The European Qur'an. Islamic Scripture in European Culture and Religion 1150-1850

Horizon 2020 DMP (initial outline)

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Plan Name: Horizon 2020 Data Management Plan

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Grant number: ERC-Syn-2018 - ERC Synergy Grant 840141

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Plan Description: The EuQu project is built on the conviction that the Qur'an has played an important role in the formation of medieval and early modern European religious diversity and identity and continues to do so. The Qur'an is deeply imbedded in the political and religious thought of Europe and part of the intellectual repertoire of medieval and early modern Europeans of different Christian denominations, of European Jews, freethinkers, atheists and of course European Muslims. We speak of the 'European Qur'an' to emphasize the significant role of the Muslim Holy Book in various intellectual and cultural debates that took place in different parts of Europe, from Iberia to Hungary, over the course of the Middle Ages and early modern period (1150-1850).

EuQu is an ERC Synergy project formed by a consortium led by the Spanish National Research Council (CSIC); the University of Naples L'Orientale (UNO); the University of Kent (UoK) and the University of Nantes (UN).

Other members of the consortium are the University of Amsterdam (UvA);Autonomous University of Barcelona; and the Humanities Research Centre of the Hungarian Academy of Sciences.

Funder: European Commission (Horizon 2020)

Institution: European Research Council

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1. Data summary

EuQu will rewrite the history of the European Qur'an by placing European perceptions of the Holy Book and of Islam into the fractured religious, political, and intellectual landscape of the period from 1150 to 1850. We will explore how the Qur'an played a key role not only in polemical interactions with Islam but also in debates and polemics between Christians of different persuasions and indeed is central to the epistemological reconfigurations that are at the basis of Modernity in Europe.

Project Objectives

The project studies how the European Qur'an was interpreted, adapted, used and formed in Christian European contexts -often in close interaction with the Islamic world, as well as with the Jewish populations living in both Christian and Islamic regions. Our multidisciplinary team of researchers studies various aspects of this European phenomenon, paying particular attention to:

- the Qur'ans which Europeans brought, collected and copied;

- the Qur'ans they translated and printed in Arabic and in translation, often using Muslim exegesis (*tafsir*) and Arabic grammars and dictionaries; and,

- the Qur'ans which Muslim minorities living in European Christian lands copied, interpreted, translated into local vernaculars, often in Arabic script (*aljamía*)

To present a comprehensive historical assessment of the European Qur'an EuQu will:

- document the circulation and dissemination of Arabic Qur'ans and translations of the Qur'an (in manuscripts and in printed editions);

- assess the ways in which the Qur'an was exploited in religious, political, scholarly and cultural discourse in medieval and early modern Europe; and,

- engage in knowledge-transfer, communication and public engagement through seminars, workshops and conferences, digital material on our website, exhibitions at major European cultural institutions and events that bring together Muslim and non-Muslim citizens and residents to discuss and reflect upon the European Qur'an.

EuQu seeks to challenge both traditional perceptions of the Qur'anic text and well-established ideas about European religious and cultural identities. At the same time our project will address pressing and current issues in Europe and promises to open new perspectives on our multi-religious societies.

EuQu will produce:

- a comprehensive database on the European Qur'an between 1150 and 1850 that will become a fundamental research tool for scholars in a variety of fields;

- research into the various uses of the Qur'an in polemical debates, missionary endeavors, historical, philosophical and religious works and literary and cultural contexts; and

- events including seminars, summer schools, conferences, major exhibitions at leading European cultural institutions and other public engagement activities.

The project Database

In 2019 EuQu will begin to compile comprehensive documentation of the geographical history of the European Qur'an. This material will be used to create a GIS-mapped database where we will collect all the available data about the circulation of Qur'anic manuscripts in medieval and early modern Europe, as well as data about all published and unpublished European editions and translations of the Qur'an in Arabic, Greek, Latin and the European vernaculars. The database will also collect all anti-Qur'anic polemical tracts written and published in Europe between 1142 and 1800.

This unique database will provide a valuable tool with which researchers will be able to trace the development, spread and transformation of the European Qur'an from the Middle Ages to the modern period, and from Spain to Russia and to the borders of the Ottoman Empire. By displaying this data on a map with spatial and temporal dimensions, we will create a depiction of the geographical history of the European Qur'an. Our map will visualize the circulation and distribution of Qur'an manuscripts and also relate them geographically and chronologically to translations and editions and to anti-Qur'anic polemics that appeared during the period.

The European Qur'an database will support and generate new insights in a number of areas, including:

- a new understanding of the social history of oriental manuscript collections, providing comprehensive information about the uses of Qur'an manuscripts, the social spaces in which they moved and the different actors involved in their production and procurement;

- information on the Arabic manuscripts that European scholars had at their disposal and hence what reading(s) of the Qur'an they were acquainted with; as well as on how they approached the challenges posed by different scripts and the numerous formal devices they employed (verse divisions, partitions of the Qur'an, indications of variant readings, recitation signs, etc.) when reading, copying or printing the manuscripts;

- new insights into the acquisition of manuscripts through travelers, diplomats, merchants, soldiers, and missionaries as well as through Muslims and converts. This will help us gain a better understanding of the role of Muslims and converts in producing copies of the Qur'an in Spain, in the Habsburg borderlands, and in other parts of Christian Europe where Muslim slaves and captives often acted as scribes. The inventory complied for the database will also allow us to assess the process of copying Qur'an manuscripts by Europeans, including Christians; and,

- new understanding of the relationship of Latin and vernacular / aljamiado (vernacular written in Arabic script) translations. Only in the context of a comprehensive project like the EuQu Database, it could be possible to establish whether and how European translations made by non-Muslims, and traditions of translations constitute a new text - i.e. the European Qur'an. At the other end of the spectrum, the database will also foster new understandings of the European Qur'an as it was produced: situating these translations and editions as created in close collaboration with Muslim agents or converts. These texts were often intended for the use of Muslim minorities or crypto-converts and might virtually converge with the dominant Qur'an tradition in the *Dar al-Islam*.

Data sources, data types and formats generated/collected

1) **Manuscripts**: Team members will collect data about provenance, date, quality and size of Qur'an manuscripts in European collections; prosopographical metadata about the principal actors involved in acquiring, collecting and copying of these MSS, as well as annotations, which will shed light on the readers and reception of the Qur'an in Europe. We will start with major European collections such as the Vatican Library, the National Library of France, the Royal Library of El Escorial, the National Library of Spain, the Royal Library in Copenhagen, the collections in Leiden and Groningen, private and public collections in Oxford, Cambridge and London, and private and public collections in Germany before and after the Thirty Years' War. In most of these cases, historical catalogues will allow the reconstruction of the historical development of the collection and will help to identify relevant Qur'anic manuscripts. Another focus will be on archives of missionary orders that were active in the Middle East (such as Franciscans, Carmelites, Dominicans etc.), in Rome, Spain and France. To this will be added the study of smaller collections across Europe as well as circulating individual Qur'an manuscripts.

2) **Translations**: The database will also include an annotated inventory of all known published and unpublished translations of the Qur'an (including partial translations in textbooks, dissertations etc.) as well as European editions of the Arabic Qur'an (from Paganini's Venice print to the edition of Flügel in 1834). The data will include detailed bibliographical and prosopographical information about translators, publishers, readers, owners (including collectors), and editors. These will be complemented by in-depth philological assessments and state-of-the-art descriptions of the religious and scholarly background as well as the economic and political contexts of these translations.

3) **Anti-Qur'ans**: A third component of this work package is a database of anti-Qur'anic polemical tracts. Data will include bibliographical information, detailed prosopographical information about their authors, as well as descriptions of the religious and scholarly background of these texts. These will include Latin texts from the Middle Ages and the Renaissance (a number of which have been already studied by the Barcelona *Islamolatina* project and by other researchers who will be affiliated with EuQu), vernacular texts in Spanish, French, German, English, Italian and other languages, as well as texts by Jewish authors and even texts in Arabic composed by 17th-century Catholic missionaries (which have been studied by Naples PI Tottoli). This information will allow scholars for the first time to appreciate the breadth and variety of Christian European polemical and apologetical responses to the Qur'an.

In sum, according to the objectives described above, for the most part EuQu members will collect and extract data from public and private libraries, archives and inventories. They will also extract data from manuscripts and other documentary sources. Bibliographic information will also be incorporated into the databases. We are also likely to draw on other existing datasets created and structured by previous projects related to our field.

System Architecture

> NB: We are currently recruiting for the Digital Humanities Specialist who will lead on the architecture and design of the database. We expect the Specialist to be in post by November 2019. This section therefore provides a high level overview of our current expectations regarding system architecture and is subject to change.

The database will be designed as an structured relational database. The data will be incorporated into a PostgreSQL spatial database with spatial extension PostGIS.

Server: All project data will be stored on a dedicated server within the CSIC, taking advantage of the security protocols implemented within the institution. This server will also provide a distributed work network for the different information generating entities contained in the project, and will also store the project website. Later, this dedicated server will house the web publication of the database. Free access will be provided to the public database (query forms and direct download of various data sets). This publication will exclude non-proprietary data.

Access to the information (months 36-72) will be made through any thin client (internet browser) by means of the project's website. Access to the spatial data will be made through a map viewer compatible with any web browser which implements W3C standards, such as XML or Javascript. At the same time, using thick clients such as GIS software, standard services offered through the SDI will be made available.

In addition to this, all the final datasets will be stored in **Digital CSIC**, which is the open access repository of the host institution (CSIC).

Most libraries manuscript descriptions are encoded in a specialized XML. The XML format used complies with the Text Encoding Initiative guidelines for the electronic presentation of manuscript descriptions (TEI-P5). Compliance with this international standard enables the exchange of metadata with other digitization projects, meta-search engines, and portal sites. In addition, the structuring of metadata according to the TEI-P5 standard allows the assignment of metadata information to individual fields or substructures, enabling users to perform focused searches with a dedicated software tool for Author, Title of Work, Incipit, Decorative Elements, and etcetera.

Furthermore, the utilization of XML guarantees the long-term usability of the current metadata, independent of the need to use a particular software or edition of particular software. For this reason, the database may incorporate other corpuses based on standard exchange languages, specifically Text Initiative Encoding (TEI).

The EuQu database has originally been planned as a PostgreSQL open source, object relational database, in order to simplify and clarify the future mapping of the research objectives of the project. In this sense, PostgresSQL can easily store XML data. However, there is also scope for the Digital Humanities Specialist to design the database exclusively according to TEI. A decision on this will be made in months 7-8 of the project.

Finally, in terms of the bibliographic management of the project: a common reference manager will be use by all members of the project (ie Mendeley or Zotero). The selected manager will also be used for the bibliographical references included in the database.

2. FAIR data access

Making data findable, including provisions for metadata

The data the project generates will be available for direct access through the project website. For this purpose, both query forms (to filter thematic information) and a cartographic view (spatial visualization of the data) will be developed.

In addition to these open data sources, consultation and data download services will be implemented through the creation of a Spatial Data Infrastructure (SDI).

A semantic web

Open access to the thematic data the project creates will also be offered using standard languages of interchange (XML or CSV). To increase the interoperability of the registry, an international thesauri will be used.

An ontology is a formal representation of the terminology and concepts of a scientific domain, which is used to clarify the relationships between terms and concepts. An ontology includes a vocabulary of terms (belonging to a disciplinary field) with their definitions and the relationships between concepts.

The great challenge of the semantic web at the technological-scientific level is to improve the levels of description applied to the contents of the pages, and it is in this context where the ontologies play a central role. When representing the knowledge through the assignment of meaning to concepts, meaning that can be transcribed into formal languages, which creates an "intelligent" communication bridge between user and system.

For the purpose of the project, the [Getty Thesauri](#) created and maintained by the Getty Research Institute has been selected as the most appropriate tool. Among other advantages, this will provide:

- lexical standardization, and

- increased interoperability between the dataset and other models that use the Getty thesaurus as a reference.

In addition to the Getty thesaurus, other concepts included in the thesauri used by the diverse libraries/ research institutions/ projects that have already standardized the data will be added, as well as those concepts generated *ex profeso* for the EuQu project. This thesaurus specifically developed for, and result of the project, will be published open access.

The thesauri will produce a list of descriptive terms that can be used as keywords on different entities of the dataset, mainly images and bibliography. In this way, an alternative system will be implemented to describe the datasets, complementary to the normalized information of each one of them. This system will allow the localization of dataset elements through the web.

Clear versioning

The diverse database versions will be stored by PostGis. The metadata offered will describe the complete lineage of the database from creation, to versioning, to maintenance.

Standards for metadata creation

- INSPIRE (Infrastructure for spatial information in Europe) is the main European directive on geographical information. For spatial data, we will follow INSPIRE and ISO 19115.

- [ENRICH schema](#) will be used for manuscripts, Encoded Archival Description (EAD), and other directives will be used for archival material.

- Dublin Core (ISO 15836): The Dublin Core Metadata Element Set is a vocabulary of fifteen properties for use in resource description, Dublin CORE will mainly apply to graphic documentation.

- BIB or BibTex standards that include their own metadata sets are followed for bibliographic exchange.

We are also considering to adopt the recommendations provided by the Open Archives Initiative (https://www.openarchives.org/) in order to increase the accessibility and interoperability of the datasets.

Open access provisions

During the life of the project, the project datasets will be stored and systematically organised in the database described above. The final database will be accessible online by the end of the project. This database will not include any information that implies copyright or confidentiality restrictions.

The information will be accessible via the website through any light client (internet browser), following the protocols established by W3C. In order to consult the thematic data, access will be through the data query tools embedded in the

project website, or after downloading any database management system that allows the user to import the data in standard XML or CSV formats.

The spatial data will be accessible through a map viewer that operates on any web browser which implements W3C standards, such as XML or Javascript. Simultaenously, users will be able to access the data via heavy clients such as the proprietary software ArcGIS, or free software like QGIS. The standard services offered through the SDI will be accessible on heavy clients.

All project data will be stored on a dedicated server at CSIC, taking advantage of the security protocols implemented by the institution. In addition to this, the final database will be stored in Digital CSIC, which is the open access repository of the host institution (CSIC). Open Aire automatically includes all the information stored in Digital CSIC, thus complying with the H2020 policy in terms to open access to research data.

A working platform, for members and collaborators of the project will be created. Access will be provided only to the users of the project database itself. Authentication systems will be created that allow access without compromising the security of the datasets.

Making data interoperable:

Interoperability is defined as the ability of two or more systems to exchange information and to use it. In EuQu we will use three levels of interoperability:

Syntactic interoperability:

Ensures the existence of a technical connection, that is, the data can be transferred between different systems. We will search for syntactic interoperability by using standard languages in the exchange of information (XML: "constitutes a way to provide a common syntax in the processes of exchange and integration of heterogeneous information", in particular space languages will use the extensions

GML; CSV), in addition to services defined by OGC (Open Geospatial Consortium).

Semantic interoperability:

Ensures that the content of the information exchanged (its meaning) is understood in the same way by any system. The main aim of semantic interoperability is to reduce the ambiguity of criteria, so that information contents can be shared and interpreted efficiently in the specific contexts in which they are used. The use of the aforementioned thesauri is fundamental to achieving this.

Structural interoperability:

This is an intermediate level between syntactic interoperability and semantics. It provides the means for common conceptual schemas to be specified and shared. The strategy is oriented toward the use of common modeling languages to conceptualize information, such as the UML.

Using the UML modeling language, a conceptual data model of the project will be generated (available in the open via the project web page), which will provide structural interoperability and increase the semantic interoperability.

The datasets will be licensed under Creative Commons, the specific type of license will be confirmed at a later date in the project's development.

The privacy of the users will be protected to the standards set out in the General Data Protection Regulation.

The EuQu database and webpage will be operational at least for five years following the end of the project. However, we expect that the research data and, hopefully, its geospatial extension, will continue to be available for the lifetime of Digital CSIC, the institutional repository of the CSIC.

3. Allocation of resources and Human resources management

Total cost of a database developer and manager: 282.000€

Website including mapserver, mapviewer, database and website filters: 12.000€

Server: 3.000€

Total cost for data management allocated in EuQu: 297.00€ The costs will only be initial when acquiring the server and generating the web platform.

The CSIC provides working desktops, security systems and maintenance.

Data management roles in EuQu

Supervision of data: it is up to the project investigators to analyze the completeness of the data, its integrity and robustness. To this end, control systems will be implemented in the database management system to ensure the standardization and accuracy of the data collected.

Data management: it is up to the project data manager (Digital Humanities Specialist) to generate the structure to gather the necessary information to respond consistently to the objectives previously set out. They will in turn be responsible for providing access permissions to the database manager system, and performing maintenance and backup tasks.

Internal users: members of the work team will have editing permissions on the dataset. They may create, modify, delete and consult all records to which it is relevant to give them access.

External users: all those interested in being able to access the data results of the project (month 72). In principle only query permissions will be allowed. Later in the project the possibility of generating a collaborative space will be assessed. If implemented this would imply that some limited permissions for editing parts of the dataset will be granted.