

DH Foresight: informing the future of digital humanities

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Abstract:

In recent years there has been rapid growth both in the development of digital methods and tools and in their application across a wide range of disciplines within the humanities and cultural heritage studies. In parallel to these developments, there have been numerous initiatives and projects at both national and international levels dedicated to the creation of more coordinated research infrastructures at different levels of subject specificity. These projects have been marshalling and integrating data, tools, services, technologies, policies and human resources in support of advanced research in universities, cultural heritage institutions, and other organisations.

The future development of this landscape depends on a complex and dynamic ecosystem of interactions, involving not only technological advances and new tool development, and changing scholarly priorities, questions and methods, but also the broader social, cultural and political contexts within which both scholars and infrastructures are situated, and upon which (digital) humanities practice may impact. A sound knowledge base is required if policy-making bodies are to 'optimise' outcomes and impact through implementing appropriate research and innovation policies, setting research priorities, and influencing the progress of research through funding programmes and other interventions.

To this end, the Horizon 2020 project PARTHENOS (<http://www.parthenos-project.eu/>) has carried out a *foresight study* (Georghiou et al., 2009), investigating how (digital) research methods, technologies and infrastructures in digital humanities and cultural heritage may develop in the short to medium term. It is important to understand that foresight research is not simply 'future gazing', nor is it about forecasting by experts (although experts may, and indeed should, participate). Rather, it is a way of facilitating structured thinking and debate about long-term issues and developments, and of broadening participation in this process of thinking and debate, to create a shared understanding about possible futures, and to enable them to be shaped or influenced.

A key component is the participative aspect. The vision is not that of a small number of experts, but is based on engagement with and involvement of a broad range of key stakeholders, including decision- and policy-makers, but also members of the broader community, including scholars (who need not be current users of research infrastructures),

actual and potential users of research infrastructures, and practitioner stakeholders such as infrastructure providers, data curators, and archivists.

The aim of this study was thus not *simply* to identify trends and to predict future evolution within the sector, but rather to enable the community to inform and influence this evolution by identifying research and funding strategies and interventions that can be taken forward by the various stakeholders active in the (digital) humanities landscape, including universities, research institutions, funding agencies, and research infrastructure providers. This study will thus feed into strategic R&D thinking within the European Commission, other funding bodies, and research organisations, and will give participants the opportunity to make their opinions known and to influence these strategic developments over the coming years, and thus to maximise the innovative potential of digital research in the humanities.

Over the last years, the foresight study team has organised a series of structured, interactive workshops to obtain input for the study by curating a multi-polar discussion between representatives from various EU research infrastructure initiatives (including DARIAH, CLARIN, EHRI, CENDARI, ARIADNE and IPERION-CH), and a range of actual or potential stakeholders in those infrastructures, including (but not restricted to) user/researchers. Engaging a representative range of relevant and informed stakeholders in the dialogue extended the breadth and depth of the knowledge base created by the foresight process, by drawing on distributed knowledge (different stakeholders having access to different information), and thus enriches and improves the decisions that may ultimately be made on the basis of our work. These events were supplemented by a series of interviews with key actors representing different career backgrounds and levels, as well as reviews of relevant literature.

The discussion of ‘foresight’ in this study was framed by asking the following questions, and identifying:

- current trends – what is happening, and what impact is it having?
- potentialities and opportunities – what may happen?
- requirements – what do we want to happen?
- obstacles, constraints, risks and threats – what might prevent this from happening?
- what activities and interventions (e.g. funding programmes, strategic research, service provision) might serve to ‘optimise’ outcomes?

These trends etc. may have aspects relating to one or more of the following:

- technology (e.g. tools or services);
- scholarly or professional practice;
- the environment, including social, cultural, economic, and political aspects, as well as implications for the broader public.

Together, these two dimensions form a conceptual framework underlying both the data capture activities undertaken and the foresight knowledge base that is one of the primary outcomes of the study. In this paper we examine the methodology followed in the foresight study, together with key results from the study, structured according to this conceptual

framework, and the ongoing plans for ensuring the continuation of the foresight study as a dynamic and sustainable body of knowledge.

Foresight does not end along with the formal project, but is conceptualised as an ongoing process, not only in terms of dissemination but also by continual monitoring the changing landscape and updating the results of the study, and through the creation of sustainable networks of foresight research by embedding stakeholders with ‘foresight interests’ within research and education organisations.

One particular component of the sustainability plan is the PARTHENOS Hub publishing and interaction platform (Spiecker et al., 2018), which will be used both as a dissemination channel and as a locus for capturing further input to the foresight knowledge base. In particular, Issue 2 of the Hub (Hedges, 2019) contains a summary of the main findings of the foresight study, grouped according to identified trends, obstacles, potentialities, and requirements, followed by a proposed research agenda around five broad themes that emerged during the course of the study: public engagement; research infrastructures; development of the digital commons; artificial intelligence; and impact and evaluation methods and metrics. It also includes a link to the full report.

References

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