

Fashion's Data Doubles: How AI is Reshaping Modeling Work

Alexandra Mateescu, Zoë West, and Sanjay Pinto*

In March of this year, fashion mega-retailer H&M [announced](#) that it would debut a cohort of AI-generated replicas of real fashion models and feature them across its social media and marketing campaigns. In a promotional image, South Sudanese model Yar Aguer poses next to her AI-generated digital “twin” — one of them decked out in a white blouse and the other in a plush cashmere sweater. It’s unclear which image shows the “real” Aguer. “Finally a way for me to be in New York and Tokyo on the same day,” reads a quote superimposed over the image.

Companies like H&M have framed the use of AI as empowering to fashion models, arguing that they can reap its benefits by literally putting their digital avatars to work for them. But in an industry long characterized by major power asymmetries and serious job quality challenges, the impacts are far more complex.

In forthcoming research investigating the role of AI in fashion modeling, we interviewed a diverse group of 21 models to better understand how they experience and perceive the use of AI in their industry, and what it may mean for the future of modeling as a profession. We found that a variety of actors — including modeling agencies, brands, and AI startups — take advantage of existing industry gray areas, often treating models’ labor as “data” to be collected in order to bypass contractual protections and increase opportunities to profit. In turn, models struggle with the unsettling question of when an altered image no longer counts as their own “likeness,” worsening precarity and extending dehumanizing practices that have long been entrenched in the industry.

Extending Power Over Images

Fashion photography and image production have always been shaped by technological innovation. Image editing techniques evolved from the chemical alteration of photographic film in darkrooms to the use of an increasingly sophisticated arsenal of digital editing tools. But while models’ images used in brand campaigns and clothing catalogs have long been “artificial” in certain ways, new generative AI tools like Midjourney and Adobe’s Firefly AI, as well as techniques like 3D body-scanning and computer-generated imagery (CGI), have vastly enhanced the scope for models’ likenesses to be altered and distributed. In certain cases, such as when an image is completely AI-generated, these tools have eliminated the need to hire human models. In others, images of real models may be altered, or a model may be reproduced as an avatar. The adoption of AI tools varies widely across different segments of the industry, with distinct applications in brand advertising, commercial catalogs, e-commerce, fit modeling in garment prototyping, and social media content.

Large fashion brands and media companies hold enormous power in the fashion industry. As workers, fashion models have long faced challenges exercising control over the use and re-use of their image — their primary “product.” Despite the industry’s glamorous reputation, models typically work under precarious arrangements as independent contractors engaged through management companies, which are held to very few legal standards and exert significant control over models’ working lives. As with other feminized creative professions, fashion models are positioned as entrepreneurial

* All authors contributed equally to this work.

workers, expected to sometimes work without compensation based on the prospect that “exposure” may bring future economic returns.

Our research finds that these conditions have made the deployment of AI tools in the fashion industry ripe for labor exploitation. With the highly concentrated ownership and control of AI technologies intensifying corporate power over creative workers across different industries, the fashion industry may offer a glimpse into a future where growing numbers of workers face challenges around bodily autonomy, economic security, and control over their public identities.

What We Learned

Generative AI is being used to take advantage of existing power inequities and gray areas within the fashion industry, enabling fashion brands and others to more intensely exploit models’ labor. In our interviews, we heard about how a single photoshoot or booking with a model can be used by client companies to capture images, body scans, and/or measurements that can then be easily manipulated with AI technologies, allowing companies to extract additional profit from this data without needing to re-hire or further compensate the model. While conventional photo editing technologies have long allowed for what one model called the “Frankensteining” of a model’s image — like editing an image of a model’s face to change a hairstyle or alter body parts — generative AI technologies make it far easier for companies to radically manipulate models’ images and repurpose them. This dynamic further diminishes fashion models’ already limited control over how their own likenesses are used and profited from.

According to our interview subjects, such uses of AI are often enabled by — and further reinforce — the murkiness of models’ contracts and the sharp power asymmetries that allow brands to violate contract terms frequently and with impunity. Many models don’t actually see their contracts with client companies, since agencies frequently review and sign on their behalf. Agencies, we heard, are often ill-equipped or disinclined to stand up for the interests of models in negotiating the terms of AI usage, while some brands deploy AI tools and data collection practices without providing any contractual language about terms of use. Models often have little leverage to negotiate or contest terms, creating conditions in which some models feel pressured to relinquish rights to their likeness indefinitely or “in perpetuity.” As one model expressed, “I absolutely feel like the more I speak up, the less work that I get, and the more I’m kind of gaslit.”

The increasing use of AI tools is contributing to greater economic insecurity for fashion workers. Already, AI is limiting or eliminating the need for models, photographers, stylists, make-up artists, and location costs. We heard about casting calls for modeling gigs involving AI technologies — including 3D body-scanning for the creation of digital avatars — offering very low compensation rates. These models also noted that agencies may be incentivized to book such gigs to meet short-term targets, even if the trend poses a threat to their bottom line in the long term.

The impacts of AI are experienced unevenly across the fashion industry. Indeed, in the experience of some interviewees, certain types of modeling (such as e-commerce gigs and fit modeling) are more vulnerable to displacement by AI technologies. Models we spoke with expressed fears that younger and newer models looking to break into an oversaturated industry were particularly susceptible to accepting low compensation rates with potentially exploitative contract terms around the use of AI. Many also voiced concerns about how AI might exacerbate unspoken racial quotas, further narrowing [already limited opportunities](#) for models of color.

Most models we interviewed who had digital avatars were not able to leverage them for their own benefit. While some modeling agencies now enable models to book gigs through their digital avatars (often on separate contracts from their “real” selves), models we spoke to encountered opaque terms of ownership and control, low compensation, and/or a lack of bookings. However, one model’s experiences offered an example of a better alternative future for AI in the fashion industry: contracting with a high-profile agency and relying on a trusted friendship with her agent, she was able to use her avatar to gain access to new work opportunities with major brands and an important level of visibility. Still, while some other interviewees imagined such potential in the creation of digital avatars, our research suggests that most models would not be able to benefit without a shift in the power inequities and regulatory gaps marking the industry.

Beyond its economic impact, AI may be reinforcing and accelerating harmful beauty standards, particularly along gendered and racial lines — potentially reversing progress that has been made in recent years. Some pointed to the ways [racial biases](#) in AI learning models promote narrow, racialized beauty norms at the expense of diverse representation. One Asian model described to us a homogenous “AI aesthetic” that is becoming more common: “There’s AI bias when you sort of type in, ‘generate Asian model,’ [...] there’s already an image in my head that I already know that they’re sort of going to turn out.” Models also pointed to the unhealthy beauty standards AI perpetuates, undermining progress toward body diversity. A number of models we spoke with were also concerned about the harmful effects of these dynamics on the broader public, given the high visibility of models’ images.

AI technologies heighten models’ vulnerability to non-consensual uses of their images that many experienced as violations. Interviewees described models’ images being edited in hypersexualized ways or being turned into nude photos with [widely available](#) AI editing tools, or finding sexualized images of themselves generated in AI image libraries. One model we spoke with described this as “image violence.” Such a severe loss of control over their images was a source of distress, yet they were generally left without any avenue for recourse. As one model told us, “[T]he Venn diagram of people who want to do problematic things with your image, and the people who have the skills to do it isn’t a circle. But when you make it free for somebody to do a face swap in an AI image that they made in like, Midjourney, that increases the amount of people who now have the tools to do these horrible, problematic things.”

Can AI technologies be implemented in ways that benefit models and other fashion workers?

While a number of the models we spoke with imagined conditions under which they could benefit from AI-related uses of their data and images, most also saw current industry conditions as a barrier to realizing such possibilities. More broadly, they expressed concerns about AI’s impacts on livelihoods, worker control and dignity, and larger dynamics of cultural representation. Even if a larger number of models were able to achieve more favorable terms around AI use, the technology still raises questions about the role of human models in the future, including in branding and cultural production more broadly.

Recently in New York, the Model Alliance spearheaded [statewide legislation](#) that strengthens the rights of models to access key information about their contracts and report violations without fear of retaliation, while also requiring their consent around the creation and use of digital replicas through AI and other means. As the legislation goes into effect this month, the Model Alliance and other supporters are turning their attention to enforcement. Legislative and enforcement efforts that shore up labor rights generally while also contending with specific forms of AI-enabled labor extraction could substantially shape the technology’s impact on workers. Yet as generative AI is [increasingly embedded](#) across a range of creative industries, many of them with sharply unequal power relations, making those rights real will ultimately require bolstering the voice and power of workers themselves.

¹ Researchers at the [Worker Institute at Cornell University ILR School](#) and [Data & Society](#) carried out this research in partnership with the [Model Alliance](#), with funding from Omidyar Network and the Ford Foundation.

Alexandra Mateescu, MA, Researcher, Data & Society Research Institute: amateescu@datasociety.net

Zoë West, PhD, Senior Researcher, Worker Institute, ILR School, Cornell University: z.west@cornell.edu

Sanjay Pinto, PhD, Fellow, Worker Institute, ILR School, Cornell University: sp2458@cornell.edu