KONARSKI LECTURES

Artificial intelligence and the future(s) of archival theory and practice

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ABSTRACT

This paper reproduces the text of the third Konarski Lecture, which was presented to an audience in Warsaw on 23 October 2024. It offers a survey of recent developments in artificial intelligence and considers how they relate to archival practices and concepts. It asks what changes they can be expected to bring to the creation, maintenance, preservation, and use of records and archives, and how they can be expected to affect the daily working practices of record creators, archivists, and users of archival services. It also considers whether the growth of artificial intelligence might have implications for our theoretical understandings of archives.

KEY WORDS

archival theory, archival practice, artificial intelligence, computing, digital technology

Sztuczna inteligencja a przyszłość teorii i praktyki archiwalnej

STRESZCZENIE

Niniejszy artykuł zawiera tekst trzeciego wykładu z serii „Konarski Lectures", wygłoszonego 23 października 2024 r. w Warszawie. Zaprezentowano w nim przegląd najnowszych osiągnięć w dziedzinie sztucznej inteligencji oraz rozważania na temat ich związku z praktykami i koncepcjami archiwalnymi. Autor zadaje pytania o zmiany, jakie mogą one przynieść w procesach tworzenia, konserwacji, ochrony oraz wykorzystania dokumentacji i archiwów, a także o to, jak mogą one oddziaływać na codzienną pracę twórców dokumentacji, archiwistów i użytkowników usług archiwalnych. Rozważa również, czy rozwój sztucznej inteligencji może mieć wpływ na rozumienie archiwów w aspekcie teoretycznym.

SŁOWA KLUCZOWE

teoria archiwalna, praktyka archiwalna, sztuczna inteligencja, informatyka, technologia cyfrowa

Introduction

Good afternoon, everyone. I feel greatly honoured that I have been asked to give the 2024 Konarski Lecture, and it is a pleasure to be with you in Warsaw today. I am very grateful to the organisers of this event for their most generous invitation.

In my talk, I will endeavour to build on some of the ideas about trends and directions in archival science that were put forward in the two previous Konarski

Lectures in 2022 and 2023[1]. More specifically, I propose to share some thoughts about artificial intelligence and its likely effects on the future, or futures, of archival theory and practice.

I must begin by emphasising that I am not a computer scientist or an expert on the design of artificial intelligence systems. So I will not attempt to discuss the technical complexities of these systems, recommend methodologies for assessing them, or suggest techniques for implementing them in archival settings.

Instead, I propose to offer a broader overview of how recent developments in artificial intelligence relate to our archival practices and concepts. I will ask what changes they might bring to the creation, maintenance, and preservation of archives, and how they might affect the daily working practices of archivists and users of archival services. I will also consider whether the growth of artificial intelligence might have implications for our theoretical understandings of what archives are (or what they are thought to be) and how we comprehend their meanings and affordances.

Artificial intelligence: surveying the landscape

I am sure that everyone here today will have observed how, over the past twelve months or so, firms such as Microsoft, Google, Apple, and Adobe have begun to incorporate artificial intelligence into operating systems, internet browsers, search engines, email clients, and even PDF viewers. In the summer of 2024, after I found that Microsoft's Copilot artificial intelligence software had installed itself on my computer without asking my permission, it did not take me long to discover that many other people had recently had very similar experiences. It now seems almost impossible to open any piece of everyday software without receiving a pop-up invitation to try the manufacturer's new artificial intelligence tool.

In another observable trend, electronic consumer-goods also increasingly bear claims that they are powered by artificial intelligence. Commentators have noted that some of these claims need to be treated with caution: a wish to appear on the cutting edge sometimes leads manufacturers to exaggerate the artificial intelligence capabilities of their products or to attach an "artificial intelligence"

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[1] L. Duranti, *Why a world gone digital needs archival theory more than ever before?*, "Archeion" 2022, vol. 123, p. 10–30; L. Millar, *Managing "the shapeless mass" in the digital age*, ibidem, 2023, vol. 124, pp. 10–34.

label to products that arguably use less sophisticated modes of computing[2]. This is very much a grey area, because there is no rigid dividing line between artificial intelligence and more traditional computing methods. Nevertheless, it is clear that major changes are now under way in the world of computer technology. In addition to bolting artificial intelligence onto existing applications, software companies have launched, and are likely to continue to launch, new applications designed specifically to take advantage of artificial intelligence techniques. Chat GPT is currently the best-known of these, but it is only one of many players operating in this market. Artificial intelligence, it seems, is now ubiquitous.

In presenting these topics, I am aware that some members of this audience are probably already very knowledgeable about the world of artificial intelligence, while others perhaps know very little. I feel sure that some of you will have become expert in – or at least will have experimented with – the use of artificial intelligence tools, while others may have tried to avoid any entanglement with them. In the light of this, I must ask those who already have some knowledge of the subject to excuse me if I begin by offering a basic introduction to artificial intelligence for the benefit of those who are less familiar with it.

What do we mean by artificial intelligence? The *American National Standard Dictionary of Information Technology* defines it as "the capability of a device to perform functions [...] normally associated with human intelligence, such as reasoning, learning, and self-improvement"[3]. Internationally, the Organisation for Economic Co-operation and Development has defined an artificial intelligence system as "a machine-based system that [...] infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions"[4].

The United Kingdom Government's view of such systems has focused two of their characteristics, which it calls "autonomy" and "adaptivity". Adaptivity refers to the ability of these systems to infer patterns and connections, some of which may not have been envisaged by human programmers. Autonomy refers to

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[2] B. Marr, *Spotting AI Washing: How Companies Overhype Artificial Intelligence*, 2024, https://www.forbes.com/sites/bernardmarr/2024/04/25/spotting-ai-washing-how-companies-overhype-artificial-intelligence/ [access: 14.10.2024].

[3] *American National Standard Dictionary of Information Technology*, 2007, https://www.incits.org/html/ext/ANSDIT/a3.htm [access: 14.10.2024].

[4] Organisation for Economic Co-operation and Development. Recommendation of the Council on Artificial Intelligence, 2024, https://oecd.ai/en/assets/files/OECD-LEGAL-0449-en.pdf, p. 7 [access: 14.10.2024].

their ability to "make decisions without the express intent or ongoing control of a human"[5].

Artificial intelligence is widely said to offer transformative possibilities on an unprecedented scale. It has been heralded as a means of enhancing creativity and innovation while also achieving productivity gains and cost reductions. In industry, it has potential uses in – for example – design, manufacturing, marketing, and sales; in the public services, uses have been identified in areas as diverse as policing, justice, healthcare, and the management of natural resources. It has roles to play in finance, in law, in transport, and in agriculture. It can also be applied in many cultural fields, including art, music, and literature. In scientific domains and in the university sector, it can be used to support teaching, writing grant applications, and statistical analysis, and for a range of other purposes connected with academic research. In the words of former British prime minister Rishi Sunak, it "will bring [...] new opportunities for economic growth, new advances in human capability, and the chance to solve problems that we once thought beyond us"[6].

But there are also anxieties about the risks that can be associated with artificial intelligence systems. According to a policy paper issued by the United Kingdom Government in 2023, their adaptivity "can make it difficult to explain the [...] logic of a system's outcomes", while their autonomy can obstruct attempts to assign responsibility for the system's actions[7]. If the outputs of an artificial intelligence system are not verifiable, public trust in them will rapidly be undermined.

While governments around the world remain very alert to the benefits that artificial intelligence is expected to bring, many of them have growing concerns about its inherent dangers. Several national governments – including those of the United Kingdom, the United States, Japan, and Australia – have responded to these dangers by producing, or working on, best practice recommendations for suppliers or users of artificial intelligence systems. Best practice documents have

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[5]   M. Drake et al., *UK Government Adopts a "Pro-Innovation" Approach to AI Regulation,* 2023, https://www.insideprivacy.com/artificial-intelligence/uk-government-adopts-a-pro-innovation-approach-to-ai-regulation [access: 14.10.2024].

[6]   United Kingdom Government. Prime Minister's Speech on AI: 26 October 2023, 2023, https://www.gov.uk/government/speeches/prime-ministers-speech-on-ai-26-october-2023 [access: 14.10.2024].

[7]   United Kingdom Government. A Pro-Innovation Approach to AI Regulation, 2023, https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper [access: 14.10.2024].

also been disseminated by international agencies such as the Organisation for Economic Co-operation and Development, UNESCO, and the G20 Group of the world's major economies; and by teams of experts focused on particular sectors or employed within particular institutions[8]. Those of you who watched the recent ICA webinar on artificial intelligence will have learnt of a local initiative undertaken by the Canadian Library of Parliament, which issued guidelines about artificial intelligence to employees of the Parliament of Canada[9]. Similarly, many universities now produce guidance notes for students who want to use artificial intelligence tools to assist with essay-writing, and scholarly journals have begun to publish recommendations for authors who have employed artificial intelligence while researching and creating their articles[10].

There is certainly no shortage of guidance documents and recommendations. Indeed, I am tempted to argue that, because so many of these documents have been issued, it is often difficult to choose between them. Some are addressed primarily to developers and vendors of artificial intelligence systems and tools, while others are aimed at organisations, organisational employees, or other individuals seeking to make use of such tools. Variously labelled as governance principles, frameworks, or guidelines, they provide a range of excellent advice, but their adoption is largely discretionary; the effort that has gone into their dissemination has not yet been matched by any detailed studies of their uptake or effectiveness.

The European Artificial Intelligence Act

Many commentators now argue that the most comprehensive response to the challenges brought by the growth of artificial intelligence has come from the European Union. In contrast to initiatives elsewhere in the world, the European

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[8]   For an overview of national and international initiatives, see Hogan Lovells. Global AI Governance Principles, 2023, https://iapp.org/media/pdf/resource_center/hogan_lovells_global_ai_governance_principles.pdf [access: 14.10.2024].

[9]   YouTube. AI and Archives: Advancing Archival Engagement, webinar hosted by the International Council on Archives (ICA) Expert Group for Research and Outreach Services, 19 September 2024, https://www.youtube.com/watch?v=ZXTe7oLK-mc [access: 14.10.2024].

[10]   See, for example, Society of American Archivists. Generative AI in SAA Publications Program, 2024, https://www2.archivists.org/sites/all/files/Publications%20Board_AIstatement_0.pdf [access: 14.10.2024]. In the interest of openness, I am happy to affirm that no artificial intelligence tools were used in the writing of the present paper.

response has taken the shape of formal legislation. After extensive (and sometimes acrimonious) negotiations among a wide variety of stakeholders over a number of years, the European Union has introduced an Artificial Intelligence Act[11]. The Act came into force in August 2024, although implementation of most of its provisions will not begin until 2026. Since it is the world's first – and, at present, the world's only – supra-national attempt at compulsory regulation of the use of artificial intelligence, an examination of its detailed provisions may prove worthwhile.

Broadly speaking, the Act seeks to classify artificial intelligence systems in terms of levels of risk. For much of the period while the Act was in gestation, its drafters proposed a universal scheme that identified four categories of risk: "minimal-risk", "limited-risk", "high-risk", and "unacceptable". The scheme was represented graphically as a pyramid[12], and it was assumed that it would be possible to assign every artificial intelligence system to one of the four categories.

Under this scheme, unacceptable artificial intelligence systems are those that are likely to cause physical or psychological harm, or are deemed to endanger fundamental human rights. They include the use of subliminal or manipulative techniques; systems that aim to "exploit [...] vulnerable groups such as children or persons with disabilities"; so-called "social scoring systems", which set out to evaluate the trustworthiness of individuals based on their social behaviour; and certain uses of biometric or facial recognition systems, such as their remote deployment in public spaces. With very limited exceptions, these applications of artificial intelligence are to be prohibited within the member states of the European Union[13].

High-risk systems are the main focus of the legislation, and are defined mainly in terms of the purposes for which they will be used; these include education, employment and welfare rights, policing, and the administration of justice. When enforcement of the Act begins, systems designed for these purposes will

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[11] Regulation (EU) 2024/1689 of the European Parliament and of the Council, 2024, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401689 [access: 14.10.2024]. Polish version: Rozporządzenie Parlamentu Europejskiego i Rady (UE) 2024/1689, 2024, https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=OJ:L_202401689 [access: 14.10.2024].

[12] See the diagram provided by the European Commission: Shaping Europe's Digital Future: AI Act, 2024, https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai [access: 14.10.2024].

[13] R. J. Neuwirth, *Prohibited Artificial Intelligence Practices in the Proposed EU Artificial Intelligence Act*, "Computer Law & Security Review" 2023, vol. 48, article 105798, pp. 1–14.

not be banned, but will be subject to strict obligations in terms of risk assessment and security precautions. In addition, strong documentation obligations will apply to those who provide and operate them. These measures are evidently intended to address the concerns, frequently expressed by advocates of so-called explainable artificial intelligence[14], that existing artificial intelligence systems are frequently opaque and their outputs often unverifiable. The legislation imposes requirements for the logging of activity to ensure the traceability of results, and for the retention of these logs for an appropriate period. Providers of high-risk systems will also be expected to supply extensive documentation relating to the design, construction, and quality assurance of these systems.

When the European legislation was first proposed, the third category of systems was to consist of those designated as "limited-risk". It was envisaged that these systems would also have transparency requirements, although the requirements would be less rigorous and would simply be intended to allow users to make informed decisions about whether they wish to interact with the system in question. Most discussions about the systems in this category focused on what are often called "generative" and "deep-fake" artificial intelligence. Generative artificial intelligence refers to systems used to generate content such as news articles, research papers, literary works, or real-time responses to questions posed in online chat: content that may appear to be generated by a human being when in fact it is created by a computer. Deep-fake artificial intelligence generally refers to a system that creates or manipulates images, or audio or video recordings, in ways that lead them to represent events that have never occurred, or to depict people saying or doing things that they have never said or done. Users of such systems can easily be misled into believing that they are interacting with another person when they are actually interacting with artificial intelligence, or into believing that content is authentic when it is not.

To mitigate these risks, the legislation enacted in 2024 requires the relevant interfaces to be designed and deployed in ways that ensure that users are aware that they are dealing with the outputs of an artificial intelligence system. Some exceptions are proposed, for example when deep-fakes are used for self-evidently creative or artistic reasons, or when artificial intelligence is used to support crime

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14   S. Ali et al., *Explainable Artificial Intelligence (XAI): What We Know and What Is Left to Attain Trustworthy Artificial Intelligence*, "Information Fusion" 2023, vol. 99, article 101805, p. 1–52; J. Bunn, *Working in Contexts for which Transparency Is Important: A Recordkeeping View of Explainable Artificial Intelligence*, "Records Management Journal" 2020, vol. 30(2), pp. 143–153.

detection; but the general approach is to counteract the risks of impersonation or deception by introducing obligations for transparency[15].

The fourth category of artificial intelligence systems comprises those which, in the opinion of the experts charged with drafting the legislation, present low or "minimal" levels of risk. These include spam filters, most artificial-intelligence-enabled computer games, and – in the workplace arena – systems that support relatively mundane functions such as stock control and inventory management. Some policy-makers have suggested that codes of conduct should be developed for low-risk systems, but in general these systems fall outside the scope of the European legislation.

In short, the goal of the drafters of the legislation was to achieve a balance between the need to mitigate the risks of artificial intelligence and the desire to encourage its use as a means of boosting innovation and productivity. Similar concerns will almost certainly underlie other legislation that is likely to be enacted elsewhere in the world.

Soon after the European Union's legislative proposals were announced, it became evident that they were contentious. In particular, commentators noted that the four proposed categories of risk took little account of the rising numbers of general-purpose artificial intelligence systems that can be used in a wide variety of contexts. In response to these concerns, a set of rules for such systems was drawn up and was added to the draft of the legislation. In the form in which it was eventually enacted into law, the Act requires providers of general-purpose systems to maintain comprehensive documentation about system architecture, training methodologies, testing processes, and energy consumption. In addition, any general-purpose systems deemed to incur what the Act calls "systemic risks" are subject to a range of additional regulatory obligations[16].

Inevitably, however, much of the European law remains controversial. In the media and in wider public debate, numerous questions are being asked, both about artificial intelligence in general and about the European legislators' response to it. Is seeking to regulate its use by categorising levels

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[15] J. Chamberlain, *The Risk-Based Approach of the European Union's Proposed Artificial Intelligence Regulation*, "European Journal of Risk Regulation" 2023, vol. 14, pp. 1–13, at p. 7.

[16] O.J. Gstrein et al., *General-Purpose AI Regulation and the European Union AI Act*, "Internet Policy Review" 2024, vol. 13(3), pp. 1–26, at pp. 10–13; A. Hendry et al., *The EU AI Act: Uncharted Territory for General-Purpose AI*, 2024, https://www.bakerbotts.com/thought-leadership/publications/2024/april/the-eu-ai-act-uncharted-territory-for-general-purpose-ai [access: 14.10.2024].

of risk the right approach? Are the proposed categories mutually exclusive? How will regulators deal with borderline cases? Can general-purpose artificial intelligence systems be controlled satisfactorily within the framework that the drafters of the legislation have envisaged? Will the legislation be able to accommodate new systems that are developed in the future and may not conform to today's paradigms? Do the proposed measures deal adequately with the risk of bias? Should we find the whole movement towards artificial intelligence deeply worrying, whether in terms of its possible exploitation by criminals and terrorist groups, in terms of expected job losses among skilled workers, or in terms of a seismic shift from human responsibility to automated decision-making? Are the proposed control mechanisms robust enough? Isn't it likely that even so-called low-risk systems will need to be closely controlled, at a level far beyond what is currently proposed? These are important questions for the future of human society, and we will undoubtedly hear more about them in the months and years that lie ahead.

Artificial intelligence and the archival profession

But, important as they undoubtedly are, these questions will not be the centrepiece of my talk today. My topic is more closely focused on our own field: my aim will be to encourage you to consider how artificial intelligence is relevant to archivists and to the world of archives.

Very broadly, I think, there are three aspects of artificial intelligence that should be of particular interest to us. The first of these – and the aspect that seems to have attracted most attention among archival professionals – is the potential for using artificial intelligence in our response to the explosive increase in the numbers of documents that are now being created. Of course, the challenge of quantity is not wholly new. When she spoke to this audience last year, Canadian archivist Laura Millar reminded you that as long ago as 1927 Dr Kazimierz Konarski wrote about the "shapeless mass" of archives, the "flood" of documentation that archivists faced a century ago[17]. But in the digital age,

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[17]   L. Millar, *Managing…*, pp. 13, 23, quoting K. Konarski, *On the Issues of Modern Polish Archival Science*, translated and edited by Bartosz Nowożycki, "American Archivist" 2017, vol. 80(1), pp. 213–229, at p. 217 and 226. Similar remarks can be found in K. Konarski, *Nowożytna archiwistyka polska i jej zadania,* Warszawa 2022, p. 145 (originally published in 1929).

quantities of material exceed anything that archivists have experienced in the past, and we need to find ways of managing and providing access to documents and archives on an unprecedented scale.

Consider, for example, the American presidential emails held by the National Archives of the United States. In 2022, there were estimated to be about 600 million of these emails, covering a period of more than 30 years, and fewer than 0.1% of them were available for public access[18]. Governments in other countries have almost certainly used email and other messaging systems on a similar scale, and archival institutions may soon be faced with collections of emails numbering in the billions.

Given the limited resources available to most archivists, how can we expect to appraise materials in such vast numbers? And if we decide that we need to keep some – or even all – of these materials, how will we be able to preserve and give access to them? How will we sustain their findability, usability, and integrity over time, while ensuring appropriate levels of privacy and confidentiality?

I will not try to give detailed answers to these questions this afternoon, but I would like to address them strategically and to argue that we will not be able to cope with the vast increase in the quantity of documentation using traditional hand-crafted approaches. Scaling up our established practices will not be an option. Responses to the challenges we will face will require us to look to automated techniques from the world of computer science, and it is becoming increasingly evident that such techniques will include the use of new generations of artificial intelligence tools.

As yet, of course, there are few such tools built specifically for archival purposes, although a growth in their availability can be expected in the future. To date, as Professor Luciana Duranti noted in the first Konarski Lecture in 2022[19], archivists have focused their efforts on using or adapting general-purpose artificial intelligence tools or tools designed for other market sectors. Tools built to support e-discovery were among the first to receive attention. These are designed to review large collections of documents; whilst their primary function is to identify items relevant to litigation, there have been expectations that they could be repurposed to meet other needs for document classification

[18]   J.R. Baron, *Correcting the Public Record: Reforming Federal and Presidential Records Management*, 2022, p. 8, https://www.hsgac.senate.gov/wp-content/uploads/imo/media/doc/Testimony-Baron -2022-03-15.pdf [access: 14.10.2024].

[19]   L. Duranti, *Why a World…*, p. 24.

and retrieval[20]. Automated recognition tools have also attracted a lot of interest: several archival institutions have used image recognition or audio transcription software enabled or enhanced by artificial intelligence, and the potential value of systems for recognition and transcription of handwritten text has also been widely promoted[21]. Tools of this kind provide innovative ways of accessing and experiencing archives, and it seems almost certain that scholarly researchers, as well as archivists themselves, will increasingly seek to employ them.

Of course, challenges will arise in acquiring the skills and the technical capacity to use these tools. For many archivists, implementing them will also demand cultural adjustment. Some archivists are already resisting the notion of entrusting computers with tasks that have long been the domain of human judgement[22]. The use of artificial intelligence to help with retrieval, content summarisation, metadata extraction, or the production of finding aids will presumably be found widely acceptable; indeed, it may be warmly welcomed, especially by archivists faced with backlogs of work that would otherwise seem intractable. But other potential applications of artificial intelligence in the archival sphere have often seemed considerably more problematic.

Particular concerns have been expressed about artificial intelligence tools that aim to identify sensitive or confidential files in large digital archives; many commentators are far from certain that these tools are trustworthy. Similar anxiety has been voiced about attempts to automate appraisal: stakeholders may be unwilling to trust disposal decisions based on algorithmic analysis. Some archivists have argued that, where digital resources are concerned, an emphasis on disposal is out of keeping with the spirit of our times; others affirm that it remains necessary, but that decisions about the deletion or destruction of documents and the selection of future archives cannot safely be left to computer programs.

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[20] G. Rolan et al., *More Human than Human? Artificial Intelligence in the Archive*, "Archives and Manuscripts" 2019, vol. 47(2), pp. 179–203, at pp. 188–190; The National Archives [of the United Kingdom]. The Application of Technology-Assisted Review to Born-Digital Records Transfer, Inquiries and Beyond, 2016, https://cdn.nationalarchives.gov.uk/documents/technology-assisted-review-to-born-digital-records-transfer.pdf [access: 14.10.2024].

[21] M. Terras, *Inviting AI into the Archives: The Reception of Handwritten Recognition Technology into Historical Manuscript Transcription* [in:] *Archives, Access and Artificial Intelligence,* ed. L. Jaillant, Bielefeld 2022, pp. 179–204.

[22] A.L. Cushing, G. Osti, *"So How Do We Balance All of These Needs?": How the Concept of AI Technology Impacts Digital Archival Expertise*, "Journal of Documentation" 2023, vol. 79(7), pp. 12–29, at p. 20, 24–25.

In 2023, apprehensions of this kind were examined by British records manager James Lappin, who argued that:

> "A distinction can be made between low-stakes and high-stakes applications of artificial intelligence within record systems. Low-stakes usage […] includes the use of AI to rank […] [or] personalise search results, to push recommendations, to provide visualisation of contents and in entity extraction. These are all […] useful ways of making records more exploitable. […] However, […] a machine model's judgement[s] […] used as a basis for actions which change […] the retention […] or […] access rules applying to […] records […] are high-stakes decisions: if an organisation expunges a record, […] then that record is no longer available […]; if an individual or group is wrongly given access to […] records, then revoking that access at a later date may be too late to prevent harm being done"[23].

The distinction that Lappin sought to make can usefully be compared to the categorisation of risk in the European Artificial Intelligence Act. His "high stakes" seem a close match to the European legislators' notion of "high risk", and unease about "high-stakes" applications on the part of records managers and archivists parallels the concerns expressed by the legislators about high-risk systems. In both cases, special measures and additional safeguards have been deemed essential. In the case of decisions about the retention or the sensitivity of records and archives, it has plausibly been argued that artificial intelligence – and other automated tools – should be used only as a supplement to human-centred review processes[24].

Questions about retention in an era of rapid technological development have given rise to several further tiers of controversy in professional debate. Some archivists have argued that emerging analytic techniques for "big data" now demand that ruthless appraisal and destruction policies be abandoned in favour of the preservation of records in substantial quantities; others have affirmed that privacy considerations or data protection law counteract these demands, or

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[23]   J. Lappin, *The Science of Recordkeeping Systems – a Realist Perspective*, doctoral thesis, University of Loughborough 2023, pp. 387–388.

[24]   J.R. Baron, M.F. Sayed, D.W. Oard, *Providing More Efficient Access to Government Records: A Use Case Involving Application of Machine Learning to Improve FOIA Review for the Deliberative Process Privilege*, "Journal on Computing and Cultural Heritage" 2022, vol. 15(1), article 5, pp. 1–19, at p. 16.; Cf. R. Harvey, D. Thompson, *Automating the Appraisal of Digital Materials*, "Library HiTech" 2010, vol. 28(2), pp. 313–322, at p. 319.

that the retention of huge numbers of records is impossible in practical terms. Some have pointed to evidence about the environmental impact of large-scale digital preservation and have sought to use this evidence to support arguments for the systematic destruction of records; others have contended that we must find a way of minimising such impact so that the records future researchers will need can be preserved[25].

I am among those who have argued that appraisal and selection decisions are always flawed, and that in the digital world we can escape many of their defects if we keep records in larger quantities. We cannot keep everything, but if we can find preservation methods that are ecologically viable new technologies will allow us to serve future generations of users by retaining more records than archival institutions have customarily kept in the past. We can also expect that new technologies will supply innovative modes of comprehending and gaining access to records in large aggregations whose size and scale would otherwise seem impossibly daunting. The primary role of artificial intelligence will not, or should not, be in selecting records for destruction; instead, we should see it as a means of facilitating the ongoing management and use of records in abundant quantities[26].

Although archival professionals have divergent opinions on these matters, I think there is widespread agreement that these are important issues that the profession needs to address as a matter of urgency. I believe there is also a growing consensus that – whatever may be our preferred solution to these challenges – we can no longer rely wholly on traditional manual methods in our daily work. In an age of digital profusion, we will not be able to capture, manage, and give access to archives unless we harness appropriate technological tools.

Moving on from the working practices of archival institutions, the second aspect of artificial intelligence that has important consequences for our profession is its use in an ever-growing range of contexts where records of personal and

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[25]   M. Addis, *What Is the Carbon Footprint of Large-Scale Global Digital Preservation?*, 2023, https://www.dpconline.org/blog/blog-matthew-addis-ipres23 [access: 14.10.2024]; A. Nicolet, B. Makhlouf Shabou, *Coûts écologiques de nos pratiques archivistiques*, "Comma" 2021, vol. 2, pp. 399–415; K.L. Pendergrass et al., *Toward Environmentally Sustainable Digital Preservation*, "American Archivist" 2019, vol. 82(1), pp. 165–206.

[26]   G. Yeo, *Can We Keep Everything? The Future of Appraisal in a World of Digital Profusion* [in:] *Archival Futures,* ed. C. Brown, London 2018, pp. 45–63. Very similar arguments have been put forward independently by T. van der Werf and B. van der Werf: eidem, *Will Archivists Use AI to Enhance or to Dumb Down Our Societal Memory?*, "AI & Society" 2022, vol. 37(3), pp. 985–988.

organisational activities are created. I am sure you will have observed that many of the artificial intelligence applications that have started to appear in everyday software are described as "AI assistants". The label is meant to be reassuring: these applications are intended to help us in the tasks we need to perform, but they are not explicitly meant to usurp our role and perform the entire task on our behalf. In practice, however, users seeking to trim their workloads are finding that they can now often delegate the whole of a task to an automated "assistant". There are also growing numbers of more specialist applications of artificial intelligence that do not simply claim to "assist", but instead explicitly offer to eliminate any obligation for humans to contribute to a particular set of tasks. Tools of this kind will significantly alter the ways in which documentation is created in – and beyond – the workplace.

There are many possible examples, but I will mention just a few. Artificial intelligence tools can now be used to create minutes of online meetings; any human checking of the minutes for accuracy and completeness is entirely optional[27]. Even more controversially, in the field of recruitment, artificial intelligence can be deployed, not merely in the initial sifting of job applications, but also in the use of robots to conduct interviews – a practice that is already under way in countries such as Sweden[28]. A school in London has set up a course that employs no human teachers: students are taught and their work evaluated entirely by artificial intelligence tools[29]. And those of you who have been following the debates about blockchain will doubtless be familiar with so-called "smart contracts": forms of contract that are made on behalf of organisations without any direct human intervention and are increasingly powered by artificial intelligence[30].

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[27] C. Griffiths, *How to Use Copilot to Keep Teams Meeting Minutes and Action Points*, 2024, https://aag-it.com/how-to-use-copilot-to-keep-meeting-minutes-and-action-points/ [access: 14.10.2024].

[28] J. Davies, *Robot Interviewers: How Recruitment Is Evolving for Gen Z Professionals*, 2023, https://www.worklife.news/technology/robot-interviewers-how-recruitment-is-evolving-for-gen-z-professionals/ [access: 14.10.2024].

[29] M. Carroll, *UK's First "Teacherless" AI Classroom Set to Open in London,* 2024, https://news.sky.com/story/uks-first-teacherless-ai-classroom-set-to-open-in-london-13200637 [access: 14.10.2024].

[30] A. Jackob, *The Rise of AI-Based Smart Contract Development: A Paradigm Shift in Blockchain Technology*, 2024, https://medium.com/coinmonks/the-rise-of-ai-based-smart-contract-development-a-paradigm-shift-in-blockchain-technology-1007f14eac78 [access: 14.10.2024]; M. Krichen, *Strengthening the Security of Smart Contracts through the Power of Artificial Intelligence*, "Computers" 2023, vol. 12(5), article 107, pp. 1–18, https://www.mdpi.com/2073-431X/12/5/107 [access: 14.10.2024].

Artificial intelligence systems also have the potential to allow records to be created more or less effortlessly in circumstances where record-making was previously deemed difficult or impossible. In addition, the proliferation of artificial intelligence is giving rise to new contexts in which records are, or arguably should be, made and kept: the deployment of automated sensors in "smart" devices in the so-called "Internet of Things" is perhaps the most obvious example[31].

All these developments will affect the shape of future documentation, as well as the contexts in which it is generated. This documentation will need to be managed, and at least some of it can be expected to warrant long-term archival preservation. So these changes will have a profound impact on the materials that future archivists will receive and the ways in which these materials may be contextualised and interpreted.

The third aspect of the growth of artifical intelligence that is or should be of great interest to archivists relates directly to the safeguards and precautions that the European legislation addresses. You will have noticed that, when I was speaking about this legislation earlier in this talk, I mentioned its requirement for both the design and the use of high-risk artificial intelligence systems to be fully documented. It seems to me that the careful and thorough documentation of high-risk systems will be of crucial importance in the coming years, and I believe that there will be a key role for our profession in making sure that documentation of this kind is as complete and accurate as possible, that it is securely captured and properly maintained, and that it is preserved for as long as it is needed. The European lawmakers haven't wholly overlooked these issues: the legislation makes specific reference to record-keeping and requires that, in the interest of traceability, all activity logs should be kept for at least six months[32]. However, I'm sure that many archivists will want to argue that the documentation of high-risk systems should be retained for a much longer period, and that at least some of it should be preserved indefinitely.

Besides our concern with preserving system documentation, there is a further aspect of the development of the European legislation which I think will attract

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[31] G. Colavizza et al., *Archives and AI: An Overview of Current Debates and Future Perspectives*, "Journal on Computing and Cultural Heritage" 2022, vol. 15(1), article 4, pp. 1–15, at p. 8; G. Yeo, J. Lowry, *Data, Information and Records: Exploring Definitions and Relationships* [in:] *A Matter of Trust: Building Integrity into Data, Statistics and Records to Support the Sustainable Development Goals,* ed. A. Thurston, London 2020, pp. 49–66, at pp. 58–59.

[32] Regulation (EU) 2024/1689 of the European Parliament and of the Council, pp. 59, 64.

the notice of archivists. I mentioned that the legislators originally proposed to categorise so-called "deep-fake" artificial intelligence as "limited-risk", and I imagine that I may not be the only person here today to find this surprising. Let me quote Dan Cooper and his colleagues, from the American multinational law firm of Covington and Burling: deep-fake artificial intelligence, these lawyers say, "features [...] natural persons appearing to say or do something they have never said or done, in a manner that would falsely appear to be authentic"[33]. In the traditional language of archivists, deep-fakes are *forgeries*: they purport to be something that they are not, and users of them who are not alert to their falsity are likely to be deceived.

Perpetrating deceit by means of forgery is not a matter that should be lightly dismissed. Not every deep-fake is created with deceptive intent, but deep-fake technologies undoubtedly open up many possibilities for deceit. Those of you who peruse the international news media have probably seen some of the deep-fake images that have proliferated in connection with the 2024 presidential election in the United States. Many of these images appear highly plausible; a casual viewer may find it almost impossible to detect that they have been faked. And it seems clear that almost all of them have been produced with malign intent. They have been circulated in order to manipulate the result of the election by influencing voters' perceptions of the candidates[34].

From an archivist's perspective, describing forgeries of this kind as "limited-risk" seems a severe under-estimation of the dangers that may arise if they find their way into archival repositories without their fake status being noted. If today's viewers are easily misled by them, it seems even more likely that tomorrow's historical researchers will be deceived. The European legislation in its enacted form contains stricter regulations about the creation and use of deep-fakes than those included in some of the earlier drafts of the Act. Nevertheless, if archival professionals are truly concerned about the reliability and trustworthiness of future historical resources, this remains an issue on which we should be lobbying our political representatives.

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[33] D. Cooper et al., *A Preview into the European Parliament's Position on the EU's AI Act Proposal,* 2023, https://www.insideprivacy.com/artificial-intelligence/a-preview-into-the-european-parliaments-position-on-the-eus-ai-act-proposal [access: 14.10.2024].

[34] S. Bond, *How AI-Generated Memes Are Changing the 2024 Election,* 2024, https://www.npr.org/2024/08/30/nx-s1-5087913/donald-trump-artificial-intelligence-memes-deepfakes-taylor-swift [access: 14.10.2024].

Conclusion: the impact of artificial intelligence on archival concepts and practices

The final question that I would like to address this afternoon is how artificial intelligence might affect our professional thinking. Will it oblige us to revise our conceptual and theoretical understandings of archival science? Some recent commentators have suggested that the growth of artificial intelligence may require us to reconsider the principles of provenance and original order[35], while others have surmised that, at an even more fundamental level, it may lead us to rethink our ideas of what records and archives might be[36].

These are interesting suggestions, but I feel that a note of caution is required. Questioning of the conceptions of earlier generations of archivists began long before artificial intelligence tools became widely available. As early as the 1990s, some commentators sought to move beyond traditional perceptions of archives as rigidly arranged entities and began to look for more flexible ways of addressing archival contexts[37]. Over several decades, the archival profession has come to understand that no single ordering of an archive can capture the multiple relationships of archival materials or serve the multiple needs of their diverse users[38]. Artificial intelligence makes it easy to put these new understandings into practice. It enhances our ability to re-organise and re-aggregate the components of an archive to meet the requirements of different stakeholders; instead of a single arrangement (a so-called original order), we can have multiple arrangements simultaneously[39]. Provenance and context remain crucial, and

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[35] G. Colavizzi et al., *Archives and AI…*, p. 9; J. Lappin, *The Science of Recordkeeping…*, p. 406.

[36] D. Mordell, *Neither Physical nor Juridical Persons: Electronic Personhood and an Evolving Theory of Archival Diplomatics*, "Archives and Records" 2021, vol. 42(1), pp. 25–39, at p. 26.

[37] See, for example, C. Hurley, *Problems with Provenance*, "Archives and Manuscripts" 1995, vol. 23(2), pp. 234–259. The lineage of these ideas can be traced back to P.J. Scott, *The Record Group Concept: A Case for Abandonment*, "American Archivist" 1966, vol. 29(4), pp. 493–504.

[38] J. Bailey, *Disrespect des Fonds: Rethinking Arrangement and Description in Born-Digital Archives*, "Archive Journal" 2013, vol. 3, https://www.archivejournal.net/essays/disrespect-des-fonds-rethinking-arrangement-and-description-in-born-digital-archives/ [access: 14.10.2024]; G. Michetti, *Archives Are Not Trees* [in:] *The Memory of the World in the Digital Age,* eds. L. Duranti, E. Shaffer, Vancouver 2013, pp. 1002–1010; G. Yeo, *Contexts, Original Orders, and Item-Level Orientation: Responding Creatively to Users' Needs and Technological Change*, "Journal of Archival Organization" 2015, vol. 12(3-4), pp. 170–185.

[39] J. Lappin, *Records Management before and after the AI Revolution,* 2020, https://thinkingrecords.co.uk/2020/01/30/records-management-before-and-after-the-ai-revolution/ [access: 14.10.2024].

artificial intelligence can be expected to facilitate the modelling or documentation of archival contexts in powerful ways that do not depend on physical ordering. But although artificial intelligence tools can help us to achieve these objectives at a practical level, the artificial intelligence revolution did not give birth to the underlying conceptual understandings, which had already emerged from an intellectual environment that owed as much to postmodernism and inclusivity models as to developments in technology.

We may reach a broadly similar conclusion when we address issues relating to deep-fakes, which I spoke about earlier. Undoubtedly, archivists need to be aware of the dangers that artificial intelligence brings. It makes fake documents and images easy to construct and hard to detect, and a likely consequence of this is that they will be created in increasing numbers. We may need to refine our practical methods of identifying and categorising forgeries in order to respond to these dangers; in an overheated technological future, we may find that we need to use artificial-intelligence-driven detection tools to identify artificial-intelligence-driven forgeries[40]. But at a conceptual level, at the level of understanding what we mean by concepts such as authenticity, reliability, and trustworthiness, the issues that arise from deep-fake technology are no different from those that arise from other modes of falsification that have been used in the past. Concepts of authenticity are open to differing interpretation, but the growth of artificial intelligence does not demand a wholly new understanding of them; it merely gives renewed emphasis to a range of understandings that we already possess.

Much the same can be said about our understandings of archives themselves. Artificial intelligence offers new ways of creating, maintaining, and using archives. It also seems likely to facilitate the creation and preservation of a broader range of archival material than we experienced in the past. These changes will certainly have important consequences for our working lives. But I am not convinced that artificial intelligence will require a fundamental re-invention of conceptual ideas about archives.

Even in the era of artificial intelligence, archives will still represent, and emerge from, activities and events that take place in the world. Their provenance and their contextual relationships will still need to be safeguarded, alongside their content and structure. They will continue to fulfil important roles in society,

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[40] A. Gaurav et al., *Forgery Detection Based on Deep Learning for Smart Systems* [in:] *Digital Forensics and Cyber Crime Investigation: Recent Advances and Future Directions,* ed. A.A. Abd El-Latif et al., Boca Raton 2025, pp. 196–210.

because there will still be demands for the evidence and information they can provide, the accountability they can support, and the aids to memory they can supply. And they will remain potential sources of controversy, not least because they often operate as instruments of power and authority, and because they sometimes bring trauma as well as knowledge and edification.

Of course, concepts of archives are very diverse, and ideas about what archives are and how they function will continue to evolve. New conceptualisations will almost certainly continue to appear in the years ahead, both within and outside the professional community of archivists. Some, perhaps many, of these new conceptualisations will probably be influenced in some way by the growth of artificial intelligence. But I think it is unlikely that artificial intelligence will be the sole or even the main force that drives them.

It is at the practical, not the conceptual, level that changes will be experienced most acutely, and it is at the practical level that our response to artificial intelligence needs to be focused. We must consider how best we can ensure the capture of relevant documentation from artificial intelligence systems. We must explore ways of managing what we capture, perhaps using advanced artificial intelligence tools to manage the outputs of other artificial intelligence tools. And we must remember that we do not simply require search tools; we need tools to support digital preservation and tools that can provide overviews of complex aggregations and uncover their interrelationships. As yet, we do not fully understand the cultural and emotional responses that such tools will evoke. But we can expect that, if we can acquire confidence in them, these technologies will increasingly overcome the difficulties of maintaining digital documents on an extended scale. Computational methods will allow us to give access to large digital archives by facilitating tasks that would otherwise be impossibly arduous.

Bibliography

Addis M., *What Is the Carbon Footprint of Large-Scale Global Digital Preservation?*, 2023, https://www.dpconline.org/blog/blog-matthew-addis-ipres23 [access: 14.10.2024].

Ali S., Abuhmed T., El-Sappagh S., Muhhamad K., Alonso-Moral J.M., Confalonieri R., Guidotti R., Del Ser J., Díaz-Rodríguez N., Herrera Triguero F., *Explainable Artificial Intelligence (XAI): What We Know and What Is Left to Attain Trustworthy Artificial Intelligence*, "Information Fusion" 2023, vol. 99, article 101805, pp. 1–52.

American National Standard Dictionary of Information Technology, 2007, https://www.incits.org/html/ext/ANSDIT/a3.htm [access: 14.10.2024].

Bailey J., *Disrespect des Fonds: Rethinking Arrangement and Description in Born-Digital Archives*, "Archive Journal" 2013, vol. 3, https://www.archivejournal.net/essays/disrespect-des-fonds-rethinking-arrangement-and-description-in-born-digital-archives/ [access: 14.10.2024].

Baron J.R., *Correcting the Public Record: Reforming Federal and Presidential Records Management*, 2022, https://www.hsgac.senate.gov/wp-content/uploads/imo/media/doc/Testimony-Baron-2022-03-15.pdf [access: 14.10.2024].

Baron J.R., Sayed M.S., Oard D.W., *Providing More Efficient Access to Government Records: A Use Case Involving Application of Machine Learning to Improve FOIA Review for the Deliberative Process Privilege*, "Journal on Computing and Cultural Heritage" 2022, vol. 15(1), article 5, pp. 1–19.

Bond S., *How AI-Generated Memes Are Changing the 2024 Election,* 2024, https://www.npr.org/2024/08/30/nx-s1-5087913/donald-trump-artificial-intelligence-memes-deepfakes-taylor-swift [access: 14.10.2024].

Bunn J., *Working in Contexts for which Transparency Is Important: A Recordkeeping View of Explainable Artificial Intelligence*, "Records Management Journal" 2020, vol. 30(2), pp. 143–153.

Carroll M., *UK's First "Teacherless" AI Classroom Set to Open in London,* 2024, https://news.sky.com/story/uks-first-teacherless-ai-classroom-set-to-open-in-london-13200637 [access: 14.10.2024].

Chamberlain J., *The Risk-Based Approach of the European Union's Proposed Artificial Intelligence Regulation*, "European Journal of Risk Regulation" 2023, vol. 14, pp. 1–13.

Colavizza G., Blanke T., Jeurgens Ch., Noordegraaf J., *Archives and AI: An Overview of Current Debates and Future Perspectives*, "Journal on Computing and Cultural Heritage" 2022, vol. 15(1), article 4, pp. 1–15.

Cooper D., Peets L., Hansen M., Jungyun Choi S., Drake M., Oberschelp de Meneses A., *A Preview into the European Parliament's Position on the EU's AI Act Proposal,* 2023, https://www.insideprivacy.com/artificial-intelligence/a-preview-into-the-european-parliam ents-position-on-the-eus-ai-act-proposal [access: 14.10.2024].

Cushing A.L., Osti G., *"So How Do We Balance All of These Needs?": How the Concept of AI Technology Impacts Digital Archival Expertise*, "Journal of Documentation" 2023, vol. 79(7), pp. 12–29.

Davies J., *Robot Interviewers: How Recruitment Is Evolving for Gen Z Professionals*, 2023, https://www.worklife.news/technology/robot-interviewers-how-recruitment-is-evolving-for-gen-z-professionals/ [access: 14.10.2024].

Drake M., Agyekum J., Hansen M., Peets L., Young M., *UK Government Adopts a "Pro-Innovation" Approach to AI Regulation,* 2023, https://www.insideprivacy.com/artificial-intelligence/uk-government-adopts-a-pro-innovation-approach-to-ai-regulation [access: 14.10.2024].

Duranti L., *Why a world gone digital needs archival theory more than ever before?*, "Archeion" 2022, vol. 123, pp. 10–30.

European Commission. Shaping Europe's Digital Future: AI Act, 2024, https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai [access: 14.10.2024].

Gaurav A., Gupta B.B., Bansal S., Tai Chiu K., *Forgery Detection Based on Deep Learning for Smart Systems* [in:] *Digital Forensics and Cyber Crime Investigation: Recent Advances and Future Directions,* eds. A.A Abd El-Lafit, L. Tawalbeh, M. Mohanty, B.B. Gupta, K.E. Psannis, Boca Raton 2025, pp. 196–210.

Griffiths C., *How to Use Copilot to Keep Teams Meeting Minutes and Action Points*, 2024, https://aag-it.com/how-to-use-copilot-to-keep-meeting-minutes-and-action-points/ [access: 14.10.2024].

Gstrein O.J., Haleem N., Zwitter A., *General-Purpose AI Regulation and the European Union AI Act*, "Internet Policy Review" 2024, vol. 13(3), pp. 1–26.

Harvey R., Thompson D., *Automating the Appraisal of Digital Materials*, "Library HiTech" 2010, vol. 28(2), pp. 313–322.

Hendry A., Lugard P., Hancock P., *The EU AI Act: Uncharted Territory for General-Purpose AI,* 2024, https://www.bakerbotts.com/thought-leadership/publications/2024/april/the-eu-ai-act-uncharted-territory-for-general-purpose-ai [access: 14.10.2024].

Hogan Lovells. Global AI Governance Principles, 2023, https://iapp.org/media/pdf/resource_center/hogan_lovells_global_ai_governance_principles.pdf [access: 14.10.2024].

Hurley C., *Problems with Provenance*, "Archives and Manuscripts" 1995, vol. 23(2), pp. 234–259.

Jackob A., *The Rise of AI-Based Smart Contract Development: A Paradigm Shift in Blockchain Technology*, 2024, https://medium.com/coinmonks/the-rise-of-ai-based-smart-contract-development-a-paradigm-shift-in-blockchain-technology-1007f14eac78 [access: 14.10.2024].

Konarski K., *Nowożytna archiwistyka polska i jej zadania,* Warszawa 2022.

Konarski K., *On the Issues of Modern Polish Archival Science*, translated and edited by Bartosz Nowożycki, "American Archivist" 2017, vol. 80(1), pp. 213–229.

Krichen M., *Strengthening the Security of Smart Contracts through the Power of Artificial Intelligence*, "Computers" 2023, vol. 12(5), article 107, pp. 1–18, https://www.mdpi.com/2073-431X/12/5/107 [access: 14.10.2024].

Lappin J., *Records Management before and after the AI Revolution,* 2020, https://thinkingrecords.co.uk/2020/01/30/records-management-before-and-after-the-ai-revolution/ [access: 14.10.2024].

Lappin J., *The Science of Recordkeeping Systems – a Realist Perspective*, doctoral thesis, University of Loughborough 2023, pp. 387–388.

Marr B., *Spotting AI Washing: How Companies Overhype Artificial Intelligence*, 2024, https://www.forbes.com/sites/bernardmarr/2024/04/25/spotting-ai-washing-how-companies-overhype-artificial-intelligence/ [access: 14.10.2024].

Michetti G., *Archives Are Not Trees* [in:] *The Memory of the World in the Digital Age,* eds. L. Duranti, E. Shaffer, Vancouver 2013, pp. 1002–1010.

Millar L., *Managing "the shapeless mass" in the digital age*, "Archeion" 2023, vol. 124, pp. 10–34.

Mordell D., *Neither Physical nor Juridical Persons: Electronic Personhood and an Evolving Theory of Archival Diplomatics*, "Archives and Records" 2021, vol. 42(1), pp. 25–39.

Neuwirth R.J., *Prohibited Artificial Intelligence Practices in the Proposed EU Artificial Intelligence Act*, "Computer Law & Security Review" 2023, vol. 48, article 105798, pp. 1–14.

Nicolet A., Makhlouf Shabou B., *Coûts écologiques de nos pratiques archivistiques*, "Comma" 2021, vol. 2, pp. 399–415.

Organisation for Economic Co-operation and Development. Recommendation of the Council on Artificial Intelligence, 2024, https://oecd.ai/en/assets/files/OECD-LEGAL-0449-en.pdf, p. 7 [access: 14.10.2024].

Pendergrass K.L., Sampson W., Walsh T., Alagna L., *Toward Environmentally Sustainable Digital Preservation*, "American Archivist" 2019, vol. 82(1), pp. 165–206.

Regulation (EU) 2024/1689 of the European Parliament and of the Council, 2024, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401689 [access: 14.10.2024]. Polish version: Rozporządzenie Parlamentu Europejskiego i Rady (UE) 2024/1689, 2024, https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=OJ:L_202401689 [access: 14.10.2024].

Rolan G., Humphries G., Jeffrey L., Samaras E., Antsoupova T., Stuart K., *More Human than Human? Artificial Intelligence in the Archive*, "Archives and Manuscripts" 2019, vol. 47(2), pp. 179–203.

Scott P.J., *The Record Group Concept: A Case for Abandonment*, "American Archivist" 1966, vol. 29(4), pp. 493–504.

Society of American Archivists. Generative AI in SAA Publications Program, 2024, https://www2.archivists.org/sites/all/files/Publications%20Board_AIstatement_0.pdf [access: 14.10.2024].

Terras M., *Inviting AI into the Archives: The Reception of Handwritten Recognition Technology into Historical Manuscript Transcription* [in:] *Archives, Access and Artificial Intelligence,* ed. L. Jaillant, Bielefeld 2022, pp. 179–204.

The National Archives [of the United Kingdom]. The Application of Technology-Assisted Review to Born-Digital Records Transfer, Inquiries and Beyond, 2016, https://cdn.nationalarchives.gov.uk/documents/technology-assisted-review-to-born-digital-records-transfer.pdf [access: 14.10.2024].

United Kingdom Government. A Pro-Innovation Approach to AI Regulation, 2023, https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper [access: 14.10.2024].

United Kingdom Government. Prime Minister's Speech on AI: 26 October 2023, 2023, https://www.gov.uk/government/speeches/prime-ministers-speech-on-ai-26-october-2023 [access: 14.10.2024].

Werf T. van der, Werf B. van der, *Will Archivists Use AI to Enhance or to Dumb Down Our Societal Memory?*, "AI & Society" 2022, vol. 37(3), pp. 985–988.

Yeo G., *Can We Keep Everything? The Future of Appraisal in a World of Digital Profusion* [in:] *Archival Futures,* ed. C. Brown, London 2018, pp. 45–63.

Yeo G., *Contexts, Original Orders, and Item-Level Orientation: Responding Creatively to Users' Needs and Technological Change*, "Journal of Archival Organization" 2015, vol. 12(3-4), pp. 170–185.

Yeo G., Lowry J., *Data, Information and Records: Exploring Definitions and Relationships* [in:] *A Matter of Trust: Building Integrity into Data, Statistics and Records to Support the Sustainable Development Goals*, ed. A. Thurston, London 2020, pp. 49–66.

YouTube. AI and Archives: Advancing Archival Engagement, webinar hosted by the International Council on Archives (ICA) Expert Group for Research and Outreach Services, 19 September 2024, https://www.youtube.com/watch?v=ZXTe7oLK-mc [access: 14.10.2024].