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Education,
Science, Culture,
Communication

Approaches to an ethical
development and use of

AI in the Cultural and Creative Industries

Artificial intelligence (AI) has long been used extensively in the cultural and creative industries (CCI) – long before the sensational introduction of generative AI in 2022. In the future, AI will continue to play a significant role in all stages of the creative process, from creation, post-production and curation to marketing and archiving. While the use of AI in arts and culture is by no means always in the interests of cultural practitioners, a blanket condemnation of this future technology would be inappropriate. Rather, there is a need for clear regulation of AI in the cultural and creative industries, based on human rights and international ethical principles.

In practice, AI simplifies or eliminates many repetitive or cumbersome steps for artists, creators and other professionals in the cultural and creative industries. AI can serve as an inspirational muse, lower high barriers to artistic production and create new access points, for example to cultural content in other languages.

At the same time, it is well known that the use of AI in the CCI sector also has negative, sometimes serious, implications. Hundreds of thousands of jobs in certain professions, from extras to translators and illustrators, are at risk of disappearing forever, while copyrights are being violated on a daily basis by AI systems, for example by scraping content for large language models (LLM) or by reproducing styles, voices and faces. However, these challenges could be mitigated through regulation and case law. The same applies to the negative impact of AI on cultural diversity, for example through an increased focus on English as a lingua franca. The effective implementation of existing international law, in particular the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, could mitigate these undesirable consequences of the use of AI.

Against this ambivalent background, the German Commission for UNESCO organised three workshops with international experts between October 2023 and May 2024 – one of them in cooperation with the UNESCO Commissions for Austria, Luxembourg and Switzerland. The following summary presents the key findings of all workshops with concrete approaches for an ethical use and development of AI, particularly in the CCI sector. These are in line with the central statements of current relevant studies and formats of UNESCO and the German foreign cultural and educational policy (see a recent study written by a UNESCO expert[1]).

[1] Kulesz, Octavio. 2024. "Artificial Intelligence and International Cultural Relations: Challenges and Opportunities for Cross-Sectoral Collaboration". in: ifa – Edition Culture and Foreign Policy.

The following findings are also in line with the "Fair Culture-Charter" recently presented by the German Commission for UNESCO. The following summary does not necessarily reflect the opinion of all participants of the workshops or of the UNESCO Commissions for Austria, Germany, Luxembourg and Switzerland.

Guiding principle: Consistent application of existing international law

The development and use of AI require ethical guidelines and regulations to prevent the negative effects of AI that are already visible – such as discrimination, market concentration or precarious working conditions – from becoming more entrenched. UNESCO has long provided an international legal framework to address these challenges. This consists of the binding UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions from 2005, the equally binding UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage from 2003, and the UNESCO Recommendation on the Ethics of Artificial Intelligence from 2021. In this UNESCO Recommendation, the international community has already agreed on, among other things, sector-specific training programmes, support for local cultural enterprises and the promotion of cultural diversity through AI. All of the following approaches that were identified during the workshops are aimed at the consolidated implementation of this UNESCO international law in national regulatory practice, as also requested by the UNESCO Executive Board in October 2024 (220 EX/Dec. 42).

However, it is by no means sufficient to simply 'copy' the wording of UNESCO's international law for national policy-making. **Instead, sector-specific regulation is needed that takes into account the specific circumstances of the CCI sector in Germany.**

In an international comparison, Germany has a high density of institutions and regulations for the protection of cultural diversity (such as the social security fund for artists or, more recently, the minimum wage). Nevertheless, there is still a considerable backlog in the implementation of sector-specific regulations and the promotion of ethical AI in the cultural and creative industries.

This complex task requires both sensitivity and speed: First, it is important to find the right balance between effective protection of creative work and intellectual property on the one hand, and maintaining the greatest possible freedom to exploit the creative potential of AI on the other. Secondly, time is of the essence in the arts and creative industries, as generative AI systems are massively and rapidly changing fundamental dynamics.

Incentives and support structures (rather than bans) are also particularly important to enable the sector – and especially artists themselves and others working in the cultural and creative industries – to use AI applications in an ethical way.

Field of action 1: Protecting copyright and providing high-quality data

Copyright protection and a different approach to training data in terms of quality and labelling are currently top priorities for the cultural and creative industries in relation to AI. There have rightly been repeated and vigorous calls for appropriate control measures, including regulatory action.

Currently, most AI systems – especially those of large technology companies – are trained on data sets whose use violates either the rules of European copyright law and/or the legitimate interests of authors in at least three ways:

First, the data sets (texts, audiovisual material, database entries, etc.) are generally used without the consent of the authors. An 'opt-out' by authors is only effectively possible with a few known LLMs and their providers. Moreover, the data sets of many large providers and how they were created are often completely opaque; even large media companies have to go to great lengths to prove that their data sets have been used without their consent.

Second, authors are not remunerated for contributing to such data sets.

Third, data sets generated unsystematically by web scraping and similar methods are not representative, i.e. they reproduce existing biases and prejudices.

In light of these issues, the following four measures could help to improve copyright protection as well as data quality and availability.

The first measure is the introduction of a **right of use reservation for rights holders** on the use of their data. AI systems should only be allowed to use data if consent has been given or no explicit objection has been raised. An effective opt-out must be possible. There are already preliminary approaches to certificates that can be used by technology companies as proof that rights holders have consented to the use of their data. (e.g. the Fairly Trained Certificate).

The second measure, in line with the Open Data Principle, is the introduction of a **labelling requirement for input data** used to train AI systems. This is the only way to transparently trace the data basis on which the AI results were generated. Labelling could (also) take the form of a data registration system combined with a remuneration mechanism (e.g. similar to GEMA[2]). In some areas, existing systems can be used or learned from. For example, articles in scientific journals are now universally provided with a DOI number according to the Digital Object Identifier System. If AI companies were required to always train their generative text generation systems with this DOI number, it would be comparatively easy to understand which results these systems have obtained from which texts.

The third measure, despite significant technical challenges, is the mandatory **labelling requirement of the final output** of AI systems. In contrast to data registration systems, the labelling requirement would apply to AI-generated output in the form of image, audio or video content. According to Art. 50 of the EU AI Act, for example, AI systems that create synthetic content (such as deepfakes) must label their final outputs as artificially generated. It must be transparent whether texts, images, films, etc. were created by AI or essentially by humans. Clear and verifiable standards should be defined for demarcation problems, for example because almost every smartphone today takes AI-optimised photos.

As a fourth measure, **the public sector should ensure the provision of representative, fair and, where possible, openly accessible data sets.** This can be done through financial support (e.g. for creatives, universities and businesses), incentive schemes and by regulating and standardising the production of data sets (e.g. by setting data quality standards). Access to new and existing high-quality data sets also needs to be significantly improved, for example through the creation of secure data repositories (where museums, for example, can share data securely).

[2] German government-mandated collecting society for collective rights management.

Field of action 2: Extensive expansion of educational programmes

This paper argues for the opportunity-driven use of AI systems in the creation and marketing of artistic and cultural goods and services. Many creative professionals are already using AI systems intensively in their daily work. Others are more cautious in view of the problems and risks that undoubtedly exist.

It is therefore necessary to develop new skills so that creative professionals can use AI as a tool in their work – be it in creation, marketing or public presentation and communication – in a profitable and meaningful way.

An **education and innovation campaign for the cultural and creative industries**, especially for artists, is needed to embed these skills across the sector.

Recognising the wide professional diversity of people working in the different fields of the CCI sector, and to ensure that as many people as possible can benefit, the **teaching of AI skills should be part of the curricula of all vocational training and degree programmes in the arts and creative sector**[3]. This could include programming skills to enable the co-creation of industry-specific (open source) software. As a result, people working in the cultural and creative industries should be able to design and use AI according to their own needs.

In addition, **people who are already working in the CCI sector also need further training programmes on the use of AI in their daily work.** The combination of education and training would also enable locally based cultural organisations, small and medium-sized enterprises and self-employed artists to counter concentration trends in the arts and cultural market.

Germany could look to France as a model for financing such an education campaign. There, revenue from taxes on large technology companies goes into a cultural and creative fund that also finances education programmes.

[3] One example of how the transdisciplinary teaching of AI skills is already being practised is the digitisation course "Artificial Intelligence in Culture and Arts" at the University of Music and Performing Arts Munich.

Field of action 3: Promoting networking within the CCI sector and across sectors

The CCI sector in Germany – as well as worldwide – is extremely diverse. It ranges from the solo self-employed person to the voluntary art association, the museum association and the large publishing house to the commercial film studio with thousands of employees. Networking platforms within the sector are just as rare as exchange formats with other industries. Yet these would be important prerequisites for the effective, informed and ethical use of AI by artists and workers in the cultural and creative industries.

Within the cultural and creative industries, **platforms for the exchange of data and examples of good practice on the quality and utilisation of AI** should be created. The **reusability and open exchange of data and code**, e.g. in data or code repositories, should already be taken into account during their generation or development.

Currently, even high-quality training data or code is often not reusable (or only with great effort).

Just as important as the exchange within the CCI sector is the **exchange with other sectors.** There are only few people with close contacts and knowledge of the technology sector in some cultural and creative industries – and vice versa. As a result, the innovation potential of AI in the small and medium-sized music industry, for example, is largely untapped – reinforcing existing market concentration in favour of large music streaming platforms. Applications for technology funding from music technology start-ups are often rejected on the grounds that they are more appropriate for cultural funding. In turn, cultural funding programmes reject applications with the analogous argument of technology funding. **Government funding programmes therefore need to be reviewed or relaunched with a view to their cross-sectoral applicability.** Overall, the concerns of the cultural and creative industries need to be reflected in all government AI strategies.

A good example of a funding programme that supports cross-sector collaboration between science, technology and culture is the EU-funded STARTS initiative. The core of STARTS is a residency programme in which artists, for example, work in technology companies for a certain period of time.

To ensure that interfaces and cross-sector networks become the norm rather than the exception, art schools, for example, should work together with university departments for computer science to (co-)develop digital systems and AI architectures, or to make profitable use of existing AI systems. Based on such collaborations, another important medium-term goal can be achieved: **More diverse and interdisciplinary teams in cultural institutions and the technology sector.**

Field of action 4: Making AI contribute to cultural diversity at a global level

From a global perspective, today's AI ecosystems in the cultural and creative industries collide with binding international law: a few large companies from North America and China (and to a limited extent from Europe) dominate the market. This effectively undermines almost all the provisions of the UNESCO Convention on Cultural Diversity, as the AI systems developed by these companies and the training data and recommendation algorithms they use reinforce a 'monoculture'. The data on which AI systems are based is often incomplete, biased or otherwise of poor quality. As a result, the systems replicate the cultural content, but also the underlying worldviews, aesthetics and prejudices of already very dominant world regions in all other regions of the world. These effects are amplified by the algorithms of generative AI. Well-known artists from culturally dominant world regions are suggested and displayed in favour of local cultural content. AI thus massively threatens the diversity of cultural content and reinforces marginalisation.

A diverse, fair and human-centred global digital ecosystem requires **incentives for businesses and mechanisms for the local production of data sets and LLM, the discoverability of local content, the removal of barriers to digital participation, the fair remuneration of authors and the transparency of algorithms.** Human-centred AI systems are characterised by being guided by the interests of the people affected by the system's decisions throughout its life cycle, from programming and use to decommissioning, and by respecting human rights.

Some of the approaches discussed in fields of action 1–3 with regard to Germany are also relevant on a global scale, such as mandatory labelling of data and the creation of remuneration systems for its use. Such incentive systems can, among other things, improve the discoverability of diverse and local content.

AI systems that are designed to be fair and human-centred can certainly enhance cultural diversity and inclusion to the benefit of the so-called Global South: For example, they can help preserve endangered forms of cultural expression (such as languages, poetry, folk tales, writing styles, etc.) and fundamentally improve participation in both value creation and cultural exchange.

However, this positive technical potential of AI will not unfold automatically – the conditions for a human-centred global use of AI that promotes the diversity of cultural expressions must be created by people themselves.

Action in four areas can help: First, clear **policy and regulatory measures are needed to create more, more representative and higher quality data sets** as a basis for AI systems. Second, targeted **AI skills development and local AI funding programmes** are needed, particularly in countries of the Global South, to address the current massive global market imbalance. Third, **digital infrastructure and participation**

must be improved in the Global South. Fourthly, **digital platforms for data exchange and the cross-border use of computer capacities** can also help to bridge global divides in cultural and economic participation in the short and medium term (i.e. even before the nationwide expansion of local infrastructure). Foreign cultural and educational policy and German development cooperation can play a supporting role in all these areas.

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