

User Required? On the Value of User Research in the Digital Humanities

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Although computational tools play an increasingly important role in the humanities, adoption of tools by scholars does not always reach its potential. (Warwick, Terras, Huntington, & Pappa, 2007). In projects where the research data is published within a tool, this can result in neither the tool nor the research data being used by other scholars. One partial solution to this problem is to publish research data separately from the tool, as advocated by Borgman (2012), and Kansa et al. (2010). In order to create tools that will be adopted by scholars, one approach is user-centred design, which starts with user research to uncover the needs and wishes of the user group, commonly referred to as *user requirements*. However, it is debatable whether such user requirements can be generalized to a wider group of humanities scholars (Blanke & Hedges, 2013; Unsworth, 2000; van Zundert, 2012), and whether users are able to explicate their requirements for methodological innovation (Nielsen, 2001; Norman, 2010). We ask what the role of user research is within the Digital Humanities. Our research question is: *what is the added value of user research for developing tools aimed at digital research methods?*

To address this question, we will discuss results from our own user research for gathering user requirements for two Digital Humanities projects; PoliMedia (<http://www.polimedia.nl>) and Oral History Today (<http://zoeken.verteldverleden.org>). In these projects, we held semi-structured interviews with respectively five and fifteen scholars to inform development. We will show how many user requirements were common to multiple participants, and our categorization of the requirements as within- or out-of-scope of the projects' goals.

Our results show scholars have a clear idea how they perform their research, and how tools could simplify steps in the process of discovering and analysing sources. Participants did not limit their needs and wishes to the scope set by the project. First, a large portion of the user requirements was out-of-scope, related to e.g. unavailable metadata or computational processing of sources. Second, only few user requirements were related to the specific technological goals of the projects. Moreover, due to the many unique and out-of-scope user requirements, we note that there is a tension between the specificity of scholarly research methods, and generalizability for a broader applicable tool.

Nevertheless, our findings suggest that user research has a clear benefit for DH projects: first, the user requirements that were within-scope led to usable features that were sufficiently generic for the tool to

be adopted for purposes for which it was not specifically created. Second, the out-of-scope user requirements give insight into the tool's compatibility with the individual's wider research workflow. However, this also shows that this wider research workflow cannot be generalized into a single tool. Therefore, in addition to performing user research for the tool under development, we note that the data should be published independently from the tool. This allows researchers to not only use the data with the tool provided, but also to use required or preferred tools at other steps in their research workflows. By thus combining user research with open data, we expect the tool and the data will be able to reach their full potential.

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