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# DIGITAL MEMORIES: ETHICAL PERSPECTIVES

*Summary report on the  
workshop held at JRC  
Ispra, Italy  
16<sup>th</sup> - 17<sup>th</sup> January 2014*

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Contents

Introduction ..... 2

Overview and background ..... 4

Research questions ..... 7

The workshop..... 7

Recommendations ..... 17

Further reading and interesting links..... 20

Annex I - Agenda ..... 22

Annex II - Abstract and Bios ..... 24

# Digital memories: ethical perspectives

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Ispra, Italy 16<sup>th</sup> - 17<sup>th</sup> January 2014

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‘The best way to preserve things is make things accessible.’  
*Brewster Kahle, The Internet Archive*

2

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## Introduction

Four paradigms underpin the current theory and practice of archival science: evidence, memory, identity and community (Cook, 2013). But archival science has been evolving. In Europe, after the French Revolution, archives emerged as part of public institutions. In that period, archives acted as the guardians of the juridical legacy of the government agencies, records being treated as evidence for actions. During the 20th century (1930–70), modern archiving, through appraisal and selection <sup>(1)</sup>, intentionally shaped cultural memory. That period was determined by the subjectivity of the historian-archivist when selecting materials that would constitute public memory. From the 1970s onwards, the archivist emerged as a profession throughout what is now the EU, embracing other disciplines and reaching out to other kinds of users, beyond historians. It was also in that period that deontological codes, regulations and archival procedures, as we now know it, were developed. With the development of social history, the focus moved to ‘documenting citizens as much as the state’, so the archive became a societal resource. Archivists found

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<sup>(1)</sup> Between 3 % and 5 % of the records were preserved.

their own identity as mediators, helping society ‘in forming its own multiple identities’. We are currently entering the fourth paradigm, known as ‘community’, characterised by having ‘too much evidence, too much memory and too much identity’ (Cook, 2013) to be governed under the prism used in the three precedent paradigms.

Parallel to the evolution of all four paradigms, institutions of memory <sup>(2)</sup>, understood as loci that collect materials, have been acquiring physical and legal status. Regulations around archival practices have been written, their duties have been specified and mandates have been defined, but there is still a lack of praxis about ethical concerns regarding these institutions, especially if we bear in mind the impact information and communication technologies (ICT) are having on the social and institutional practice of memory.

In western societies, governments have to provide democratic access to public information. In most EU countries <sup>(3)</sup> access to public information has a parallel development with the spreading of the Internet and ICT, given the fact that most of the regulations about access to public information were defined in the 1990s and were accommodated from 2000 onwards. The Charter of Fundamental Rights of the European Union <sup>(4)</sup> goes further and includes freedom of expression and information and right of access to documents as fundamental rights.

The lack of a corpus regarding ethical issues in institutions of memory is triggering some concerns about trustworthiness in institutions. At the Joint Research Centre (JRC), we are investigating approaches to improving citizens’ trust towards institutions. The focus of this endeavour is on institutional and corporate digital historic identities vis-à-vis the impact of institutional compliance with privacy rules on the institutional image through time; ultimately, we want to seek to improve the conditions for conciliation between privacy rights and archiving obligations. Indeed, since the origins of the state under the rule of the law, different rights and obligations define and shape the moving boundaries separating and connecting private citizens and public institutions. As for more than a century privacy has been framed as the set of values aimed at preserving and protecting the intimacy and autonomy of individuals’ lives, and is currently a fundamental right in most legal systems, public institutions are entitled and obliged to gather and preserve history and collective memories. Institutional memory has a long-standing tradition in terms of creating, maintaining and guaranteeing organisational identity, stability of relationships, trust and accountability, both within institutions themselves and towards citizens.

These duties have been strengthened through the historical experiences of authoritarian regimes which erase institutional historical memory and through the transition towards e-government, where institutions primarily interact with citizens through the Web. Moreover, their ethical dimensions — if not a real citizens’ right to institutional memory — have become apparent, as matters of personal identity

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<sup>(2)</sup> The term ‘institutions of memory’ or ‘memory institutions’ is recent. It was first used in 1994 by Roland Hjerpe to indicate all the institutions that catalogue materials. It includes: libraries, archives, museums, heritage (monuments and sites) institutions and aquaria and arboreta, zoological and botanical gardens. Hjerpe, R., ‘A framework for the description of generalized documents’, *Advances in Knowledge Organization*, Vol. 4, pp. 173–180, 1994. In the context of this report it is used as a synonym of archives.

<sup>(3)</sup> As stated in the Resolution of the Council and the Ministers of Culture meeting with the Council of 14 November 1991 on arrangements concerning archives (<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:C:1991:314:TOC>): ‘Bearing in mind that the European archival heritage provides an indispensable resource for writing the history of Europe or of an individual nation,’ EU Member States now have full autonomy on laws and regulations on records and archives. The Interpares 2 project (2000) has produced numerous studies on various types of legislation, including archival legislation, privacy laws and intellectual property rights ([http://www.interpares.org/ip2/ip2\\_documents.cfm?cat=policy](http://www.interpares.org/ip2/ip2_documents.cfm?cat=policy)).

<sup>(4)</sup> Charter of Fundamental Rights of the European Union. OJEC 2000/C 364/01, 18/02/2000 [http://www.europarl.europa.eu/charter/default\\_en.htm](http://www.europarl.europa.eu/charter/default_en.htm). [Last accessed: 18.06.2014]

and reputation and protection of family relations, as well as a commitment towards future generations, are involved.

Indeed, these practices aiming at keeping track and trace of institutional history can be seen as part of an institutional ethics, at least as conceived in the European context, namely how institutions ‘should’ — in all legal systems — behave in articulating, assessing and implementing values and moral principles related to their practices, procedures and policies. In the digital age, as institutions increasingly relate to, and interact with, citizens/users through the Web, and their Web self-representation already expresses not only a different channel of communication, but their metonymic image as a whole, institutional memory has become a relevant issue for ICT ethics. Moreover, other ethical concerns arise because new ‘mechanical’ players such as research engines are self-attributing the mission that was traditionally performed by human agents in those institutions.

In this context, we argue that values such as accountability, credibility, transparency, respect for identities and human agency should be also taken into account through the maintenance of institutional Web histories. Do we need a right to institutional Web history in order to ensure responsible, reliable, accountable and documented storytelling about our pasts? Time has passed since we first saw our lives going digital and we are witnessing some symptoms of urgency with regards to memory practice, in particular some undiscussed trends and transpositions from other realms that affect the practice of institutional memory; for example, private Web archiving practices, arbitrary deletion of websites or parts of them within institutions or just poor or labyrinth-like access to past sites, algorithmisation and automation of memory-keeping and access, discussions about the private and public value of memory, etc.

All these observations made it timely to run an expert workshop with theorists and practitioners in order to collect their views on what discussions are needed to ensure good governance of memory in a digital age, especially in institutions that cannot be considered as ‘institutions of memory’ but for which, because of their roles, memory-keeping becomes one of their fundamental functions. Hence, at the JRC we organised a workshop that intended to reflexively look at those urgent questions <sup>(5)</sup>.

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## Overview and background

With the pervasiveness of ICT and progressive hybridisation of our online and offline lives, institutional archives (institutions of memory) are also undergoing a continuous and fast process of adaptation. First, institutions of memory have been urged to modify their working and preservation procedures to allow digital documents to enter the archive. During the 2000s, the spreading of social networks and the massive participation of citizens as active content creators for the Web raised new issues for the governance of the institutions of memory. Besides complex technical problems, which are mainly due to the abundance of digital information and its apparently easy and costless retrieval, some ethical issues have emerged.

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<sup>(5)</sup> ‘Joint Research Centre — Workshop on “Digital Memory”, 16–17 January 2014, Ispra, Italy’ (JRC 87283), Publications Office of the European Union, Luxembourg, 2014.

Firstly, digital memories generated outside an institution seem to be expected to form part of institutional memories, not just for contextualising purposes, but to enhance understanding about the archival materials. In a wider sense, the expectation is that ordinary people, previously underrepresented, form part of the constitution and preservation of history, despite loosening up archival procedures and received notions of quality. Given the open and free access to huge amounts of information, disintermediation is a real threat that puts the authenticity, accuracy and veracity of digital documents under suspicion. So, some concepts, such as access to trustworthy information, provenance and unbroken custody, should be revisited.

Access to trustworthy information is considered a crucial element for institutional accountability. The rediscovery of the concept of provenance for guaranteeing digital documents' integrity is paramount to ensuring trustfulness with institutions of memory. Moreover, the idea of the 'unbroken custody' — i.e. 'a traceable and uninterrupted line of care, control and usually possession of a body of records from creation to preservation that can serve as a means of protecting the authenticity of the record'<sup>(6)</sup> — needs a clearer definition of rules in the digital context. Who ensures the quality of institutional memories? What quality criteria are needed in a world of overlapping and redundant memory functions?

Secondly, in a society that considers and uses corporate search engine results (from commercial companies, such as Google, Yahoo and Bing) instead of using the material stored and accessible from institutions of memory, it is possible to have a parallel development of biased memories: the (legitimated according to the tradition) ones generated by institutions of memory and the ones generated by people and the algorithms corporations use (legitimated by — not necessarily known — different societal mechanisms). Moreover, corporations in the form of search engines have self-assigned uninvited functions in memory preservation, as is well expressed by Google's mission statement: 'Google's mission is to organise the world's information and make it universally accessible and useful'<sup>(7)</sup>.

In that hybridised (i.e. coexistence and co-production of different endeavours of memory preservation with different agendas and different actors) and multi-layered space, what will govern memories? Their secrecy, confidentiality or free availability? With which criteria will they be preserved? Can intellectual property of digitally born documents be ethically and clearly established? And how should the institutional ethical duty to preserve memories be framed? The social practice of memory — understood as a source of knowledge — inevitably changes the (co-)production of knowledge.

Our third question regards the process of remembering as a function of memory. Since we think everything can be found, collected, organised, etc. using ICT, we make little effort to remember. We can better retrace how to look for information or where we put it than the information itself. Our tendency to rely on ICT is accelerating de-skilling, de-learning and forgetting mechanisms, which also leads us to the use of the Internet as an infinite archive.

And, last but not least, will the paradoxical character of digital information simultaneously being ephemeral and lasting provoke an irremediable loss of collective memory? In addition, destroying traces or purposefully stopping their deletion through ICT technologies could constitute another way of biasing information, conscious that the fragmentation of historical sources is not related only to digital but it can be enhanced by it. It is argued that History — here capitalised to refer to the broad collection of all the

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<sup>(6)</sup> InterPares 2 project: terminology database ([http://www.interpares.org/ip2/ip2\\_terminology\\_db.cfm](http://www.interpares.org/ip2/ip2_terminology_db.cfm)). [Last accessed: 28.3.2014]

<sup>(7)</sup> <https://www.google.com/about>

relevant documented narratives that humankind is willing and responsible to preserve — needs to be written looking at the digital landscape and its wide spectrum of points of view. In order to do so, a debate among institutions should be generated to see if traditional institutions of memory can cope with this new digital framework, or if a new kind of ‘participatory archive’ should be developed.

As an important pillar for knowledge, cultural heritage and history, these open questions about digital memory aim to shed light on how the ‘digital’ has changed the concept of memory (of remembering and forgetting) and the changing role that institutions of memory need to play in this challenging context of memory governance and ethics.

Despite having been developed within scholarly literature, institutional ethics has not significantly impacted institutional behaviours. As institutional and corporate entities are composed of individuals, ethics codes have primarily looked at, and established norms for, individuals and individual behaviours, as institutions and corporations are made up of people. However, institutional ethics has also addressed issues related to institutions as ‘moral subjects’ — super-individual entities expressing special forms of behaviour. When dealing with institutions as subjects, the mission and vision of the institution should be consistent with its operations and management, and these should be integrated with ethical goals — which, in contemporary societies, should include democratic goals. At the individual level, this should imply not only that those who are associated with the institution behave ethically in implementing institutional duties, but also that these duties strengthen their ethical behaviours as individuals.

If these principles traditionally apply to institutions, the impact of ICT on the institutional management of memories and its ethical problems require further investigation and reframing of rights. ICT introduces essential differences between individuals and institutions. In the EU context, there is no still universal right to be forgotten <sup>(8)</sup>. When institutional memories involve individual behaviours, the distinction between the private and public sphere can be blurred. How far can (and how much need is there for) historical memory (to) legitimately override an individual right to forgetfulness? How should the line be drawn? And who will draw it?

Rethinking institutional behaviours, reconnecting individuals and institutions and building trust in managing memories in a multi-stakeholder pervasive ICT context is just at the beginning.

What ethics framework do we need in view of this changing context?

The workshop addressed these questions with a focus on institutional memory ethics.

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<sup>(8)</sup> A proposal to reform the EU data protection regulation is in its final stages ([http://europa.eu/rapid/press-release\\_MEMO-14-186\\_it.htm](http://europa.eu/rapid/press-release_MEMO-14-186_it.htm)).

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## Research questions

At the workshop the following four research questions, identified at its conception, were primarily addressed.

- 1. What is the role of institutions of memory in a highly automated environment?**
- 2. Are the right to access, modify and delete personal information and the need to preserve historical legacy in conflict?**
- 3. By whom and how will institutional memories be governed in the context of hyper-connectivity and progressive dematerialisation of memory?**
- 4. How is trust in institutions of memory being built and nurtured?**

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## The workshop

On 16 and 17 January 2014, the Institute for the Protection and the Security of the Citizen (IPSC) of the JRC organised a workshop on ‘Digital memory: ethics perspectives’, framed within the TRUDI project (Building trust in digital interactions: citizens, institutional and corporate ethics). The general objective of the workshop was to gather several perspectives regarding how ICT and the digitising momentum are ethically impacting institutions of memory and which ethical principles are governing observed changes.

The aim of this 2-day workshop was to gather experts (academic and practitioners), from across Europe and beyond, in order to identify and discuss ethical issues arising from the governance of digital memory in institutions, to support EU policies in this field. As guidelines for the workshop discussions the JRC had suggested some issues:

- governance of digital archives and online memories, in institutional and private contexts;
- accessibility issues for citizens;
- net (non-)neutrality;

- technical ‘neutrality’;
- constitution and building of democratised digital repositories;
- what will constitute an official repository in the future, given that the do-it-yourself movement has also arrived in this area?
- the influence of digital memory governance on History to be (how history is told and how history is understood).

The challenge of the workshop was to collect several perspectives about some a priori detected emerging issues deepening into them.

The workshop consisted of two days of presentations and interactive activities<sup>(9)</sup> about these emerging key issues. The results of the workshop will help researchers at the JRC to identify preliminary recommendations and findings for policy and research in this area, namely how we currently think about the specific roles of institutions in maintaining historical memories, the new legitimising criteria for fulfilling these tasks and how a well-performed memory-keeping is contributing to enhancing trust between public institutions and their citizens.

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<sup>(9)</sup> See Annex I and II for Agenda and Abstracts and Bios

## ***What is the role of institutions of memory in a highly automated environment?***

Institutions of memory (here we focus on archives) have the obligation, by mandate, to preserve the memory of the institutions they serve and attend to their target users' needs. It also must be noted that, in the information era, institutions of memory, on their own, will not only not be able to preserve the current huge volume of generated digital data but also the material productions that accompany many digital enterprises.

In this changing landscape, archives are facing several problems. The assumption that most of the questions are related to technical concerns, such as storage capacity, data migration, retrieval of information, ways of preserving records and data, interoperability issues, etc., is a poor evaluation of what the key issues are. Nonetheless, these technical questions bring us to other issues including the need for skilled professionals, and other aspects of political, social and ethical nature.

Archives, as preservers of historic identities, need sustainable and stable models that ensure the digital safeguarding of documents, both paper and digital, without losing their **trustworthiness**. Digitisation projects are quite expensive and there is pressure for archives to make their fonds <sup>(10)</sup> available to society. Given that one of the fundamental problems for archives is budgetary constraints, institutions of memory are looking for solutions to digitise collections (Aparsen D32.1, 2013). The public–private partnership is a model encouraged by the EU (Recommendations on Digitisation, 2011) in order to find a balance in combining private and public investment for 'making a rapid progress' on preserving European cultural heritage. Since this collaboration is always based on private commercial interests, some ethical questions could arise. Which collections will be digitised? Under which criteria? Could some commercial visions be privileged amongst others? Do we have to worry about preferential use embargoes applied to collections by patrons? *Experts at the workshop emphasised that there is a need to discuss the ethical concerns these agreements could entail.*

When talking about storage capacity or accessing records on the Web, technical issues could also influence ethical aspects. In the search for storage capacity, some archives are moving their fonds to the cloud, which can be considered as 'commercial exchange', i.e. 'delegating to cloud providers the responsibility for their security, accessibility, disposition and preservation' <sup>(11)</sup>; inevitably, some questions are raised. For example, can one be sure that the information uploaded in the cloud meets privacy requirements? Who is the owner of the data: the service provider, the archive or the individual? Experts invited to the workshop suggested that solutions such as voluntarily adhering to the Cloud Security Alliance <sup>(12)</sup> could help with some of the drawbacks. This alliance is responsible for regulating cloud entities and is looking for a system that certifies corporate responsibility and transparency regarding issues such as: 'prove the chain of custody and the authenticity of the records; to ensure protection of legal privilege or trade secrets when using a third party; to isolate documents for legal hold; to conduct audits; and to guarantee that the records to be permanently preserved are kept according to archival standards' <sup>(13)</sup>.

There is also a great deal of arbitrariness about the role search engines play in preservation, and what is the difference between them and institutions of memory. In several areas of scientific and expert

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<sup>(10)</sup> Fond: the entire body of records of an organisation, family or individual that have been created and accumulated as the result of an organic process reflecting the functions of the creator (<http://www2.archivists.org/glossary/terms/f/fonds>).

<sup>(11)</sup> Records in the Cloud (<http://www.recordsinthecloud.org>).

<sup>(12)</sup> <https://cloudsecurityalliance.org>

<sup>(13)</sup> <http://www.recordsinthecloud.org>

knowledge, scholarly work has widely explored the need for a more open, publicly scrutinised and socially robust production of expertise. The field of archiving sciences seems to have remained untouched by these analyses. Studies in this field would be highly relevant as they directly touch on new criteria of legitimisation for institutions in democratic societies. Moreover, citizens should be involved in rethinking these categories. Experts at the workshop stated that corporate search engines have not been assigned the duty of preservation or accessibility to documents or other digital artefacts in the way archives have, ensuring integrity and reliability. Corporate search engines are mere tools that help users to find information, but cannot supplant institutions of memory in any way, because they do not guarantee information access as a citizen's right. We cannot overlook the fact that their objectives are radically different. Institutions keep records for historical and accountability purposes, inscribed in a democratic context, while corporate search engines always have a commercial purpose. In order to avoid citizens thinking of institutions of memory and search tools as having similar functions, that difference needs to be highlighted through the definition of who the relevant actors (preservers, users, producers, etc.) are and their current and future roles.

Experts invited to the workshop expressed the need for institutions of memory to make a step forward and enter into the regulatory arena, have a more proactive part in defining roles and standards and clarify the objectives and possible bias of every institution with regard to preservation tasks, at historical, administrative or commercial level.

### ***Are the right to access, modify and delete personal information and the need to preserve historical legacy in conflict?***

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The right to equal access to information is a fundamental right for citizens, but there are other rights, like privacy, that are also relevant for the discussions on institutional memory. In order to ensure privacy, it seems that there is only one solution: being as restrictive as possible. However, experts stated that there could be intermediate options with an appropriate risk management. From an historical perspective, content generation and accessibility have evolved, so archives have to keep up with the evolution of society and technologies, ensuring the maintenance of a complete historical scene incorporating a variety of pieces of information — including data generated from outside the institution — from the digital world as records.

In order to pursue their obligations of privacy and the confidentiality of sensitive materials, traditional archives have been keeping sensitive archival series inaccessible for long periods of time<sup>(14)</sup> and regulation is getting stricter. On the other hand, with the emergence of the Internet and ICT, the perception of time has changed and this precautionary attitude might be revisited. For instance, in the United Kingdom's Freedom of Information Act there are some exemptions<sup>(15)</sup>, like defence, economy and privileges, under which information is considered sensitive and cannot be made available. But are these exceptions acceptable in all cases or should they be more flexible? Who makes the final decision of classifying or

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<sup>(14)</sup> Each Member State has its own national law on the access to different series preserved. In some cases, depending on the level of sensitivity governments had conferred to some series, these series are closed for 100 years. Usually, in most countries and in the EU institutions, records are ruled by a 30-year law, which means that cabinet papers of a government will be publicly released 30 years after they were created. Some countries, like the United Kingdom, are moving to a 20-year rule.

<sup>(15)</sup> The full list of exemptions can be found here: <http://www.justice.gov.uk/information-access-rights/foi-guidance-for-practitioners/exemptions-guidance/foi-exemptions-summaries>.

declassifying documents? Under which criteria? And how will contemporary History be written with those restrictions? Regulations have been constructed to cover every possible spot, resulting in overly strict access rules. Especially with regard to defence and national security systems, in order to protect one part of society, other citizens' rights, like access to information, seem to be being violated. So, in this case, open and linked governmental data initiatives and archival regulations seem to be at odds. We have clear ethical issues here.

As we know, in a digital environment, information can be shared and found more easily than in an analogical context. Recent information-leak cases show in an alarming way how easily secret information could be put into the public sphere. Could those leaking cases be telling that there is a need to open up archives for ensuring institutions' accountability and trustfulness? And what is the point in keeping records closed if there is no reciprocity among institutions or among countries?

Experts in the workshop wondered whether there are enough decisions in courts in common law systems but also in the European jurisprudence to address this state of affairs and whether some consolidated rules are emerging. This could be a subject of further research.

The need for public access (and their exceptions) must be reconsidered in order to reduce the tension between different rights and to reach a social consensus about what personal information should be in the public domain and what should not, otherwise there is a risk of ending in a 'paternalistic' precautionary closure. Keeping records closed is cheaper, mainly because of the need for less administrative practices and the more complex and costly sensitivity review documents. The solution will probably come with technologies protecting personal information, while giving historical access to documents. An appropriate risk management for sensitive information, avoiding the closure of complete series for records, and just denying access to some sensitive documents inside series, would be an optimal solution. But who will establish the appropriate risk management?

Social norms and technological advances affect the decision to reuse and remix information. The Web is a rich source of accessible and reusable data and users are not always conscious of how easy it is for their personal data to be accessed. Organisations and people prefer to ask for forgiveness rather than for permission to use it. How far can historical memory needs legitimately override an individual's right to forgetfulness?

In 2010 <sup>(16)</sup>, the European Commission, in the person of Commissioner Viviane Reding, introduced the idea of a right to be forgotten (RtbF). In 2012 <sup>(17)</sup>, the commissioner again expressed the need to take into consideration people's control of their data and the RtbF. This was followed by a proposal for an updated EU general data protection regulation <sup>(18)</sup>. On 12 March 2014 the European Parliament formally adopted the text, after the approval of the Committee on Civil Liberties, Justice and Home affairs in October 2013, in which the RtbF is presented as follows: 'When you no longer want your data to be processed and there

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<sup>(16)</sup> Reding, V., 'Privacy matters — Why the EU needs new personal data protection rules', The European Data Protection and Privacy Conference, Brussels, 30 November 2010 (<http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/10/700>). [Last accessed: 28.3.2014]

<sup>(17)</sup> Reding, V., 'The EU data protection reform 2012: Making Europe the standard setter for modern data protection rules in the digital age', Munich, 22 January 2012 (<http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/12/26&format=PDF>). [Last accessed: 28.3.2014]

<sup>(18)</sup> 'Proposal for a directive of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data by competent authorities for the purposes of prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and the free movement of such data', COM(2012) 10 final, Brussels, 2012 (<http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:52012PC0010>). [Last accessed: 28.3.2014]

are no legitimate grounds for retaining it, the data will be deleted. This is about empowering individuals, not about erasing past events or restricting freedom of the press’ (19).

The concept of the RtbF has roots (20) that can find a common terrain with the management of memories, digital or not. The right to have information deleted implies legal and social consequences.

Another important issue raised at the workshop was the ownership of data and digital productions after the death of a person. Up until now, digital legacy has been de facto owned by the service provider — as it was stored in their Web domains — before legislators paid attention to the issue. Several states in the United States (21) (22) have been progressively introducing legal recommendations in will legislation— ‘digital estate’ — to address fiduciary access to digital property, both data and digital production. As trusted institutions, archives could help with digital estate management.

### ***By whom and how will institutional memories be governed in the context of hyper-connectivity and progressive dematerialisation of memory?***

Memories as History, memories as power artefacts, memories as sense of community, memories as public good, memories as a commercial product, memories as commemoration ... So who governs such a powerful matter and who will govern them in a digital environment?

Up to now, institutions of memory have had the privilege of judging what information needs to be preserved for the future and so what History prevails. ‘Artifacts and texts selected for preservation and veneration were typically products of intellectual and artistic elites rather than illiterate artisans and performers’ (Haskins, 2007). As we have seen before, nowadays, institutions of memory need strategies and economical models to cope with all the information produced by a multiplicity of social actors that are not passive spectators of history, but are interested in co-creating it. The privilege seems to be moving towards private corporations, but commercial interests cannot supersede public goods.

Global projects such as Europeana could also be an example of biased memory; as the European Commission recommendation (2011) pointed out, ‘[its] development will depend to a large extent on the way the Member States and their cultural institutions feed it with content, and make it visible to citizens’. But which countries are most represented in Europeana? Who decides what will be kept as representative from every state? Who governs the construction of a European memory?

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(19) ‘Progress on EU data protection reform now irreversible following European Parliament vote’, press release, 12 March 2014 ([http://europa.eu/rapid/press-release\\_MEMO-14-186\\_en.htm](http://europa.eu/rapid/press-release_MEMO-14-186_en.htm)). [Last accessed: 28.3.2014]

(20) Related concepts such as ‘the right to oblivion’, ‘social forgetfulness’ and ‘the right to information self-determination’ were already addressed in the past.

(21) <http://www.digitalestateresource.com/law>

(22) <http://www.digitalpassing.com/2013/08/30/august-2013-list-state-laws-proposals-fiduciary-access-digital-property-incapacity-death>

For the first time in history, we have contemporary complementary records, preserved in institutions of memory by professionals and preserved by other kinds of participatory communities or societal initiatives. If both visions are not properly preserved and their coexistence nurtured, one will prevail over the other. So, are institutions of memory the only relevant actors or could different communities be involved in controlling so much power? Museums, libraries, universities, non-governmental organisations (NGOs) and foundations are some of the voices producing memory, history and knowledge, hence claiming extended participation. There are cultural heritage experiments and experiences that reflect participatory initiatives, where ordinary citizens and communities can upload, co-create, help, tag and contribute to a collaborative way of forming memories, with different perspectives from the ones created by institutions of memory up to now.

Is it possible for both forms of archiving to coexist? The existence 'of various institutions or individuals involved in the creation of memories will prevent any agent from imposing narratives and ideological closure upon the data' (Haskins, 2007). But, what are we looking for: a participatory archive or aim to parallel archiving? With the continuous Web creation process that cannot be stopped and that would be

hard to put under institutional control, new and multiple memories coexist. Could archives be connected structures, supported on and by the Internet and ICT? Would a collaborative model instead of a competitive model be more appropriate? It seems that archives are not as open to participatory activities as other institutions of memory are and that poses a great deal of challenges not only for the constitution of memory but also for the governance of the memory preservation processes. Activities such as 'Total archives' <sup>(23)</sup> aim to preserve information that is not under mandate, but for maintaining an understanding of society over time. 'Total archives' maintain a balance between public and private archives. But the same questions come along: how are those private archives selected and by whom?

Institutions of memory have helped and could continue to help organise and preserve contents generated by people, assuring the qualities that an archival collection should have. Letting citizens participate in contents' selection, in a kind of participatory archiving, will increase the dialogue between citizens and institutions in order to improve institutions' of memory trustworthiness. Accommodating as many perspectives as possible of our present and of our past and setting the grounds for providing a place to

**Parallel Archive**, developed by Open Society Archives (OSA) at the Central European University, is at the same time a personal scholarly workspace, a collaborative research environment and a digital repository for managing privately digitised archival documents.  
<http://www.parallelarchive.org>

**Historypin** is a way for millions of people to come together, from across different generations, cultures and places, to share small glimpses of the past and to build up the huge story of human history.  
<http://www.historypin.com>

**Internet Archive**, a 501(c)(3) non-profit, is building a digital library of Internet sites and other cultural artefacts in digital form. Like a paper library, it provides free access to researchers, historians, scholars, the print disabled and the general public.  
<http://archive.org>

The **International Internet Preservation Consortium** is a membership organisation dedicated to improving the tools, standards and best practices of web archiving while promoting international collaboration and the broad access and use of web archives for research and cultural heritage.  
<http://netpreserve.org>

*Participatory examples*

<sup>(23)</sup> <http://www.archivalobjects.com/total-archives.html>

diversity will be some of the challenges for institutions of memory in constructing robust data for citizens of the future. Can an inclusive approach be considered in the definition of archival policies?

### ***How is trust in institutions of memory being built and nurtured?***

An archive record has to meet some requirements to be considered as ‘an impartial piece of evidence’ (Huvila, 2008). Duranti (1995) outlined several terms connected to archival science; two of the major features are as follows.

- Authenticity: ‘A record is authentic when it is the document it claims to be.’ Authenticity considers both identity and integrity. Identity is the characteristics determining what the thing is, and integrity ‘ensures the authenticity of records as they pass through various transmissions over time’.
- Reliability: ‘A record is considered reliable when it can be treated as a fact in itself, that is, as the entity of which it is evidence ... Reliability is provided to a record by its form and procedure of creation.’

Those characteristics are the ones that institutions of memory have been supporting, nurturing and guaranteeing for historical accountability, that also being the reason why they were originally created. Perception of authenticity and reliability could be related to the object, the process it has undergone or the institution that keeps the record. Considering these three perspectives, the **truthfulness of records is based on the overarching idea that they are under the control of a trusted authority**, which ensures the integrity of the system, its accuracy and reliability; but what makes existing institutions trustworthy and how can this be reinforced?

If we consider these three perspectives separately, might some additional concrete measures reinforce public trustworthiness in institutions of memory?

Until now archivists relied on physical documents for assuring authenticity but, in a digital context, the authenticity of the **object** or record could be put into doubt (Currall et al., 2008). Because of the existence of digital surrogates and the way they could change in time, at a certain point it might be impossible to tell if a document is what it claims to be.

*Experts at the workshop stated that it is quite important to reinforce the reliability of digital records, developing concepts like ‘provenance’ in such a way that an archive could trace the chain of custody back to the original document.* Provenance refers to ‘the integrity of an information object [which] is partially embodied in tracing from where it came’ (Preserving digital information, 1996). But, what confidence are citizens willing to grant to fluid and unstable documents when those are validated by fluid and unstable technologies? Are these unstable documents socially acceptable as evidence?

The archival **process** itself — and archivists as part of the process — could be used to address institutional trust. Archivists have produced a great deal of knowledge about trusted repositories, procedures and classification that is now being challenged. In a digital environment, the anarchic way of producing and using information by citizens is shaking the pillars of the archival discipline. The archival initiatives generated outside the institutional context lack archivists’ know-how, so their products cannot be seen to be as trustworthy as the ones from institutions of memory. Consequently, a clear distinction between archival records and information collected from the Internet as ‘artificial memories’ should be made. However, as pointed in the report on archives in the enlarged European Union (2005), ‘the specific duty

of the archivist is to provide the appropriate content and context so that citizens can be guaranteed that the information they receive is authentic'. So there could be a way of providing a trustful context for these documents, by allowing to the archives to be custodians of non-institutionalised archival initiatives. Archives could apply the knowledge acquired over time to embrace these initiatives in order to give them more reliability.

As part of the archival process, archivists were put in the spotlight as well. Despite the existence of ethical deontological codes <sup>(24)</sup> in the archival profession, there is a big controversy about their — and the institutions they work for — **neutrality**. There is a need for a clear definition of responsibilities at each step of the archival process, from selection to dissemination, and a social request for transparency and openness in the archival processes and the archivists' deontological code.

**Institutions** themselves are experiencing a devastating loss of trust. A recent study discussed the high corruption levels in EU countries that 'undermines the trust of citizens in democratic institutions and processes' (COM(2014) 38 final). 'High profile scandals associated with corruption, misuse of public funds or unethical behaviour by politicians have contributed to public discontent and mistrust of the political system', and to some extent also mistrust in institutions (Yeo, 2013). Citizenship is demanding more transparency in order to regain trust in institutions, but ethical issues are not equally visible in all institutions of memory. Institutions of memory, in particular, could take the opportunity to balance the level of transparency and privacy by giving a wider and easier access to their fonds. Yeo (2013) states that, for people, the credibility of documents relies on 'their assessment of the data content, on their own experience and pre-existing knowledge of data producers and on corroborative interrelationships between records'. Another important issue that institutions of memory should take into account is their websites and social media interactions. Given the fact that institutional websites create the image institutions convey to society, it is important to preserve them and make them accessible over time, also because they are basis for the institutions' credibility.

As discussed in the workshop, there are some actions that could be taken for archives to guarantee the reliability of documents. The Aparsen project (2012) has studied trustworthiness and trust on digitally preserved documents: certification of digital repositories, data quality, authenticity, persistent identifiers and interoperability.

At the workshop, the important function of archives for contextualising records and the role standardisation could play was addressed. Archives ensure the preservation of the context in which records were created. The contextualisation of records needs to take into consideration technical issues, namely a consistent description of the content (semantics) and the structure of elements (syntax) when describing digital records and series. Common practices on archival description provide internal and external users with a consistent rendition <sup>(25)</sup> of their archival materials, so it assures the quality of the records kept.

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<sup>(24)</sup> For instance one can consult the code of ethics adopted by the International Council on Archives (<http://www.ica.org/5555/reference-documents/ica-code-of-ethics.html>).

<sup>(25)</sup> In the context of digital asset management, rendition means different editions or versions of an original asset, for example an alternative file format, colour space or resolution (<http://damglossary.org/Rendition>).

Standardisation is another way that experts proposed for making records reliable. But geopolitical biases<sup>(26)</sup> during the creation of standards have been a 'standard' practice, as a limited and unbalanced number of countries have participated in the endeavour. Experts considered that this unbalanced power should be noticed by citizens because the standards adopted, applicable worldwide, are defined by a group of people that only represent a part of the world. They also stated that allowing each country to participate in standardisation, establishing different methods and values in performing these activities, could also constitute a democratic and inclusive way of participating in constructing memories.

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<sup>(26)</sup> For instance, on this website, one can check which states are members of the International Council of Archives that develops archival standards (<http://www.icacds.org.uk/eng/membership.htm>).

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## Recommendations

From the literature review and experts' discussion and findings of the workshop (see earlier section), a number of recommendations for the practice of memory preservation of current Institutions of Memory are offered here that speak to practice, policy and further research:

### *Recommendations for practice:*

In the era of pervasive Internet access and intense on-line activity, citizens' expectations about free access to authentic documents are increasing. Trust in Institutions of Memory relies on acknowledging that the practice of archival is being democratised and there is a growing number of loci for 'un-official' versions of facts.

### **Recommendations:**

- (1)** Institutions of Memory have a central role in **explaining the distinction between the information stored in Institutions of Memory – historical evidence and legacy - and the information that flows unverified in the Internet**. Hence, **it is the duty of traditional practice to raise awareness of demarcations and spell out qualities of traditional practice itself**. Taking for granted that citizenry can in general make a difference based on transparency and reputation criteria is no longer a valid assumption.
- (2)** In the digital environment, Institutions of Memory should take advantage of their skilled experience and play the role of **third trusted parties** to store materials and make them available.
- (3)** In order to verify trustworthiness in a digital context and clarifying the aforementioned distinction to users, Institutions of Memory should **reformulate traditional and fundamental archival procedures** taking into account the digital context, where multiple actors and multiple sources co-exist; these procedures should themselves be widely discussed with the users.
- (4)** Institutions of Memory are putting great effort in digitisation; however, the rapid increase of digitally born documents makes them hard to manage. In that context, digital information created by institutions is not always preserved as it is expected. So, the recommendation is to **encourage proper institutional websites archiving**.
- (5)** Since the archived records only become memory when they are registered by *Institutions of Memory*, **inclusive procedures when creating standards** and policies are required, in order to foster an extensive participation of countries.

**(6)** In order to meet citizens' Right to access to documents and also meeting what is expressed in the article regarding Freedom of expression and information <sup>(27)</sup>, public engagement in the social construction of memory should be promoted by the Institutions of Memory, namely by providing **friendly and effective tools** to facilitate access, creation and reuse of the records they contain.

*Recommendations for policy on digital memory governance:*

As discussed at the workshop, the multi-actor, multiple values, multi-usages, multi-media and emerging norms require a co-produced approach to memory governance. Hence, in here a number of recommendations are suggested.

**Recommendations:**

**(1)** Provided that hybrid and sustainable funding models are found, it is paramount **to promote a close collaboration among all parties implied** (industry, institutions, governments, and citizens); it is recommended that **ethics specifications are the main criteria when defining business models for collaborative preservation initiatives and establish each partner's scope and responsibility.**<sup>(28)</sup>

**(2)** Not all the issues are equally visible and defined in Institutions of Memory. 'In several Member States no clear and comprehensive policies are on the preservation of digital content' (European Commission Recommendation, 2011). **Harmonised and coordinated policies regarding digital preservation should be encouraged by the EU**, in order to promote an equal construction of European Memory. Indeed, **besides harmonizing existing legal provisions, those policies should be proactively informed and driven by ethical considerations.**

**(3)** Preserving processes are expensive and could be unequal, in order to facilitate content creators to have their content preserved, Institutions could **provide incentives and recommendations for creators of digital content to make content born-archival** and therefore ensuring their preservation.

*Recommendations on further research:*

A great deal of the issues discussed in relation to the research questions proposed was not settled. Furthermore, those research questions have created further ones. Hence in here we briefly allude to research questions that need further examination with regards to the project TRUDI.

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<sup>(27)</sup> As stated in the European Chart of Fundamental Rights, article 42 Right of access to documents and article 11 Freedom of expression and information (OJEC C364, 18-12-2000) Retrieved from: [http://www.europarl.europa.eu/charter/pdf/text\\_en.pdf](http://www.europarl.europa.eu/charter/pdf/text_en.pdf) [Last accessed:4.4.2014]

<sup>(28)</sup> For instance, in Commission Recommendation of 27 October 2011 on digitization and online accessibility of cultural material and digital preservation (OJEU L 283/39 29-10-2011), general guidelines for public-private partnerships models for digitization are given. These guidelines do not mention anything about ethical criteria to take into consideration when establishing this kind of collaboration. Retrieved from: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:283:0039:0045:EN:PDF> [Last accessed: 4.4.2014]

## Recommendations

(1) Not just policies are needed, but knowledge. There are some issues that could be solved with adequate policies and discussions, but there are others that will need another approach to archival practices. Experts in the workshop agreed that they do not have yet enough knowledge regarding digital environment (legal and technical) and there is a need to understand how everything is intertwined in a digital world. Hence, a **dialogue among all relevant actors should be initiated in order to provide a wide multi-perspective shared ground** for developing further timely and appropriate policies in this arena.

(2) The archival profession has developed its code of ethics, but experts at the workshop thought that every actor involved in building memories need an ethical approach to data. Those **ethical principles must be considered as shared societal values and they need to be further investigated**, as the discussion of ethics of archiving is not a settled issue.

(3) Experts of the workshop put a lot of emphasis on the importance of Institutions of Memory, but not so much in memory in Institutions themselves. **Institutions should refocus the act of preserving memories from administrative practices to the knowledge sphere**. The process of creating organisational knowledge and ensuring the maintenance of its traces inside their daily organisational practices by all the actors involved, should also be considered as part of the institutional memories to be preserved. But this is clearly a subject of further research and will be further enquired by TRUDI, as this is at the heart of developing trustworthy relationships with the entities that are responsible for digitalisation of knowledge.

Finally, history and historical legacy and in general knowledge and values to be left to future generations need to delve not just in institutions, but also on citizens. Moreover, there is a need to ensure that policy and technology take those values into account in the ICT design and deployment phases. What memory is and which roles Institutions of Memory are playing in a digital landscape should be widely discussed in order to properly frame ethical and legal concerns and eventually offer recommendations for policymaking.

The TRUDI Project will further delve on those concerns.

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## Further reading and interesting links

‘Aparsen (Alliance for Permanent Access to the Records of Science Network) — D32.1 Report on cost parameters for digital repositories’, Alliance for Permanent Access to the Records of Science Network (Aparsen), 28 February 2013, pp. 29–38 ([http://www.alliancepermanentaccess.org/wp-content/uploads/downloads/2013/03/APARSEN-REP-D32\\_1-01-1\\_0.pdf](http://www.alliancepermanentaccess.org/wp-content/uploads/downloads/2013/03/APARSEN-REP-D32_1-01-1_0.pdf)). [Last accessed: 5.2.2014]

‘Commission recommendation of 27 October 2011 on the digitisation and online accessibility of cultural material and digital preservation’ (2011/711/EU), OJ L 283, 29.10.2011, p. 39 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:283:0039:0045:EN:PDF>). [Last accessed: 4.2.2014]

‘Report from the Commission to the Council and the European Parliament — EU anti-corruption report’, COM(2014) 38 final, European Commission, Brussels, February 2014 ([http://ec.europa.eu/dgs/home-affairs/e-library/documents/policies/organized-crime-and-human-trafficking/corruption/docs/acr\\_2014\\_en.pdf](http://ec.europa.eu/dgs/home-affairs/e-library/documents/policies/organized-crime-and-human-trafficking/corruption/docs/acr_2014_en.pdf)). [Last accessed: 5.2.2014]

‘Trust is fundamental to the working of society’, Alliance for Permanent Access to the Records of Science Network (Aparsen), 2012 (<http://www.alliancepermanentaccess.org/wp-content/uploads/downloads/2012/09/APARSEN-Trust-Brochure-Low-Res-Web-Version.pdf>). [Last accessed: 5.2.2014]

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Duranti, L., ‘Reliability and authenticity: the concepts and their implications’, *Archivaria*, Vol. 39, 1995, pp. 5–10.

Garrett, J. and Waters, D., ‘Preserving digital information: report of the task force on archiving of digital information’, commissioned by the Commission on Preservation and Access and the Research Libraries Group, 1996 (<http://www.clir.org/pubs/reports/pub63/reports/pub63watersgarrett.pdf>). [Last accessed: 3.2.2014]

Haskins, E., ‘Between archive and participation: public memory in a digital age’, *Rhetoric Society Quarterly*, Vol. 37, Routledge, 2007, pp. 401–422.

Huvila, I., ‘Participatory archive: towards a decentralised curation, radical user orientation, and broader contextualization of records management’, *Archival Science*, Vol. 8, Springer, 2008, pp. 15–36.

*Report on archives in the enlarged European Union — Increased archival cooperation in Europe: action plan*, Publications Office of the European Union, Luxembourg, 2005 ([http://ec.europa.eu/archival-policy/docs/arch/reportarchives\\_en.pdf](http://ec.europa.eu/archival-policy/docs/arch/reportarchives_en.pdf)). [Last accessed: 3.2.2014]

Yeo, G., 'Trust and context in cyberspace', *Archives & Records*, Vol. 34, No 2, Routledge, 2013, pp. 214–234.

Aparsen project (<http://www.alliancepermanentaccess.org>).

Cloud Security Alliance (<https://cloudsecurityalliance.org>).

Records in the Cloud (<http://www.recordsinthecloud.org>).

## Annex I - Agenda

### Day 1 – January 16<sup>th</sup> 2014 - Room 12a bld. 58c

08:45	Breakfast
09:00	Welcome & Introduction - Mariachiara TALLACCHINI (European Commission – JRC)
09:15	Tour de Table & Organization
09:30	Ivan SZEKELY (Open society archives at Central European university) – <b>Do memory-preserving institutions have a future in the digital age?</b>
10:00	Samir MUSA (Historical Archives of the European Union - European University Institute) - <b>The digitisation strategy of the historical archives of the European Union: New challenges and reflections in the digital era</b>
10:30	Tea Break
11:00	Zinaida MANŽUCH (Vilnius University) - <b>Ethical issues in digitization of cultural heritage</b>
11:30	Michael MOSS (Glasgow university) - <b>Digital memory: what has sensitivity got to do with it?</b>
12:00	Group discussion
12:30	Lunch Buffet
13:30	Giovanni MICETTI (University of British Columbia) - <b>Shaping the digital memory: biases in archival standards and processes</b>
14:00	Mariella GUERCIO (Università Sapienza Rome) – <b>Digital archiving and preservation: the role of policies for an ethical approach to the research data</b>
14:30	Per LOEKEMYHR (European Commission – JRC) - <b>Management of the Joint Research Centre annual work programme outputs</b>
15:00	Paula CURVELO (University of Lisbon) – <b>Memory, digital memories and responsible research and innovation</b>
15:30	Tea break
16:00	Group Discussion
17:30	<b>End of day 1</b>
19:30	Social dinner

22

### DAY 2 - January 17<sup>th</sup>

#### - Room 12a bld. 58c

08:45	Breakfast
09:00	Group Discussion
09:30	Zoltán SZATUCSEK (National Archives of Hungary) – <b>Facelifting or revolution? Two sides of the digital era of public archives</b>
10:00	Attila MARTON (Copenhagen Business School) – <b>Digital forgetting and the future of the past. Dis-memembering social memory into bits and bytes</b>
10:30	Tea break

#### - Room 11 Auditorium bld. 58c

11:00	Public seminar:
11:00	Julien MASANÈS (Internet Memory Foundation) – <b>Digital memories: views from a web archivist</b>
11:30	Luciana DURANTI (The University of British Columbia) - <b>Ethics in the cloud: an oxymoron or a model needing re-interpretation?</b>
12:00	Open discussion
12:30	End

**- Room 12a bld. 58c**

12:30	Lunch Buffet
13:30	Group discussion
15:15	Tea Break
15:30	Plenary group discussion
17:00	<b>End of day 2</b>

## Annex II - Abstract and Bios

### **Do memory-preserving institutions have a future in the digital age?**

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*Dr. Iván Székely, social informatist, is an internationally known expert in the multidisciplinary fields of data protection and freedom of information. A founder of the democratic informational-legal system in Hungary, Székely is at present Counsellor of the Open Society Archives at Central European University and associate professor at the Budapest University of Technology and Economics. His studies and publications, as well as his research interests are focused on information autonomy, openness and secrecy, data protection and freedom of information, privacy, identity and archivistics.*

The presentation will start with an exploratory overview of the human and machine-generated inputs and outputs of digital memory. It will take stock of various scenarios and implications depending on the change of players at the input and output sides. Individual observers of the real and the imaginary, self-loggers, group and organizational observers, as well as artificial (machine) observers and their intermediaries can serve as the input of digital memory. The process itself necessitates the recording, structuring and retrieving of information and context. At the output side not only human interpreters may use the preserved information but artificial (machine) interpreters, too, typically in contexts different from what was originally preserved.

Although various memory-preserving techniques and tools have existed to support human memory down through the ages, the different characteristics of human and machine-stored memory become evident only nowadays. People tend to have greater confidence in machine-stored information than in human memory, and the importance of human memory seems to have gradually been devalued among computer users in the developed countries.

Memory-preserving institutions were created in periods of history when forgetting was natural and remembering the exceptional. Despite their strong traditions, professions, skills, language and forums these institutions are struggling with the problems posed by mass digital information, both inside and outside the institution. There are different types of institutions preserving human (personal or societal) memory, and these institutions, when dealing with the problems of digital storage and access, need to re-clarify whether their mandate is to provide authenticity, or integrity, or truth.

Trying to answer the question put in the title of the presentation, the author concludes that such memory-preserving institutions (museums, libraries and archives) do have a future, at least in the medium term, for several reasons: despite the changing role of these institutions the functions of the documents and data preserved are similar to those of previous historical periods; the institutions – with the exception of some specialized archives – preserve digital and non-digital materials alike; archives and their sister institutions try to preserve context, too, and their institutional responsibility for guaranteeing the authenticity or integrity of the data and documents is an important social, legal and administrative requirement.

In these institutions, however, the practice of digitizing and making data and documents available online is but a necessary escape forward and rather generates problems than solutions regarding the ethical use of digital memory, mainly because the applicable legal and ethical norms were developed for a different kind of relationship between the source, the custodian and the user of information. This is also true at a general level, since the relationship between the source and the user of the preserved information becomes increasingly blurred, and a major part of society – the users of digitally preserved information – are not yet prepared for handling this situation.

### **The digitisation strategy of the historical archives of the European Union: New challenges and reflections in the digital era**

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*Samir Musa graduated in 2003 in Archival Science and Records Management with a thesis on OAIS (Open Archival Information System) Model. He collaborated with an EU funded project, ERPANET (Electronic Resources and Permanent Access NETwork) and worked as a consultant in both the private and public sector, in the field of long-term digital records preservation. In September 2012, he was appointed Digital Records Manager in the Historical Archives of the European Union which forms part of the European University Institute in Florence (Italy).*

The Historical Archives of the European Union (HAEU), located in Florence (Italy), is a research centre devoted to the archival preservation and study of European integration and cooperation.

The HAEU is the official archives for the historical documents of the Institutions of the European Union, and also hosts more than 150 private archival deposits from eminent European politicians, movements and associations as well as a collection of documents concerning European integration from National Archives and Ministries of Foreign Affairs Archives.

The HAEU was established following Decision No. 359/83 of the European Coal and Steel Community and Regulation No. 354/83 by the European Council to open their historical archives to the public.

An agreement in 1984 between the European Commission, acting in the name of all Community institutions, and the European University Institute (EUI) laid the groundwork for establishing the Archives in Florence. The HAEU opened its doors to researchers and the public in 1986.

Since then, a Framework Partnership Agreement signed on 8 November 2011 between the EUI and the European Commission “reinforces the role of the EUI in providing access to and promoting consultation of the EU archives” and ensures a medium term programme whereby the responsibilities of the EUI and the EU institutions in relation to the processing of deposits and access for researchers to paper and digital archives are clearly set out.

Access to documents, particularly through digital means, is an essential component of the policy of transparency being implemented by the European institutions. Under the Treaty, all EU citizens and all residents of the Union enjoy this right of access, which is governed by Regulation (EC) No 1049/2001.

For these reasons the HAEU has heavily invested in digital archive programmes. The digital strategy includes the passage from a proprietary to an open system for its online inventories in compliance with the International Standard of Archival Description ISAD(G) and the International Standard for Archival Authority Records ISAAR(CPF). In 2008 the HAEU digitised the first archival fonds and since then other 11 fonds have been digitised and made available in the online database. EU Institutions have started digitisation activities, parts of which have already been transferred to Florence.

Currently more than 12,000 archival files have been digitised and made available to the research community online. These figures are growing rapidly in cooperation with the archives services of the EU Institutions.

The focus for the HAEU lies on the harmonisation of both structure and content elements of archival description produced by the Archives' services of EU Institutions and published by the HAEU in its online database. By this common practice of archival description the EU Institutions provide to internal and external users a coherent presentation of their archival materials. Once these historical archives are transferred from the EU Institutions to the Historical Archives of the European Union, the common description practice will facilitate the digital data transfer from the Institutional databases to the HAEU's database.

Another priority for the HAEU is to prepare for a coherent presentation of the EU Institutions' historical archives in APEnet (Archives Portal Europe network). The fundamental aim of the APEnet project is to provide a common gateway, which will enable to effectively search within Europe's archives.

### **Ethical issues in digitization of cultural heritage**

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*Zinaida Manžuch is an associate professor at the Institute of Library and Information Science, Faculty of Communication, Vilnius University, Lithuania. She is actively involved in initiatives and research concerning digitisation of cultural heritage. Since 2003 she has participated in the EU RTD projects CALIMERA, TEL-ME-MOR, DPE and NUMERIC. Being a part of the working group initiated by the Ministry of Culture, she contributed to the development of the National Digitisation concept of the Republic of Lithuania (2005). In 2006-2007 she represented Lithuania in the National Representatives Group, an international network of governmental bodies and experts for co-ordination of digitisation in Europe and currently is a member of Member States' Expert Group on Digitisation Statistics and the member of the Editorial board of LIBER Quarterly journal.*

Archives, libraries and museums (memory institutions) around the world are widely engaged in digitization for several decades. However, the current situation shows that technical infrastructure and digitization management practices in memory institutions evolve much more quickly than understanding of the roles and obligations of these institutions in the contemporary society. This is also the reason of scarce discussions of ethical digitization issues in comparison to those related to information management

and technological processes. However, many praised advantages of digitization also became a source of various ethical issues that are faced by archives, libraries and museums converting their collections into digital format. Those ethical issues are pre-conditioned by the fact that digitization is not a mere technical activity but a part of complex roles and processes in memory institutions. Those relate to communication of memory, heritage as a public good, as well as the obligations of memory institutions to ensure the human rights to seek and get necessary information, to use quality and authoritative information, to learn and express their opinion by (while) using cultural heritage. The presentation is aimed at describing major ethical issues in digitization, providing an overview of solutions (if they are in place) and encouraging discussion. It is focused on several themes: a) issues of (mis)interpreting heritage and the past of the communities; b) solving issues of privacy and the demand for accessibility of heritage collections; c) providing access to heritage that generates conflicting interpretations and breakthroughs of hatred; d) commercial exploitation of heritage, collaboration with business and possible limitations of access; e) ensuring authenticity of digitized surrogates that do not convey all features of the original heritage objects. Some ethical issues are well-known to memory institutions and common to different activities, while others – specifically generated by digitization. Discussion of these issues benefits not only everyday practice and problem-solving in memory institutions, but also raises questions about the roles of memory institutions and how they should be performed.

### **Digital memory: what has sensitivity got to do with it?**

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In the paper world curators could run the risk of releasing records with some personal information as there was a relatively low risk of discovery. In the digital environment, which is indexed by ubiquitous search engines, this is no longer the case and the risk of discovery is much higher. Moreover, contrary to those who predicted a digital black hole, far more digital data survives than the paper equivalent, largely because the default in the digital environment is 'save'. This simply adds to the burden of sensitivity review. If the established practice of archiving information for future research is to survive into the digital era a way must be found around this formidable obstacle that threatens to become almost insurmountable if the new EU directive is enforced. The solution will of necessity have to be risk-based and in the long term may require changes in accepted practice, such as providing full personal contact details on emails and in correspondence that increases the risk of identity theft. The archive profession needs urgently to address the question, as if records are to be closed for such long periods of time can the cost of digital preservation be justified? Digital preservation comes with much higher costs than deep storage.

## Shaping the digital memory: biases in archival standards and processes

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The presentation will deal with technical un-neutrality of tools and functions in the archival domain, focusing on the biases that affect descriptive standards and archival practices.

Standardization is a very complex process in which many different factors need to be mediated and harmonized in order to create tools based on the consensus of the parties involved: standards are the result of a negotiation process where different perspectives and approaches compete, in a domain populated by different stakeholders. As such, they may well be qualified as social constructions. However, the widespread technocratic attitude tends to hide the very human nature of standards, overstressing the technical aspects and presenting them as neutral instruments to get to some objectives. For example, archival standards – as all standards – are based on consensus but the level and quality of such consensus is rarely investigated: as a matter of fact, the creation of international archival standards has been committed to groups of people representing a well-identifiable geographical and cultural portion of the whole world; nonetheless, they are assumed to serve archival communities all over the world. Also, it may be worth noting that so far archival consensus has been reached within the professional community, with little attention to the voice of all different stakeholders: for example, users perspective has hardly been taken into account, and the same for software developers and ICT companies.

Standardization may be seen as a process of codification of professional knowledge—as such, it is a biased and historically determined process. The language, the interpretation of objects and actions, the nature of professional functions, the definitions of terms and concepts: all standards rely on these ever-changing factors.

Digital memory relies on the use of technical standards in order to be managed, accessed and preserved. Therefore, it is fundamental to investigate the nature of technical standards along with their biases, in order to understand how they affect digital memory. In a sense, standards shape digital memory just like any container does when you pour some water in it. This is clearly seen when dealing with standards for archival description, but it holds for any standards and technology: for example, the hierarchical nature of XML structures influences the representation of archival materials; digitization parameters and procedures affect user perception of archival objects; adoption of specific technologies may either inhibit or enhance user access; and so on. The danger behind the positivistic approach is to forget that memory

is not a stable and consolidated entity: memory is malleable, continuously reinterpreted and represented on the basis of the cultural milieu and available tools.

We cannot escape unneutrality but we can raise awareness of the discretionary factors affecting digital memory if we really want to serve our role of professional mediators between objects and users. This is more than a technical issue: it is an ethical obligation.

### **Digital archiving and preservation: the role of policies for an ethical approach to the research data**

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29

The presentation investigates the increasing and crucial role played by guidelines and policies for ensuring accurate and qualified data/records management and preservation. It is not only a question of efficiency and risk mitigation: the presence of well formed procedures and the definition of clear responsibilities – specifically in case of complex digital environment – can be considered basic, unique and irreplaceable requirements for qualified, accurate and authentic digital resources. If a policy for data management and preservation can be intended as “an accountability framework to encourage desirable behavior in the valuation, creation, storage, use, archival and deletion of information” which includes “the processes, roles, standards and metrics that ensure the effective and efficient use of information in enabling an organization to achieve its goals” (Gartner report), many questions are still open and unanswered. They concern both organizational and technical issues like:

- the completeness of the data collected and made available (with special attention to the provenance and contextual information),
- the level of transparency and access made available by taking into account digital rights
- the role (and the costs) of maintaining and documenting a chain of custody
- the function of digital repositories and the implications of their auditing and certification
- the relevance of the standards, but also the feasibility of their application when referred to the digital resources life cycle management.

The analysis includes the evaluation of the capacity of balancing conflicting information priorities (privacy, confidentiality, access and transparency) through proper risk management.

The set of crucial recommendations for ensuring the completeness and the quality of policies relevant for information and records management and preservation identified by APARSEN team is here discussed with specific reference to the most important components (ownership, capture, storage, delivery, access, preservation and disposal) and the “generally accepted recordkeeping principles” (GARP) recently approved by ARMA international. GARP is created for qualifying and making auditable a recordkeeping system, by identifying its distinctive characteristics as a *summa* of the disciplinary knowledge and professional expertise, selected within international recommendations, projects and best practices.

### **Management of the Joint Research Centre annual work programme outputs**

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Management of the Joint Research Centre Work Programme outputs, both scientific publications and policy support deliverables, comprises many different processes and purposes such as authorisation, archiving, retrieval, dissemination, monitoring, reporting and evaluation. Each of these will be described briefly and some of the issues and implications relevant for the workshop will be highlighted.

### **Memory, digital memories and responsible research and innovation**

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Over the last few years, geoengineering, or the "deliberate large-scale intervention in the Earth's climate system, in order to moderate global warming" (The Royal Society, 2009), has attracted increasing attention among strategies to limit the impact and consequences of climate change. However, the understanding of the physical science basis of geoengineering is still limited, and there are still major uncertainties concerning the impacts these technologies might have on human and natural systems. Therefore, in spite of the controversy prevailing in the debates surrounding geoengineering technologies, there is widespread agreement on the need to consider the far-reaching ethical and social implications that proposals for intentional climate change entail. This has been the prime objective of my research over the last three years - to critically examine the key ethical and social questions that proposals to geoengineer the climate raise.

For this meeting, I propose to make a brief presentation of the preliminary results of this research in order to discuss what I consider to be important ethical issues that need to be addressed when considering the relationships between memory and digitally "mediated memories" (van Dijck, 2007) in current research and innovation practices. At first glance, this may seem a tortuous path to follow. Indeed, the relationships implicit in the title of this presentation are far from straightforward. They carry within themselves a series of assumptions that need to be made explicit:

The first of these assumptions refers to the idea that the time-consciousness of the late twentieth century - the turn towards memory and the past - involves not only the attempt to secure the future, but also the no less perilous task of taking responsibility for maintaining an active memory of the past (Huysen, 2003, p. 16).

Second, that learning from experience (including the lessons learnt from past mistakes) must constitute a key aspect of the strategies that have been proposed for strengthening Responsible Research and Innovation (European Commission, 2013; von Schomberg, 2011). This is so not only "for the instrumental reasons of avoiding harmful mistakes, but also for the democratically-accepted legitimacy of our institutions of policy and politics, and of the science which shapes these" (Felt et al., 2007, p. 64).

Third, the need to subject the commitments to a particular knowledge-trajectory to more critical and open reflection, insofar as these commitments carry with them epistemological consequences, and responsibilities about the "unlearning processes", i.e. "the non-pursuit of alternative possible knowledge-trajectories that could have been developed" (Idem, p.67).

If these three first assumptions sustain the important role that I believe memory (and forgetting) plays in the processes of research and innovation, the second link suggested in the title of this presentation is still missing, that which relates the memories that are being created and managed through digital technologies (digital memories) with current scientific memory practices.

Indeed, if we agree that what is remembered, whether individually or collectively, is largely dependent on media technologies and the associated socio-technical practices of memory-making and memory retrieval, and that the increasing availability, sophistication, capacity and portability of technologies to capture, transmit, store, retrieve, manipulate and display data have resulted in profound shifts in how we conceptualize our ideas of remembering and forgetting, there is no reason not to consider the challenges that new technologies of memory pose for emerging areas of research and innovation.

However, as Dijck points out "memory is not mediated by media, but media and memory mutually constitute our everyday experiences. Media and memory inscribe and transform each other" (van Dijck, 2008, p. 76). Accordingly, the term "mediated memories" - "the activities and objects we produce and appropriate by means of media technologies, for creating and re-creating a sense of past, present and future of ourselves in relation to others" (van Dijck, 2007, p. 21) - aims to capture the intersections between personal and collective, between past and future and between mind, technology and culture. Against this background, the relationship between digital memories and responsible research and innovation expressed in the title of this presentation, does not assume a one-to-one relationship between new digital instruments of memory and current research practices (or current scientific memory practices (Bowker, 2005)). It rather suggests the need of finding an adequate vantage point from which the mutual shaping involved in current memory practices - "how we configure the world and ourselves to maintain an active memory of the past" (Idem) - may become apparent.

Thus, by discussing the processes of research and innovation in the field of geoengineering, the attempts that have been made to govern these processes, and the processes of co-production of digitally mediated memories and scientific memory practices, I hope to shed some light on the ethical issues that arise from the ongoing, changing epistemological and ontological status of mediated memories.

I will claim that an active memory of the past must constitute a key part of the comprehensive governance framework for responsible research and innovation (RRI) (European Commission, 2013; von Schomberg, 2011). In order to explain my argument, I will provide some background on the concept of Responsible Research and Innovation, and discuss some of the options that have been proposed for its operationalisation. In this context, particular attention will be given to distinct notions of responsibility (Hart, 2008; van de Poel, 2011; Vincent, 2011), and to how memory is connected with different ascriptions of responsibility.

In order to address all these points, I will structure my presentation around the following questions: Is it possible to talk about the memories of new emerging technologies, such as geoengineering? If so, what memories are those and what role do they play in responsible research and innovation? How are digital memory practices embedded in current research and innovation processes? How can digitally mediated memories facilitate and improve the consideration of ethical concerns and societal needs in research and in innovation?

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## **Facelifting or revolution? Two sides of the digital era of public archives**

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In the last one and a half decade the new technologies have a remarkable impact on the world of archives. Like the computers transformed the libraries in the sixties and the visitor-focused new museology revolutionized the museums – the new century brought the renaissance of archives. Archives services held many and often vast collections of unique records with limited access due to the physical nature of paper records. Digitization and online access opened up the archival information meaning both opportunities and threats in the world of archivists.

With the development and spread of information and communication technologies the historical research has changed fundamentally. One example is the Archives Portal Europe. At the moment of this presentation 125 million digital objects from 262 archives can be searched in the portal. As a comparison Europeana is currently aggregating only 30 million from more than 2,300 institutions.

It became possible to put together the medieval Europe from the fragmented family archives or reconstruct the cadastral map of the Habsburg Monarchy from the collection of different national archives. Many former of communist country published online the communist party records, opened new dimensions for comparative studies or history of diplomacy.

Not only scholars are able to conduct their research easier, but remote access also opened the archives for wider public. This way archives can support business efficiency, individual and collective memory and rights of citizens. The relations between archives and citizens are changing as well as the role what archives and archivists fulfil in public administration and society.

The vast text corpus of archives is a field of new research activities for special disciplines of computer science as digital preservation, data mining, natural language processing.

The development of these new studies poses new challenges for us.

Archives seek opportunities to rationalize the way they manage their resources. Cloud computing could help to outsource or centralize the IT from storage to ASP services, providing the responsibilities remain clear and archives can maintain the control on their own data.

We are responsible for considerable quantities of restricted data within our archive collections including classified records, depositors' contractual limitations, and intellectual property rights not to mention the huge amount of personal data. Automatic procession is a new danger in archives; information is easier retrievable by digital form than from papers.

Moreover, development of Electronic Records Management in public sector means a data explosion in archives. Without proper metadata on personal data our choice is to apply an overall closure or make work intensive processes.

Archivists in the EU support the European Commission's work to ensure proper protection of personal information hoping that the European Commission is recognising the value of historical research for society. Archive collections contain reliable evidence of past decisions and actions and of the reasons for those decisions and actions. Right to 'correct' or 'complete' personal data in a record shouldn't undermine credible archives. Right to be forgotten shouldn't endanger understanding the past, and lead to collective amnesia.

## Digital forgetting and the future of the past. Dis-membering social memory into bits and bytes

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The concept of memory invokes the dynamic and self-referential interplay between forgetting and remembering as the basis for the construction of a past aligned to what the future is expected to bring. Conceived of as the construction of sameness into difference, memory is to be seen as the process of filtering singular details of events in order to make them comparable with other events according to gradually emerging categories. Forgetting means dis-membering singularities into categories; remembering, by contrast, is the construction of an event out of these categories. Thus conceived, forgetting is the rule and remembering is the exception.

Brought into a societal context, forgetting and remembering can be observed as social phenomena sui generis – social memory - with respect to socially constructed systems of categorization and classification. In particular, the librarian catalogue created for a closed-shelf arrangement is a highly sophisticated and abstract practice of social forgetting. Since books are stored according to size to save shelf-space, the closed-shelf repository can only be navigated by means of the catalogue. If one loses the catalogue, the collection of books turns into noise bereft of any organization. This setup, however, enables a library to manage, in principle, an infinite number of books by relying on abstract classification criteria used for their description and the arrangement of catalogue cards the books are represented by. The books themselves are forgotten. What is remembered, are the rules of cataloguing. In more abstract terms, the more elaborate the classification system, the more details can be filtered out. However, the more elaborate the classification system, the more can be remembered as well. The more we forget, the more we remember. The more we remember, the more we forget.

Given these considerations, social memory presents itself as a more complex societal structure than concepts of information storage and retrieval would reveal. Propelled by the immense capacities to store data, the ideal of information technologies as a remedy against forgetting seems to be an overstatement considering the fact that digital media are based on the most radical classification possible – the classification of everything and anything into only two classes of 0 and 1. Digital memory is the dis-memberance of singular events into binary digits leading to the counter-intuitive conclusion that the storing of binary-based data itself is a way of forgetting. Re-memberance, in turn, is the computational reconstruction of artefacts composed out of binary digits. Thus conceived, binary-based digital media are very ill-fitted for mnemonic purposes, since, for the first time, the conservation of a communication medium as such is not enough for societal remembering. If we lose the catalogue, the books themselves, if conserved, remain. By contrast, without appropriate computational processing, bits are mere noise devoid of any inherent meaning, which poses a serious threat to the capabilities of future generations to

reconstruct the past based on authentic documentation. What we thought was safely stored in our computational silos of knowledge, may have slowly decayed into rotten bits and bytes.

### **Digital memories: views from a web archivist**

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Constitution of large corpus of digital material certainly raises a wide range of issues ranging from privacy to ownership, access and circulation to name just a few. Yet a balance has to be struck between the need of the future (which can be tomorrow) to understand, check, refer to what has been presented, exposed and circulated.

The Internet Memory Foundation has, since its inception, considered that this principle applies for the central medium of our time, the net and that the open Web, exposing content that can be viewed by anyone, is primarily a public space. This, we believe, gives right to society to record and memorize such a medium, a precondition to be able to reflect upon itself and analyze its own expression.

Other rights (privacy, property, etc.) can, in places, supersede this right to memorize, but proposing a systematic erasure of our digital public space (by hindering or limiting drastically digital memories) would equal to foster a form of digital Dark Age.

Several ways to regulate and balance constitution of digital memories in the context of open fragmented publication spaces like the web exist, including self-regulation where content producers have means to control further circulation and archiving of their content. Although primarily designed for economical purposes, such means can easily be extended to regulate the archiving regime in a satisfactory manner.

The main risk we believe is that institutional setting so that representative digital memories can be preserved still has to be created and contrary to previous media, the net and digital media more generally cannot survive without active preservation taking place.

Finally, one should not look only at the first level of the mission of digital memories, which is to collect and preserve. The second level, which is to provide aggregation, processing and analytical capabilities

needs to be considered as well. At a moment where primary information can be seen as commoditized and the focus is being turned to its massive processing to extract new insights, digital memories will also be considered as reservoirs of data and information to be processed, with the crucial addition of the temporal dimension to potential analysis. Using these digital memories will not just be a matter of localizing and extracting a precise piece of information, but will also include analytical tools to derive trends, aggregated results and what more generally could be called secondary or derived information. The impact on issues we mentioned at the beginning of this contribution (privacy, ownership for instance) will obviously be diminished while new issues will arise

### **Ethics in the cloud: an oxymoron or a model needing re-interpretation?**

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Individuals and organizations are increasingly storing all kinds of information in the Cloud, some of them with the same expectations of privacy, access, intellectual rights, and control they have when storing it in in-house systems, either digital or analogue. With such expectations come disgruntled reactions in finding out that behaviour in and by the Cloud is not guided by long established ethical rules, but needs to be controlled by legal contracts and enforced by law. In other words, the expression "ethics in the cloud" has become an oxymoron.

However, the Y (or Millennium) generation has a different approach to the Cloud and its expectations are strongly affected by the transformation of socio-technical practices brought about by the use of social media networks and of mobile devices merging old and new technologies, like cameras, phones, computers and the Internet. This transformation encompasses constant connectivity within both the personal and the work contexts, a state that is also termed "mobility and liquidity;" the tendency to communicate thoughts, events, acts rather than recording them (often using images as the language of choice, e.g. sending the picture of a building and a Google Map instead of a message with the invitation to a place and address); the renunciation to manage content or to consider the long term value of the material generated in and stored on a variety of platforms; and, mostly, the desire to share and to give contacts the permission to make comments, add notes and tags, metadata, and their own materials. Social science research has coined for this behaviour the term "produser," which merges the roles of producer

and user. Obviously, in the context of this new reality, the ideas of privacy, access, intellectual rights and control need to be re-interpreted and given new meaning.

This paper will present the panorama of behaviours in and by the Cloud, both in the context of organizations and businesses and in the personal sphere, focusing on the consequences for our digital memory of this blurring of boundaries between public and private, organizational and personal, ephemeral and permanent, complete and in a state of becoming, platform generated and user generated, owned and open, recorded and performed, etc.. Its basic tenet is that technological change cannot be steered using old approaches and models neither can the enthusiastic adoption of it by the Y generation be arrested, and that, if we want to have any chance of preserving a digital memory of our present and incumbent future, the ethical rules valid in traditional environments need to be re-interpreted in light of a deep understanding of the interaction of producers, Cloud providers, and societal infrastructure.

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Abstract

On the 16th and 17th January 2014, The Institute for the Protection and the Security of the Citizen (IPSC) of the Joint Research Centre organised a workshop on “Digital memory: ethics perspectives”, framed within the TRUDI project (Building trust in digital interactions: citizens, institutional and corporate ethics). The general objective of the workshop was to gather several perspectives regarding how Information and Communication Technologies, and the digitising momentum are ethically impacting Institutions of Memory, and by what ethics are observed changes being governed. The goal of this two-day workshop was to gather experts (academic and practitioners), from around Europe and abroad, in order to identify and discuss ethical issues arising from governance of Digital Memory in Institutions, in order to support European Commission policies in this field.

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