



Seminar: Digital Cultural Heritage: Legal, Ethical and Technical Considerations

Date, Time and Venue: 7th April 2022, 9.00 – 12.30. The seminar will be held on a hybrid form, physically at the University of Lapland (Yliopistonkatu 8, FI-96101 ROVANIEMI, FINLAND), Lecture room 16 and online (via Microsoft Teams).

Description: The ‘Digital Cultural Heritage: Legal, Ethical and Technical Considerations’ seminar will discuss key legal, ethical and technical issues related to balancing protection and access to cultural heritage. Especial emphasis will be posed to digital cultural heritage and to indigeneity. The academic discourse will be complemented by real-life examples and concrete cases, such as those related to protecting digital cultural heritage while fostering access to archive materials.

Students can gain 1 ECTS (either under the general optional studies, Code ONVAL9999 or in the course Advanced Course in Legal Informatics, Code OTEMEVAL0018 by attending the entire seminar and submitting a learning diary. The learning diary should summarise one key issue learned during the seminar. It should be around 3–5 pages (Times New Roman, 12) in length. It shall be sent to Girardi Dino (dino.girardi@ulapland.fi) by 25th April 2022.

Link (to Microsoft Teams): https://teams.microsoft.com/l/meetup-join/19%3ameeting_N2E5Y2Y1MzgtOWRiYS00ZmQwLWlwZGQtNGEwYzMxMTU4MWQw%40thred.v2/0?context=%7b%22Tid%22%3a%224c60a66f-0a8d-446e-9ac0-836a00d84542%22%2c%22Oid%22%3a%2234bdf43e-8a68-4e81-90e4-5e5a773c007d%22%7d



Programme

9.00 – 9.10 Opening words / Prof. Soili Nysten-Haarala (University of Lapland)

Chair: Juhana Riekkinen (University of Lapland)

9.10 – 9.40 ARCH@RITAGE – Toward a New Approach to Archival Studies for Cultural Heritage? / Prof. Dorit Raines (University of Venice)

Abstract: In our contemporary Digital Age, whereas Humanities as a cluster of sciences are waning, Cultural Heritage is prospering. In historical research this dichotomy is extremely visible: less and less research topics concern themselves with the classical approach of interpreting the major historical processes, shifting their attention from the 'why' to the 'how', using a growing inventory of material objects as a testimony to the past. Historical research itself, in view of the technological revolution, is currently debating on the significance of 'data' as a basic unity of research instead of the 'fact' or the more complex and subjective 'event', commonly used until now as crucial instruments of verification. This ongoing evolution which valorizes 'data' as a principal unit of measure, brings forth solutions but equally new problems for the treatment of cultural heritage artefacts. Regardless of their nature, all artefacts: statues, posters, records, musical scores, manuscripts, buildings, paintings, books, pottery, coins, various instruments, become in the digital world an abstraction described by a common-language metadata (standardization), including properties and methods, such as Dublin Core or IIIF. This, in turn, allows their treatment in a structural manner, but it is their infinite duplication that devoid them (or at least this aspect becomes secondary), of their particular history: creator, provenance, present location, etc. Can the 'principle of provenance', i.e., that records of different origins (provenance) be kept separate, according to their creator, to preserve their context - agreed upon as of the nineteenth century as the correct approach to archival records - still survive in a digital environment? Can it be applied to all types of artefacts in cultural heritage regardless of their material categorization? What is then the role of the digital object (i.e., the reproduction of the object with its metadata) in archival sciences? Should a future historian treat cultural heritage data or big data the same way he treats material objects? And, if the digital object data becomes associated with the data extracted from the material object itself, can we consider the outcome still valid according to the present archival terms? These are the methodological and epistemological questions our society faces today in the field of cultural heritage.

9.40 – 10.10 Expressing uncertain statements in digital metadata in the humanities. The case of Digital Cultural Heritage / Prof. Fabio Vitali (University of Bologna)

Abstract: Critical debate as well as uncertain or subjective claims are pivotal elements in arts scholarly analysis. Asserting such statements with Semantic Web technologies (e.g., in RDF) is hindered by the correct representation of uncertain or evolving understanding of facts. I will examine and discuss the need and usefulness of expressing without asserting (EWA) arbitrary claims as RDF named graphs. I will examine effectiveness of prior approaches to EWA and propose a solution, so-called conjectures, to express and retrieve statements whose truth value is not known. My talk will be particularly focused on pointing out problems and solutions referring to the Cultural Heritage environment.

10.10 – 10.40 Mine? Yours? Theirs? – What are the copyright implications of NFTs? / Prof. Peter Mezei (University of Szeged)



Abstract: Non-fungible tokens (NFTs) are used by established and wannabe artists, celebrities, media corporations, movie studios, sports conglomerates and many more as a means to monetize artworks and other contents, typically in the online environment. It is widely used by cultural heritage institutions alike as a way to preserve and disseminate cultural products. Using blockchain in these ways may seem secure and may offer authenticity for both the “seller” and the “buyer”. Is this a legally sound way of content dissemination or only an illusion? Do NFTs represent a valuable alternative for the traditional ways of content creation and dissemination? The presentation introduces the doctrinal and practical pitfalls of NFTs from the point of view of copyright law.

10.40 – 11.20 Coffee break

Chair: Pigga Keskitalo (University of Lapland)

11.20 – 11.40 A current state of 3D modelling for humanities research and education / Prof. Sander Munster (University of Jena) ([Online](#))

Abstract: Visual digital humanities encompasses a wide range of research approaches to explore and communicate complex visual information to answer humanities research questions. One core technology is 3D digital modeling and especially 3D reconstruction. During the presentation, I will report on and discuss current strands and challenges for employing 3D technologies for humanities research and education. That includes, for example, motivational design, data management, visualization, and modeling. In addition, I will report on results as well as research perspectives from the EU Time Machine and previous and ongoing projects at my chair.

11.40 – 12.00 Linked Open Data for Legal Cultural Heritage / Prof. Monica Palmirani (University of Bologna) ([Online](#))

Abstract: The Legal Cultural Heritage includes a variety of important content that is now transformed in digital format and in this transaction is fundamental to embrace the Linked Open Data approach for supporting interoperability, dissemination, searchability, long-term archiving, and preservation over time. In this perspective, the PSI II introduces standard licenses and the EU Commission adopted creative commons approach for harmonizing the IPR. Additionally, the DCAT-AP is a standard methodology for annotating metadata of the dataset and their intellectual propriety rights are not always protected adequately especially if we are in the Legal Cultural Heritage domain. Finally, Europeana has been nominated as the Cultural Heritage official data space in Europe and their IPR imposes some rules that could conflict with domestic law. We intend to present this complex scenario where the Legal Cultural Heritage needs Linked Open Data Approach and in meantime a special analysis and IPR protection.

12.00 – 12.20 Digitizing Indigenous Cultural Heritage – Building a Responsible IPR Regulatory Framework / Prof. Rosa Maria Ballardini (University of Lapland), Iiris Kestilä (University of Lapland), Taina Pihlajarinne (University of Helsinki) and Jukka Mähönen (University of Oslo and University of Helsinki)

Abstract: Cultural heritage (CH) is an important element of identity for both Indigenous communities and individuals. Global policies such as the UN Sustainable Development Goals that form the most comprehensive agenda for development, put culture at the center, asking the important question of



how culture can flourish while contributing to enhancing the other goals of the framework. In this context, questions related to the protection, access and management of Indigenous CH through legal means have been gaining increasing attention lately, due to multiple developments. First, awareness regarding the rights of Indigenous Peoples to their CH has seen a remarkable increase globally. Second, technological developments such as digitalization and Artificial Intelligence have greatly enhanced possibilities for protecting, accessing and further developing CH. Yet, the digitalization of CH calls us to rethink both digital and postcolonial. Indeed, these developments bring opportunities, challenges, and completely new considerations especially in relation to legal and ethical use of digital technologies in CH. Beyond the efficiency, the challenge remains as to how to design proper laws and policies, as well as share knowledge and raise awareness amongst the various stakeholders involved, for solutions that are respectful of the 'cultural awareness' which are by definition intrinsic elements of the heritage of a culture. Previous research has shown that IPR are central to promote innovation and creativities in the context of digitalization of CH. At the same time, most discussions on IPR and CH are stacked to perspectives where Indigenous communities' and Western countries' and organizations' views are either considered in silos or presented as an unmanageable unsolvable conflict. This fundamental structural imbalance and narrow approach has led to distrust in the system by the many stakeholders involved in the process and, as a consequence, to the rise of several irresponsible actions. To build trust for sustainability in the digitalization of Indigenous CH we shall build responsibility in its regulatory framework: this is the key issue that this presentation will address.

12.20-12.30 Concluding remarks / Dr. Melanie Sarantou (University of Lapland) ([Online](#))



About the Speakers (in alphabetical order):

Rosa Maria Ballardini is a Professor of IP law and Vice Dean (research) at the University of Lapland, Faculty of Law. Rosa's research interests focus on the interface between law, technology and sustainability, including social innovation models. Currently, she also investigates issues related to the role of empathy in law and decision making. She has written extensively especially in the fields of patent and copyright law, open innovation and open source, as well as IP strategies and IP management in various technological contexts (e.g. software, 3D printing, Artificial Intelligence and industrial internet), and on the interaction of these fields of law in regulating technological innovations through the lenses of ethical principles (e.g. sustainability values). Her research approach is multidisciplinary, combining law, technology, ethics, and policy via using different types of methodologies (e.g. traditional legal research methods, empirical methods and design thinking in legal studies). More information is available at her public researcher profile: <https://research.ulapland.fi/en/persons/rosa-ballardini>.

Péter Mezei is a full-time faculty member of the Szeged Law School, Hungary. He is an adjunct professor (dosentti) at the University of Turku (Finland), and the visiting professor of the Université Jean Moulin Lyon III (France). He focuses on comparative law; and comparative, digital, International and European copyright law. He has delivered numerous lectures and he has joined multiple renowned conferences on a global scale. His key English language papers are available via <http://ssrn.com/author=1697918>.

Sander Münster is junior professor for Digital Humanities (images/objects) at the Friedrich Schiller University Jena. He received his PhD in educational technology from the TU Dresden, where he studied history, education and business and recently submitted his Habilitation thesis in media computing at Uni Regensburg. Until 2019 he headed the Department for Media Design at the Media Center at the TU Dresden and the junior research group UrbanHistory4D. His main research topics are in the visual digital humanities about interdisciplinary teamwork, 4D information systems, information behaviour, methodologies and scientific communities.

Monica Palmirani has been full professor in Computer Science and Law and Legal Informatics at University of Bologna, School of Law since 2001. She co-chairs the LegalDocML and the LegalRuleML. Since 2013 she serves on the OASIS LegalXML Steering Committee. In 2015, she was recognized as an OASIS Distinguished Contributor. She was member of Board of Directors of OASIS from 2016 till 2018. Her research fields include XML techniques for modelling legal documents in structure as well as in aspects connected to legal knowledge, including logic rules and legal ontologies, and ICT-enhanced legal drafting techniques using artificial intelligence techniques. She has developed a large database of manuscripts (approximately 165.000) related to XI-XIII centuries of legal history of law <http://irnerio.cirsfid.unibo.it/>. She is also the scientific coordinator of the Legal Blockchain Lab. She has published more than 120 papers and she has been chair of several international conferences, editor of book series and member of the scientific committee of "AI and Law" Journal. She is Director of the International PhD programme "Law, Science and Technologies" MSCA-ITN and vice-president of the IAAIL.

Dorit Raines is Associate Professor at the Università Ca' Foscari Venezia in Italy where she teaches History of Libraries, History of Documents, Archival science and Digital Humanities. She holds a Ph.D.



in History from the École des Hautes Etudes en Sciences Sociales in Paris and is mainly interested in the social and cultural formation of elite groups through their libraries and archives. She has been President of the board of the Library System at Ca' Foscari University (2016-2021) and is Academic Librarian at the Ateneo Veneto as of 2005. She has been Visiting professor in Bern University (Switzerland) and in Chukyo University (Nagoya, Japan). She was on the Executive Board of the CSA stage of the H2020 FET-Flagship project "Time Machine" and was a member of the scientific board of the ERC-funded project (2014-2019) directed by Cristina Dondi (Oxford University, UK: *The 15th-century book trade*) and member of the Management Committee of the Cost Action TD1408: *Interdisciplinarity in research programming and funding cycles* (INTREPID) (2015-2019). She is currently head of the Digital Humanities unit of the national PRIN project: *The Nuncio's secret archives: Papal diplomacy and European multi-denominational societies before the Thirty Years War*. Among her publications are *L'invention du mythe aristocratique. L'image de soi du patriciat vénitien au temps de la Sérénissime* (2006). She is the editor of *Biblioteca effimera. Biblioteca circolanti a Venezia (xix - xx secolo, Venezia, Edizioni Ca' Foscari - Digital Publishing* (2012), and also edited with Anna Bellavitis and Laura Casella. *Construire les liens de famille dans l'Europe moderne* (2013), and *Famiglie al confine*, in *MÉLANGES DE L'ÉCOLE FRANÇAISE DE ROME. ITALIE ET MÉDITERRANÉE*, Ecole Française de Rome, vol. 125 (2013).

Fabio Vitali is Full Professor in Computer Science at the Department of Computer Science and Engineering (DISI) of the University of Bologna. He holds a PhD in Computer and Law from the University of Bologna and has been working for a long time on digital document formats, hypertext systems, web technologies and usability and user experience design. He has been part of the W3C Working Group on XML Schema and is currently co-chair of the OASIS TC on LegalDocML. He is the main author of Italian and international standards on legislative XML such as NormeInRete, CEN Metalex and Akoma Ntoso, which became an OASIS standard in 2018. He teaches Web Technologies as well as Usability and User Experience Design at the Computer Science School and at the graduate course on Digital Humanities and Digital Knowledge of the University of Bologna.