

# A hands-on approach to digital tool criticism: Tools for (self-)reflection

Jasmijn van Gorp (Utrecht University)

Marijn Koolen (Royal Netherlands Academy of Arts and Sciences - Humanities Cluster)

Jacco van Ossenbruggen (Centrum Wiskunde & Informatica)

Recently, the topic of digital tool criticism is a recent and important discussion in Digital Humanities research. We define digital tool criticism as the reflection on the role of digital tools in the research methodology and the evaluation of the suitability of a given digital tool for a specific research goal. The aim is to understand the impact of any limitation of the tool on the specific goal, not to improve a tool's performance. That is, ensuring as a scholar to be aware of the impact of a tool on research design, methods, interpretations and outcomes.

Our goal with developing digital tool criticism as a method is to help scholars better understand how research methods, tools and activities shape our interpretations. Based on our experiences with two hands-on workshops on digital tool criticism, we find that reflection on using digital tools and data in all phases of the research process is key.

Reflection urges scholars to consider digital data and tools as part of the overall research goals and design, and interdependent with other elements of research design, namely research questions and methods. As scholars go through their research process, assumptions on the research design and the connection between tools, data and questions are constantly challenged, forcing updates in the design and the interpretation of data and question.

Another aspect of criticism is to understand the complex entanglement of digital tools and data. At the point where scholars interact with digital data, a range of digital tools has already been applied to transform source materials into the data as they encounter it. Interpretation happens not only by the researcher in the analysis and publication phase, but also in preceding phases of exploring and gathering digital resources and by digital data curators and digital tool builders in the many steps of transforming source materials into digitally accessible data. Being able to critically evaluate the digital data and tools that a researcher uses requires an awareness of this complex entanglement and the scholars assumptions on whether and to what extent they play role in their own research.

In this presentation we will propose a model for digital tool criticism. In addition, we will discuss our experiences with the use of several tools for (self-)reflection during the workshops, such as research-DNA-visualisations and a Digital Tool Criticism Canvas (DTC<sup>2</sup>). We advocate to incorporate these methods and tools into both research practice and education.