that she and her colleagues at University College London created. By using the tool to create intuitive text clouds, users of the app can analyse corpora and sources; they can i.a. also make use of the collocation function to analyse terms within their most frequent context of use. 15 By enabling the exchange of these and many more approaches to DH work and its application, the DH Benelux conference functions as an important event within the international DH landscape.

The Riddle of Literary Quality then, was one of several long-term research projects within the DH landscape of the Netherlands that aimed to qualify as well as quantify the parameters of literary quality (Filarski, de Jong, & van Dalen-Oskam, 2014). It incorporated a wide network of researchers who are taking on different and interconnected projects to come closer to understanding the concept of literary quality (Huygens ING – KNAW, n.d.):

This project explores [the] assumption [that formal characteristics underlie literary quality], integrating the analysis of low-level lexical-statistical features and high-level syntactic and narrative features. The main results that will come out of this project are: [1] a list of formal characteristics and their distribution in a training corpus of differently valued Modern Dutch novels; [2] an evaluation of other Modern Dutch novels based on the results of the training corpus; [3] results of first experiments of the application of the same measurements on novels from another time period or language. (Huygens ING – KNAW, para. 2)

With several interesting findings and indications for further research to be noted (as e.g. the role of topicality in fiction (Van Cranenburgh & Koolen, 2015)), there are still forthcoming

¹⁵ For more detailed information see: http://www.textal.org/. And specifically for the DH context: http://blog.textal.org/2013/11/15/text-analysis-smartphone-app/.

publications following up this project. 16 In this context, the project closely addresses the aforementioned (and often discussed) linking points between DH and more traditional humanities research. The findings are intended to shed light on social understandings of literary quality and how these arise.¹⁷

Despite the financial and organisational pressures, through participating in and organising such events and projects, the UB and interested faculties at the UM might raise awareness of their expertise and connect with other (inter-)national institutions and researchers, potentially also for teaching and expertise exchange. For this, it might be fruitful to also grant librarians the possibility to submit and share own research findings at such events and to participate actively in these forms of DH knowledge creation to enhance the collaborative atmosphere at the UM.

A further initiative that is in the process of being organised and set up is the 'DH Clinic Program' in which Michiel Cock (Universiteitsbibliotheek VU), Steven Claeyssens (KB), and Lotte Wilms (KB) are involved. The idea with this initiative is to set up a series of meetings and workshops to come together to exchange advice and receive help with setting up DH programs (S. Claeyssens and Lotte Wilms, personal communication, 19th October 2016). Participating in the 'DH Clinic Program' might also help in determining which kind of events might be beneficial for the UM in particular. This might also branch out in becoming more actively involved in DH education.

DH education

As demonstrated above, many DH centres are also involved in teaching DH to students in the form of courses or entire minors offered by specialists and experts in DH - both from the faculties and the library, and in the ideal case in close cooperative partnerships between faculties and the library. It is to be seen as advantageous that specialists from the library, e.g. on meta-data, coding, publishing and scholarly communication, preservation and digital migration, text mining and computational analysis, give lectures, workshops, and courses and thereby create effective connections and partnerships with teaching staff and students: "[e]mbedded librarianship is a recommended approach to showcasing the value of academic librarians outside the library walls" (Monroe-Gulick, O'Brien, & White, 2013, p. 382). While being time and work-intensive, 'embedded' here refers to effectively partaking in "courses, academic departments, and research teams" (Monroe-Gulick, O'Brien, & White, 2013, p. 382).

Also concerning research, librarians can be active partners in creating e.g. "systematic [literature] reviews and corresponding meta-analysis research" (Monroe-Gulick, O'Brien, & White, 2013, p. 384). At the same time, the know-how of librarians can be employed when organising courses taught by or with the library and in which students are in direct contact with librarians. This direct involvement and connection creates an integrated network that might lead to a more connected system of researchers, both in undergraduate as well as graduate and higher research levels (Stanley & Vandegrift, 2016).

As previously outlined, using MOOCs rather than on-site education may be beneficial timeand resource-wise but may also have its shortcomings: as Konnikova (2014) argues MOOCs work well for professionals or academics who are used to disciplined learning. This can be helpful in advancing skills of which the respective students already possess basic knowledge of and which they can connect to. MOOCs do not seem to be very successful in enabling people

¹⁶ For details about the research publications resulting from this project, see http://literaryquality.huygens.knaw.nl/?page_id=588.

¹⁷ For more information, please see the project's blog: http://literaryquality.huygens.knaw.nl/?page_id=36.

who would otherwise not receive an education in a particular field to gain access (Konnikova, 2014). For the UM context, we can assume that the focus group will mostly be researchers, so learned in academic methods and experts in their own fields, but potentially also scholars with limited competences in computational and digital analysis tools. The question arises in how far MOOCs which are somewhat context-less and do not offer immediate possibility for direct discussion and exchange are a suitable means for developing e.g. programming skills. Konnikova (2014) outlines that "easy learning does not make for good learning" and for the DH, this may be particularly true (para. 17). Thus, the library might step in and effectively guide and centre education in DH related themes through either on-site or more loosely directed e-learning methods with available on-site support, however (see also footnote 9 in this report).

For this, and to be able to competently function in this manner, also the UB would need to enhance its staff's comp3tences. As Posner (2013) highlights in this context and concerning general programming and computational online classes used by librarians to prepare for DHwork, "in many cases these classes lack relevance to the library professional who cannot yet imagine what skills will be called for" (p. 4). One important aspect of facilitating a general DHinfrastructure at the library thus also includes giving enough time for staff to adapt to the roles they will be performing in the future and to give them enough opportunities to train their skills before they are thrown in the 'real world' of DH scholarship; the approach of the University of Maryland Library's 'Digital Humanities Incubator' presents a way how this could be done. The aim of the preparatory stages of this project is to lead librarians towards developing the skills they need to participate in DH projects as actual research partners: "librarians participate in a semester-long series of workshops on research development, working with data, developing projects, and writing funding proposals" (Posner, 2013, p. 50). Over several years, the project is slowly built up to create a fruitful basis for cooperation in DH (MITH, 2015):

By understanding the project development process themselves, librarians were able to better communicate the potential of digital projects to faculty, help identify opportunities that integrate library collections, and enlist faculty and student researchers in joint projects. (MITH, 2015, para. 3)

Further, as Stanley and Vandegrift (2016) highlight, librarians need to become active in DH teaching to counter another of the previously mentioned shortcomings: the lack of context for many MOOCs or short Masterclasses. By teaching DH as librarians in an academic course setting, staff, and students are familiarised with the workings of DH in context which makes for a more successful integration and cooperation. Here the students can especially draw on the librarians' expertise in such 'under-rated' fields as metadata creation and metadata management: DH might actually be an important proponent of the value and the interesting insights that metadata can lend (Wilson & Alexander, 2016). One particularly interesting example here is the digitisation project at Oxford of John Stuart Mills marginalia: cooperation between metadata experts and researchers led to very creative and interesting solutions to standardising hand-written marginalia and enabling their systematic study (Wilson & Alexander, 2016). Further interesting examples and approaches are implemented in the University Library of Helsinki, Michigan State University, and Leiden University in cooperation with the Koninklijke Bibliotheek.

In Helsinki's DH Teaching Module, as presented at the LIBER Conference 2016, one can see interesting approaches to becoming involved in DH education: with its teaching pilot in 2015/2016 the courses focused on multidisciplinary cooperation with humanities scholars, librarians, and computer science developers to combine research on Finnish heritage collections and connectedly also library management (Paavolainen, 2016). Organised by the library, the course functions as an introduction to DH research as well as library practices and thereby connects these themes organically and clearly for the students:

Heldig will participate in extending and developing further the DH minor programme at the Faculty of Arts, in collaboration with other faculties at the University of Helsinki and Aalto University. Educational efforts in Heldig are targeted not only to students but also to researchers in humanities and social sciences as well as to IT developers willing to learn digital humanities by themselves. To serve such a large and diverse audience, online interactive learning materials will be developed in collaboration with computer scientists. (University of Helsinki, 2016)

By targeting a broad audience with their courses and by connecting their DH efforts so closely to heritage concerns, Heldig ensures a clear relevance and purpose of its activities and also presents a recognisable mission to its users. This heritage focus might also be of interest to scholars at Maastricht University (as indicated by V. van Saaze, personal communication, 17th November 2016).

Similarly, the Koninklijke Bibliotheek (KB) and Leiden's Master programme 'Book and Digital Media Studies' (BDMS) successfully cooperate concerning a course taught especially for the students by experts from the library:

In Digital Access to Cultural Heritage [DACH], [students] focus on the ways and means of making cultural heritage digitally accessible. In this course, [students] address such issues as the challenges and possibilities for exhibiting special collections and knowledge domains in knowledge centres. We place special emphasis on the interaction between the providers and the users of digital information. We cooperate with the Dutch National Library (KB) in The Hague on this subject. (Leiden University, n.d.a, para. 3)

In DACH, as well as in the course Digital Media Technology (DMT), there is a strong cooperation between the teaching staff (with course content) and the library staff (with library's collections). In participating in the Booktrade Correspondence Project for instance, students digitise and investigate letters from the special collections. The DMT students learn how to digitise and employ TEI-encoding¹⁸ and simultaneously provide researchers with searchable and enriched digital documents for their study of "the causes and nature of the decline of the international significance of the Dutch international book trade in (...) the eighteenth and (...) nineteenth centuries" (Leiden University, n.d.b, para. 3). This course and project also includes the library as facilitating the organisation and storage of the digitised materials, which was also named as a desired element of DH engagement at the UB.

A further interesting approach to DH in the library is presented by Michigan State University: in a "semester-long course on digital humanities and digital history (...) we advocate for information literacy sessions, special collections and archives visits, and librarian sessions as crucial components of digital humanities education" (Locke & Mapes, 2016, para. 3). The proponents of this project argue that it is important to set up these collaborations early so that (future graduate) students and researchers are aware of the connections and possibilities between faculties and the library and also continue to make use of them then. This avoids researchers forgetting about the library services until it is 'too late' or they are too far in a non-feasible project which the librarians' help could have unearthed earlier (Locke & Mapes, 2016). The UB could build on this too with their information literacy courses that could be enhanced to include

¹⁸ See the TEI guidelines: http://www.let.leidenuniv.nl/wgbw/DMT/projectGuidelines.html.

more DH specific training and focus: "[o]ur position of embedded librarianship is also bolstered by our participation in library digital humanities initiatives" (Locke & Mapes, 2016, para. 9).

6 | Recommendations for DH at UB Maastricht

This chapter presents a collection of potential recommendations for the faculties and library at the UM for future cooperation in DH work. Seeing as the UM's mission as a young and innovative university is to be leading in research (Maastricht University Library, n.d.b), the question whether or not there should be increased cooperation concerning this very important and influential development in (humanities) research can easily be answered with 'yes'. But how may the beginnings of this development be furthered and how may the UM's approach to DH be further improved? As the following visualisation in Fig. 5 summarises, libraries have different possibilities concerning the degree to which they can become involved with DH work. While the network model may be seen in conjunction to the aforementioned infrastructure improvements, the service model has also been discussed, as well as the lab model, and the DH lab model:



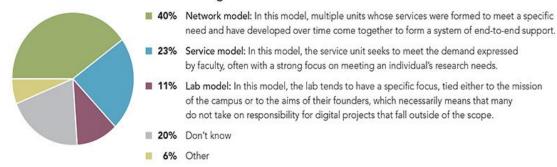


Fig. 5: Different models of DH in the library (Survey results of Cengage Learning and American Libraries as cited in Varner & Hswe, 2016).

The following overview gives potential recommendations in the structure of short-term, mediumterm, and long-term possibilities.

Short-term recommendations

As a first step, the UM needs to decide what it wants to achieve with DH: this means that the library and faculties have to create their own interpretation or weighting of how 'DH' should be called, defined, and what the purpose of pursuing it will be. For this, one could organise an 'expert panel', e.g. a meeting on 'DH in Maastricht', to discuss possibilities: very important for the success of this meeting would be to invite leading DH scholars based in Maastricht such as Sally Wyatt, as well as all interested staff from the UB, faculty members from FASoS, FHS, and other interested faculties in terms of staff and students, and representatives from other DH organisations and DH Centres with similar developments and questions (see appendix b for a preliminary 'guest list'). The aim of this expert panel would be to establish a clearer vision of what researchers expect from the library, what the library expects from researchers, which skills are employed and mastered respectively, and how these could be combined most fruitfully. A first step that will be fundamental to the future success of DH at the UM is a clear understanding of terminology and definitions needs to be reached. Or, one could pursue the understanding that while terminology remains open and diverse, similar processes and developments are meant by different descriptions and specifications within these pluralist approaches.

After approaching several researchers and staff members of the UM and other institutions about their potential participation in such a meeting, it can be concluded that the idea has been well received. This might present a fruitful future avenue to explore and to achieve a more concrete understanding of which precise wishes and questions the researchers and institutions of the UM have in the field of DH, and how the library might most fruitfully engage in this field more actively. The short-term recommendations might be seen as preparing the envisioned DH 'light' (see appendix a) which also includes supporting the DH infrastructure at UM further. Inspirations for this might be drawn from the discussion in chapter 5 and the best practices from other institutions and libraries in the field of DH.

Medium-term recommendations

In case or once it has been coordinated where the UM might be headed in terms of DH involvement and based on the decision what the UB wants to achieve with DH, one can start thinking about how to facilitate a DH-infrastructure more concretely at the UM and which role the UB could play in this. In order to find out how this might be pursued best, one could hire one or two PhD candidates or Post-docs or otherwise experienced DH researcher (for at least a year) to see in how far the collaboration between the UB and the researchers already involved in DH can be set up better (S. Claeyssens and Lotte Wilms, personal communication, 19th October 2016; and see previous discussion of Posner, 2013). These researchers could then also join the previously discussed 'DH Clinic Program' for further inspiration and support. These staff members could also investigate in how far cooperation between different DH centres in the Netherlands might be possible, as e.g. the Centre for Digital Humanities in Amsterdam: the minor that is taught here could be an inspiration to the work that Maastricht might engage in and it might also be possible to seek cooperation with guest lecturers and teachers. Also, research similar to Isabel Brouwer's work at Leiden University might be interesting in the context of the UM to determine the exact key areas in which DH collaboration might be most fruitful and desired. In joining the Netherlands eScience Center, further networks across the country could be established and strengthened to further DH work at the UM. Building on the work by Wyatt's and Millen's (2014) research in the CHAT White Paper might present another fruitful step.

The UB can also promote more engagement in DH work by giving its staff the possibility to participate in research projects and become experienced DH scholars themselves so that they can actively work together with researchers at FASoS and other interested faculties at the UM. Here, the UB could draw on positive examples such as the University of Maryland Library's 'Digital Humanities Incubator'. Digitising (special) collections and making them available for use and analysis by DH scholars - on-site and potentially also off-site for maximal access and use might also be a valuable way to facilitate DH work more. By digitising and making available digitised texts and resources for study scholars the library could openly try to counter copyright restrictions that favour 'out-of-date'-texts and thereby skew research.

Preserving and granting access to outcomes of DH projects in the library for consultation is an important manner in which the UB could contribute to promoting DH in Maastricht. This goes hand in hand with the envisioned metadata enhancement and preservation.

Long-term recommendations

The creation of a DH Centre, lab, or workgroup at the UB would present an important step in the UB's long-term approach to DH. To avoid the pitfalls that previous DH incentives have encountered, it would be beneficial to include expert views and support during the planning and implementation of this.

By organising symposia, conferences, and colloquia, the UB could attempt to become a 'hub' for DH and to stimulate DH research in the area of Maastricht. This might facilitate exchange between researchers at the UM and improve their connectivity, both from the library as well as from the different faculties (similar to the Symposium on Digital Scholarship at Leiden University, for instance). This could also serve to get a better overview of which work is currently being done and how these efforts may best be combined with aspirations of the library and the faculties.

As aforementioned, one way the UB could begin to become involved with DH teaching might also be to enhance their work on information literacy trainings and to include basic DH work in here already. In pursuing DH education further, the UB could seek out cooperation with the FASoS Master in Media Culture: a module on DH research offered by the library and perhaps even with the option of a research internship might present an interesting addition to the curriculum offered in this Master Program (Maastricht University, n.d.a). While the curriculum currently is based rather firmly on sound studies and analyses, a more textual and also visual approach to new media could perhaps be offered by the library. The UB could also teach courses in digital humanities methods as skills courses in other pre-existing Bachelors and Masters or newly developed/developing programmes at the UM (e.g. programming, discussing the pitfalls using black-box technology, metadata enhancement and creation, etc.).

The goal might be to teach students how to find and also how to create digitised texts and facilitate a good understanding of which possibilities current copyright legislation allows. The Booktrade Correspondent Project of Leiden University might be seen as a precedent project for this. It might be very interesting to look into the (Special) Collections of the UB and see which resources might yield important insights for researchers. There is for instance an extensive Jesuit collection obtained in the 1970s of which not all items have been included in the catalogue (so far only 90%) and only few works in the collection have actually been digitised (University Library Maastricht, 2008). Or, to name another promising example, the Charles Eyck documentation collection: this can lead to important insights into the work of the Maastricht painter Charles Eyck (1897-1983). And while a full digital inventory of images is available online, the actual works and letters can only be viewed on-site and not (yet) in digital form (off-site) (Maastricht, n. d.a). There certainly are financial limitations and burdens to digitisation projects, but Flanders' (2009) idea might be worth considering here:

[i]t is easier, in some contexts, to digitize an entire library collection than to pick through and choose what should be included and what should not: in other words, storage is cheaper than decision-making. The result is that the rare, the lesser-known, the overlooked, the neglected, and the downright excluded are now likely to make their way into digital library collections, even if only by accident. (para. 5)

Of course, this only works if the quality of the metadata is high enough and the storage can be guaranteed over a long period of time, but it might present an interesting idea for what the cooperation in education between the UB and FASoS might accomplish.

Looking into opportunities for cooperation with the KB, similarly to the University of Leiden with its BDMS Master might also be a fruitful endeavour: inviting guest lectures from other institutions, work with networking, and increasing expertise at Maastricht thereby could be helpful means and also promising starting points to secure funding opportunities and funding cooperation.

7 | Conclusion

Based on the previously outlined different levels of recommendations, several conclusions can be drawn. These may serve as starting points for new questions and for future processes towards approaching DH at Maastricht University. The choice between the different depths and degrees of committal – among others staff-wise and finance-wise – hinges on a basic conceptual question surrounding DH and its future at UM: how is DH defined at the UM and which particular stakeholders (e.g. faculties, departments) are involved and to which degree and where do they (jointly) want to take their vision of DH? Further questions this choice entails are: how do these stakeholders wish to phrase the respective terminology and which implications and connotations should this terminology evoke? Which (inter-)national institutions, centres, and organisations are interesting from a networking perspective and how might cooperation with these also lead to funding and financing opportunities?

While this report was written based on the inspiration for DH collaboration that Ingrid Wijk and Henk van den Hoogen gained at the LIBER Conference in Helsinki, June 2016, its aim goes beyond a mere investigation on behalf of the UB. The goal of the report is to outline and compare potential courses of action for the UB and the respectively interested faculties of the UM to facilitate the discussion about future cooperation and decisions within fields of digital research. Such future discussions could take place in the aforementioned DH expert panel: appendix a presents a preliminary 'guest list' for this event. Appendix b summarises the proposed approaches to DH that are discussed in this report in a more concise form.

And it is important here to remember the introductory quotations by Dietrich and Sanders on the value of digital librarianship and Vandegrift's call for action and involvement in the ongoing DH developments world-wide:

Digital librarianship [...] is librarianship that concerns itself with enabling and empowering faculty, students, and staff to discover, engage with, create, and preserve quality content whose properties extend beyond mechanical reproduction into areas that include duplication, manipulation, and remix. (Dietrich & Sanders, 2016, para. 9)

Stop asking if the library has a role, or what it is, and start getting involved in digital projects that are already happening. (Vandegrift, 2012, para. 1)

It is in this spirit and in the hopes that the future of DH at the UM will be even brighter than today that this report seeks to indicate possible ways of approaching DH in cooperation between the UB and the faculties.

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9 | Appendix

- a. Potential attendees for DH Expert Panel, 'guest list'
- b. Possibilities of involvement in DH

Potential attendees for DH expert panel

Researchers at Maastricht University:

- Cornips, Leonie, Chair of 'Language Culture in Limburg'; Professor at the Faculty of Arts and Social Sciences at Maastricht University.
- Leonards, Chris, Historian at the Faculty of Arts and Social Sciences at Maastricht University.
- McAllister, Denise, English Language Tutor, Language Centre Maastricht University; working with corpus linguistic tools and providing training programmes and courses for MA students and PhD candidates.
- Randeraad, Nico, Historian at the Faculty of Arts and Social Sciences at Maastricht University.
- Richterich, Annika, Assistant Professor in Digital Culture Letteren en Kunst, Faculty of Arts and Social Sciences.
- Van Saaze, Vivian, Managing director of MACCH; Assistant Professor at the Faculty of Arts and Social Sciences at Maastricht University; coordinator of 'Sharing Cultures'.
- Wenz, Karin, Coordinator of the NWO funded project 'Narrative Fan Practices' (2010-2015) and the NWO KIEM project 'Hacking Heritage' (2014-2015).
- Wyatt, Sally, Professor of Digital Cultures in Development at Maastricht University; WTMC (Wetenschap, Technologie en Moderne Cultuur) Scientific Director at the Netherlands Graduate Research School of Science, Technology and Modern Culture; and member of the Executive Committee of the eHumanities network.
- Wylie, Neill P., English Language Tutor and Course Coordinator Digital Learning, Language Centre Maastricht University.
- All interested faculty and library staff and potentially also students

Researchers at institutions and DH Centres in the Netherlands and surrounding:

- Bod, Rens, Professor of Digital Humanities; Director of the Center for Digital Humanities, Director of the Vossius Center for the History of Humanities and Sciences, president of the Society for the History of the Humanities, and member of Royal Dutch Society of Sciences and Humanities (Koninklijke Hollandsche Maatschappij der Wetenschappen) and of the Society for the Dutch Letters (Maatschappij der Nederlandse Letterkunde).
- Brouwers, Isabel, Vakreferent Latijns Amerika (incl. Spaans en Portugees), Caraïben, Leiden University Library.
- Chambers, Sally, Digital Humanities Research Coordinator, University of Ghent.
- CLARIAH (Common Lab Research Infrastructure for the Arts and Humanities): focus on facilitating research infrastructure for arts and humanities e.g. enhancing the interoperability of databases and other connected processes, http://www.clariah.nl/
- **CLARIN** (European Research Infrastructure for Language Resources and Technology), https://www.clarin.eu/
- Clayessens, Steven, Collectiespecialist Dataservices, Koninklijke Bibliotheek.
- Cock, Michiel, Universiteitsbibliotheek Vrije Universiteit Amsterdam.
- http://dhbenelux.org/wp-DARIAH. and more specifically in the Benelux: content/uploads/2015/06/68.pdf

- **EADH** (European Association for Digital Humanities), https://eadh.org/
- EHRI (European Holocaust Research Infrastructure), http://ehri-project.eu/
- Netherlands eScience Center: Software and scientific methods centre, networking and financing coordination and connection, https://www.esciencecenter.nl/
- **UKB** (Universiteitsbibliotheken en Koninklijke Bibliotheek), https://www.ukb.nl/home
- Wilms, Lotte, Project Leader Research at Koninklijke Bibliotheek; Digital Scholarship Advisor; Coordinator of DH Clinic Program.

Possibilities of involvement in DH

DH involvement 'light'

- Organise an 'expert panel' on 'DH in Maastricht' and gather more input on where DH at the UM is headed (for instance by making use of potential 'guest list' in appendix a).
- Come to a clearer (working)
 definition of what the UB, FASoS,
 and other potentially interested
 faculties will pursue within DH
 work and projects and how they
 define these activities
 (terminology).
- Focus on elaborating service approach to researchers in DH.
- Distribute DH responsibilities among librarians who are also continuing to work on their regular library responsibilities.
- Focus on RMD and metadata enhancement and other preparatory processes necessary to facilitate DH infrastructure.

Medium involvement in DH

- Embrace 'Service and support model' (potentially involving the creation of MOOCs or e-modules).
- Have at least one staff member working full-time on the possibilities for cooperation between faculty and libraries – focus on clarifying where UB wants to go with DH further and in more practical terms.
- Join 'DH Clinic Program' and/or the Netherlands eScience Center.
- Create training program for staff to become more involved and engaged in DH (see e.g. he example of University of Maryland Library's 'Digital Humanities Incubator').
- Preserve and grant centralised access to data and outcomes of DH projects from the UM.
- Focus on key areas of computational linguistics, history, area studies, digital literacy, and digitisation within DH for now.

Full-blown DH involvement

- Begin 'Partnership model' between researchers and librarians.
- Create collaborative DH Centre that is supported and made up of faculty, department, and library staff members.
- Set up research partnerships between faculty researchers and librarians: initiate and organise projects and in-depth cooperation; also concerning funding (perhaps similar to the 'Library Lab' of the University of Harvard).
- Take on digitisation projects, and perhaps also TEI encoding and thereby improve DH infrastructure.
- Assume active role in teaching DH courses at FASoS (and potentially in cooperation with other institutions and faculties).
- Begin active involvement in the organisation of symposia, lectures, lecture series, and conferences.