

How should the information profession respond to generative artificial intelligence (GenAI)?

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Abstract

The internet-fueled digital information environment of the future will likely contain many contentious media objects as creation costs are significantly lower when using generative artificial intelligence (GenAI). We argue that responding to the impact of GenAI is a challenge to the whole information profession. Acknowledging the diversity among GLAM institutions (Galleries, Libraries, Archives, Museums) we propose that GLAM institutions along with their specific strengths are well placed for guiding, if not overseeing, proposed authenticity infrastructures to complement the demand for improved media literacies in the age of GenAI as these institutions are able to engage with the public in ways that often exceed the reach of more technology-focused organizations.

Keywords

generative AI, authenticity, infrastructure, interfaces, GLAM, leadership

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Introduction

The recent surge of generative artificial intelligence (GenAI) systems has rattled many sectors including business, media, education, and the GLAM sector (Galleries, Libraries, Archives, Museums). Initially, discussions focused largely on so-called prompt engineering to obtain “good” results as well as emerging organizational challenges (e.g., office productivity, learning and assessment in education). Discussions now include a greater need for output verification and how to address likely copyright violations due to the source materials used for training AI models.

The “generative” power of GenAI tools that used to be in the hands of corporations has become widely available even for people with limited technical expertise. As a consequence, the internet is being swamped with computer-generated material. GenAI-produced articles have become widespread¹ to the extent that some eBooks and news sites on the internet appear to be produced almost entirely by AI.^{2,3} A few sites/publishers have been caught using AI without notifying readers, for example, when eBooks on mushroom foraging contained potentially deadly advice⁴ or when the summer reading list from the Chicago Sun-Times recommended books that do not exist.⁵ Recent reports suggest that AI bots may pretend to be journalists when requesting interviews.⁶ Some publishers now feel the need to point out, via bylines, that articles were

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“written by a human being.” Writers have started to share on social media footage of themselves working on manuscripts⁷ to demonstrate their work is human-made.

Early GenAI-produced content was mostly in text form; however, GenAI-generated media now include images and videos. Marr⁸ estimates that about 2/3 of the images shared on social media platforms were created using AI technologies. During the June 2025 Israel-Iran conflict, AI-generated fake footage was widely shared on social media to fill a lack of actual footage from the conflict.⁹ The New York Times identified a “cascade of AI fakes” during the March 2026 USA-Iran conflict.¹⁰ These observations are in line with DiResta’s¹¹ prediction that “the supply of disinformation will soon be infinite.” There are concerns that at some point, most of the web’s content could be AI-generated, resulting in an internet where human-human interactions are rare.

GenAI challenges to authenticity and trust

GenAI not only changes how media are produced and consumed. GenAI also has a profound and likely irreversible impact on key aspects of media production and consumption including authorship of content, authenticity of content, and last but not least, trust: was the video recorded at the specified time and location? Is this video even from the real world or from a video game like Call of Duty? In the early days of social network sites, people worried about “MySpace Angles”¹² whereas today’s challenge is whether a video depicts an actual person or an artificial character, such as the computer-generated social media influencers “Emily Pellegrini,”¹³ “Mia Zelu,”¹⁴ and political influencer Emily Hart.¹⁵

Determining and documenting the authenticity of digital documents was a challenge even in the pre-GenAI era^{16,17} and misattribution of content is rife (see Bakir and McStay¹⁸; Thomson et al.¹⁹ for example). In the aftermath of BP’s Deepwater Horizon oil spill almost two decades ago, Tompkins²⁰ cautioned that “*in the coming days, we will begin to see more ‘user-contributed’ videos and photos of dead and dying animals. What process will you use to be certain that these images are from the BP spill and not some other incident? Have the images been toned, cropped or altered in ways that also alter the truth?*” GenAI is lifting this challenge to an entirely new level in terms of scale and impact.

Gambin et al.²¹ note that a core concern “*is that these [AI technologies] grant individuals with technical expertise the ability to create videos that undermine the very concept of truth.*” The emergence of AI deepfakes has sowed sufficient doubt in all media—including the legitimate ones since people may think authentic footage is “AI” (e.g., Goh²²). A side effect of the lack of trust is that “anyone can claim something didn’t happen.”²³

We do not think it is possible or even desirable to try to turn back the clock and impose strict limits on who should be able to use GenAI. We need to accept that even in a restricted-use scenario, bad faith actors including state actors would still have access to this technology and could deploy it with online global reach (e.g., Watts²⁴; Ferrara²⁵).

Authenticity and trust in the age of GenAI

One avenue towards supporting an understanding of authenticity and associated trust is pushing for media literacies to be updated for the age of GenAI. Aljalabneh²⁶ stresses the importance of “*teaching students to deconstruct visual content by considering the creator’s background.*” This improved form of media literacy is a useful element of a response to a lack of trust in content, but it can only go so far. When encountering images in everyday life, such as on social media, it is practically difficult to establish who the “creator” really is. Zheng, Zhang, and Thing²⁷ show that humans are poor at recognizing alterations to real-world images and they are particularly poor when encountering images for the first time. Cox and Mazumdar²⁸ note a need for “information literacy training” for citizens to cope with an anticipated growth in manipulated and generated images. Lankes²⁹ suggests that we need a new form of information literacy to enable the public to counter the effects of “corrosive AI” the hypothesis that GenAI-produced pretend realities will undermine trust in public institutions and will do so quickly. “*An information literacy that is not about generating skepticism and methods of interrogating information sources but instead coping with a world where all information is seen as suspect.*”²⁹ Gambin et al. propose four responses to deepfake images: legislation/regulation, voluntary policies, education/awareness and technological countermeasures. They note that “*increased proliferation of deepfake videos will eventually make people more aware that they should not always believe what they see.*”²¹

A complementary avenue is technological assistance for verifying authenticity. Most people will need technological assistance in understanding the provenance of the content they encounter, certainly in areas where it matters, for example, when state actors are engaging in election interference.^{24,25} Provenance is a complex term that may be used in different ways. The six types of provenance identified by Bettivia et al.³⁰ are story, authenticity (of an object), performance of compliance (or authenticity of an agent), discriminator, system characterization, and process. Bettivia et al.³⁰ note that their review of the term is based on LIS coded articles from Web of Science (WoS). GLAM organizations approach provenance in different ways depending on their respective specialization. So what can we do to assist people when trying to understand

the provenance of the content they encounter in a more systematic way than sending them to web sites like Reddit (<https://www.reddit.com/r/isitAI/>) where lots of humans spend a lot of time trying to work out whether some content, usually images, is real or AI?

Towards authenticity infrastructures

GLAM institutions are custodians of the past in its many interpretations and as documented in multiple ways. They are professionally concerned with directly relevant issues including authorship and authenticity. For example, museums have decades, even centuries, of experience in assessing provenance and the work needed to determine if an artwork is a fake or genuine, as well as tracking provenance-related data. So the question arises if and how this important sector could respond to the GenAI challenge when the informational foundations of society are shifting beneath our feet? Automated approaches to identify GenAI content are likely to be inadequate³¹ and would be subject to an arms race between those that try to identify the products of GenAI and those that wish to hide the origin. This relationship is reminiscent of the historic arms races between email spammers and spam filter maintainers.³² We believe this poses a unique challenge to (but also opportunity for) the GLAM sector, especially since the different specializations within the sector are well placed to complement each other, as in some organizations being stronger in engaging with audiences as to why provenance is important whereas others may focus more on technical aspects of provenance. It is important to note in this context that establishing and documenting provenance is not the same as establishing the meaning of a document or object, and we certainly do not propose to “hard-code” meaning. Bettivia et al.³⁰ highlight the critical nature of provenance metadata: *“it is being recorded to tell the story and processes of an object in order to help the object establish its authenticity in the world as well as the authenticity of the infrastructure in charge of the object. When the provenance is missing or suspect [...], then the authenticity of the object is also in question.”* The well-publicized discovery of Adolf Hitler’s diaries along with the subsequent determination that they were elaborate forgeries³³ illustrates why the (lack of) provenance of the “Hitler diaries” was essential for their historic value, which turned out to be miniscule.

Assuming it is no longer feasible to determine the authenticity of new media appearing on the internet, perhaps we can at least keep track of media:

where provenance is established or
where trusted content producers are willing to share provenance data.

For this to have any kind of real-world impact, for users of any type of media, checking authenticity should become a habit a bit like using fact checkers, quote verifiers, and reverse image search before adopting unverified sources and potentially getting ridiculed (or sued) for relying on “hallucinated” information.^{34,35} Currently, this work is implicit in the expectation of quality publishing by respected sources (e.g., NPR, The New York Times in the U.S., Reuters, BBC, The Guardian in the UK). If there is an explicit indicator in the interface, then people can start to create an association between trust and authenticity indicators which is especially important now that social media has made large sections of society media producers as well as consumers. Return only authentic results from search engines? Check!

As mentioned earlier, we believe that the different specializations within the GLAM sector are well placed to complement each other, as in some organizations being stronger in engaging with audiences as to why provenance is important whereas others may focus more on technical aspects of provenance. Furthermore, we see GLAM institutions as able to engage with the public in ways that often exceed the reach of more technology-focused organizations. The need for technical advances is recognized by the 2026 C2PA for G + LAM (government + libraries, archives, and museums (LAMs)) Community of Practice white paper: *“What is clear is that the emergence of AI technologies, especially generative AI, has introduced an entirely new dimension of authentication of LAMs collection content for consideration. This moment demands deliberate, thoughtful, and sustained efforts to document and verify CAP data throughout the digital preservation lifecycle.”*³⁶ The authors of the white paper also highlight *“a risk of a dependency knowledge debt in which LAMs may be relying on external vendors and platforms to apply or manage CAP data without expert internal understanding of the process, resulting in a loss of control over verification, migration, trust assurance and long-term accessibility and access of collections content.”*³⁶

A possible inspiration for the proposed direction, its challenges, and its potential acceptance through engaging with audiences (in this particular case web users) can be found in the history of the world wide web. The original web data transfer protocol, http, did not contain any encryption and so communication between browsers and servers was vulnerable to interception. As more sensitive transactions occurred over the web the encrypted extension, https, became the new standard. Web users have gradually learned about the benefits of https and adapted to seeing https, and the associated lock icon in their browser address bar, as a necessary symbol of a trustworthy connection. Browsers introduced warnings when

submitting information via the non-encrypted http channel. A combination of user education and technological support has led to http-only connections being regarded as inherently untrustworthy.

The information infrastructure needed to make “authentic” icons happen really is just a new technologically mediated kind of provenance but how can we get there from a technical point of view?

Picha Edwardsson and Al-Saqaf³⁷ review several technical approaches for providing “journalistic authenticity and integrity” that are based on blockchains. It is not necessary for information professionals to understand the technical details of blockchains, but they will need to grasp the linked concept of hashes (or “fingerprints”). The central idea is that any content can be hashed into a much smaller digest. This digest can be used as an identifier for the content. When a publisher associates a hash digest with some content then anyone can re-compute the hash value to check the content has not been changed.

In conjunction with digital signatures, as used in secure web connections, hashing features will probably be present in any successful content authenticity technology. The ability to use these hash values to check the authenticity of content will need to be present in both publishing systems (such as digital archives) and in consuming systems (such as web browsers and social media apps).

Key to making this effort sustainable is to have trusted media and other content-producing organizations be able to share unique identifiers of the content they produce. This requires establishing a network of trusted content providers that provide machine readable descriptions and unique identifiers for content they create and where they can possibly provide the original sources upon request. Content providers would share these unique identifiers widely along with ways to compute whether a “found” media object matches the identifier.

A leading candidate for an accepted technical solution in this area is the Coalition for Content Provenance and Authenticity (C2PA) (<https://c2pa.org/>). The C2PA is continuing the work of the Content Authenticity Initiative to “develop the industry standard for content attribution.”³⁸ However, the C2PA has no representatives of the GLAM sector in its Steering Committee or general Members: the closest organization may be the BBC (British Broadcasting Corporation). Another avenue to explore for sharing provenance data would be a Usenet type of “internet broadcasting.”³⁹ A historic precedent of using Usenet infrastructure for broadcasting is Clarinet’s wire-service news in Usenet form.⁴⁰ Usenet’s inherently distributed approach comes with a high level of fault tolerance in case that some Usenet servers don’t want to propagate certain contributions.⁴¹

Discussion

GLAM institutions and the wider information profession have a responsibility to society to aid the public in making informed decisions about the veracity of the information they encounter. So far, GLAM and libraries in particular are responding to the GenAI challenge largely in ways they have become accustomed to over decades of transformative technological developments. The sector should realize that they will need to step up and leverage their expertise to become key custodians of what is known to be “authentic”: soon to be buried in an avalanche of AI-generated content.

The sector should not just use visible content authenticity indicators (when available) for their collections and social media; they should be actively engaged in the development of this technology. Information professionals will need to apply knowledge of authenticity technologies when educating others in their communities and also when purchasing new information systems. Consequently, understanding these concepts will likely need to become a core part of both education and professional development for information professionals. iSchools in particular, but also LIS education in general, will need to review/update their curricula. Oladokun and Umar⁴² argue for a similar strategic direction when demanding strategic reform to prepare future professionals for the growing use of artificial intelligence in library services. As always, there are many different voices, but the overall direction is clear: the GLAM sector should be a leader in developing and using authenticity infrastructures. In doing so information professionals can both model best practice and aid society in the coming transformation of our digital environment.

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This article was written by humans, not AIs. The use of AI is limited to using search engines and spell checkers that may or may not include AI routines.

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