Envisioning Alternative Futures: Reinventing and Reimagining Technologies for Art and Creative Practices

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Practice problem

Bruce Sterling's 1995 manifesto for the Dead Media Project highlighted the growing uncertainty surrounding our evolving media landscape, stating, "We have no idea...what we are doing to ourselves with these new media technologies" (Sterling, 1995). This uncertainty has only intensified in the 21st century with exponential technological growth. Media art practices are often intrinsically intertwined with technological development, serving as a critical lens for examining technology's societal impact.

Historically, artists like Nam June Paik have been early adopters, repurposing consumer electronics to create groundbreaking video art. However, the rapid pace of technological change presents significant challenges for today's artists. Profit-driven tech companies often black-box their products, concealing their inner workings and mechanisms. Additionally, Cloud-based AI text-to-image generation tools offer shortcuts, generating hyperrealistic images with just a few lines of text, attempting to eliminate artistic processes and human experiences with AI automation.

Artists often lack the specialized knowledge and equipment needed to engage with these complex and opaque technologies, losing agency and the ability to critically engage with them. Furthermore, rapid technological development disrupts the traditional critique-innovation cycle, where art influences technology. By the time an artistic critique is published, the technology it analyzes might already be outdated, pressuring artists to passively adopt new tools and embrace, rather than critique and challenge, the dominance of technology in our lives (Cascone, 2021).

Tech companies and artists have very different approaches to envisioning the future. Tech companies focus on solving problems and maximizing efficiency and profits, while artists aim to discover meanings and aesthetics through human experiences and hands-on creation. To reclaim communal ownership of the future (Emerson, 2023), this research proposes an alternative approach: envisioning our own technological future by developing various artistic tools and practices that break free from the constraints imposed by tech companies. By engaging with art communities and embracing DIY (Do It Yourself) culture, this research explores the potential of reimagining and reinventing decommodified and marginalized technologies and existing practices within media art practice and education. Through critical analysis and practice-based artistic research, this study examines the viability of this approach and its potential benefits and challenges.

Ambition/goal

This research challenges the dominance of maximalist techno-aesthetics, which prioritize ever-increasing digital resolution, fidelity, and connectivity at all costs (Mansoux et al., June 2023). It argues that art practices can engage with technology beyond simply relying on the services and infrastructures provided by large tech companies. The aim is to explore ways to liberate artists from the pressure to passively adopt new tools and break free from the built-in obsolescence of digital culture. Additionally, it proposes a path towards an alternative technological future for artists and creatives—one that fosters diverse aesthetics, empowers artistic agency, and actively and critically engages with technologies.

Drawing on Zielinski's non-linear and alternative ways of thinking about media, this research seeks to reinvent and reimagine "forgotten, failed, or marginalized technologies and art practices" (Zielinski, 2006). By collaborating with art communities and embracing DIY (Do-It-Yourself) culture, it integrates the "new in the old" into current media discourses, questioning and critiquing existing technological trajectories and rethinking materiality in contemporary media practices and arts (Hertz & Parikka, 2010).

From the perspective of a practice-based artist and educator, I contend that these overlooked technologies are not merely curiosities of media studies and media archaeology, but also hold significant potential for artistic experimentation. These technologies display two main characteristics that contrast sharply with problematic high-tech tools:

Decommodified: The collapse of the industries behind these technologies has rendered their original purposes obsolete, allowing these devices to transition from commercial products into a decommodified state. This enables artists to repurpose, reinvent, and reimagine them with unique artistic visions.

Possibilities of Failures: Imperfect by nature, these technologies provide opportunities for artists to explore, embrace errors, and appreciate the aesthetics of failure (Cascone, 2000), which are often overlooked by commercial industries.

Together, these attributes—with their emphasis on de-commodification and the aesthetic of imperfection—empower artists to delve into the materialities of media culture. This approach goes beyond the smooth facade of the interface, contrasting sharply with today's high-tech tools and their reliance on cloud-based infrastructures and complex technological processes (Kemper, 2023).

Grounded in these concepts, this research explores the potential of reimagining and reinventing decommodified and marginalized technologies within media art practice and education. By collaborating with existing art communities, such as artist-run film labs, a framework can be established for transforming countercultural aesthetics in experimental film practice within the context of contemporary media art and education. This approach emphasizes DIY culture and community support networks.

By empowering artists through making and participation, this research aims to cultivate a more resourceful and critical relationship with technology in their artistic practices. It challenges the paradigm of relying solely on the latest, most complex tools. Additionally, it advocates for a shift towards valuing artistic exploration, experimentation, and critical engagement over technical complexity and commercial interests.

Research questions

In response to rapid technological advancements and the increasingly complex and opaque commodification of media, this research explores alternative futures for media art practices. By envisioning and developing artistic tools that break free from the constraints of profit-driven tech companies, this study aims to reclaim communal ownership of technology. Embracing DIY culture and collaborating with art communities, the research investigates the potential of decommodified and marginalized technologies within media art practice and education. To achieve these goals, the following research questions will guide the investigation:

Emergent Practices and Impact:

What alternative art practices can emerge from artists' involvement in reinventing decommodified technologies, and how can these practices shape cultural and technological discourses?

Reconfiguration and Empowerment:

Can this research reconfigure media art practices and creative curricula, empowering artists and institutions to critically engage with technologies through diverse and critical strategies rather than passively adopting the latest tools?

Challenges and Opportunities:

What are the specific challenges and opportunities of implementing reinvented decommodified marginalized technologies in contemporary art practices and creative curricula, and how can they be systematically addressed?

DIY Culture and Community Support:

In what ways can DIY culture and community support networks empower artists to integrate technology into the creative process and enhance their expressive capabilities to comment on the impact of technology on society and culture?

Research Methods

This research employs a methodology combining media archaeology, technical reinvention, artistic practice, and critical analysis. By collaborating with artist-run film labs and engaging with DIY culture, it explores the potential of decommodified technologies in media art.

Context of Artist-Run Film Labs and Filmwerkplaats

The shift from film to digital has rendered analog film technology "obsolete" in mainstream media production, creating unique opportunities for artistic exploration. A global network of 68 artist-run film labs has emerged, dedicated to reinventing analog film as artistic practice (Rey, 2009). Filmwerkplaats in Rotterdam is part of this network. These labs offer several benefits for this research:

Access to "Obsolete" Decommodified Technologies: Due to the digital transition, professional analog film equipment has become decommodified, allowing artists to experiment and manipulate directly (Saude, 2018).

Community Knowledge and Expertise: Film lab members possess extensive knowledge and practical skills, providing insights into established practices and exploring challenges and solutions for transforming these technologies.

Collaborative Innovation: While analog practices offer great potential for artists, their direct application is often limited. In some artist-run film labs, practices may remain rooted in the avant-garde films of the 60s, where filmmakers deconstructed narratives to challenge mainstream film aesthetics (Drummond, 1979). However, with analog film no longer dominant, these labs, including Filmwerkplaats Rotterdam are actively seeking new ways to reinvent practices for the future. Collaboration with artist-run film labs, such as Filmwerkplaats in Rotterdam, is crucial for this research. These labs offer unique opportunities for exploring 'obsolete' analog film technologies, providing a rich context for artistic experimentation.

Through collaboration with Filmwerkplaats members, we aim to establish a framework for transforming countercultural aesthetics in experimental film practice within the context of contemporary media art and education.

Year-by-Year Plan:

Year 1: Foundational Research and Media Archaeology

Objective: Establish a comprehensive understanding of historical, failed, or marginalized technologies through media archaeology and explore their potential in artistic practices.

Activities:

- Archival Research and Literature Review: Conduct in-depth archival research to gather historical data on decommodified technologies with artistic potential. Review relevant literature to understand the socio-cultural contexts of these technologies.
- Collaboration with Filmwerkplaats: Engage with Filmwerkplaats members to observe and analyze their practices. Discuss possibilities for reinventing analog technologies within contemporary media art.
- Technical Skill Development: Develop technical skills required for reinventing selected technologies, including digital fabrication, DIY electronics, and open-source digital tools.
- Documentation: Document the research process through photographs, videos, and detailed technical notes to capture insights and progress.
- Collaborative Strategies: Outline specific collaborative activities with Filmwerkplaats and other partners, including joint workshops, shared exhibitions, and co-authored publications.

Milestones:

- Complete detailed documentation and analysis of selected historical technologies.
- Initiate the reinvention process for selected technologies.
- Establish collaborative practice frameworks with the Filmwerkplaats community.

Year 2: Technical Reinvention and Initial Artistic Practice

Objective: Advance the reinvention of selected technologies and begin integrating them into contemporary art practices and educational settings. Develop specific criteria for evaluating the success of the reinventions and educational integrations.

Activities:

- Reinvention of Devices: Continue the technical reinvention of devices using digital fabrication, DIY electronics, and open-source digital tools.
- Collaborative Workshops: Organize initial workshops with Filmwerkplaats members and WDKA students to explore artistic applications of reinvented devices.
- Artistic Creation: Develop artworks incorporating reinvented devices, focusing on themes such as perception, temporality, and the aesthetics of failure.
- Documentation: Document collaborative processes and outcomes through photographs, videos, and written reflections.
- Evaluation Metrics: Develop specific criteria for evaluating the success of the reinventions and educational integrations, such as participant feedback, engagement levels, and the quality of artistic output.

Milestones:

- Produce an initial body of artistic work incorporating reinvented technologies.
- Document and analyze the outcomes of initial workshops and collaborative projects.
- Refine research methodologies based on initial findings and feedback.

Year 3: Expanded Collaborative Workshops and Critical Analysis

Objective: Expand collaborative workshops to broader artistic and educational institutions and conduct critical analysis and case studies of reinvented technologies in media art practices. Continue to evaluate the success of these integrations.

Activities:

- Broader Workshops: Organize and conduct workshops and presentations for audiences beyond analog communities. Engage with broader art communities and educational institutions.
- Feedback Collection: Gather feedback from workshop participants and collaborators to assess the impact of reimagined practices.
- Case Studies: Develop in-depth case studies analyzing specific instances of integrating reimagined and reinvented technologies into artistic and educational practices.
- Evaluation Metrics: Continue developing and applying specific criteria for evaluating the success of the reinventions and educational integrations, adjusting as necessary based on feedback and findings.

Milestones:

- Produce a comprehensive analysis of workshop outcomes and their potential to foster new alternative practices.
- Complete detailed case studies exploring the challenges and opportunities of implementing reinvented technologies in art practices.
- Gather and analyze feedback from a diverse range of participants and collaborators.

Year 4: Documentation, Dissemination, and Future Directions

Objective: Finalize the critical analysis and documentation of the research process and findings and explore future directions for ongoing development and application of reimagined technologies in art and education.

Activities:

- Research Synthesis: Compile and synthesize research findings into a comprehensive dissertation.
- Exhibitions and Presentations: Organize exhibitions and presentations to showcase the artistic work produced throughout the research.
- Educational Integration: Engage with educational institutions to discuss integrating research findings into art and creative curricula.
- Collaborative Strategies: Continue outlining and implementing specific collaborative activities with Filmwerkplaats and other partners, including joint workshops, shared exhibitions, and co-authored publications.

Milestones:

- Hold exhibitions and presentations to disseminate research outcomes to a wider audience.
- Publish research findings as an artist’s book.
- Establish a network of collaborators and institutions interested in continuing the exploration of reimagined technologies in art and education.

Expected Outcomes:

- **Artistic Innovation:** Develop new artistic tools and practices that challenge the dominance of high-tech tools, promoting critical and resourceful engagement with technology in art.
- **Educational Impact:** Integrate reimagined technologies and practices into art and creative curricula, providing students with alternative approaches that prioritize critical thinking and hands-on experimentation.
- **Community Engagement:** Strengthen community support networks and foster collaborative initiatives that empower artists to explore and critique technology's impact on society and culture.

Intended Contribution of Your PD Project to (Professional) Practice

This research has the potential to significantly impact professional practice in several ways:

Empowering artistic agencies and fostering diverse aesthetics and alternative practices: By exploring and reimagining decommodified and marginalized technologies, this research empowers artists to reclaim control over their tools and creative processes. This shift from passive adoption to active engagement fosters greater artistic independence and innovation. This could lead to the emergence of new alternative art practices. Additionally, the emphasis on repurposing "obsolete" technologies opens new avenues for aesthetic exploration. Artists can develop diverse aesthetics that challenge the homogeneity often seen in mainstream digital media, enriching the cultural landscape and promoting a broader range of artistic expressions.

Promoting critical engagement with technology and challenging commercial Interests:

By encouraging a critical examination of current technological trajectories, the research equips artists and educators with the tools to question and critique the pervasive influence of technology in society. This critical engagement is essential for developing a more nuanced understanding of technology's role in shaping cultural and social dynamics. Furthermore, by advocating for a shift away from technical complexity and commercial interests, the research promotes a more sustainable and ethical approach to media art practice. This stance challenges the dominance of commercial technologies and encourages artists to explore alternative paths that prioritize artistic exploration and social responsibility.

Reconfigure educational curricula:

The integration of alternative technological practices into educational settings has the potential to reconfigure art and creative curricula. By incorporating hands-on, practice-based learning and emphasizing DIY culture, educational institutions can cultivate a more resourceful and critically engaged generation of artists. This approach also challenges the prevailing focus on the latest, most complex tools, encouraging students to value experimentation and creativity over technical proficiency.

Documenting and Disseminating Knowledge: The extensive documentation and dissemination efforts ensure that the insights and practices developed through this research are accessible to a wider audience. By sharing findings through workshops, presentations, publications, and online platforms, the research contributes to the broader discourse on media art and technology. This dissemination also facilitates feedback and iterative improvement, enhancing the overall impact and relevance of the research.

In summary, this research not only enriches the field of media art practice and education but also has far-reaching implications for how artists interact with and critique technology. By fostering a more resourceful, diverse, and critically engaged artistic community, the research contributes to the development of a more equitable and innovative cultural landscape.

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