

Digital Humanities – Challenges for Humanities in the Digital Society Era

Foreword

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The aim of this focus issue of Computational Methods in Science and Technology is to present examples of research and development works related to digital humanities.

As the term digital humanities does not have a clear definition, for the purpose of this publication it is worth specifying how it is understood by scientific teams conducting applied research in the field of Information and Communication Technology (ICT), including computational methods. In such a perspective, we perceive digital humanities, first of all, as a global trend of innovation in the broadly understood humanities, social sciences and arts, which changes the face of these sciences, conforming to the current development of the digital society. It is clear that the trend of digitization alone, which is in line with the development towards ubiquitous technology in various areas of life, will not suffice to break the new ground in scientific research and pose new challenges both in science and other areas of influence, such as education, medicine, agriculture, industry or social relations. At least two more components, which constitute the potential for the aforementioned changes, are needed here: competences and advanced eInfrastructure.

In terms of competences, it is possible to stimulate innovation when a source of inspiration occurs both in the field and the ICT area. However, these two areas of competence need to be continuously developed and interlinked. Such a trend of competence diffusion takes place in the current of digital humanities.

The second component – advanced ICT infrastructure (eInfrastructure) – creates favorable conditions for unlimited

experimentation in the field of communication and storage, processing and visualization of large data sets, as well as for creating tools and applications enabling verification of research hypotheses or discovery of new knowledge. This is obvious and undoubtedly understandable in the scientific community. We boast such infrastructure in Poland: the PIONIER network – Polish Optical Internet, 21 Metropolitan Area Networks and 5 High Performance Computing Centers. It has been used for many years by national and European scientific teams, giving equal (and often even greater) chances to Polish scientific teams to cooperate in the European Research Area. The need for continuous development of this infrastructure is indisputable.

With regard to humanities, DARIAH European infrastructure fits in with the above goals. DARIAH stands for Digital Research Infrastructure for the Arts and Humanities and focuses on the development and delivery of e-Infrastructures for digital humanities. Poland is a member of DARIAH, and Polish eInfrastructure is visible in the map of European eInfrastructure, also in several other areas (e.g. Computing, Data, Visualization).

Naturally, it is good for innovative trends in scientific research to focus on effects for the economy and to lead to its stimulation. Synergies with industry and business are always necessary in this context. However, we should not overlook the other, perhaps even more significant, impact of innovation, which is social growth. Nowadays, it is often referred to as the development of the information (or digital) society. Challenges related to the development of the information

society faced by the humanities will not be effectively part of this impact if innovative trends in these sciences are not associated with qualitative changes in the methods of conducting research inspired by digital technologies. A special role may be played here by the DARIAH-PL consortium, which is the largest scientific consortium in the history of Polish humanities. The consortium, whose objective is to organize cooperation in this new, important area, is composed of 18 leading Polish scientific and research institutions. The Consortium has been a member of the European network of

DARIAH-ERIC since November 2015.

This publication presents sample results of research works and implementations presented during the 3rd DARIAH-PL Conference in Poznań. The aforementioned key factors in the development of digital humanities were the thematic components of the conference, whose main theme was “Inspirations – Innovations – Human”. This message indicates the potential that we can develop on the basis of interweaving the areas of inspiration, technology and innovation as well as humanities.