What are the digital humanities?

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Blog • • Professor David M. Berry

Digital humanities are at the leading edge of applying computer-based technology in the humanities. Initially called ‘humanities computing’, the field has grown tremendously over the past 40 or so years. It originally focused on developing digital tools and the creation of archives and databases for texts, artworks, and other materials. From these initial uses, and as computation developed, computers offered increasingly sophisticated ways of handling and searching digitised culture. For example, with recent advances in digital imaging, it is now possible to produce very high-quality reproductions of books and artworks that can transform our ability to study them.

The key to understanding the digital humanities is to reject the idea that digital technology is invading the academy. Computers were used for humanist ends from very early on in their history, and not only, as one might expect, as mere storage for large libraries of text. Computer networks, particularly the internet, have also enabled digital files to be used from almost anywhere on the globe. This access to information has had a tremendous effect on the ability to undertake research in the arts and humanities.
Pianist Shin Suzuma uses a digital score app Syncphonia for ensembles powered by Sussex University research funded by AHRC.

Digital humanities incorporate key insights from languages and literature, history, music, media and communications, computer science and information studies and combine these different approaches into new frameworks. More recently, the disciplinary focus has widened to include critical digital studies, as well as fields more commonly associated with engineering such as machine-learning, data science and artificial intelligence. Indeed, as early adopters of technology, digital humanists were prescient in seeing that computation would have an increasing centrality to research in the humanities.

As part of their work, digital humanists have developed new methods, such as computer-based statistical analysis, search and retrieval, topic modelling, and data visualisation. They apply these techniques to archives and collections that are vastly larger than any human researcher
or research group can comfortably handle. These methods enable ambitious projects to be created with large interdisciplinary teams that are brought together to work on difficult or complex projects. Digital humanists are transforming the idea of what a humanities research project can be, giving us new ways of seeing past and present cultures.

These new collections of historical or literary artefacts are often publicly available on the web or in digital databases, and the material they contain is more openly available than previously possible with print. They increase the ability for humanists to combine data sets, social media, sound, web and image archives and also to move between them with greater ease. Equally crucial has been the creation of software for analysing, understanding and transforming these digital materials. Digital tools can also be freely accessed over the internet so they can be easily incorporated into other projects, enabling the rapid diffusion of new methods, tools and ideas across disciplinary boundaries. These digital technologies open up exciting opportunities for connecting the humanities to a wider public culture.
The social network Facebook has authorised giants like Amazon, Netflix, Spotify and Microsoft to access the personal data of its 2.2 billion users, according to the 'New York Times'. Photo by Chesnot/Getty Images.

However, with the greater diffusion of digital technologies into our lives, new concerns have arisen about the capacity these technologies have to spy on their users, about digital bias and discrimination, and the emergence of ‘fake news’. Companies such as Facebook, Apple, Amazon, Netflix and Google use our data in very intrusive ways, making collection of both public and private data a public matter of concern. Here too digital humanities, with its expertise across many knowledge areas, can help us understand these problems and provide critical interventions and policy insights.

The academy is now much more comfortable with the use of computation across disciplines. It has brought new powers of analysis, comparison and understanding to a range of research areas. The digital
humanities have been exemplary in transferring digital techniques and methods into the humanities and by doing so have laid the ground for a golden age of humanities research in the 21st century. In a digital age, the humanities need to communicate humanistic values and their own contribution to public culture more than ever. The humanities continue to ask the important question: what is a life worth living? The digital humanities are part of this tradition, helping us to reflect on this question and expanding our understanding of human culture in a digital world.

David M. Berry is Professor of Digital Humanities at the University of Sussex. He writes widely on the theory and philosophy of computation and algorithms. His most recent book is Digital Humanities: Knowledge and Critique in a Digital Age (with Anders Fagerjord). His forthcoming British Academy-supported research is concerned with the idea of a university in a digital age.