

Policy Brief 10:

Generative AI poses a risk to European culture



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THE ISSUE

We risk losing intangible European cultural heritage if the generative AI of the future is not trained on European data.

Generative AI produces texts and images that are statistically probable based on the data the model was trained on. This means that minority viewpoints are less likely to be reflected in AI-generated content, which could lead to a tyranny of the majority. This is a problem for democracy in general, because of the potential loss of diverse voices. It is a problem for Europe in particular because European content is underrepresented in popular generative AI models like ChatGPT.

POLICY RECOMMENDATIONS FOR EUROPE

- Support the development of national and European AI models.
- Work to increase European content in international and commercial AI models while supporting creators' rights to their content:
 - Develop legal frameworks for collective rights so copyrighted material can be included in training data while creators are compensated and their intellectual property rights respected.
 - Make European data that is not copyrighted available as open access datasets that can be used to train AI models
 - Prioritise making data from small and minority languages accessible in collaboration with language communities.
- Increase the general public's understanding of how generative AI works so we are better equipped to use it productively without succumbing to its biases and flaws.

BACKGROUND

Generative AI has gone mainstream since the introduction of ChatGPT in November 2022. In sectors and industries from education and media production to sales and marketing people are using AI to create, edit or inspire new texts and images.

European policy-makers need to be aware that most generative AI models are trained on English language content, predominantly from the United States. Although models like OpenAI's ChatGPT, Google's Bard and Microsoft's Bing Copilot can produce texts in many languages, their base language is English. This means that Anglo-American genres, styles and ideas are the basis for the texts and images produced by AI models like ChatGPT.

This leads to new types of AI bias that threaten European culture. Previous discussions of AI bias often point to bias in the training data. For example, a facial recognition system trained mostly on images of white men's faces will recognize white men better than it recognizes black women. Generative AI is known to have biases as well. For example, an AI model given the prompt "terrorist" will tend to produce pictures of people who look Arabic, while the prompt "nurse" produces pictures of women.

The biases that may lead to the loss of European cultural heritage are more subtle. Generative AI is trained on stories, and stories are culturally specific. For example, in Norway Thorbjørn Egner's *Folk og røvere i Kardemomme By* (Folk and Robbers in Cardamom Town) is a well-known children's book and musical that features three comical robbers who steal food because they are hungry and don't understand that work is necessary. After being caught stealing sausages and chocolate they are rehabilitated by the kind police officer and townsfolk and end up saving the town from a fire. This story is not just a shared cultural reference, it is a cultural support for the Norwegian criminal justice system's focus on rehabilitation above punishment. Hollywood stories about robbers or criminals are very different: Bank heists and gangster movies glorify criminals, while Disney movies have unambiguous villains who die at the end of the movie.

An AI model trained on stories about bank heists or villains will produce stories that are similar to what it was trained on. What do we miss if generative AI never produces stories where rehabilitation is a solution to crime?

Europe is culturally and linguistically diverse. Different countries, regions and communities have stories that are important to their identity.

If we fail to develop generative AI that supports European culture, we risk losing our cultural heritage. We risk losing our stories.

HINDRANCES TO GENERATIVE AI THAT SUPPORTS EUROPEAN CULTURE ARE:

- Commercial – the dominant companies (OpenAI, Google, Microsoft, Baidu) are based in the USA or China and do not have incentives to use European training data.
- Legal – high quality training data is usually copyrighted. Data scraped from the internet may contain personal information (e.g. photos of individuals, social media posts).
- Infrastructural – we need to increase capacity for research and development in Europe
- Cultural – human-centred generative AI requires collaboration between the humanities and computer science. Statistics and computer science were developed for numeric data. When the training data for and output from AI models are cultural (language, images and records of human behaviour) we need input from other fields.

RESEARCH

I have researched AI bias in the ERC funded project Machine Vision in Everyday Life: Playful Interactions with Visual Technologies in Digital Art, Games, Narratives and Social Media (2018-2024), finding that although biases can be encoded in technology, the cultural contexts in which technologies are introduced are just as significant. Generative AI complicates this because the training data that shapes the AI model is from a specific cultural context.

In July 2023 we launched the Center for Digital Narrative (CDN), a Norwegian Centre for Research Excellence at the University of Bergen that is funded by the Norwegian Research Council for ten years. Scott Rettberg and I are co-directors of the CDN, with Scott Rettberg leading it for the first five years.

The CDN focuses on digital narratives ranging from video games, electronic literature, and social media narratives to AI-generated narratives and other emerging genres. Generative AI a central concern for the CDN.



REFERENCES

Rettberg, Jill Walker. *Machine Vision: How Algorithms are Changing the Way We See the World*. Cambridge: Polity Press, 2023.

Rettberg, Scott, Talan Memmott, Jill Walker Rettberg, Jason Nelson, and Patrick Lichty. «AIwriting: Relations Between Image Generation and Digital Writing», 2023.

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