



ReIReS

Research Infrastructure
on Religious Studies

This document presents the preliminary programs of the ReIReS Digital Humanities Course in Leuven (December 7-9, 2020) organized and by the KU Leuven and of the ReIReS Digital Humanities Course in Turnhout (December 9-11, 2020), organized by Brepols.

It is possible to attend both courses or one of them.

1. Digital Humanities Course in Leuven

Dates

December 7-9, 2020

Location

Leuven

Organising Institution

KU Leuven

Contact

Prof. Mathijs Lamberigts, Faculty of Theology and Religious Studies, Mathieu.lamberigts@kuleuven.be

Trainers

- D. Bosschaert
- G. van Reyn
- A. Soetaert
- L. Watteuw
- B. Vandermeulen
- I. Deman
- J. de Joode
- R. Wyns
- K. Christiaens

Specific Learning Goals

- The participants will be able to define the possibilities and the limits of digital humanities (OCR, active and passive digitization; search tools).
- The participants will develop a basic knowledge of how to develop digital search tools.
- The participants show familiarity with the diversity of documents (manuscripts, archival material, rare books).





- The participants will adequately digitize simple documents such as books and prints of the 19th and 20th century.
- The participants will detect problems in digitized texts.
- The participants will acquire an introduction into Historical Network Research, using Gephi.
- The participants will be able to metadata archival material in view of adequate digitization.
- The participants will learn how to cluster texts through R and Python.

Unique Contribution to the ReIReS Training Programme

The KU Leuven Digital Humanities and Historical Religious Studies course will concentrate on unique belongings preserved in the Maurits Sabbe Library on the one hand, and on a number of best practices and DH tools on the other hand. It will focus particularly on historical sources related to the medieval, modern and contemporary time periods. The course will benefit of the long-term multi- and interdisciplinary collaboration of historians, theologians, art historians, archivists.

The mornings of this course are focused on ongoing digitization projects of the Maurits Sabbe Library collections. In smaller groups the participants will be introduced to the collections and the opportunities and challenges of their digitization. The following documents are chosen because they offer a unique insight in the diverse challenges for digital humanities as auxiliary instruments for historical religious studies:

- a manuscript of the 14th century;
- books printed in the 16th and 17th centuries (the examples chosen, belong to the Capuchins Library);
- digitization of large contemporary archival material (the case Willebrands).

The choice for these three documents is evident as described in the detailed programme.

The choice for these documents is also motivated by the following arguments

- Specific documents require specific approaches and result in different forms of time investment, expertise, knowledge and the like.
- The types of documents chosen confront scholars with particular and peculiar challenges.
- The documents chosen well fit into different periods of religious history.

The documents chosen are good examples for multidisciplinary and interdisciplinary approaches.

In the afternoon short introductions and hands on-sessions are provided to equip the participants with tools and skills to integrate DH insights in their own research.



Programme

<p>Sunday December 6, 2020</p>	<p>Arrival at Leuven 19:00 h: Dinner</p>
<p>Monday December 7, 2020</p>	<p>Venue: Maurits Sabbelibrary, Faculty of Theology and Religious Studies, Charles Deberiotstraat 26, 3000 Leuven</p> <p>Welcome and Introduction 9:00-9:15 h (Mathijs Lamberigts)</p> <p>Presentation of ReIReS – Structure and Goals 9:15-9:30 h (Karla Boersma)</p> <p>Book Heritage Lab and the Bible of Anjou 9:30-12:30 h (Lieve Watteeuw & Bruno Vandermeulen)</p> <p>Book Heritage Lab – KU Leuven, is an innovative expertise lab of KU Leuven for research and conservation of manuscripts, early printed books and documentary heritage. The Book Heritage Lab focuses on diagnosis and research of the material history of medieval and early modern paper and parchment artefacts, with a special focus on book archeology, production, preservation, scientific imaging and conservation. The Book Heritage Lab and the Imaging Lab (University Library) are closely collaborating to establish protocols and data to reveal sources of artistic production and degradation characteristics of fragile documentary cultural heritage artefacts.</p> <p>It holds among others, the Bible of Anjou, which was made at the court of Robert of Naples and is considered to be one of the most impressive manifestations of Italian miniature art. It is recognized by the Flemish Community as part of our cultural heritage. It is a beautifully ornamented manuscript which is now digitized. The manuscript not only offers the Latin Biblical text, but also consists of beautiful miniatures that offer historical and cultural information about the court of Naples and its members.</p> <p>https://theo.kuleuven.be/gbib_en/heritage</p> <p>Literature: L. Watteeuw-J. Van der Stock (eds.), <i>The Anjou Bible. A Royal Manuscript Revealed</i>, Leuven, 2010.</p>



Book Heritage Lab: The restoration of manuscripts: risks and challenges (group I/II)

- Technology driven research questions
- The interaction between ideas and techniques
- Doctor and engineer

Digitization (group II/I)

- The new techniques: possibilities, challenges, weaknesses
- The complex process of “active” digitization
- Magister dixit
- Lovaniensia

Lunch break

12:30-14:00 h

Innovation at LIBIS

14:00-15:45 h (Roxanne Wyns)

- Data-modeling
- Reference thesauri
- International Image Interoperability Framework (IIIF)

Coffee break

15:45-16:15 h

Genre, Style, Authorship: A Short Introduction to Automated Document Clustering based on Linguistic Features

16:15-17:45 h (Johan de Joode)

This tutorial introduces the participants to different ways to cluster documents based on their linguistic features. Using both off-the-shelf tools and scripting languages such as R and Python, we discuss how text clustering can provide new insights into long-standing issues. Starting from existing corpora, we analyse how different features can be extracted; we subsequently practice clustering documents and interpreting the results.

Feedback and train the trainer

17:45-18:00 h



Tuesday,
December 8, 2020

The Digitization of Books Printed in the 16th and 17th Centuries: The Library of the Capuchins

09.00-12.00 h (Geert Van Reyn)

The Library of the Capuchins, preserved in the Maurits Sabbe Library (FTRW, KU Leuven) consists of the collections of Capuchin friaries in both Flanders and the Netherlands. Holdings date from the Early Modern Period up to the Contemporary period. The Study and Documentation Center The Capuchins in the Low Countries has developed experimental samples of digitized books, paying attention to the specific characteristics of printed books on the basis of printing features of publishing houses. On the basis of concrete samples, the participants will be made familiar with these characteristics and their consequences for digitization. The Center will provide a list of challenges digitization for this period is confronted with. The samples developed are not perfect. However, a via media is already possible.

https://theo.kuleuven.be/en/research/research_units/ru_church/ru_church_capuchins/ru_church_capuchins_index.html

Digitization of Rare Books: Theory and Praxis (group I/II)

- Characteristics of printing types
- Digitization of rare books of the Capuchin Library
- Strength and weaknesses of digitization

Digitization of Rare Books: OCR (group II/I)

- Challenges and risks of OCR
- ABBYY FineReader

ODIS Database

12:00-13:00 h (K. Christiaens)

ODIS is a dynamic and contextual database. It offers instruments for innovative, multidisciplinary and comparative research into the history civil society, furthering cross-fertilisation between scholarly researchers and the custodians of the relevant cultural heritage collections.

https://www.odis.be/hercules/en_home.php

Lunch break

13:00-14:00 h



	<p>Historical Network Research and Religious Studies (Dries Bosschaert)</p> <p>14:00-15:45 h</p> <p>This tutorial will introduce the participants in Historical Network Research as a method to be integrated in religious studies. The tutorial will provide a brief introduction in this method in general and its integration in the discipline of history. Next, it will point out a number of opportunities and challenges it provides to religious studies. Finally, the participants will get a hands-on training with the Gephi software to visualize own network data.</p> <p>Coffee break</p> <p>15:45-16:15 h</p> <p>WP6 Discovery tool</p> <p>LIBIS integrated database</p> <p>16:15-18:00 h (LIBIS : Michiel De Clerck & Roxanne Wyns) ; Brepols : Jan Driesen</p> <p>One of the ambitions of ReIReS is to develop a platform where disparate digital resources and databases are searchable in a unified and standardized way. The ReIReS partner institutions house their own collections of manuscripts, documents and rare books and represent relevant collections of Christian, Jewish and Muslim works. To address the growing need of scholars to discover large sets of data such as these, WP6 has been designing a unified discovery environment for sources relevant to religious studies. Rather than consulting different collections separately and having to adjust their specific searches to the way these collections are indexed, a user will be able to search them from one location using a single query.</p> <p>Enough progress has been made on the technical design of this discovery tool to present it to researchers. The architecture design was informed by their requirements and they will be given the chance to test and evaluate it during the DH course at KU Leuven. This feedback will be important for fine-tuning the ReIReS unified discovery environment.”</p> <p>Feedback and train-the-trainers</p> <p>18:00-18:15 h</p>
<p>Wednesday December 9, 2020</p>	<p>The Centre for the Study of the Second Vatican Council and Digitization</p> <p>09.00–10:45 h (Dries Bosschaert & Alexander Soetaert)</p> <p>G. Alberigo (ed.), History of Vatican II, Maryknoll-Leuven, 1995–2006, 5 volumes, is still the most comprehensive study on Vatican II. A by-product of this academic milestone has been the growing interest of many scholars, institutions and</p>



archival centers all over the world in the preservation of material related to this Council.

See the acts of the International Academic Conference: "Vatican Council II in the Light of the Archives of the Council Fathers, on the Fiftieth Anniversary of its Opening (1962-2012)": Ph. Chenaux, *Il concilio Vaticano II alla luce degli archivi dei padri conciliari*, Rome, 2015.

In order to become familiar with the size and complexity of the material available, participants are expected to consult this volume as preparation for this part of the workshop.

https://theo.kuleuven.be/en/research/centres/centr_vatii/

K. Schelkens, *The Centre for the Study of the Second Vatican Council in Leuven. Historical Developments and List of Archives*, in ETL 82 (2006) 207–231.

The Centre for the Study of the Second Vatican Council (group I/II)

- Introduction: A Tour through the Center for the Study of Vatican II
- Digitization and Vatican II

Willebrands project (group II/I)

- Digitizing a corpus of diverse documents ((handwritten texts, polycopies made with different types of ink, printed material, different forms of material)
- ScopeArchive
- Dos and don'ts of archival digitization

Coffee break

10:45-11:15 h

Train the trainer session and evaluation

11:15-13:00 h

Lunch break

13:00-14:00 h

Bibliographies and encyclopaedias (Index Religiosus, DHGE)

14:00-16:30 h (Chris Vanden Borre, Mathieu Lamberigts, Eddy Louchez)

The *Index Religiosus* originated from two existing bibliographies: the bibliography of the *Revue d'histoire ecclésiastique* and the *Elenchus Bibliographicus* from the journal *Ephemerides Theologicae Lovanienses*. These two tools are



internationally recognized as essential working instruments for Theology and Religious Studies.

The *Index Religiosus* is the fruit of a partnership between the Université catholique de Louvain, the KU Leuven and Brepols.

The *Dictionnaire d'histoire et de géographie ecclésiastiques* Online (DHGE) is an unparalleled source of information for anyone interested in the history of the Church. It comprises a vast amount of information: 30 volumes, 70,000 entries and sub-entries, over 50,000 columns by specialists, aimed at an academic readership. Every year, about 1000 articles are updated to further enrich the database.

The DHGE is realised under the supervision of the Université catholique de Louvain in Louvain-La-Neuve.

17u transfer to Turnhout (by train), dinner in Lier (half way)



ReIReS

Research Infrastructure
on Religious Studies



BREPOLS

1. Digital Humanities Course in Turnhout

Dates

December 9-11, 2020

Location

Leuven/Turnhout

Organising Institution

Brepols

Contact

Bart Janssens, bart.janssens@brepols.net

Trainers

- Yannick Anné (CTLO).
- Rita Beyers (*Corpus Christianorum* / UAntwerpen).
- Jeroen De Gussem (UGent).
- Paul De Jongh (Brepols)
- Tim Denecker (Brepols / CTLO).
- Eddy Gouder (CTLO).
- Luc Jocqué (Brepols).
- Jeroen Lauwers (CTLO).
- Reuben Pitts (KU Leuven).
- Bram Roosen (Brepols / KU Leuven).
- Alexander Sterkens (Brepols).
- Paul Tombeur (CTLO).
- Chris Vanden Borre (Brepols).
- Christine Van de Veire (*Corpus Christianorum*).
- Toon Van Hal (KU Leuven).
- Thomas Van Sas (Brepols).

Specific Learning Goals

The participant will acquire:

- an understanding of the benefits and use of online bibliographies and encyclopedias in the field of religious studies;
- an overview of Latin text publishing initiatives both in print and online;
- a critical sense and knowledge in order to select and use reliable Latin text (in print and online);
- an in-depth knowledge of digital tools and resources in the field of Latin language and literature;

- an overview of possibilities and developments in language processing of Latin (and other ancient languages).

Unique Contribution to the ReIReS Training Programme

The three days workshop focuses on activities where Brepols' involvement is going far beyond her normal role as academic publisher.

On the one hand, there are activities at the *Corpus Christianorum* Library and Knowledge Centre.

In 1951 *Corpus Christianorum* and Brepols started their prestigious series of critical text editions in Latin and Greek. Today the activities related to the Latin series and databases are centralized at the CCBK (more information on <https://www.corpuschristianorum.org/library-knowledge-centre>).

On the other hand, Brepols develops in-house online research tools and databases for the humanities. In-house philologists, historians and software engineers at the CTLO work hand-in-hand with academic partners in order to develop these digital tools. But the Brepols and *Corpus Christianorum* staff also assists authors (editors) to produce outstanding critical text editions.

This course will allow participants not only to hear from Brepols' staff what digital resources are available for their research, but also to learn the philosophy that lies beneath, how it evolved over time and will continue to change. They will learn how to optimise search strategies and use more than the usual 20% of the possibilities of the online tools. The participants will also get an insight into digital research possibilities at Brepols. The participants will be in direct contact with the experts and decision makers at Brepols. These experts will give guidance during case studies or personal studies by the participants.

Of course, the participants will be provided with useful material and exercises (about each of the research tools). This will enable them to play their role as trainer in their home institutions, as it is important that researchers can use the digital tools to their full extent, knowing their strengths but also their weaknesses. During this course access to all of Brepols digital tools and to the *Corpus Christianorum* library is free. For institutions who are not subscribed to our databases a temporary free access can be agreed upon to allow training sessions to be organised.



Programme

<p>Wednesday December 9, 2020</p>	<p>Day 1: Leuven</p> <p>14:00-16:30 h</p> <p>Bibliographies and encyclopaedias (Index Religiosus and, DHGE)</p> <ul style="list-style-type: none">• Chris Vanden Borre, Mathieu Lamberigts, Eddy Louchez <p>The <i>Index Religiosus</i> originated from two existing bibliographies: the bibliography of the <i>Revue d'histoire ecclésiastique</i> and the <i>Elenchus Bibliographicus</i> from the journal <i>Ephemerides Theologicae Lovanienses</i>. These two tools are internationally recognized as essential working instruments for Theology and Religious Studies.</p> <p>The <i>Index Religiosus</i> is the fruit of a partnership between the Université catholique de Louvain, the KU Leuven and Brepols.</p> <p>The <i>Dictionnaire d'histoire et de géographie ecclésiastiques</i> Online (DHGE) is an unparalleled source of information for anyone interested in the history of the Church. It comprises a vast amount of information: 30 volumes, 70,000 entries and sub-entries, over 50,000 columns by specialists, aimed at an academic readership. Every year, about 1000 articles are updated to further enrich the database.</p> <p>The DHGE is realised under the supervision of the Université catholique de Louvain in Louvain-La-Neuve.</p> <p><i>17u transfer to Turnhout (by train), dinner in Lier (half way)</i></p>
<p>Thursday December 10, 2020</p>	<p>Day 2: Turnhout, CCBK</p> <p>9:00-11:15 h</p> <p>General introduction</p> <ul style="list-style-type: none">• Welcome & Keynote: "Publishing policy & Open Access in the Humanities": Paul De Jongh, Alexander Sterkens, Thomas Van Sas (Brepols)• Testimonial: "The Early Days of Digital Humanities": Paul Tombeur (CTLO) <p>Professor Paul Tombeur (UCLouvain), until recently director of the Centre 'Traditio Litterarum Occidentalium' (CTLO) can be rightly called the grandfather of Digital Humanities, having introduced computer-aided research in the humanities and more particularly in the field of Latin literature as early as the 1970s.</p>



For about 35 years, the CTLO has continuously invested in what is the largest database of Latin text and lexicographical material, applying rigorous scholarly criteria and consistency to the whole of its corpus. The information stored in its numerous databases serves editors of Latin texts and visitors to the *Corpus Christianorum* Library & Knowledge Centre. These records are perfectly suited for the comparison of different texts, lexicographical analysis, and so on. Because of their size and scope, the databases combine a tremendous breadth of data with the profound attention to detail that is invaluable to academics. The databases offer a vantage point for the application of digital tools in the scholarly exploration of textual data, such as the development of new technologies in linguistic engineering and in stylometrics. Intensively relying on in-house knowledge and experience, the CTLO also creates online research tools for the benefit of researchers, that are made available through the Brepolis platform.

Coffee break

11:45-13:15 h

Textual databases and the integration of lexicological/linguistic data

- **LLT & DLD: processing texts and the potential of integration:**
Yannick Anné, Tim Denecker, Eddy Gouder (CTLO)

Started in 1991 as the *Cetedoc Library of Christian Latin Texts (CLCLT)*, the *Library of Latin Texts (LLT)* is produced by Brepols' Centre "Traditio Litterarum Occidentalium" (CTLO), under the current academic supervision of professor Toon Van Hal. The *LLT* is one of the leading databases for Latin texts, providing texts from the beginnings of Latin literature up to the present day. Bringing together no less than 28 dictionaries, the *LLT's* more recent lexicographical counterpart, the *Database of Latin Dictionaries (DLD)*, is an unparalleled resource for research on the Latin language throughout the ages.

In this session we will take you through the process of bringing rough Latin texts to the high level of philological quality required for inclusion in the *Library of Latin Texts* (through structuring, referencing and various checks), and demonstrate the advantage of the close proximity of the *Database of Latin Dictionaries*, in particular for our work in progress regarding lemmatization.



- **Computers analyzing Ancient Greek: Reuben Pitts and Toon Van Hal (KU Leuven)**

In this workshop we will work with morphological and syntactic annotation of Ancient Greek sentences. In a user-friendly environment, we will determine which word is dependent on another ('dependencies') and establish syntactic relations (such as 'object', 'subject', etc.). Then we will examine the extent to which computers can take over this task and find out what challenges automatic text comprehension presents for ancient Greek. On the basis of one or two sentences, we will organize a competition between the computer on the one hand and the participants of the workshop on the other. And finally, we ponder the following question: what possibilities does an automatically (and hence: imperfectly) analyzed Greek text offer?

Lunch break

14:30-16:00 h

Digital tools for research concerning authenticity, authorship, quotations etc. in Latin full text corpora

- **Search strategies and text comparison in *LLT*: Eddy Gouder, Jeroen Lauwers (CTLO)**

The quality and sheer volume of texts included form the first of two pillars on which the *Library of Latin Texts* is built, the other one being a rich pool of advanced (re)search tools. In this session we will explore the various search strategies that are available in the *LLT*, including statistics, query syntax, similarity search, and the (in-house) text comparison tool which makes it possible to identify Bible quotations or passages showing overlap with other works.

- **Computational Attribution and Verification Methods for Detecting the Authorship(s) of Latin Historical Texts: The Case of Heloise and Abelard: Jeroen De Gussem (UGent)**

Computational stylistics or stylometry is a subfield of the digital humanities (DH), based on techniques from computational linguistics and natural language processing (NLP), in which computational methods are applied to segregate writing styles. In this session the participants will gain an intuition of how such methods can be applied to attribute anonymous or disputed Latin historical texts to authors, or to verify if two



	<p>texts are written by one and the same author(s), by learning about some of the most commonly applied state-of-the-art tools and methods. Such methods include clustering techniques (PCA, dendrograms), network analysis, machine-learning classification and unsupervised verification methods such as the impostors method.</p> <p>Specifically one case study, that of the two well-known letter exchanges of debated authorship in which Heloise of Argenteuil († 1164) and/or Peter Abelard (1079– 1142) are supposedly involved, will be revisited as a poignant case for illustrating these methods' potential. The results, which provide a strong argument in favour of single authorship by Abelard, are the fruit of a research project “Collaborative Authorship in Twelfth-Century Latin Literature: A Stylometric Approach to Gender, Synergy and Authority” conducted by Jeroen De Gussem (UGent) under supervision of Jeroen Deploige (UGent), Wim Verbaal (UGent) and Mike Kestemont (Universiteit Antwerpen).</p> <p>Coffee break</p> <p>16:30-17:00 h Evaluation and train the trainer; customized sessions and visits</p> <p><i>Dinner (on your own)</i></p>
<p>Friday December 11, 2020</p>	<p>Day 3: Turnhout, CCBK</p> <p>9:00-11:15 h</p> <p>About variant readings and sources: how to make apparatuses in a critical edition. The case of Jacques de Vitry, <i>Sermones vulgares vel ad status, sermo 74</i> (“ad adolescentes”)</p> <ul style="list-style-type: none">• Trainers: Rita Beyers, Christine Vande Veire, Luc Jocqué <p>The mission of <i>Corpus Christianorum</i> is to produce critical editions of texts by Christian authors from Late Antiquity till the end of the Middle Ages, with the expectation that they will serve as reference works of first resort for scholars worldwide. The core task of this long-standing project, namely the edition of primarily Latin and Greek texts, is supplemented by the production of ancillary handbooks, bibliographies, monographic studies and electronic databases.</p> <p>The session will focus on the two most important apparatuses (levels of annotation) accompanying the critical edition of a medieval Latin text, viz. the critical apparatus and the apparatus of sources. First we will learn</p>



how to correctly encode the findings of a preliminary philological and stemmatological study in a critical apparatus using the Classical Text Editor software developed by Stefan HageI (Vienna). Secondly we will discover, analyze and compare available sources and parallel texts, both printed and online, and digest our findings in a source apparatus accompanying the Latin text.

The various training elements will be applied to five well-chosen 'examples' in Sermo 74 ("ad adolescentes") by Jacques de Vitry, French biographer, historian and preacher in the first decades of the 13th century. Sermo 74 belongs to the specific genre of model sermons, meant as a template for fellow-preachers and full of references and allusions to traditional as well as contemporary literature, both in Latin and the (French) vernacular.

Coffee break

11:45-13:00 h

"Clavis Clavium": The go-to database to access Late Antique and Medieval Christian literature: Bram Roosen (Brepols / KU Leuven)

Clavis Clavium, or 'Key of Keys', is the go-to database to access Late Antique and Medieval Christian literature. It incorporates the almost 8,000 pages of data found in six so-called claves: the *Clavis Patrum Latinorum* and the *Bibliotheca Hagiographica Latina*, the *Clavis Patrum Graecorum* and the *Bibliotheca Hagiographica Graeca*, and the *Clavis Apocryphorum* of both the Old and the New Testament. Together, these six indispensable tools provide researchers (whether historians, theologians, philologists, or philosophers) working on the extensive field of Early Christian, Medieval and Byzantine literature with essential information regarding authorship, authenticity, chronological and geographical contexts, manuscript transmission, and editorial history. Now, with the creation of the *Clavis Clavium* database, researchers can for the first time access this enormous mass of printed data in an integrated and accessible way.

Clavis Clavium is a collaboration of the Bollandists, KU Leuven, FWO-Flanders and Brepols resulting in an Open Access database.

Lunch break

14:00-15:00 Evaluation & conclusion