



NARRATE

Needs for Digital Recording and Documentation of Ecclesiastical Cultural Treasures in Monasteries and Temples



Project Information

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The purpose of NARRATE project is to codify the actual recording and documentation needs for the ecclesiastical cultural treasures, through a systematic study of the users' needs.

Consortium partners



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- ASSOCIATION FOR THE PROTECTION OF CULTURAL HERITAGE (KMKD)
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Abbreviations

| | |
|----------------|-------------------------------------------------------------------|
| AR | Augmented Reality |
| VR | Virtual Reality |
| ICT | Information and Communications Technology |
| SAFT | Section for Archives and Faith Traditions |
| GIS | Geographic Information Systems |
| ReIReS | Research Infrastructure on Religious Studies |
| DRH | Database of Religious History |
| KADOC | Documentation and Research Centre on Religion Culture and Society |
| CSAD | Centre for the Study of Ancient Documents |
| CULTNAT | Center for Documentation of Cultural and Natural Heritage |
| UNESCO | United Nations Educational, Scientific and Cultural Organization. |
| UCL | University College London |
| IFLA | International Federation of Library Associations and Institutions |
| ICOMOS | International Council on Monuments and Sites |

Executive Summary

The EU Erasmus+ “NARRATE: Needs for Digital Recording and Documentation of Ecclesiastical Cultural Treasures in Monasteries and Temples” (2022-1-EL01-KA220-HED-000089867) aims at identifying and promoting the needs and priorities concerning ecclesiastical Cultural Heritage (CH) documentation.

The current study is being performed to codify the actual recording and documentation needs for the ecclesiastical cultural treasures, through a systematic study of the users’ needs. NARRATE reflects an emphasis on documenting ecclesiastic CH treasures in ways that will enable stakeholders to narrate their intertwined histories, functions, and spiritual importance throughout time.

In this report we provide the results of the R2.2- *Identification of pertinent projects and research, analysis of their characteristics, assessment, and foregrounding of best practices*, the second result of the Work Package n°2 - Needs Analysis, Best Practice Collection and Conceptual Design of the NARRATE Framework.

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1. Interdisciplinary approaches on Religious Cultural Heritage documentation and preservation through new technologies.

1.1 Introduction

Interdisciplinary approaches on documentation and preservation through new technologies, within the context of religious cultural heritage, refers to the application of digital tools, methods, and technologies to study, document, preserve, and present religious cultural heritage. It involves the intersection of technology and humanities disciplines to explore, analyze, and interpret religious texts, artifacts, practices, and traditions. There is an ongoing discussion concerning the relationship between digital humanities and religion and religious heritage [1]-[8]. There are various ways in which Information and Communication Technologies can be applied to religious heritage, e.g. digitization of religious texts, text analysis and corpus linguistics, digital archives and repositories, visualization and mapping, Virtual Reality (VR) and Augmented Reality (AR), digital storytelling and public engagement, social media and digital communities.

The book Digital Religion [9] that offers a critical and systematic survey of the study of religion and new media. It covers religious engagement with a wide range of new media forms and highlights examples of new media engagement in all five of the major world religions. There are also new terms, such as *Theology of Digitalization means the use of digital technologies to communicate, mediate, or teach theology*. It is a discipline situated within the field of practical theology and it explores the mutual relationship between theology and digital technologies [10]. In this framework there are various digital humanities initiatives can involve the **digitization of religious texts**, including sacred scriptures, religious books, manuscripts, and historical documents. By digitizing these texts, they become more accessible for scholarly research, preservation, and wider public engagement [11], [12].

Other projects concerning religious heritage and ICT involve **text analysis and corpus linguistics**. In this case digital tools and techniques can be used to analyze religious texts, identify patterns, extract linguistic features, and explore textual variations within different religious traditions [13]-[15]. This computational analysis can contribute to textual criticism, hermeneutics, and the study of religious languages.

1.2 Digital archives and repositories

Digital humanities projects can establish **online archives and repositories** that curate and provide access to a wide range of religious data, such as images, texts, audio recordings, videos, and scholarly resources. These repositories serve as valuable resources for researchers, students, and the general public [16]. Digital archives and repositories can play a crucial role in the preservation, organization, and dissemination of religious heritage materials. They provide online platforms where religious artifacts, texts, images, audio recordings, videos, and other related resources can be stored, curated, and accessed by researchers, scholars, practitioners, and the general public. Here are some key aspects of digital archives and repositories for religious heritage:

- **Preservation and Conservation:** Digital archives and repositories ensure the long-term preservation of religious heritage materials by providing secure storage and backup mechanisms. They help safeguard fragile and valuable religious artifacts, manuscripts, and documents from physical deterioration, loss, or damage.
- **Access and Discoverability:** Digital archives and repositories make religious heritage materials widely accessible to users worldwide. They offer search and discovery functionalities that enable researchers and the public to locate specific items, browse collections, and access relevant resources conveniently.
- **Documentation and Metadata:** Digital archives and repositories facilitate the documentation and cataloging of religious heritage materials. They provide standardized metadata frameworks and tools for recording essential information about each item, including its provenance, description, cultural significance, and copyright status.
- **Multimedia Capabilities:** Digital archives and repositories support various types of media, allowing for the inclusion of diverse religious heritage materials. They can accommodate text-based documents, images, audio recordings of chants or sermons, videos of rituals or ceremonies, and even interactive digital experiences.
- **Contextualization and Interpretation:** Digital archives and repositories often include contextual information, annotations, and scholarly interpretations to enhance the understanding and interpretation of religious heritage materials. This can involve linking related items, providing historical background, or offering educational resources that help users navigate the cultural and religious contexts.
- **Collaboration and Community Engagement:** Digital archives and repositories can serve as platforms for collaboration and community engagement. They can involve crowdsourcing efforts, encouraging individuals and religious communities to contribute knowledge, personal stories, and additional materials to enrich the understanding and documentation of religious heritage.
- **Open Access and Copyright:** Some digital archives and repositories access principles, making materials freely available for non-commercial use. However, copyright restrictions may apply, and access to certain sensitive or restricted materials may require permissions or agreements with relevant religious institutions or communities.

Various online archives and repositories, like the Digital Theological Library ²¹, the repository of Mount Athos², a digital archive of Indian Christian manuscripts³, Church

¹ Digital Theological Library, https://dtl2.libguides.com/home?gclid=Cj0KCQjwy9-kBhCHARIsAHpBjHiY-Fr806gMBMqJDWbhgYcE232Uy_DIZ03oxvTROIFAQV3VaPhl8O4aAILGEALw_wcB

² Repository of Mount Athos, <https://www.mountathos.org/en-US/Collections.aspx>

³ Indian Christian manuscripts, <https://eap.bl.uk/project/EAP636/search>

and Synagogue Records for Genealogy⁴, Southern Baptist Historical Library & Archives⁵ organize and make available religious archives and repositories. There are also associations and groups that are involved in archives research, like the Association of Religion Data Archives⁶, the Religious Education Association Records⁷, the Religious Archives Group that provides information on the location of principal archives of religious traditions and denominations originating in and relating to the United Kingdom⁸. In the International Council of Archives there is a special section for Archives and Faith Traditions (SAFT)⁹. This scientific area is continuously updated. As an example, it could be mentioned the biennial 'Digital Preservation for the Arts, Social Sciences and Humanities' conference that the topic of the 2022 conference was 'Digital Preservation of Religious Collections: Conversations and Collaborations'¹⁰.

1.3 Digital humanities approaches

Digital humanities approaches enable the **visualization and mapping of religious data**, such as the geographic distribution of religious sites, pilgrimage routes, religious demographics, or the spread of religious ideas and movements. Geographic Information Systems (GIS) and interactive maps can enhance understanding and exploration of religious heritage in space and time [17]. Indicatively, information is provided about:

- (a) Sacred place¹¹: Sacred space - Human Geography GeoInquiries provides the opportunity to the user to explore the location and distribution of religiously sacred sites around the world,
- (b) NET Bible Maps¹² in which data recorded by a satellite has been used in a Bible to illustrate the Holy Land,
- (c) The Spatial Distribution of Religious Organizations in the United States and their Socioeconomic Characteristics [18],
- (d) GIS and North American Religion Atlas Data Visualization [19].

⁴ Church and Synagogue Records for Genealogy, <https://guides.loc.gov/church-records-for-genealogy/repositories>

⁵ Southern Baptist Historical Library & Archives, <https://sbhla.org/digital-resources/>

⁶ Association of Religion Data Archives, <https://www.thearda.com/>

⁷ Religious Education Association Records
<https://archives.yale.edu/repositories/4/resources/290>

⁸ Religious Archives Group, <https://religiousarchivesgroup.org.uk/advice/directory/>

⁹ SAFT, <https://www.ica.org/en/about-archives-faith-traditions-saft>

¹⁰ <https://dri.ie/events/dpassh-2022-digital-preservation-religious-collections-conversations-and-collaborations/>

¹¹ Sacred place: Sacred space - Human Geography GeoInquiries,
<https://hub.arcgis.com/maps/Education::sacred-place-sacred-space-human-geography-geoinquiries/about>

¹² NET Bible Maps, <https://bible.org/maps#samples>

(e) Artistic Transfers from Islamic to Christian Art: A Study with Geographic Information Systems (GIS) [20], a GIS Approach to the Sacred Landscape of Hellenistic Attica [21].

Immersive technologies like **Virtual Reality (VR) and Augmented Reality (AR)** can be utilized to recreate religious spaces, rituals, or historical contexts [22]-[24]. Users can experience virtual tours of sacred sites, participate in virtual rituals, or interact with digital representations of religious artifacts, enhancing engagement and understanding of religious heritage. These studies discuss how:

- the Church can use VR and AR and the ways these emerging technologies can be used to provide an intense cultural, historical, and religious visitor experience [25], [26].
- the Church can use the Metaverse [27]-[30].
- the emerging technologies can be used for religious education [31],[32].

Digital humanities methods can support the creation of **digital narratives**, interactive exhibits, and educational resources that communicate religious heritage to diverse audiences [33]. These platforms foster public engagement, intercultural dialogue, and the preservation of intangible aspects of religious heritage.

Digital humanities approaches can leverage **social media platforms, online forums, and digital communities** to facilitate discussion, collaboration, and the sharing of knowledge and experiences related to religious heritage. There are various studies in the field. Indicatively, it is mentioned Åhman et al. (2021) [34] that discuss how social media affects the conditions for religious communication and what the consequences are for a traditional religious organization. Furthermore, the impact of social media in religion is discussed in Gillespie (2013) [35], whereas the impact of social media on the Religious and Spiritual Beliefs of Emerging Adults is explored in Ehlebracht (2021) [36]. On the other hand, the research of Sun (2022) [37] thoroughly analyses the difficulties associated with the preservation and transmission of religious cultural resources and the difficulties encountered in the new development environment and background. There are various online forums and digital communities concerning religious heritage, e.g., the Local Forum for religious diversity¹³ and the forum for religious heritage¹⁴. It is also worth mentioning the online group Christians in GIS¹⁵ and the forum GIS, Religions, Pratiques, Textes et Pouvoirs¹⁶.

For fulfilling the needs of NARRATE project we are mostly interested on the digitisation of movable monuments and the creation of digital archives and repositories. In this

¹³ Local Forum for religious diversity, <https://www.coe.int/en/web/interculturalcities/-/local-forum-for-religious-diversity>

¹⁴ Forum for religious heritage, <https://www.frh-europe.org/?ts=1517532977>

¹⁵ <https://christiansingis.org/>

¹⁶ <http://gis-religions.fr/>

framework we have made an extensive survey concerning relevant resources that are listed in the following chapters.

2. Identification of pertinent projects and research

2.1 Research projects

- **RelReS - Research Infrastructure on Religious Studies¹⁷**

The project RelReS funded from European Union's Horizon 2020, started in February 2018, and ended in 2021. Three core elements constituted RelReS identity:

Vision: Religion is a burning issue in Europe. Peaceful living together in a multireligious society is increasingly coming under pressure and we urgently need to deal with this. Knowledge of religious traditions helps us to reduce fear and anger because of prejudices and unfamiliarity with "the other".

Mission: RelReS is a starting community of twelve European institutions that are building a unique and highly qualified infrastructure on religious studies. RelReS brings knowledge into the field of religious pluralism in Europe, thus contributing to a stable society. It explains and implements the idea that "Knowledge Creates Understanding".

Values:

- ✓ Innovation: digital access, international collaboration.
- ✓ RESILIENCE is a unique, interdisciplinary and invigorating research infrastructure for Religious Studies¹⁸.

- **Mount Athos Repository¹⁹.**

Mission: exploit modern information and communication technologies by digitalizing, documenting and disseminating Mount Athos cultural heritage

Values: Innovation, digital access.

- **British Library Endangered Archives Programme: Creating a digital archive of ecclesiastical records in the original seven Villas of Cuba²⁰**

Mission: The project aims to digitize over 500,000 pages of unique documents that record the history of the African diaspora in the seven oldest cities of Cuba.

Values: Innovation, digital access, international collaboration.

- **European Digital Treasures: Management of centennial archives in the 21st century²¹**

¹⁷ <https://reires.eu/>

¹⁸ <https://www.resilience-ri.eu/>

¹⁹ <https://www.mountathos.org/el-GR/sylloges.aspx>

²⁰ <https://eap.bl.uk/project/EAP955/search>

²¹ <https://www.digitaltreasures.eu/about/project-objectives/>

Mission: The project aims at bringing joint European heritage, especially its digital versions, major visibility, outreach and use.

Values: Innovation, digital access, international collaboration.

- **Ethio-SPaRe Manuscript Conservation Programme²²**

Mission: The study of the local ecclesiastic libraries in Ethiopia and the manuscript culture in its original context, improving the conditions of some ecclesiastic libraries and conservation of some selected manuscripts were essential parts of the project's plan of work.

Values: Innovation, digital access, international collaboration.

2.2 Databases and Digital Platforms

- **Database of Religious History (DRH)²³**

The world's first comprehensive online quantitative and qualitative encyclopedia of religious cultural history with 1088 published entries, 515 active experts, 221.397 expert answers.

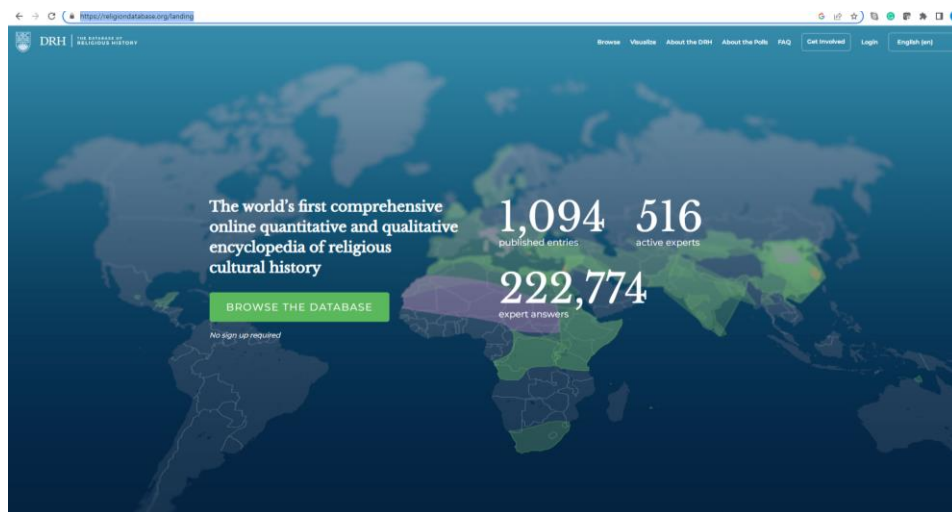


Figure 1: Database of Religious History

- **Refugee Heirloom Ark^{24,25}**. It is a database with information concerning various items. One of the categories included is related to ecclesiastical objects.

²² <https://www.aai.uni-hamburg.de/en/ethiostudies/research/ethiospare/missions/pdf/conservation-report.pdf>

²³ <https://religiondatabase.org/landing/>.

²⁴ <http://www.ipet.gr/kivotos/>

²⁵ <http://www.ipet.gr/kivotos/index2.html>

- **Digital Vatican Library²⁶**. A digital platform that provides access to digitized manuscripts, codices, and other cultural heritage objects from the Vatican Library's collections.

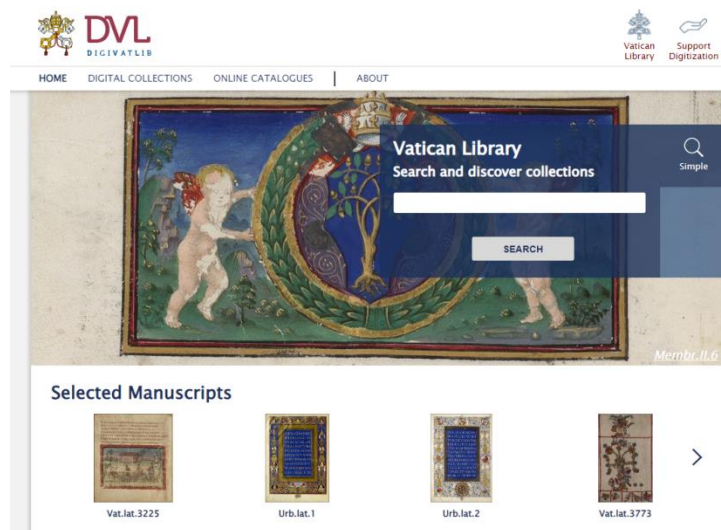


Figure 2: Digital Vatican Library platform

- **Digital Bodleian²⁷**. A digital platform that provides access to digitized manuscripts, maps, and other cultural heritage objects from the Bodleian Libraries at the University of Oxford.

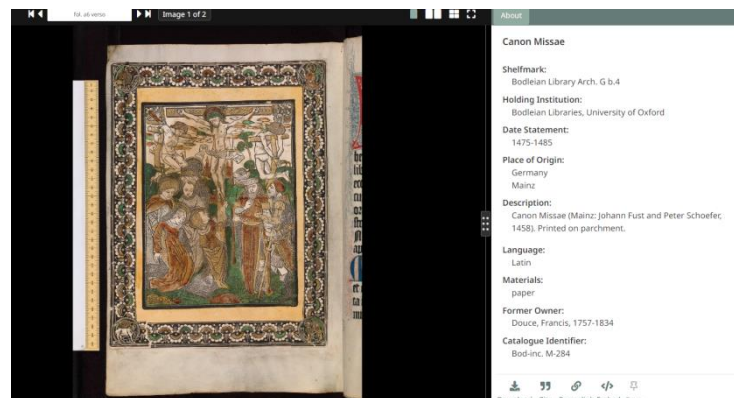


Figure 3: Digital Bodleian platform

- **Smithsonian Open Access²⁸**. Open Access brings Smithsonian collections to people in new ways, to engage with the public, and provide important context for challenging 21st century issues.

²⁶ <https://digi.vatlib.it/>

²⁷ <https://digital.bodleian.ox.ac.uk/>

²⁸ <https://www.si.edu/openaccess>

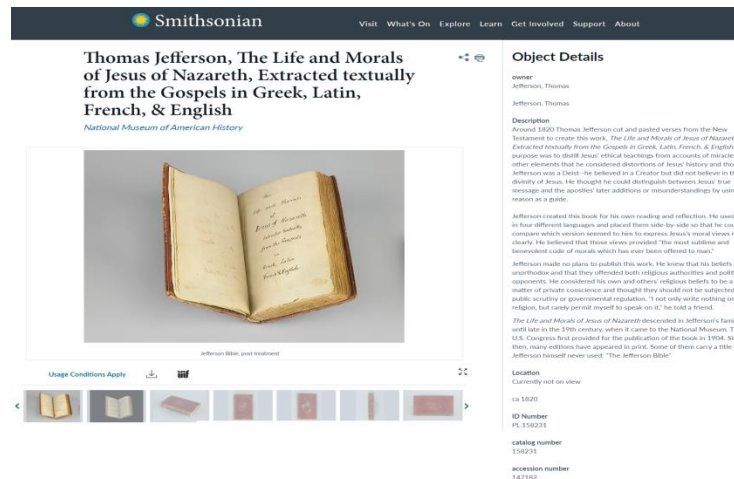


Figure 4: Smithsonian Open Access platform

2.3 Research centers

- **KADOC Documentation and Research Centre on Religion Culture and Society**²⁹ is the Interfaculty Documentation and Research Centre on Religion, Culture and Society at KU Leuven. Established in 1976, KADOC is not only one of the leading cultural heritage institutions in Belgium, but also an international center for the study of the interaction between religion, culture and society in the 19th and 20th centuries. It preserves and discloses an impressive collection of archives, data, and heritage that has emerged from the interplay between religion, culture and society in a Belgian, European and global context. In 2019 KADOC heritage collections contained 34.5km of archival units, 300.000 books, and 16.500 periodicals.
- **Centre for the Study of Ancient Documents (CSAD)**³⁰. This research center focuses on the study of ancient documents and has important archives of epigraphical material. This includes one of the largest collections of squeezes (paper impressions) of Greek inscriptions, together with the Haverfield archive of Roman inscriptions from Britain, and a substantial photographic collection.
- **Center for Documentation of Cultural and Natural Heritage (CULTNAT)**³¹. This research center for the preservation and documentation of Egypt's cultural and natural heritage.

²⁹ <https://kadoc.kuleuven.be/english>

³⁰ <https://www.csad.ox.ac.uk/current-projects>

³¹ <https://www.culnat.org/About>

2.4 European networks

- European Network for historic places of worship/Future for religious heritage³².
- The European Library³³. Users can cross-search and reuse over 26.394.274 digital items and 168.238.832 bibliographic records. The objects come from institutions located in countries which are members of the Council of Europe and range from catalogue records to full-text books, magazines, journals and audio recordings.

2.5 International cultural organizations initiatives

- UNESCO heritage of religious interest³⁴

2.6 Scientific publications

2.6.1 Journals

- Special Issue "Religious Space as Cultural Heritage"³⁵
- Sacredness as an Underlying Value of Cultural Heritage Law in Europe³⁶
- How do Museums Affect Sacredness? Three Suggested Models³⁷
- The documentation of ecclesiastical cultural heritage sites in Cyprus³⁸

2.6.2 Workshops and seminars

- Abstracts from the 2nd International Meeting for the Conservation & Documentation of Ecclesiastical Artefacts (IMCDEA)³⁹.
- Abstracts of the 1st workshop on the conservation and study of ecclesiastical relics (In Greek: Περίληψεις Εισηγήσεων 1^{ης} Ημερίδας Συντήρησης & Μελέτης Εκκλησιαστικών Κειμηλίων)⁴⁰.
- International seminar on Movable Religious Heritage⁴¹.

³² <https://www.frh-europe.org/about-frh/organization/documents/policy-documents/>

³³ <https://www.theeuropeanlibrary.org/>

³⁴ <https://whc.unesco.org/en/religious-sacred-heritage/>

³⁵ https://www.mdpi.com/journal/religions/special_issues/religious_heritage

³⁶ <https://journals.openedition.org/rdr/810?lang=en>

³⁷ <https://journals.openedition.org/iss/1917?lang=en>

³⁸ <https://www.spiedigitallibrary.org/conference-proceedings-of-spie/11534/2574015/The-documentation-of-ecclesiastical-cultural-heritage-sites-in-Cyprus/10.1117/12.2574015.short?SSO=1>

³⁹ https://www.academia.edu/36199153/Abstracts_from_the_2nd_International_Meeting_for_the_Conservation_and_Documentation_of_Ecclesiastical_Artefacts_IMCDEA

⁴⁰ https://www.academia.edu/8022365/Abstracts_from_the_1st_International_Meeting_for_the_Conservation_and_Documentation_of_Ecclesiastical_Artefacts_IMCDEA_Theological_School_of_Halki_Istanbul

2.6.3 Theses

- Thesis “3D digitisation and promotion of ecclesiastical heritage” - Διπλωματική Εργασία (In Greek: «3D Ψηφιοποίηση Και Ανάδειξη Εκκλησιαστικής Κληρονομιάς»)⁴².

2.7 Academic program

- Management of ecclesiastical relics⁴³.

2.8 Reports and Guidelines

- Guidelines on Ways of Dealing with Religious Objects⁴⁴.
- Survey Report on Digitization in European Cultural Heritage Institutions 2014⁴⁵. The report focuses on the current state of digitization in Europe. It is the result of a survey carried out by the ENUMERATE Thematic Network, with the help of national coordinators, in 33 European countries (in 11 languages).
- Museum International⁴⁶. Views and visions of the intangible.
- UNESCO Intangible Cultural Heritage⁴⁷. Guidance Note for Inventorying Intangible Cultural Heritage
- UCL Press Critical Perspectives on Cultural Memory and Heritage⁴⁸. The interlinkage of cultural memory, heritage and discourses of construction, transformation and destruction, written by Veysel Apaydin.
- IFLA (International Federation of Library Associations and Institutions)⁴⁹. Guidelines for Digitalization Projects for collections and holdings in the public domain, particularly those held by libraries and archives.
- THE ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites⁵⁰. This report outlines the principles and guidelines for

⁴¹ <https://www.frh-europe.org/cms/wp-content/uploads/2017/12/2013-Conference-in-Utrecht-Movable-Religious-Heritage-report-feedback-programme-speakers-delegates.pdf>

⁴² <https://hellanicus.lib.aegean.gr/bitstream/handle/11610/18428/%CE%94%CE%99%CE%A0%CE%9B%CE%A9%CE%9C%CE%91%CE%A4%CE%99%CE%9A%CE%97%20A%CE%A6%CE%91%CE%9D%CE%A4%CE%95%CE%9D%CE%9F%CE%A5.pdf?sequence=1&isAllowed=y>

⁴³ <https://aeaa.gr/wp-content/uploads/2021/07/English-programme-of-Studies-PDEK1.pdf>

⁴⁴ https://www.catharijneconvent.nl/documents/56/Guidelines_dealing_with_religious_objects__oyww2E0.pdf

⁴⁵ <http://enumeratedataplatfom.digibis.com/reports>.

⁴⁶ <https://unesdoc.unesco.org/ark:/48223/pf0000135852>, Views and visions of the intangible; Museum international; ISSN 1350-0775, No. 221–222 (Vol. 56, No. 1–2, 2004)

⁴⁷ <https://ich.unesco.org/doc/src/50279-EN.pdf>

⁴⁸ <https://discovery.ucl.ac.uk/id/eprint/10091628/1/Critical-Perspectives-on-Cultural-Memory-and-Heritage.pdf>

⁴⁹ <https://www.ifla.org/wp-content/uploads/2019/05/assets/preservation-and-conservation/publications/digitization-projects-guidelines.pdf>

interpreting and presenting cultural heritage sites to promote their understanding and appreciation.

- UNESCO Charter on the Preservation of the Digital Heritage⁵¹. This report analyses how to foster cooperation, awareness-raising and capacity-building, and propose standard ethical, legal and technical guidelines, to support the preservation of the digital heritage.
- UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage⁵². Basic Texts of the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage (2022 Edition).

2.9 Online touristic resources for religious monuments

2.9.1 Religiana

Religiana⁵³ is a project created by Future for Religious Heritage. It provides information mainly for tourists that are interested to visit religious monuments in Europe. It is a comprehensive resource to promote European religious heritage. Featuring information on buildings from across Europe, Religiana serves two purposes: it promotes these buildings as beautiful and unique places to visit and facilitates visits by sharing practical information with users; whilst also helping preserve European heritage through highlighting restoration and financial needs.

There are three main functions:

- **Map of buildings:** A map that a potential visitor can search for a building to visit, use the map find destinations, or use the filters to search for a building based upon different criteria.



Figure 5: Religiana

⁵⁰ https://www.icomos.org/images/DOCUMENTS/Charters/interpretation_e.pdf

⁵¹ <https://unesdoc.unesco.org/ark:/48223/pf0000179529>

⁵² https://ich.unesco.org/doc/src/2003_Convention_Basic_Texts-_2022_version-EN_.pdf

⁵³ <https://religiana.com/>

- **Inspire me:** There is a categorization of Europe's religious heritage into lists according to Arts, Family-friendly, Historical, Outdoors and Pop culture (royal sanctuaries).
- **Add your buildings:** The online user can use the online form to add/ list a religious building to appear on this website. Information can also be included concerning its short description, the type of religious building (abbey, cathedral, chapel, church, funerary heritage, hermitage, monastery, mosque, other, secularized building, mosque, temple) and its features, as well as information about (Architecture, Stained glass, Monuments, Interior features, Atmosphere / quiet space, Churchyard, Wildlife, Social heritage, Links to national heritage, Famous people or stories).



The screenshot shows the 'Add your building' form on the Religiana website. The form is titled 'Add your building' and includes a sub-header 'Use the form below to list your religious building to appear on this website.' The form fields include: 'Name of your building' (text input), 'Select language' (dropdown menu with 'English' selected), 'Photograph Gallery' (image upload area with a 'No file chosen' message), a 'USE EXISTING PHOTO' button, 'Information about your building' (text input), and a 'Summary' (text input).

Figure 6: Add your buildings

3. References

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