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KNAW expert meeting: GenAI & Authorship

Report of the KNAW expert meeting 'GenAI & Authorship' on 10 October 2025

The use of generative artificial intelligence (GenAI) in scientific research practices is increasing rapidly. GenAI models and systems are continuously evolving and becoming more advanced. For example, GenAI has emerged as a powerful tool for scientific writing, capable of generating and refining texts for scientific articles and research proposals. However, the use of GenAI also poses risks and raises ethical questions.

To contribute to the broader debate on the responsible and transparent use of GenAI in scientific practice, the Royal Netherlands Academy of Arts and Sciences (KNAW) organised an expert meeting about GenAI and authorship. During the meeting, 35 experts, mostly from the social sciences and humanities, discussed about the opportunities and risks of integrating GenAI into the scientific writing process from four different perspectives: legal, historical, cultural and ethical.

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"GenAI offers a wide range of new opportunities to researchers and scholars, but this rapid development also raises questions" says chair **Sonja Smets (professor of Logic and Epistemology at the University of Amsterdam)** in her introduction at the start of the meeting. Despite the fact that AI technology is evolving and improving rapidly, serious concerns remain, such as biases in generated output, false statements, a lack of transparency in how outputs are produced and plagiarism of both texts and ideas. She also states that risks, dangers and benefits do not seem to be distributed equally across all research domains, since in some research areas, the models are trained on less data.

"We would like to use this meeting to get a clearer view of the benefits and dangers of the use of GenAI in the process of academic writing. We want a clearer picture of what transparent and responsible use of GenAI really means. What is the role of us as a community and as individual researchers in the process of regulation and offering guidance to others. What should we pay special attention to, now and in the years to come?"

Smets also refers to the new national code of conduct for research integrity that is currently under consultation and explicitly mentions the topic of AI technology. "One of the main principles in the draft code of conduct is the 'transparency of research methods used in investigation'. Yet operationalizing this in the context of AI leaves us with many questions as we face a tsunami of new AI tools, none of which comes with a clear stamp of approval from our community."

Following the general introduction by chair Sonja Smets, there were four plenary introductions, each exploring the topic of GenAI & Authorship from a different perspective: legal, historical, cultural and ethical. These introductions guided the subsequent perspective discussion sessions, in which participants were invited to develop a statement, position or piece of advice for the scientific community.

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LEGAL PERSPECTIVE

The introduction to 'GenAI and Authorship' from a legal perspective was provided by **João Pedro Quintais (associate professor at the Institute for Information Law IViR at the University of Amsterdam).** In his research, Quintais studies how copyright law applies to new technologies such as AI. In his introduction he explained to what extent works produced with the help of GenAI systems are protected under copyright law. "As a rule, basic prompting without subsequent editing does not give rise to copyright protection of outputs. However, iterative prompting that produces text later edited or integrated into academic work is likely to be copyright-protected under EU law. Determining which parts of a final work are protected must be done on a case-by-case basis."

In practice, the distinction between basic and iterative prompting often matters little in the absence of disclosure by researchers, since listed authors in the output are still presumed to hold both authorship and ownership. Overall, Quintais argues, iterative AI-assisted research and drafting better meets copyright originality and authorship standards than common practices of gift or excessive co-authorship. "Disclosure of AI use becomes legally relevant only when authors choose to make it. Ultimately, research integrity provides a more appropriate framework than copyright for addressing the role of AI in research."

In the following discussion it was debated whether the generated output of basic prompting, without subsequent editing results, should result in copyright protection or not. The experts indicated that this heavily depends on the definition of 'basic prompting', especially if you debate this from a legal perspective. In addition, it was noted that the assessment of authorship has various 'thresholds' across different domains. To obtain authorship, a certain threshold of interaction is required, which also differs per research discipline. One could say that if the prompt significantly influences the generated outcome, the author of the prompt could also be seen as the author of the generated result. An analogy is made with the role of a supervisor: one of the roles of a supervisor is to ask questions. Supervisors can be listed as co-authors, even if they don't contribute to the actual writing of the articles themselves. Their role is mainly steering and asking questions, similar to a prompter.

One must understand that claiming authorship also comes with a responsibility for the content. Discussion leader **Natali Helberger (professor of Law at the University of Amsterdam)** concludes: "The discussion makes it clear that there are many fundamental questions about the role of authorship and we need to consider the implications of the concept of authorship. It is not only an honour to be an author, but it also brings with it a responsibility. We should continue to discuss the obligations that come with authorship."

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CULTURAL PERSPECTIVE

The introduction to 'GenAI and Authorship' from a cultural perspective was provided by **Julia Noordegraaf (professor of Digital Heritage at the University of Amsterdam)**. On the one side, GenAI plays a role in creative cultural production. "GenAI is widely used in cultural production for simple, labour intensive tasks, and experimented with for more interpretative tasks such as brainstorming concepts, script analysis and storyboarding. We should discuss amongst each other what the consequences are for authorship and the authority of content." GenAI also plays a role in studying human culture. "Machine learning, NLP and Computer vision can be used to analyse digitised historical collections and to detect patterns of cultural change over periods of centuries by analysing large textual and visual time series. However, these methods are nowhere near the capacities of human interpretation and creativity. Therefore it is

important that we develop and train GenAI models and workflows that are sensitive to the complexity of human culture".

In the following discussion, experts talked about how GenAI models are often considered to be 'world models'. However, in reality, these models are only trained using available online data, meaning they overlook a significant part of the real world. This results in GenAI models having a very limited view of the world and producing highly stereotypical output. Humans also have a partial view of the world, but unlike GenAI models they have a connection with the broader world that gives them a broader perception. Another issue is the lack of control over the artistic process. As GenAI models are unpredictable, humans lose control over the creative process, which is essential for authors and artists.

Discussion leader **Thomas Poell (professor of Data, Culture and Institutions at the University of Amsterdam)** summarises the discussion: "AI models fundamentally differ from how humans function. GenAI predicts, and humans interpret. However, we should move away from this binary distinction because these processes are often integrated. Humans are entangled with technology, and also the use of GenAI is a human-machine interaction system. It is this co-creation that makes it interesting. We shouldn't anthropomorphise these machines, yet that is what we constantly do."

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ETHICAL PERSPECTIVE

The introduction to 'GenAI and Authorship' from an ethical perspective was provided by **Hub Zwart (professor of Philosophy at Erasmus University)**. Within science there are diverging academic authorship concepts, both historically and between research fields. The rise of GenAI is challenging the basic conceptions of authorship. The question is whether the automation due to AI will lead to the death of the academic author, or whether GenAI can be incorporated in authorship practices.

"GenAI can be seen as an external threat, threatening authorship in humanities, but could also be seen as part of the process of realisation of technoscientific concept of authorship, which began a long time ago and is bent on discarding subjective dimensions of authorship, and promoting distributed, collective authorship, also in the humanities." Zwart concludes by stating that "responsible authorship calls for a comprehensive view which combines among other things ethics with philosophy of technology, political philosophy, epistemology, ontology and history."

In the following discussion, the experts discussed whether using GenAI as a partner or coach in the writing process is a problem, given that authors have always been assisted by technology. The new and challenging issue is that GenAI has the potential to take over the writing process, rather than simply being used as a tool. This carries the risk of human writers losing control of the writing process and losing track of who wrote what.

Currently, if you use AI-produced text, you are not considered the sole owner of that text, because it is machine-made. This may change at some point. A reference was made to what happened in the early days of photography. Photographers were not seen as the owners of pictures because they were 'machine-made' and no creativity was thought to be involved. However, when they tried to make the machine decide what pictures to take, it turned out to be a creative process after all, because capturing someone or something in the frame, sharp and with good lighting, was something the machine could not manage. It was the person behind the camera who made this happen, demonstrating creativity, and thus photographers are the owner of the copyrighted material: the photo.

It was discussed that significant differences exist in terms of writing styles and practices between fields. For example, publications resulting from collaborations among beta scientists tend to allow less room for personal style. This is not only due to the numerous authors, but also because of the use of fixed templates for presenting findings. Personal style may be more evident when writing an editorial or biography. On the other hand, in some humanities fields, such as philosophy, personal style appears to be an integral part of the writing process that could be compromised by the use of GenAI. This raises the question of whether different research fields require different ethical frameworks and policies for integrating GenAI into writing practices.

Another discussed challenge was the need for a deeper understanding of the technology to determine which writing tasks could be delegated to GenAI. Even routine tasks may contribute to the development of certain cognitive skills, and it is unclear how and to what extent the use of GenAI in writing would affect the kinds of cognitive skills and abilities essential for critical thinking, for example. Gaining more insight into how GenAI use strengthens or erodes certain skills and abilities could also invite us to reconsider how we teach and cultivate them.

Discussion leader **Aybüke Özgün (assistant professor at the Institute for Logic, Language and Computation of the University of Amsterdam)** concludes the discussion: "We should carefully consider what tasks we can use GenAI for. In some fields, creativity may be less important, so GenAI could be useful for filling in the gaps. In any case, we should consider issues like energy costs and access to technology. In some parts of the word, access to GenAI is limited, which could contribute to inequality."

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HISTORICAL PERSPECTIVE

The introduction to 'GenAI and Authorship' from a historical perspective was provided by **Nadine Akkerman (professor of Early Modern Literature and Culture at Leiden University)**. "In the period that I study, the 16th and 17th centuries, authorship was nearly always a collaborative enterprise. Working with a scribe was not unusual." For women, these dynamics were intensified by gender norms that deemed writing or publishing inappropriate. Many women relied on male scribes, which allowed them to circumvent societal disapproval.

"In short, women's writing was often collaborative: the result of two or more people working on a single document." In order to play devil's advocate, Akkerman asks the attending experts to consider whether GenAI could function analogously, not as a threat to authorship, but as a prosthesis for expression, amplifying rather that erasing marginalised voices.

The experts discussed how GenAI currently helps writers shape text without receiving authorship credit. The analogy between working with scribes and GenAI is valuable, as it emphasises that writing has long been a collaborative activity rather than a solitary act of ownership. The current idea of specific 'ownership of a text' is a much later development. Historical developments indicate a difference between 'ownership of an idea' and 'ownership of a text'. This difference translates into a focus on conveying the overall message or content rather than the exact formulation of the message.

When working with GenAI, the question of the importance of authorship arises. Accrediting authorship is important because it establishes accountability, indicating who can receive credit or blame. In academia, this ties in directly with how the system of recognition and reward is organised. Changing the concept of authorship would affect the system of recognising and rewarding good scientific work.

Discussion leader **Sonja Smets (professor of Logic and Epistemology at the University of Amsterdam)** concludes the discussion from an historical perspective by emphasising the importance of AI literacy. "GenAI does raise the question of how we can continue to express our creativity. Is text not an outdated medium? Where exactly is our creative activity positioned if we outsource the 'writing' itself? We can think of other ways of expressing ourselves. Perhaps the answer lies in developing 'prompting' skills, as these could be a new form of art."

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During the plenary discussion, which was moderated by **Jeroen de Ridder (professor of Political Epistemology at VU Amsterdam)**, the experts focused on two main topics that emerged from the discussions on the four perspectives:

1. Defining authorship
2. Understanding technology and human-GenAI interaction

At the start of this expert meeting, the discussion around GenAI and authorship was framed in binary terms: someone was either an author or not, and someone either used a GenAI tool or not. During the expert meeting, however, it became clear that we should move away from this binary view. The academic world must develop a more nuanced language and conceptual tools to enable academics to navigate this evolving and heterogenous landscape. This will help to establish responsible norms and practices relating to authorship and content generation across different domains.

With the rise of GenAI, the academic world is increasingly challenged to reconsider the role and meaning of authorship in scholarly work. We can already see that the definition of a strong academic profile is shifting away from a focus on scientific publications, towards the inclusion of other forms of research output. This development is also evident in education. Whereas original thinking and the ability to express were once tested through written assessments, such texts are now often generated by GenAI. Consequently, assessment practices are evolving towards more interactive formats, such as discussions and presentations.

A key insight from the plenary discussion was that we should no longer be asking 'Can GenAI be an author?' but rather 'Under what conditions can humans be considered the authors of AI-generated texts?' Ultimately, this bring us back to a more fundamental question: what does it mean to be an academic? Essential skills for academics are critical thinking and the capacity to participate in a scientific debate. The question is whether writing scientific articles is still the main proof of these skills.

Jeroen de Ridder concludes: "While the desire to define and control the concept of academic authorship is understandable, we must acknowledge that authorship is context-dependent and is already interpreted in multiple ways across disciplines. A principle that everyone agrees on is that academics should be transparent about the use of GenAI in the writing process. And that academics have a great responsibility to be open and accountable about how their research output was created."

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This meeting is part of a series of expert meetings on GenAI and scientific practices, organised by the Royal Academy of Arts and Sciences. This series is a joint initiative of the four advisory councils of the Academy and organised by a programme committee consisting of Prof. Jenny Dankelman (professor of Biomechanical Engineering, TU Delft), Prof. Sonja Smets (professor of Logic and Epistemology, UvA), Natali Helberger (professor of Law, UvA), Tim Baarslag (professor

of Mathematics of Cooperative AI, CWI & TU/e) and Christiaan Vinkers (professor of Stress and Resilience, AUMC).

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