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Homogenised Heritage:
AI and Central Europe



***HOMOGENISED
HERITAGE: AI AND
CENTRAL EUROPE***

***THE IMPACT OF AI ON LOW-
RESOURCE LANGUAGES AND
VISUAL CULTURES IN THE
VISEGRAD COUNTRIES***

Disegno

JOURNAL OF DESIGN CULTURE

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Disegno publishes original research papers, essays, and reviews on all aspects of design cultures. We understand the notion of design culture as resolutely broad: our aim is to freely discuss the designed environment as mutually intertwined strands of sociocultural products, practices, and discourses. This attitude traverses the disciplinary boundaries between art, design, and visual culture and is therefore open to all themes related to sociocultural creativity and innovation. Our post-disciplinary endeavour welcomes intellectual contributions from all members of different design cultures. Besides providing a lively platform for debating issues of design culture, our specific aim is to consolidate and enhance the emerging field of design culture studies in the Central European academia by providing criticism of fundamental biases and misleading cultural imprinting with respect to the field of design.

All research papers published in Disegno undergo a rigorous double-blind peer review process.

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Contents

introduction

- 004** Brigitta Iványi-Bitter: *Visibility under AI Mediation*

research papers

- 008** Ania Malinowska: *AI Assimilationism: The Cultural Flattening of Localities in Generative Models*
- 026** Michał Krzykowski: *Beyond Computational Illusion: Futures Worth Wanting for Artistic Practices and Technical Cultures*
- 040** Brigitta Iványi-Bitter, Tibor Bacsi, and Szilárd Szakács: *Epistemic Cultural Flattening in Generative Visual AI: Benchmarking Hungarian Heritage and Designing a V4 Path Toward Culturally Aware Text-to-Video*
- 068** Kateřina Marková: *Against Collective Vulnerability: Understanding Cultural Alignment in LLMs (Not Only) in Central Europe and Calling Design Research to Help*
- 090** Anna Keszeg: *The Paprika-Effect. Central and Eastern Europe as a Noisy Label in AI-Generated Images*
- 108** Jiří Philippe Janda: *North Bohemia as a Low-Resource Visual Context: Everyday Heritage, Uneven Visibility, and Synthetic Aesthetics*
- 132** David Kořínek: *The Liminality of Generative Creation: The Artistic Process Between Intuition and Algorithm*
- 148** Albin Kuchta: *Virtual Spaces: Tools of Poetic Resistance or Censorship Devices?*

- 168** *about the authors*

INTRODUCTION

VISIBILITY UNDER AI MEDIATION

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Artificial intelligence (AI) has come to occupy a pivotal place within contemporary design culture, reframing how images and texts are produced, circulated, classified, and made legible to publics and professionals alike. AI-driven systems increasingly structure encounters with culture, mediate memory, shape the retrieval of references, and help form authority across ordinary regimes of representation. (Vera 2025). This issue foregrounds the infrastructures through which these processes reshape appearance, legibility, and social efficacy in culture, treating AI not merely as a tool but as an ambient mediator of cultural mediation and value production.

The regional vantage of Central Europe and its Visegrád context sharpens this inquiry. The uneven presence of languages, visual archives, and everyday environments within dominant computational systems foregrounds very specific modalities of visibility and invisibility, including the post–Cold War archival history that continues to condition current digital infrastructures. The Iron Curtain legacy remains a salient frame for understanding partial visibility: archives in post-communist contexts have been less frequently digitised, more constrained in accessibility, and less represented in online data ecosystems, with consequential effects on AI training, data extraction, and model behaviour (Zaagsma 2023). Cultural narratives from the region have historically been filtered through external interpretive frameworks, reduced to geopolitical abstractions or to a limited repertoire of circulating motifs, complicating the reception of region-specific material in global AI pipelines. From this perspective, Central Europe illuminates tensions between technical legibility and historical complexity, and between cultural participation and representational distortion within global systems of visibility (Prescott and Hughes 2018).

The essays gathered here emerged from collaborative conversations across the region among authors committed to understanding how AI is altering the cultural conditions of visibility in Central Europe, and who recognised early on that this emergence urgently required concepts, cases, and attuned methods. The issue represents a regional effort to

articulate a problem that has already become materially present while its vocabulary is still forming.

Several contributors develop conceptual tools to address this shift. Ania Malinowska's work on AI assimilationism (the visibility of specific local forms after translation into dominant linguistic, aesthetic, or market-oriented frameworks) provides a lens for reading how regional specificity becomes legible through homogenising frames. Michał Krzykowski's philosophically and infrastructurally oriented notion of computational illusion captures the tendency to treat the computable as an adequate stand-in for social and cultural reality. In our collaboration, we advance the notion of epistemic cultural flattening to identify recurring gaps between technically plausible outputs and recognition grounded in culturally situated knowledge. Kateřina Marková's work on collective vulnerability—how commercial AI infrastructures expose cultures to pressures of statistical averaging—helps illuminate the pressures experienced by diverse Central European cultures under global optimisation regimes. Taken together, these concepts foreground a common claim: cultural loss in AI contexts is often subtle, enabled by systems that appear functional, convincing, and efficient.

A feature of this issue is its attention to local, material cases where AI's cultural effects become tangible. Anna Keszeg's "paprika-effect" shows how AI-generated imagery can render Central and Eastern Europe a non-differentiated region, organised around shorthand tropes rather than historically grounded knowledge, thereby revealing a fragility in how region-specific meanings survive in synthetic imagery. Jiří Philippe Janda's study of North Bohemia, framed as a low-resource visual environment, demonstrates how translation often displaces infrastructural features of everyday post-socialist life, while iconic landmarks retain visibility. This displacement reveals what is left behind when computational mediations privilege certain signals over lived experience. A Hungarian visual-heritage benchmark demonstrates how region-specific ornamental vocabularies and questions of provenance can be flattened in AI outputs, producing culturally misaligned representations despite technological fluency. The practice-based case of Rafani, a Czech collective who collaborate with generative systems, shows artistic work with AI as a liminal process—negotiations among intention and outcome, historical reference and algorithmic pattern, and human/non-human authorship—where meaning is distributed across agents and platforms. Albín Kuchta's inquiry into digital archives and virtual cultural spaces foregrounds questions of resistance versus reproduction, foregrounding Roma and queer cultures and showing how metadata and archival regimes shape what can be remembered or publicly rendered.

These regional and embodied investigations converge on a shared finding: cultural erosion under AI tends to be gradual and procedural,

manifesting as visual standardisation, provenance displacement, and the weakening of region-specific meaning rather than as crude misrepresentation.

Beyond critique, several contributions point toward interventions and governance. The infrastructures enabling AI operate as mediators of circulation, organisers of attention, and producers of plausible cultural forms; datasets, search hierarchies, moderation practices, metadata standards, black-box prompts, and generative interfaces constitute a background architecture shaping cultural participation, often without explicit design acknowledgment. In response, authors propose interventions including multilingual metadata, collaborations with GLAM (galleries, libraries, archives, and museums) institutions, and experiments in community-based archives and participatory data practices; they also map workflows aligned with Central European cultural contexts (the V4 region) to foster more contextually attuned design practices (Prados-Peña et al. 2023).

Several essays also explore artistic and curatorial strategies that repurpose existing tools, and discuss evaluation criteria for generative systems that emphasise situated memory, provenance, and ethics. The papers propose practical pathways for integrating AI into memory-work, archival practices, and regional cultural policy—ranging from open metadata to inclusive archiving workflows and from critical reviews of current benchmarks to alternative evaluation frameworks that foreground provenance and locality (Camilleri 2023).

If designed environments are understood as systems organising perception and value, the infrastructures through which AI operates belong squarely in the domain of design culture. AI acts as a mediator of circulation, an organiser of attention, and a producer of culturally plausible forms that shape expectations and habits as much as outputs. The everyday behind-the-scenes architecture—datasets, search hierarchies, moderation norms, metadata schemas, prompts, and generative interfaces—conditions participation and the reception of cultural materials in ways often not experienced as design in a conventional sense. These observations align with broader literatures on AI in culture, memory, and digital infrastructures, and they anchor regional inquiries within a global matrix of AI-mediated culture.

A critical corollary is that interventions must be concrete and contextual. Multilingual metadata and GLAM partnerships are not merely technical fixes, they are culturally meaningful governance moves that re-centre region-specific knowledge in global data ecosystems. Community-based archives, participatory data practices, and re-evaluated success metrics for generative systems offer tangible routes to counteract homogenisation and preserve local memory ecologies, particularly in post-socialist contexts where historical narratives have been unevenly digitised or archived (Menotti 2025).

The variety of approaches assembled here reflects the difficulty of grasping AI as a cultural condition from any single vantage point. Taken together, the studies suggest that what is at stake in the V4 regional context exceeds technical performance and questions of fairness taken in isolation. More fragile issues are involved: how cultures appearing in AI images can avoid homogenisation, and how cultural heritage is maintained within systems that increasingly organise collective knowledge. From this perspective, Central Europe is an important context, in which wider transformations in cultural mediation are observable with particular clarity.

Brigitta Iványi-Bitter

REFERENCES

Vera, Fulgencio. (2025). Critical Algorithmic Mediation: Rethinking Cultural Transmission and Education in the Age of Artificial Intelligence. *Societies*. 15. 198. 10.3390/soc15070198.

Prescott, Andrew, and Lorna Hughes. 2018. "Why Do We Digitize? The Case for Slow Digitization." *Archive Journal*, September 2018

Zaagsma, Gerben. 2023. "Digital History and the Politics of Digitization." *Digital Scholarship in the Humanities* 38 (2): 830–51. <https://doi.org/10.1093/llc/fqac050>

Menotti, Gabriel. 2025. "The Model Is the Museum: Generative AI and the Expropriation of Cultural Heritage." *AI & Society* 40: 5593–97.

Camilleri, Mark Anthony. 2023. "Artificial Intelligence Governance: Ethical Considerations and Implications for Social Responsibility." *Expert Systems* 41 (7) <https://doi.org/10.1111/exsy.13406>

Prados-Peña, Maria Belén, George Pavlidis, and Ana García-López. 2023. "New Technologies for the Conservation and Preservation of Cultural Heritage Through a Bibliometric Analysis." *Journal of Cultural Heritage Management and Sustainable Development* 15 (3): 664–86.

