

A DMP template for Digital Humanities: the PARTHENOS model

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Abstract. PARTHENOS, stands for "Pooling Activities, Resources and Tools for Heritage E-research Networking, Optimization and Synergies" and it is a Horizon 2020 project funded by the European Commission. It's an umbrella-project which includes both legal entities of the CLARIN and DARIAH ERICs and also their affiliated projects, including EHRI, ARIADNE, CENDARI, E-RIHS and others in the related fields across Humanities and Cultural Heritage. PARTHENOS is working on the definition and support of common standards, the coordination of joint activities, the harmonization of policy definition and implementation, and the development of pooled services and of shared solutions to the same problems. Within this framework, it has been working on the definition of a Data Management Plan (DMP) template, that will support researchers from Humanities and Cultural domains to effectively share their data according to the FAIR Data Principles.

Keywords. DMP, Research Infrastructure, Digital Humanities, FAIR Principles

Introduction

The PARTHENOS project empowers digital research in the fields of History, Language Studies, Cultural Heritage, Archaeology, and related fields across the (Digital) Humanities. PARTHENOS supports the work of relevant research infrastructures, such as CLARIN (language resources) and DARIAH (digital humanities), ARIADNE (digital archaeological research infrastructure), EHRI (European Holocaust research infrastructure), CENDARI (digital research infrastructure for historical research), CHARISMA and IPERION-CH (EU projects on heritage science), along with other relevant integrating activities projects, by building a cross-disciplinary virtual environment to enable researchers of the humanities to have access to data, tools and services based on common policies, guidelines and standards. As part of this work, one task is the implementation of a series of recommendations and guidelines based on FAIR Data Principles, targeted at researchers and research centres about which policies to apply during and after their research or infrastructure work.

Within this framework, PARTHENOS has been working on a Data Management Plan (DMP) template which is based upon the Horizon 2020 template. Indeed since 2016, the Horizon 2020 Programme has produced Guidelines on FAIR Data Management to support Horizon 2020 beneficiaries in making their research data findable, accessible, interoperable and reusable (FAIR). Funded projects are requested to deliver an implementation of Data Management Plan (DMP) which aims to improve and maximise access to and reuse of research data generated by the projects. This is part of the Commission's policy actions on Open Science to reinforce the EU's political priority of fostering knowledge circulation. Open Science is in practice about "sharing knowledge as early as practically possible in the discovery process" and because DMPs gather information about what data

will be created and how, and outline the plans for sharing and preservation, specifying the nature of the data and any restrictions that may need to be applied, DMPs ensure that research data is secure and well-maintained during a project and beyond, when it might be shared with others.

1. The PARTHENOS DMP

A first draft of DMP has been presented in the ‘Report on Guidelines for Common Policies Implementation’, that gives an overview of existing policies concerning data management as well as policies regarding quality of data, metadata and repositories, IPR, open data and open access, presented according to FAIR Data Principles. The PARTHENOS DMP and Guidelines will support researchers to effectively share their data according to the FAIR Data Principles through publicly accessible, digital repositories.

The PARTHENOS DMP will offer a clear guidance to its stakeholders, mainly researchers and data repositories, to plan the life cycle of data. It will offer a long-term perspective by outlining how data will be generated, collected, documented, shared and preserved, taking into consideration commonalities and specific requirements of the disciplines involved in the project. The PARTHENOS DMP template comprises sections about data collection and documentation, ethics, legal and security issues, data storage and preservation, and data sharing and reuse.

Fig. 1
The PARTHENOS
DMP Template on-line

The PARTHENOS DMP template provides a guidance to help researchers/data repositories for completing their data management plan and it is composed of two levels: a basic template that can be applied to all the disciplines in the humanities, as well as the closely related stakeholders: cultural heritage institutions, data archives and research infrastructures, and a domain level that contains more detailed questions where policies, specific standards and practices may vary according to the research area. Moreover, some of the questions will only apply to researchers or to data repositories. The PARTHENOS DMP template will also encourage researchers to follow common policies and use best practice for their data management.

2. Conclusions

The PARTHENOS DMP template will be made available as an online tool to support better researchers to freely access, mine, exploit, reproduce and disseminate their data and identify the tools needed to use the raw data for validating research results, or provide the tools themselves, a significant step towards the realization of Open Science.

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Sheena Bassett is the Project Manager for the PARTHENOS project and works for PIN Scrl, Prato, Italy. She has been involved in research for over 30 years, having started out as a computer programmer and subsequently working as a researcher and consultant in a number of industries such as image analysis, publishing and packaging before moving into cultural heritage. Her wide and varied work experience helps contribute to her understanding of all aspects of research, from technical through to the everyday activities.



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Since 2004, she collaborates with ICCU in developing CulturalItalia, the portal of the Italian culture, as well as many European projects for cultural heritage digitalization, on-line access and digital preservation. She participates in PARTHENOS by coordinating the task on definition of policy requirements concerning the data lifecycle.

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Franco Niccolucci is the director of the VAST Lab Laboratory at the PIN in Prato, and the Coordinator of the European project PARTHENOS, that is a cluster of research infrastructures in the Digital Humanities and Cultural Heritage fields. He coordinated the ARIADNE infrastructure (Advanced Research Infrastructure for Archaeological Dataset Networking in Europe) in the digital archaeology sector, which created a registry of over 2 million archaeological datasets. In the past, it has coordinated various European projects in the cultural heritage domain. As a mathematician, he was a professor at the University of Florence until 2008 and then, until 2013, he was the director of the Science and Technology in Archaeology Research Center at the Cyprus Institute in Nicosia, Cyprus.



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Paola Ronzino is a Post-doc researcher at PIN specialized in ITC for Cultural Heritage. She holds a Master Degree in Archaeology and a PhD in Science & Technology in Cultural Heritage. Her research interests are concerned with the development of ontologies and metadata standards for archaeological documentation and cultural heritage, with interest in the documentation of buildings archaeology. Participating in several of PIN's EU projects on digital cultural heritage, she has been actively involved in the research activities of the ARIADNE project. Currently, she is engaged in the PARTHENOS project activities, particularly in what concerns the definition of the user requirements and the design of the PARTHENOS Data Management Plan for the Humanities.