Community Norms as Self-Regulation of Generative AI in Creative Industries

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1. Introduction

History has seen many instances of technologies that provided major enhancements through automation. These developments all inevitably came with questions regarding regulation, such as, what should effective regulation look like to ensure that the technology is used productively and beneficially, and that the societal harms introduced by it are mitigated? The recent meteoric rise of generative AI (Gen AI) has raised concerns on how creative industries will be affected, as these models offer an automated method of generating artistic works with unprecedented speed and ease. The question of regulation arises again, as we seek to both protect creatives and advance the use of automation in creative industries.

Methodology: We compare Gen AI to historical automation in creative fields, noting properties distinct to Gen AI. We then look at regulatory approaches deployed and assert that community-driven self-regulation is the way forward.

2. What's the same?

Previous cases of automation in creative domains include the **printing press**, which automated transcription; the **camera**, which automated portrait painting; **sampling and digital audio technology**, which automated the playing of instruments and arrangement of different musical elements; **search engines**, which automated information retrieval; **photo-editing software**, which automated the manipulation and enhancement of visual imagery; and **3-D printing**, which automated small-scale fabrication. These technologies — much like Gen AI — enabled the development of new creative works and changed the labor landscape of creative industries such as visual art, music, and journalism.

Most if not all forms of automation have been met with regulatory and legal concerns including copyright and intellectual property rights (1; 3; 4). Despite this, technological advancements have proven themselves as a boon to the creative process, some even giving rise to entirely new artistic fields such as photography and graphic design.

Regulatory approaches to automation in these cases have historically endorsed new forms of creation, attempting to incorporate them fairly into existing structures and avoid stifling innovation. (1) and (4) both ultimately ruled in favor of the automation with respect to copyright law. Policymakers have little to gain by limiting automation, as going too far can risk staying economically competitive on the world stage. Instead, many governmental initiatives attempt to *promote* automation by way of promoting innovation. The patent system, for example, naturally promotes developments of new technologies and designs, many of which are tools of automation.

3. What's different?

Gen AI is novel in both the way it is constructed and the way it is used. We discuss these aspects below.

HOW IS THE AUTOMATION CONSTRUCTED?

Derivative nature. Previous forms of automation which draw from existing intellectual property have been intrinsically referential. A traditional search engine, for instance, links to different websites and resources. Cameras capture a scene as it exists, with metadata providing specifics as to how and of what a photo is taken. On the other hand, generative AI models must draw from vast datasets by design, and in this way the process of automating (as well as the resulting system) is inherently derivative of its inputs.

While other forms of automation discussed are able to take in vast quantities (especially, e.g., a search engine), this is at runtime of the automated process. At construction, the references needed for all other forms of automation are relatively small. By constrast, generative AI models require vast amounts of input for training.

Opacity. Gen AI is built through a complex supply chain (18) involving several different stakeholders. The developers of commercial Gen AI systems have been reluctant to disclose details such as the sources or even the size of the training dataset (10). While this complexity and opacity is not unique to Gen AI systems (and was a challenge with search engines and social media platforms as well), the derivative nature of Gen AI coupled with opacity presents novel regulatory challenges. For example, groups like The New York Times (5) and Getty Images (2) have alleged that derivations were made from their intellectual property without proper compensation, but without sufficient disclosure it is difficult to rigorously validate such claims.

WHAT IS THE NATURE OF THE AUTOMATION?

Stochasticity. Traditional forms of automation are deterministic in the following sense: Given a set of user-defined inputs (such as aperture, shutter speed and size, for instance), the machine produces a single output (e.g., a photograph). Gen AI, on the other hand, utilizes randomness to produce novel outputs, such as giving the user multiple choices (Adobe's generative fill, for example) or new responses on repeated queries (most chatbots). This presents a novel relationship between the automation and the users of it.

General-purpose. Traditionally, automation has been designed to perform a single, specific task efficiently, be it image capture, information retrieval, manufacturing tasks, or otherwise. Gen AI, on the other hand, is envisioned to be a general-purpose, adaptable form of automation with a variety of potential uses ranging from article summary (21) to concept art (11), newswriting (8), tutoring (20), voice acting (24), general assistant work (9) and beyond.

HOW IS THE AUTOMATION PERCEIVED?

Accessibility. Many past forms of automation at their time of introduction have been limited in their immediate reach. This has historically provided a natural gatekeeping effect that in theory gives some lag-time to affected industries (see, e.g., (26) with respect to 3-D printing). This has allowed creatives to adapt and integrate these tools into their workflows, without replacing them outright. Gen AI, on the other hand, is touted for it's ease of use for all levels of expertise[1]. The startup cost to using Gen AI for creative uses is small, sometimes as simple as constructing a good prompt (not considering the initial effort to train these models). By contrast, other forms of automation for commercial purposes demand a higher investment, such as in the case of warehouse automation.

Anthropomorphism. Gen AI is commonly described in agentic language and anthropomorphized (7). These models are no longer perceived as tools to assist humans in creative endeavors, but rather as agents capable of making artistic contributions in their own right.

4. What's at stake?

It is widely believed that Gen AI has the potential to impact all aspects of society. Working creatives are feeling the impact of the technology already, notably actors (14), writers (19), journalists (13), and visual artists (25).

Affected groups may have to deal with a greater intensity and quantity of competition from automation than previous forms (6). Broader labor effects in creative industries include economic losses for artists (17; 16), changes in the nature and quality of jobs (of the kind that occurred with warehouse automation (29)) and broadly a cannibalization of the creative market with Gen AI tools replacing the very artists whose intellectual property was trained on (29; 6).

5. Regulating Generative AI

Regulation of automation in creative industries has historically centered innovation over protection for artists. From our analysis in Section 3, Gen AI presents novel regulatory challenges given it's derivative nature, reliance on user generated data, and scale of impact. It is thereby insufficient to follow the historical trend of taking a hands-off approach to regulation, as is starting to be emphasized in legal and policy discourse (28). Attempts at regulating AI have been largely swayed by powerful technology corporations, who assert either that self-regulation is sufficient or that their expertise is essential for crafting new regulation to prevent unintended societal harms (12). We argue that, as a result, current discussions around regulation of Gen AI fail to center the perspectives of the most important stakeholders: working creatives. Specifically, we suggest existing community norms in creative fields should serve as the basis for self-regulation of Gen AI.

Community norms are a compelling lens from which to view the regulatory landscape of Gen AI because they are already a strong mediating force in creative industries (15). We use the term 'community norms' here in a broad sense to refer to the social standards and expectations in various artistic communities surrounding creative processes and labor, attribution, discourse, and other aspects of the social identity of individual artists (22). Note that norms are highly community-specific, for example conventions around the use of other artists' work are vastly different in music (sampling), literature (fan fiction) and film-making (referencing iconic scenes from other films).

The integration of Gen AI into artistic processes is not inevitable, and its acceptability and adoption are reliant on community perception. Development and deployment must center the opinions of artists and consensus of artistic communities on symbiotic uses of Gen AI in the creative process. Mirowski et al. (23) and Shumakova, Lloyd, and Titova (27), for example, interviewed creative professionals on their perceptions and preferred uses of AI, revealing varying normative positions regarding use of systems trained on other artists' intellectual property.

In conclusion, Gen AI is a novel form of automation with the potential to instigate dramatic changes within creative industries. As such, it requires novel regulatory mechanisms, including a robust self-regulatory approach shaped by community norms, in order to safeguard artistic expression and the livelihoods of creative professionals (27; 17).

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