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TELEVISION IN AND AFTER THE ARCHIVE: CATALOGUES, DATABASES, INTERFACES AND OTHER WAYS TO ORGANIZE AUDIOVISUAL RECORDS

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Abstract: This editorial essay introduces the *VIEW Journal of European Television History and Culture* Special Issue on how algorithmic curation mediates archival practices and influences the management, preservation and accessibility of television content. Within this scope, it examines the evolving role of television archiving in the shaping of audiovisual culture against the backdrop of significant advancements in media technologies and infrastructures. As streaming platforms like Netflix and Amazon Prime Video have transformed the landscape of television production, distribution, and reception, the growing reliance on algorithms presents both challenges and opportunities for audiovisual heritage. Taking a comparative historical perspective, this editorial underscores past, present, and future understandings of television archiving in an era characterized by pervasive digitization. By doing so, it provides an overview of how the papers reflect on the fragmented nature of television archives and repositories in the European landscape. Significant attention is given to the technocultural transformation of the archival work in light of digital and algorithmic practices, emphasizing how these innovations contribute to the making of cultural identities and collective memory while also raising questions on the circulation of television content after its initial broadcasting lifecycle. By taking a glimpse into each contribution, this introduction problematizes the interplay of data management workflows, digital library systems, user-centered platforms and their impact on the permanence of television content in online repositories. Ultimately, the issue advocates for collaborative efforts between archivists and media scholars to navigate the complexities of audiovisual archiving in an increasingly data-driven landscape.

Editorial

Against the backdrop of recent technological advancements, media scholars have discussed a digital¹, computational², algorithmic turn³ in television. This shift highlights the growing network of infrastructures, content-

hosting and delivery platforms, and other techno-cultural adaptations that have transformed television production, distribution, and reception. The impact of streaming television and its reliance on algorithms have been widely examined in relation to economic, political, social, geographic, and regulatory dimensions.⁴ In these academic studies, particular attention is given to the scale of audiovisual transmission, as well as the unprecedented increase of television content made available over the Internet. International streaming companies like Netflix or Amazon Prime Video are able to service several countries and regions all over the world, and remotely store hundreds or thousands of titles at once, ready to play on demand. Within a national scale, local television archives address similar issues of cataloguing, sorting and indexing audiovisual content from large collections.

Considering the overall archival tendency of contemporary media, this issue investigates how algorithmic curation plays out in the ecology of television archives among other attempts to preserve and organize audiovisual records. By bringing scholarly attention to both the role of streaming platforms as content repositories and the role of television archives in the circulation of audiovisual heritage, we set out to explore how digital and algorithmic practices have evolved into contemporary audiovisual archiving. Contributions to this issue address practices of storing, structuring, and accessing television content, from complex digital library systems able to classify, sort and display audiovisual materials for simultaneous distribution on online catalogues to digital interfaces designed to improve data discovery and information retrieval. In the era of algorithmic media, we put forward the argument that 'algorithmic television'⁵ functions as an archive in its own right, where automated classification and recommendation algorithms shape how television content is presented and received. Our original intention was to explore how archival practices, storage infrastructures and data management systems have been redefined by algorithmic methods within television archives across Europe. From this original scope, the academic inquiry pursued in this issue unveiled a much richer overview of audiovisual archiving and how it pours over media culture, literacy and pedagogy, by framing television history, dictating its social uses, and redirecting non-institutionalized practices of media consumption. At a time of pervasive digitization and datafication of culture, we have come to understand that most audiovisual archives still exist within their own analog socio-cultural histories, and that the new archival constructs emerged with 'digital television' are still profoundly entangled with traditional curatorial apparatuses. The papers included in this publication provide valuable insights into this entanglement between the past, present and future of audiovisual archival practices, both in Europe and abroad. Supported by a series of curated interviews with archival professionals and experts, this issue helps elucidate the history of television archiving from its inception to present days, shedding light on its multifaceted evolution throughout a number of media and filing formats.

To archive television means to account for its sometimes precarious materiality, changing technologies, fast-paced production and distribution pipelines. These aspects, along with the initial lack of well-established archival protocols for the long term management and preservation of audiovisual material, caused the television industry to face data storage challenges since its beginning, often leading to non-archival practices, such as overwriting or unrecorded live-reporting, and resulting in the partial or total loss of many early television programs. Furthermore, inconsistent records management, editorial planning, and financial support led many media corporations to adopt, over the years, somewhat dishomogeneous and temporary solutions for content archival and classification while searching for more standardized and sustainable options. The question of whether and how to archive television programs has been closely tied to technological advancements - e.g., the shift from live to recorded broadcasting, changes in the production of television programs, evolutions in transmission standards -, as well as to commercial decisions on the allocation of available financial resources and definition of editorial strategies in a rising media market. When television recordings started to be archived for future reruns, more issues arose as to how to guarantee their long term material conservation and organization.

These challenges were amplified by the highly localized nature of television, which prompted audiovisual archives across different countries to evolve with substantial incongruence in their institutional nature, as well as in the availability of physical storage space, financial capacity, and usage of archival standards. On the one hand, legacy media predating the information age were able to allocate consistent resources for the storage and preservation of analog in-house archives, which offered the premise for the digital migration initiatives to come. On the other hand, the dynamic and transient nature of smaller local television networks undermined many archival efforts - the **list of**

defunct television channels is long -, with minor if not absent record-management plans for the upkeep and preservation of many audiovisual productions. The result is a fragmented geography of television archives, varying by country, with more or less institutionalized record management approaches and uneven cataloguing practices. By the time non-commercial television archives were created, the content acquired was likely to be either unlabeled, mislabeled, incomplete, disorganized or following 'non-standardized' labeling systems. In the 1990s, access to digital technologies offered a viable solution to alter the dire state of television archives and ensure more consistent management of audiovisual heritage. Regulatory frameworks and funding for digital preservation followed, with most digitization initiatives in audiovisual archives across Europe and the US dating back to the late 1990s and early 2000s.

It is evident that television as a broadcasting medium has undergone an irregular evolution in what concerns practices of record-keeping, due to the material fragility of early formats and a constant exposure to technological transitions. While the establishment of media corporations' archives would eventually converge into attempts to leverage media archives for commercial distribution via automated content indexing and filtering in proprietary streaming platforms, the acquisition, curation and maintenance of audiovisual archives in academic and non-profit institutions followed its own evolutionary path. In Europe, the fractured topography of television archives has produced a variety of strategies for the conservation of audiovisual material — from nationwide digitization plans for preserving public television production, to private media corporations curating digital repositories for commercial purposes or local broadcasting channels entrusting their collections to institutional archives. Today, ever more sophisticated technologies not only open up to unprecedented potentials for the management and preservation of audiovisual records held in archives, but they also redefine access to television content through interactive practices and personalized experiences that affect the formation of cultural identities. In parallel, the need of streaming services to prioritize content classification for their commercial profit fostered major advancements in the cataloguing of digital televisual records, with large scale projects for the development of queryable databases, scalable media infrastructures and the implementation of algorithms for automated content tagging and indexing. Relying on computationally demanding systems, streaming services developed semi-automated solutions for information filtering and retrieval that offered a response to the longtime challenge of archiving audiovisual content.

In the time of algorithmic media, where algorithmic television counts as an archive in its own right, particular attention has been given to filtering and recommendation systems and the ways they dictate our access to television production. With this issue, we hope to gain further insight into the relation between algorithmic curation and archive-based practices, accounting for the intersection between information architectures and editorial practices. With particular attention for the infrastructural, operational and programming logics of digital archiving, we investigate the interplay between archival histories, computational methods and data management workflows, as well as the legal, commercial and sociological aspects associated to copyright licensing, acquisition regulations and social uses, which altogether affect the ways television is received. The term 'archive television' is adopted here to expand more limited definitions of 'television archive' into a broader notion of archive as both an institutional entity and the very act of record-keeping, cataloguing and documentation that regulates our modes of perceiving and understanding television history. Archive television refers to the study of how television content produced in the past is collected, organized and preserved in the present. By positing archive television as a field of inquiry, we ask: what is television in and after the archive? Ultimately, the following sections draw carefully curated accounts of how television content survives beyond its initial broadcasting lifecycle and how the practice of audiovisual archiving transforms its circulation and reception after the primary distribution occurs.

Audiovisual archiving has two main objectives: preserving heritage and ensuring its accessibility.⁶ Preservation focuses on maintaining the integrity and longevity of audiovisual materials, while accessibility ensures that preserved records are available for public use, research, education, and entertainment. Digital and algorithmic archival practices (e.g., building catalogues and databases, digital search and retrieval methods, algorithmic curation etc.), along with their social and cultural implications, cannot be properly understood without embracing the complexity of the phenomenon at hand. This encompasses endeavors that go beyond an engagement with the technical characteristics and affordances of digital media and are committed to understanding digital (archival) practices as active shapers of knowledge.

Drawing from a contemporary theory of mediatization, it has been argued that:

[d]igital materials can only be accessed by means of digitally supported search and retrieval methods to establish the re-presentation of the invisible, stored content on a screen or another output device. This relation is not conceivable in phenomenological interpretations of media communication, but it is a part of all forms of digital media and a fundamental part of the contemporary processes of mediatization, if digital media should be included.⁷

Finnemann highlights that accessing digital materials relies on digital search and retrieval methods, which are essential for displaying stored content on screens or output devices. This dynamic is distinct from traditional phenomenological approaches to media communication and is central to contemporary mediatization processes. He emphasizes that digital communication fundamentally involves storing, searching, and retrieving data, positioning these activities as defining characteristics of digital media. As such, search engines, algorithms, and databases can be understood as expressions of 'deep mediatization,' whose 'ideology of ordering, archiving, filtering, and searching contributes to a potential change in our ordinary activities when we appropriate them for our own purposes or when we are interpellated by them in our everyday life.'⁸ As Ibrus explains, this indicates that online platforms, along with their algorithms and indexing systems, play a vital role in determining which cultural resources are accessible and subsequently utilized in shaping cultural memory. It implies that streaming services, their technical architectures, the standards they implement, and the reasoning behind their technological choices all operate with an ideological influence, becoming integral components of the cultural construction framework.⁹

The digital transformation of television archives refers to the process of integrating digital technologies into the core operations and strategies of audiovisual archiving to enhance the preservation, accessibility, and management of archival records. This transformation involves transitioning from traditional, often analog, methods of storing and managing media to digital formats, enabling more efficient storage, retrieval, and dissemination. The context of cultural organizations provides a compelling area for examining this transformation, as these entities must navigate the complex task of balancing social and cultural objectives with commercial value creation. Audiovisual archives, in particular, face the intricate challenge of organizing their operations to preserve digital content while also offering services that generate value for users based on that content.¹⁰ In this context, a key goal is to understand how audiovisual archives use digital technologies to reshape their business models and ensure long-term sustainability. This is especially important for public audiovisual archives, which must balance their mission of providing public access to content with generating revenue to support ongoing operations.¹¹

In order to decipher and, by extension, start addressing the 'preservational challenges of the present,'¹² we need to revisit some classic debates around television's ephemerality. As Kelly argues, while concerns about preserving television have existed nearly as long as the medium itself, the aforementioned recent developments indicate that television remains highly ephemeral – perhaps even more so than before. Therefore, it is crucial to focus on developing innovative analytical approaches and fostering new partnerships with industry stakeholders to ensure that future television historians can avoid a 'scholarly dark age.'¹³ Digital audiovisual archives definitely have the capacity to offer prolonged availability and streaming services have been argued to be 'the best example of the promise of availability in the digital age.'¹⁴ As such, fruitful future scholarly approaches have been argued to include developing tailored analytical methods, building strong institutional and industry partnerships, and promoting digital preservation policies.¹⁵

Returning to the specificity of Public Service Broadcasters (PSBs) video-on-demand (VoD) services and archives, extant literature highlights that digital archival practices and VoD services offer opportunities for PSBs to revive content through personalization, but relying solely on digitized archives risks presenting a narrow view of history. To avoid this, PSBs should create new, diverse content alongside archives, while balancing traditional and personalized curation methods to ensure broader access and avoid media fragmentation. For instance, digital archival practices have been discussed as a means to 'revive PSB through personalization and public service algorithms.'¹⁶ The BBC's decision to make BBC Four an archive channel is a step toward addressing economic challenges, but relying solely on

digitized archive content risks presenting a homogenized view of the nation's past. While dedicating more resources to uncover lesser-known stories could help, new content is also essential to broaden the scope of 'BBC Fourish' and include diverse voices. This would enrich the archive, offering future generations a more nuanced understanding of history. People often seek content they are familiar with, but the use of AI for content personalization has shown that without fresh, diverse perspectives in the archive, the channel may alienate viewers who do not see themselves in the BBC's portrayal of the past.¹⁷

In the Nordic countries, characterized by a heightened sensitivity when it comes to questions of access, availability, and preservation within the context of cultural organizations,¹⁸ digitization is often discussed in relation to the role of cultural policy and democracy. The practice of online curation by PSBs, including publishing strategies, interface design, and algorithmic personalization, have been closely studied as new tools for expressing the PSB identity. The Danish PSB **DR** has been studied as a key example to help develop a broader understanding of the relationships between traditional linear scheduling, non-personalized VoD publishing approaches, and algorithmic (personalized) recommendation strategies, each representing a distinct method of content curation.¹⁹ In the Norwegian context, the question of availability has also been discussed as pertaining to resources and opportunities provided by streaming platforms, as well as regulatory framework. Research shows that national cultural policy appears unable to establish frameworks that promote availability on a larger scale, where fragmentation is less of an issue. As new services from public service institutions are introduced to the media landscape, they contribute to an increasingly fragmented media sector.²⁰

VIEW's commitment and engagement with issues dealing with European television history, including (digital) archival practices has been consistent throughout the years. Discussions around the transformation of television archives into online platforms within a European context, centered on how these digital archives mediate between past and present, history and memory, and curatorial and popular perspectives, have left an important imprint in scholarly debates.²¹ Drawing from the case of the documentary platform of Dutch public television, **Holland Doc**, and experimentations with alternative notions of the archive - e.g. as 'repertoire' -, research has illustrated how television, as a form of cultural memory, offers a more dynamic way of accessing televisual content, in contrast to the static nature of traditional archives.²² Research has also shown that while digitization has transformed archives into dynamic organizations that can contribute to PSBs' development, this does not automatically lead to greater accessibility or democracy. Copyright restrictions challenge PSBs' public service role, limiting citizens' access. Building on a comparison of four audiovisual archives from Austrian, Greek, Hungarian, and Polish broadcasters, research has highlighted a lack of vision within PSB archives regarding their role in serving the public, as they balance institutional responsibilities with challenges that impact their democratic function.²³ Inspired by the case of the Swiss public broadcaster, addressing algorithms as 'black boxes' and exploring whether the archive still serves as a repository of cultural heritage or has become a laboratory where institutional and non-institutional actors collaborate to develop and test algorithms, has also been put on the agenda in recent years.²⁴

A discussion around developments, transitions, and transformations is inevitably future-oriented but one should not expect clear answers yet. The impact of streaming and the potential of AI integration in audiovisual industries and archives has been explored but is still in an experimental state. Key industry decision-makers corroborate a 'nobody knows' attitude regarding the future, and a common response to questions about forthcoming trends are statements that emphasize the impossibility of prediction.²⁵ In a white paper published in 2024 by **AI4Media Centre of Excellence** researchers with the participation of the Netherlands Institute for Sound & Vision and the Flemish Public Broadcaster VRT, alongside leading experts and practitioners, the complex but promising processes of integrating AI into the media sector are explored. The report argues that as media organizations navigate the challenges and opportunities AI presents, it is essential to develop strategies that align with their core values while promoting collaboration and innovation across the industry. By embracing responsible experimentation, building internal capabilities, and forming long-term partnerships, the media sector can leverage AI to improve its operations while maintaining ethical standards and public trust.²⁶ Given the challenges outlined above, ongoing collaboration between AV archivists and media scholars is essential; by pooling their expertise, both groups can ensure a strong future for audiovisual archives.²⁷

In light of such a scenario, this issue of *VIEW. Journal of European Television History and Culture* hosts four academic research articles, two short papers and a series of interviews with television archives, each sharing a unique perspective on the evolving role of audiovisual archives in the digital age, covering a range of topics from algorithmic curation to changing archival practices and user engagement with digital records. Scholars and archival professionals in media studies are brought together to combine different views on how virtual spaces can be used for storing, structuring, and accessing audiovisual records. All contributions emphasize the transformation from traditional archival structures to more dynamic, digital, and often user-centered systems commonly found on online platforms. For instance, Re's contribution investigates key themes of the archive, network, and algorithmic personalization, tracing a progression from the historical evolution of digital media and archival metaphors to contemporary streaming television. The paper problematizes the tension between traditional archival caretaking, commercial practices of content filtering, and informal circulation of audiovisual material over the internet. The central argument is that streaming platforms like Netflix shift curatorial focus from content itself to the consumer, moving away from traditional practices of selection, classification, and presentation toward automated processes framed as 'caregiving.' The author argues that this transformation could profoundly alter – or even undermine – current theories of cultural work as 'archival work.' The article posits that algorithmic personalization in streaming services reduces the collective formation and circulation of knowledge to individual tastes and choices, seemingly 'taken care of' by the platform. Ultimately, the author proposes that cultural archival practices persist in informal digital exchanges, such as piracy, where viewers' curatorial behaviors manifest as collective archival efforts.

In another study on the local counterparts of international streaming services, Blume examines the role of the online portal *rufus* within the landscape of German public broadcasting archives, giving a glimpse into digital architectures for decentralised external access to television databases. The database in question offers communication and media researchers free access to structured metadata from the ZDF production archive. The paper outlines the development, framework, functionality, and challenges of this infrastructure, while detailing the strategies used to transfer ZDF's archival data into a publicly accessible academic platform equipped with advanced search and filtering capabilities. Moreover, the analysis contextualizes *rufus* by comparing it with initiatives from other broadcasters that rely on curatorial approaches rather than solely on complex search functions. The author highlights how this pioneering project is driving the opening up of public broadcasting archives in Germany, laying the ground for the future of researchers' access to audiovisual heritage.

In their article, Sauer et al. further explore the aspect of accessing audiovisual records by looking at how users perceive record-keeping practices within algorithmically curated audiovisual archives in classroom settings. The study considers the intersection between algorithmic curation, digital archive access, and real-world usage, with particular attention for the relationship between algorithmic processes and mediated search experiences. The authors propose a pedagogical framework that enhances learning by highlighting how data-driven transformations of archival content enable serendipitous discovery at both the data (content) and interface (search) levels. By focusing on the toolset **CLARIAH Media Suite**, a digital research environment that is part of **CLARIAH** - the Dutch Common Lab Research Infrastructure for the Arts and Humanities,²⁸ the authors adopt critical approaches to audiovisual intermediated search, encouraging a shift away from 'Google-informed' search habits and advocating for a transition from user-centered to artifact-oriented search strategies. The article concludes with a presentation of concrete guidelines for archivists, teachers, and students who explore digital archives and engage with digital (re)search.

Building upon questions related to archival search, reuse and circulation, through an empirical analysis of the structural factors that affect reception Treleani points at the circulatory logics of audiovisual content, emphasizing the nature of media images as archival materials in the context of the Crossing Border Archives (CROBORA) project. This research observes how audiovisual content - in particular, news footage from French and Italian national broadcasters - is repurposed, archived, and circulated across different media platforms from 2001 to 2020. The author argues that audiovisual images should be understood not just as fleeting visual representations but as archival units that are continuously indexed, stored, and reused, echoing the foundational practices of the media industry. This analysis of reused archival sequences reveals how images evolve in meaning and context over time, shaped by factors like institutional agendas and technical infrastructures. Based on a collection of 35,000 audiovisual sequences related to

the European Union, through case studies like the Schuman Declaration, the CROBORA project tracks how iconic historical moments are visually represented and recontextualized, demonstrating patterns of repetition and variation across different media. The findings highlight the ways in which media institutions, both public and private, regulate and reproduce visual narratives, often guided by pre-existing archival schemes and packages rather than spontaneous editorial decisions.

Ultimately, the paper introduces a materialist approach to the study of audiovisual content, advocating for the analysis of images within their archival, economic, and technical conditions. This lens anticipates additional themes addressed in this issue on archive television, by providing a close-up sight on how computational infrastructures shape the circulation of visual culture, influencing public memory, representation and interpretation of audiovisual heritage. Altogether, these research articles hosted collectively underscore the impact of digital transformation and algorithmic curation on archival practices, user experiences, and the broader cultural implications for how knowledge is preserved, accessed, and understood in the digital era. From critically evaluating algorithmic archival work in the streaming era, to highlighting success stories that fulfil the public value of PSB and secure researchers' access to audiovisual heritage, to underlining the importance of digital literacy skills that can be helpful to citizens in a datafied society and providing frameworks for understanding the circulation of digital images, the authors maintain an optimistic, yet critical, angle when it comes to the future of archival practices as rich, multifaceted resources for collective knowledge and cultural heritage.

The ensemble of these four papers reconstructs a preliminary sketch based on a variety of conceptual and practical frameworks for interpreting the evolution of audiovisual archives in the digital age, where algorithms emerge, on the one hand, as curatorial agents, with their reliance on metadata for automated content labeling and filtering, and, on the other hand, as facilitators of archival interactions in information retrieval tasks. Yet, the analysis of content organization on online platforms and digital repositories would not be complete without more detailed descriptions and perspectives from archival practitioners and metadata specialists. To better understand how digital and algorithmic curation are deployed in television archives for both commercial and non-commercial purposes, we included in this issue two short papers along with a series of interviews with archivists, librarians and data engineers specializing in the management of audiovisual collections.

The first short paper features a use case from the Netherlands Institute for Sound and Vision. In their use case, Veldhoen et al. present the development and evaluation of a 'similarity' tool within the CLARIAH Media Suite, aimed at improving search and analysis in audiovisual collections. As they outline, traditional search methods often rely on metadata, which can be sparse, imprecise or incomplete, leading to frustration for users. The Similarity tool, instead, enables users to search archives by selecting a visual keyframe, leveraging deep learning to identify related content based on audiovisual features such as color, patterns, and angles. This method allows for more intuitive searches, facilitating discovery and analysis of previously hidden connections between archive items. A key innovation is the tool's ability to cluster similar audiovisual keyframes in a latent high-dimensional space, facilitating efficient searches even in large databases. However, the tool's search results were not always consistent, with some matches perceived as irrelevant or unexpected. This variation in quality raises theoretical questions about the nature of similarity in visual content, revealing that different researchers might have divergent interpretations of what constitutes a relevant match. For example, some users sought similarities based on people or symbols, while others focused on patterns or colors. Despite these challenges, user evaluations revealed the tool's potential for enhancing archival research by enabling novel ways of tracing reused content and exploring media framing. The study concludes that while this method opens up new avenues for media research, it also problematizes the need for greater transparency and accountability in the cataloguing and retrieval process of television content.

With the digitization of film, television, and video materials, historians now have access to extensive computational resources, but the sheer volume of content creates challenges in terms of broad scale content analysis. For this reason, other projects using AI for enhancing search in multimedia collections have been initiated at many academic institutions across Europe. For instance, the project *IMAI – Researching Intermedia Collections with Artificial*

Intelligence, based at the University of Applied Sciences Düsseldorf, explores the potential of AI models, particularly machine learning, to support archivists and historians in analyzing and organizing vast collections of audiovisual media in the context of post-World War II German history. By supporting the systematic processing of audiovisual content through AI toolsets, IMAI aims to enhance research workflows, offering a more efficient and comprehensive approach to the study of time-based media. In this and similar projects, AI stands out as a viable solution for automating the structuring and interpretation of audiovisual collections, allowing for more effective navigation and analysis of audiovisual records from existing digital archives. The second short paper takes a step back and looks at the history behind the making of audiovisual archives from basic storage sites to sophisticated digital repositories. Taking the Italian private broadcaster Mediaset as a case study, Rossi points at the strategic significance of archives within commercial television, particularly regarding the reuse of television materials. It outlines the implementation of digitization and automation in the Italian media industry, showcasing Mediaset's unique model for digital resource management, content retention and audience engagement. The paper first discusses the initial formation of the archive in the 1980s, primarily as a logistical solution for managing broadcast materials, and then describes the launch of a mechanized video library in the 1990s as a pivotal upgrade in the company's cataloguing system. The author then moves on to illustrate more recent initiatives, such as Mediaset's ARCA project, designed in 2017 as a shift of focus from traditional content organization practices to large-scale digitization, metadata integration, audiovisual content indexing workflows aimed at capitalizing on investment opportunities. Ultimately, the paper posits that Mediaset's archival evolution not only addresses operational needs but also enriches cultural narratives, preserving the zeitgeist of Italian television for future audiences.

These key insights into the history of local archival initiatives reveal how computational and algorithmic technologies are increasingly utilized to enhance content storage, cataloguing, retrieval with improvements on archival accessibility and business efficiency. The pervasive adoption of innovative archival practices in response to the growing digital landscape, however, holds risks as much as benefits. While digitized and born-digital audiovisual records represent a solution to preserve analog records into more efficient formats and storage units, they can raise sustainability challenges related to the accessibility to digital management ecosystems and computing resources, along with more ethical concerns over the automation of metadata extraction pipelines, copyright assessment in open access collections and data integrity. Bearing in mind the complexities of applying digital and computational methods for the classification, labeling and indexing of audiovisual records, we enriched this issue through interviews with archival professionals who helped us reconstruct a partial survey of television archives in the digital age. Moving across different archival projects, the questions we asked seek to unveil the historical, cultural and technological sublayers that make digital audiovisual archives from their original establishment to their current digital layouts.

The interviews complement Blume's insight into metadata infrastructures and deepen the Veldhoen et al.'s example of AI applications in archival settings, highlighting a twofold approach to algorithmic curation in the field of television archiving: as expected, some archives show resistance to the adoption of automated data processing and classification methods based on ML, whereas others have already implemented AI in their workflows. Overall, these conversations with television archives demonstrate that the practice of storing, structuring and accessing audiovisual records has evolved with the techno-cultural evolutions of the television industry itself. While some algorithmic practices in national television archives are still in the exploratory phase, most sound and vision archives have run customized experiments with state-of-the-art AI models based on their extensive knowledge of archiving practices for audiovisual records.

Finally, in the section 'Dialogues with Audiovisual Archives' we feature an additional interview that illustrates the project *Watching Videos Like a Historian* as a strategic effort to address the growing need for audiovisual literacy in the digital age, especially within the context of media history education. By developing a suite of educational tools, the project equips educators across Europe with the resources to integrate audiovisual materials into their history lessons, enabling students to engage critically with historical narratives and media content. The interview explains how this toolkit is meant to overcome technical barriers—such as the accessibility and usability of audiovisual resources—and facilitate challenges faced by educators in utilizing rich, historical media. The co-creation of resources with educators from diverse European countries (the Netherlands, Spain, and Poland) ensures that the materials are culturally

relevant and adaptable to different educational contexts, enhancing the toolkit's utility across varying teaching environments. The project's commitment to using existing audiovisual archives, particularly through Europeana, further emphasizes the importance of preserving and making accessible cultural heritage for educational purposes. While the project does not employ AI tools in its immediate workflow, it recognizes the growing role of AI in education and includes a guide for teachers to critically engage with AI in history lessons. This proactive approach encourages both educators and students to confront the ethical and intellectual challenges posed by digital technologies. By refining its materials through teacher feedback, the project strives to create a sustainable framework for integrating audiovisual heritage into modern education, fostering a more media-literate and historically aware generation.

As we enter a new phase of digital archiving, some media history scholars might still remember their first encounter with audiovisual archives as a traditional archival experience. Until recently, most archives relied on a digital repository system that allowed scholars to query the records through keywords, search through the vast catalogue and filter a selection of titles of interest based on metadata. Upon request to the archive staff, each record would be made accessible to view on site. By the time this *VIEW. Journal of European Television History and Culture* issue is published, such a traditional process for querying records belongs to somewhat outdated archival experiences. Most television archives in Europe have already embraced innovative paradigms for information search and retrieval based on the computational processing of digital records. In a UNESCO study on Audiovisual Archiving: Philosophy and Principles, Edmonson examines the dawn of this transition from analog to digital, pointing at pivotal questions in archival studies that still resonate today: 'Are we facing the prospect of digital archiving where everything is kept on computer mass storage systems? If digital-to-digital copying is lossless, are all our preservation problems solved forever? Is this the ultimate? Will we even need audiovisual archives if anything and everything is reduced to digital content which can be called up at will from a computer server?'²⁹ (ivi, 40)

The prospect of a mass storage system for large scale digital archiving presents both significant opportunities and challenges. The shift to digital preservation does offer a level of convenience, scalability, and accessibility, but it does not entirely resolve the complex issues surrounding archival practices. While digital-to-digital copying may be lossless in theory, the idea that it guarantees perpetual preservation is overly optimistic. Preservation is not solely a technical matter of bit-perfect replication; it is also a cultural, social, and institutional practice that requires continuous stewardship. Much like analog media, digital media are not inherently eternal. While copying can reproduce digital content without visible degradation, digital files are vulnerable to obsolescence due to the rapid pace of technological change. File formats, software dependencies, and hardware infrastructures can become unsustainable, creating risks to long-term accessibility. For instance, older file formats may no longer be compatible with current systems, and new compression algorithms or storage technologies may not support legacy formats without data loss or degradation. Furthermore, digital files, unlike analog materials, are more susceptible to cyber threats, such as hacking or data corruption, and environmental factors such as power failures or system malfunctions.

The belief that digital archiving will ultimately obviate the need for audiovisual archives misrepresents the role archives play in cultural preservation. Archives are not just repositories of digital data; they serve as curators and facilitators of historical memory. The archival process involves records interpretation, metadata creation, and organization—functions that cannot be fully automated or replaced by technology. Even if everything is reduced to digital content, the role of archivists in ensuring that content is preserved, contextualized, and made accessible remains essential. Furthermore, the existence of physical archives provides a crucial backup to digital storage systems, which are prone to hardware failures and other vulnerabilities. The future of audiovisual archives will likely involve a hybrid model that combines digital technologies with traditional archival expertise to ensure the longevity and meaningful use of our cultural heritage.

The notion of 'archive television' is deeply intertwined with the cultural aspects of television as a unique form of historical documentation that offers insights into societal norms, politics, entertainment, and technological developments across different eras. Archiving television therefore involves not only storing and maintaining audiovisual materials, but also curating and making them accessible for future generations, ensuring they can be used for research, education, and cultural reflection. As television continues to evolve, the practice of 'archive television' has

to adapt to the challenges and opportunities posed by digitization, rights management, and the growing importance of online access media platforms like digital databases and repositories. This *VIEW Journal of European Television History and Culture* issue ultimately attempts to chart these methodological and conceptual evolutions of audiovisual archiving in a hybrid media ecosystem, where physical analog media (such as tapes, discs, and film) and digital formats (such as digitized video files) coexist. In academic contexts, archive television often serves as a source for media scholars, historians, and cultural critics who examine the role of television in shaping public discourse and collective memory. We hope that the historical and cultural readings of television archives found in this issue will assist readers in making sense of the practice of organizing television programs after their original broadcasting and before academic analysis, in the liminal space of media formats, filing cabinets, storage management systems and metadata descriptions that accompany primary materials, enabling their survival and interpretation over time.

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Notes

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