

# STOA workshop

Humanities in the digital age: Securing innovation and empowering democracy

## Participants' booklet



# Humanities in the digital age: Securing innovation and empowering democracy

**STOA Workshop** 

Wednesday, 26 April 2023, 14:30 - 17:00

**EP Info Hub** 

Participants' booklet

Prepared by António Vale, Scientific Foresight Unit

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## Table of contents

1. Programme	2
2. Introduction	3
3. Chairs	4
3.1. Ivars IJABS, MEP and STOA Vice-Chair	4
3.2. Sanita REINSONE, Institute of Literature, Folklore and Art, University of Latvia	5
4. Speakers	6
4.1. Toma TASOVAC, DARIAH and Belgrade Centre for Digital Humanities, Serbia	6
4.2. Maciej OGRODNICZUK, Institute of Computer Science, Polish Academy of Sciences _	7
4.3. Normunds GRŪZĪTIS, Institute of Mathematics and Computer Science, University of L	.atvia 8
4.4. Agiatis BENARDOU, DARIAH and ATHENA Research Centre, Greece	9
4.5. Panos CONSTANTOPOULOS, UNESCO Chair on Digital Methods for the Humanities as Sciences, Athens University of Economics and Business, Greece	
4.6. Marieke van ERP, KNAW Humanities Cluster, Netherlands	11
5. About STOA	12
5.1. Mission	12
5.2. STOA Panel members	14
5.3. STOA administration	16

## 1. Programme

#### 14:30 - Welcome and introductory remarks

• Ivars IJABS, MEP and STOA Vice-Chair

#### 14:40 - Digital Humanities and Democracy

Chair: Ivars IJABS, MEP and STOA Vice-Chair

- There is no future without the past: Why Europe still needs the humanities, and why they must be digital
  - Toma TASOVAC, DARIAH / Belgrade Centre for Digital Humanities, Serbia
- ParlaMint: the impact of parliamentary resources for society and (data) science
   Maciej OGRODNICZUK, Institute of Computer Science, Polish Academy of Sciences
- Handling 1000 truths: Innovation in multilingual media monitoring SELMA project and beyond
   Normunds GRUZITIS, IMCS, University of Latvia

#### 15:40 - Digital Humanities: Navigating New Frontiers in Education and Science

Chair: Sanita REINSONE, Institute of Literature, Folklore and Art, University of Latvia

- Learning and skills development in the digital age: Unlocking the potential of digital humanities with DARIAH-Campus
  - Agiatis BENARDOU, DARIAH / DCU, Athena Research Centre, Greece
- Digital humanities and the changing landscape of higher education and research
   Panos CONSTANTOPOULOS, Athens University of Economics and Business, UNESCO Chair on Digital Methods for the Humanities and Social Sciences
- New frontiers in higher education and research: The role of digital humanities in enhancing understanding of Al-powered tools
  - Marieke VAN ERP, KNAW Humanities Cluster, Netherlands

#### 16:40 - Concluding remarks

• Ivars IJABS, MEP and STOA Vice-Chair

**16:50 - Special talk:** Empowering democracy - Introduction to the 'what-Europe-does-for-me.eu' and 'together.eu' initiatives of the European Parliament, DG COMM representative

The event will be held in English only, without interpretation.

#### 2. Introduction

Digital Humanities use computational tools to extend the horizon of the traditional humanities. Digital methods such as the creation and handling of large-scale sets of data enable researchers to answer questions we could only have speculated about before. At the same time, transforming texts and cultural artifacts into data runs the risk of flattening their unique qualities and has thus to be combined with close readings and qualitative approaches. In order to take full advantage of the potential of digital humanities, we need a sensible understanding of how to best use its tools, as well as databases that include metadata and are expertly curated.

Situated at the cross road of social sciences and computer sciences, Digital Humanities focuses on bringing computational methods into the Humanities, Social and Behavioural Sciences. This includes the use of digital analysis and visualisation techniques in e.g. (art) history, languages, instructional sciences, the use of digital games in social sciences or the use of digital technologies in the sector of museums, archives and libraries. Obtaining further insight and foresight in this area especially in relation to the social and political impacts of this emerging field of research is essential.

The event will explore, highlight and discuss the opportunities and challenges related to the research and development of Digital Humanities and their implications on policy decisions in areas from education, culture and research to communications and security.

#### 3. Chairs

## 3.1. Ivars IJABS, MEP and STOA Vice-Chair



Ivars Ijabs is a Member of the European Parliament and 2nd Vice-Chair of the Panel for the Future of Science and Technology (STOA). He is a member of the Committee on Industry, Research and Energy (ITRE), and the Delegation for relations with the United States, and a substitute member of the Committee on the Internal Market and Consumer Protection (IMCO), the Delegation for relations with the countries of the Andean Community, the Delegation for relations with the countries of Southeast Asia and the Association of Southeast Asian Nations (ASEAN) and the Delegation to the Euro-Latin American Parliamentary Assembly. From 2014 to 2019 Ivars Ijabs was Chairman of the Board of the Foundation for an Open Society DOTS. From 2009 to 2013 he was Chairman of the Board of the Latvian Association of Political Scientists. Since 2018 he is a Corresponding member of the Latvian Academy of Science.

# 3.2. Sanita REINSONE, Institute of Literature, Folklore and Art, University of Latvia



Sanita Reinsone, PhD, is a senior researcher and head of the Digital Humanities Group at the Institute of Literature, Folklore and Art of the University of Latvia. She is also a guest lecturer at Riga Technical University and the University of Latvia, and has extensive experience leading research, development, and networking projects related to digital humanities and digital cultural heritage. Her main research focus encompasses digital participatory methods in digital humanities and cultural heritage. Reinsone is an active advocate for digital humanities and is the founder and coordinator of the digitalhumanities.lv initiative.

### 4. Speakers

# 4.1. Toma TASOVAC, DARIAH and Belgrade Centre for Digital Humanities, Serbia



Dr. Toma Tasovac is the Director of the Belgrade Center for Digital Humanities and President of the Board of Directors of the Digital Research Infrastructure for the Arts and Humanities (DARIAH ERIC). With an academic background in Comparative Literature and degrees from Harvard, Princeton and Trinity College Dublin, Dr. Tasovac's areas of scholarly expertise include historical lexicography and the development of language resources, data modelling, digital editions and research infrastructures. He is the co-creator of 'TEI Lex-0: a baseline encoding format for lexicographic data', which has received the 2020 Rahtz Prize for TEI Ingenuity from the TEI Consortium. He has served on a number of major international committees such as the European Research Council (ERC), Europeana Research and JPI Cultural Heritage. He has played a leadership role in numerous DH projects funded by national and international bodies, including Erasmus+, Horizon 2020 and the US-based National Endowment for the Humanities. He is currently Chair of the Social Sciences and Humanities Open Cluster (SSHOC).

#### Key message

Europe, despite all its proverbial identity crises and recurrent political, social and economic turbulence, remains a powerful symbolic space in which tradition and innovation are inherently intertwined. In this talk, I will argue that the digital humanities are positioned at the centre of an intellectual and technological vortex: by exploring our history, culture, values and beliefs, the arts and humanities help us understand, question and reflect upon the crucial elements of our identities, while, at the same time, the use of digital methods helps us push the boundaries of accessibility, inclusion and innovation. The importance of what digital humanities and digital research infrastructures in this field have to offer reaches far beyond the ivory towers of academia because democracy can only thrive in self-reflective societies, and because politics requires both knowing one's past and being able to imagine one's future.

# 4.2. Maciej OGRODNICZUK, Institute of Computer Science, Polish Academy of Sciences



Maciej Ogrodniczuk is an associate professor at the Institute of Computer Science of the Polish Academy of Sciences, where he leads the Linguistic Engineering Group. He is a graduate of the University of Warsaw with a master's degree in computer science, a Ph.D. in linguistics, and a habilitation in information and communication technology. He takes an active part in the LT (language technology) and AI community and is involved in numerous national and international projects related to Natural Language Processing. His research interests include coreference resolution, discourse processing, and computational analysis of parliamentary data. He has published over 100 scientific articles.

#### Key message

ParlaMint is a CLARIN ERIC-supported project which contributes to the creation of comparable and uniformly annotated multilingual corpora of parliamentary sessions. It is also a solid data-intensive infrastructure which can be used by various analytic tools to make the parliamentary debates more transparent to researchers and citizens. And it is just a starting point of a long-term impact action of bringing the accurate and trustworthy information coming from our national parliaments to all parties interested in using it – and doing it in a cross-lingual perspective which was never possible before.

# 4.3. Normunds GRŪZĪTIS, Institute of Mathematics and Computer Science, University of Latvia



Normunds Grūzītis is an associate professor at Faculty of Computing, University of Latvia (UL), and a lead researcher, head of Al Lab at Institute of Mathematics and Computer Science, UL. He studied at the Nordic Graduate School of Language Technology, received a PhD in computer science from the University of Latvia, and conducted a postdoc at the University of Gothenburg. He has coordinated many research and innovation projects in language technology and digital humanities, including development of advanced Latvian language resources and computational models, practical solutions for media monitoring, automatic speech transcription for the medical domain, etc. Dr. Grūzītis is the author or co-author of more than 45 scientific publications, and he represents Latvia as a national expert at CLARIN ERIC and other European initiatives on language resources and technology.

#### Key message

Al-aided monitoring of online and broadcast media can be a powerful instrument not only for businesses, politicians and journalists but also for researchers in social sciences, analysts of strategic communication and other experts. In the right hands, it can give crucial support for decision-making and counter-acting processes to empower and protect democracy.

Various public and social media channels spread different opinions and perceived truths. The large language models like Chat GPT can handle many such "truths", while instruction tuning can make them purposely biased (conditioned) towards a certain task or truth. Public and private knowledge bases are maintained and used as authoritative sources of some truth which, in the case of media monitoring, is grounded by named entity mentions in texts. Such grounding facilitates fact-checking, however, it also raises questions of privacy.

Technology is there to help empower democracy; is EU open for it and ready to act while still preserving its values?

# 4.4. Agiatis BENARDOU, DARIAH and ATHENA Research Centre, Greece



Agiatis Benardou is Director of DARIAH-EU. She is a Postdoctoral Fellow at the Department of Informatics, Athens University of Economics and Business and a Senior Researcher at the Digital Curation Unit, ATHENA R.C. She has held posts as Research Associate at the Departments of Information Science and Critical Studies, University of Glasgow, and Visiting Scholar at the Department of Near Eastern Studies, University of California Berkeley. Agiatis has served as Teaching Fellow in Digital Curation at the Department of Media and Culture, Panteion University, and she is co-ordinating a MSc course on Applications of Digital Methods in the Humanities at the Department of Informatics, Athens University of Economics and Business. She has carried out extensive research as project member and work package leader in the context of various Greek, EU and International initiatives. Agiatis holds a PhD in Ancient History and Classical Archaeology from King's College London.

#### Key message

In light of the ongoing evolution of the digital landscape, there is hard evidence for a pressing need for a dedicated space that supports the acquisition and development of the skills required to interact with digital data and employ digital methods in the Humanities. DARIAH Campus stands out as an important resource for learning and skills development in the digital domain, as it provides a platform for accessing and sharing knowledge about digital humanities research and tools.

With its comprehensive range of courses and materials, DARIAH Campus offers researchers the opportunity to acquaint themselves with the latest trends and practices in the field of Digital Humanities, thereby fostering and sustaining a community of practitioners and scholars. DARIAH Campus recognizes the importance of empowering researchers with the ability to integrate digital methods and tools into their scholarly work, facilitating the development of new insights and perspectives. The platform's diverse range of courses and materials cater to researchers at all levels of digital proficiency, from beginners seeking to gain basic knowledge to advanced practitioners aiming to acquire the latest cutting-edge skills. Through its community-driven approach, DARIAH Campus provides access to a vast array of resources, including webinars, online tutorials, and collaborative projects, to assist researchers in mastering digital skills that can transform their research and scholarship.

# 4.5. Panos CONSTANTOPOULOS, UNESCO Chair on Digital Methods for the Humanities and Social Sciences, Athens University of Economics and Business, Greece



Panos Constantopoulos is Professor Emeritus in the Department of Informatics and head of the UNESCO Chair on Digital Methods for the Humanities and Social Sciences at the Athens University of Economics and Business, where he also served as the first Dean of the School of Information Sciences and Technology, and former Professor of the University of Crete. He has played a leading role in the application of informatics in culture and in the humanities in Greece: he founded and led the Center for Cultural Informatics at the Foundation for Research and Technology – Hellas (1992-2004), the Digital Curation Unit at the "Athena" Research Center (2007-), the MSc in Digital Methods for the Humanities at the Athens University of Economics and Business (2018-2022), and is the coordinator of "APOLLONIS", the Greek Infrastructure for Digital Arts, Humanities and Language Research and Innovation.

#### Key message

Originating in the application of computers to text analysis in the early 1950s, the meeting ground of the humanities with information technologies has grown into a particularly dynamic cross-disciplinary area and took the name "digital humanities" only in 2004. On one hand, this designates the inclusion of computational methods and digital media in the humanist's equipment along with the ever-increasing use of digital surrogates and born-digital source material. On the other, it underscores the need and the opportunity to incorporate in the humanities a critical reflection over the digital.

The use of digital resources and methods in the Humanities, as well as in the Social Sciences, has indeed seen a dramatic rise in recent years. Digital collections of all sizes, along with technologies for extracting, organizing, representing, curating, managing, visualizing, linking and accessing information, on which all sorts of processing and logical and quantitative analyses can be performed, are inducing a deep digital transformation of these domains. This includes enabling new research questions and approaches, novel ways of interpreting, communicating and teaching, and, eventually, their impact on society and the economy. Inherent to this transformation is the transgression of disciplinary borders and the osmosis of methodological traditions. Internationally, this digital trend has fostered new curricula and research units, and new operational modes in memory institutions, agencies, social services, and politics.

## 4.6. Marieke van ERP, KNAW Humanities Cluster, Netherlands



Marieke van Erp leads the Digital Humanities Research Lab at the Royal Netherlands Academy of Arts and Sciences Humanities Cluster. She holds a Ph.D. in computational linguistics and has been working on combining language technology and the semantic web in many interdisciplinary research projects. She is one of the founders and scientific directors of the Cultural Al Lab, a collaboration between 8 research and cultural heritage institutions in the Netherlands aimed at the study, design, and development of socio-technological Al systems that are aware of the subtle and subjective complexity of human culture. She is a project manager and researcher in the H2020 Odeuropa project. In January 2023, she was awarded an ERC Consolidator Grant for a project focusing on improving language and semantic web technology for humanities research.

#### Key message

In this talk, I will argue that humanities scholars can play a vital role in enhancing understanding of Al-powered tools in higher education and research. I will discuss opportunities and challenges of current Al tools such as ChatGPT and recommendations on how to adapt and adopt such technologies in a responsible manner. As Al pervades many aspects of our daily lives, policy-makers, technology developers, humanities scholars and society at large will need to work together to ensure safe, transparent and inclusive integration of Al-powered tools in our daily workflows.

#### 5. About STOA

#### 5.1. Mission

The Panel for the Future of Science and Technology (STOA) forms an integral part of the structure of the European Parliament. Launched in 1987, STOA is tasked with identifying and independently assessing the impact of new and emerging science and technologies.

The goal of its work is to assist, with independent information, the Members of the European Parliament (MEPs) in developing options for long-term, strategic policy-making.

#### **The STOA Panel**

The STOA Panel consists of 27 MEPs nominated from eleven permanent parliamentary committees: Agriculture & Rural Development (AGRI), Culture & Education (CULT), Employment & Social Affairs (EMPL), Environment, Public Health & Food Safety (ENVI), Internal Market & Consumer Protection (IMCO), International Trade (INTA), Industry, Research & Energy (ITRE), Legal Affairs (JURI), Civil Liberties, Justice and Home Affairs (LIBE), Regional Development (REGI) and Transport & Tourism (TRAN).

<u>Marc ANGEL</u> is the European Parliament Vice-President responsible for STOA for the second half of the 9<sup>th</sup> parliamentary term. The STOA Chair for the second half of the 9<sup>th</sup> parliamentary term is <u>Christian EHLER</u>, with <u>Ivo HRISTOV</u> and <u>Ivars IJABS</u> elected as 1st and 2nd Vice-Chairs, respectively.

#### The STOA approach

STOA fulfils its mission primarily by carrying out science-based projects. Whilst undertaking these projects, STOA assesses the widest possible range of options to support evidence-based policy decisions. A typical project investigates the impacts of both existing and emerging technology options and presents these in the form of studies and options briefs. These are publicly available for download via the <u>STOA website</u>.

Some of STOA's projects explore the long-term impacts of future techno-scientific trends, with the aim to support MEPs in anticipating the consequences of developments in science. STOA communicates its findings to the European Parliament by organising public events throughout the year.

#### **Focus areas**

STOA activities and products are varied and are designed to cover as wide a range of scientific and technological topics as possible, such as genetic engineering, antimicrobial resistance, energy, pollution, sustainable agriculture and fishing, artificial intelligence & digital technologies such as blockchain, 5G, satellite communications, IoT and Internet, Covid-19 and health in general.

These activities are clustered within three main thematic areas: Artificial intelligence & other disruptive technologies, The new Green Deal, and Quality of life. In addition, STOA's work addresses four cross-cutting policy areas: Science, technology and innovation; Societal and ethical challenges; Economic challenges; and Legal challenges.

#### **ESMH**

The European Science-Media Hub (ESMH), operating under the political responsibility of the STOA Panel, is a platform to promote networking, training and knowledge sharing between the European Parliament, the scientific community and the media. The ESMH creates a network among policymakers, scientists and media involving science, academia, educational and research entities, and professional associations of journalists and scientists.

For journalists and media representatives, the ESMH organises training sessions and workshops on current technological developments, both as subjects of their reporting and as means of facilitating their work. Via media monitoring and media intelligence tools, the ESMH follows the most popular topics in the field of science and technology on different platforms including journals, newspapers and social media.

The ESMH makes information available to journalists, other media and citizens about new scientific developments, as well as about scientific topics that attract media attention, and promotes information based on evidence.

#### **EP Forum for Academic Freedom**

In 2022, the STOA Panel established the <u>EP Forum for Academic Freedom</u>, as its new initiative. This authoritative platform monitors the state of play of the academic freedom in the EU member states and offers a platform to all stakeholders to discuss how to protect the academic freedom in Europe.

The EP Forum for Academic Freedom publishes studies and organises events to tackle the different aspects of the academic freedom. Academic Freedom.

## 5.2. STOA Panel members

Panel Member	Committee	Panel Member	Committee
Marc ANGEL (S&D, LU) EP Vice-President STOA Bureau member		Rosa D'AMATO (Greens/EFA, IT)	REGI
Christian EHLER (EPP, DE) STOA Chair STOA Bureau member	ITRE	Jakop DALUNDE (Greens/EFA, SE)	TRAN
Ivo HRISTOV (S&D, BG) 1st STOA Vice- Chair - STOA Bureau member	ITRE	Pietro FIOCCHI (ECR, IT)	ENVI
Ivars IJABS (Renew Europe, LV) 2nd STOA Vice- Chair - STOA Bureau member	ITRE	Emmanouil FRAGKOS (ECR, EL)	AGRI
Atidzhe ALIEVA- VELI (Renew Europe, BG)	EMPL	Lina GALVEZ MUÑOZ (S&D, ES)	EMPL
Adam BIELAN (ECR, PL)	IMCO	Maria GRAPINI (S&D, RO)	TRAN
David CORMAND (Greens/EFA, FR)	ІМСО	Martin HLAVÁČEK (Renew Europe, CZ)	AGRI

Panel Member	Committee		Panel Member	Committee
Marina KALJURAND (S&D, EE)	LIBE		Susana SOLÍS PÉREZ (Renew Europe, ES)	ENVI
Radan KANEV (EPP, BG)	EMPL		Barbara THALER (EPP, AT)	TRAN
Maria-Manuel LEITÃO-MARQUES (S&D, PT)	IMCO		Patrizia TOIA (S&D, IT)	ITRE
Victor NEGRESCU (S&D, RO)	CULT		Marion WALSMANN (EPP, DE)	JURI
Michèle RIVASI (Greens/EFA, FR)	ENVI		Pernille WEISS (EPP, DA)	ITRE
Bronis ROPĖ (Greens/EFA, LT)	AGRI		Juan Ignacio ZOIDO ALVAREZ (EPP, Spain)	INTA
Jordi SOLÉ (Greens/EFA, ES)	ITRE	CULT: Culture at EMPL: Employn ENVI: Environm IMCO: Internal INTA: Internation ITRE: Industry, JURI: Legal Af LIBE: Civil Lib REGI: Regional	are and Rural Development and Education ment and Social Affairs ment, Public Health and Food SMarket and Consumer Protectional Trade Research and Energy fairs erties, Justice and Home Affai Development t and Tourism	on

#### 5.3. STOA administration

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