

Augmented Lookism and Responsible Design

Gendered Appearance Harm in AI-Mediated Design Systems

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Evaluation based on appearance, commonly referred to as lookism [1], has been theorized as a form of epistemic injustice [15] and operates as a structural bias with extensively documented economic consequences [6] and entrenched legal injustices [13]. With the proliferation of digital platforms and systems mediated by AI, such biases are no longer confined to interpersonal judgment but are increasingly automated, scaled, and embedded within sociotechnical infrastructures that shape visibility, credibility, and participation online [3, 9, 10].

This position paper examines *augmented lookism* as a sociotechnical imaginary through which gendered appearance norms are translated into design assumptions, algorithmic mechanisms, and decisions at the product level [8]. Across social media, dating platforms, professional networking tools, and generative AI applications [2], appearance is routinely quantified, filtered, ranked, and optimized, reinforcing existing hierarchies of desirability through data bias, optimization driven by engagement, and algorithmic feedback loops [5, 11].

Rather than framing lookism solely as an individual or cultural bias, this work positions platforms as norm-producing institutions and design systems as active agents in reproducing inequalities rooted in appearance [4, 14]. Drawing on sociotechnical analysis and emerging governance practices, the paper traces how aesthetic norms travel from cultural imaginaries into training data, interface affordances, and accountability gaps.

In alignment with responsible design and gender-based online harm mitigation, the paper proposes alternative design futures that resist optimization centred on appearance. These include dignity-preserving design principles, appearance-agnostic visibility mechanisms, and intervention points for practitioners to identify and challenge gendered appearance harm within products enabled by AI. Grounded in theories of discrimination as demeaning [7] and self-respect as a basic good [12], this work shifts emphasis from aesthetic conformity to inclusive participation, contributing to ongoing discussions on responsible technology design and sociotechnical imaginaries for safer digital futures.

Additional Key Words and Phrases: lookism, gender-based online harm, sociotechnical imaginaries, responsible AI, platform governance, algorithmic bias, appearance discrimination

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CCS Concepts • Human-centered computing; • Social media; • Responsible computing.

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1 Introduction

Appearance has long functioned as a social sorting mechanism, shaping access to employment, credibility, and social participation. While bias based on appearance historically operated through interpersonal judgment, contemporary digital platforms increasingly formalize and scale these dynamics through algorithmic systems that rank, recommend, and optimize visibility. In environments mediated by AI, appearance is no longer merely perceived; it is measured, encoded, and operationalized as a design variable.

Recent advances in computer vision, recommender systems, and generative AI have intensified this shift. Platforms now translate culturally situated aesthetic norms into data pipelines, interface affordances, and engagement metrics, embedding hierarchies based on appearance into sociotechnical infrastructures. These processes can disproportionately affect women and gender-diverse individuals, exposing them to heightened scrutiny, harassment, and reputational risk, while reinforcing dominant standards of desirability and legitimacy.

Despite growing attention to algorithmic bias and responsible AI, harm rooted in appearance remains undertheorized within HCI and design practice. Existing frameworks tend to focus on demographic fairness or model performance, often overlooking how aesthetic norms travel from cultural imaginaries into decisions at the product level.

This paper introduces *augmented lookism* as a sociotechnical imaginary to describe how evaluation based on appearance is amplified through design systems enabled by AI. Rather than treating lookism as an individual prejudice or isolated cultural phenomenon, I position platforms as norm-producing institutions and design systems as active agents in reproducing inequality based on appearance.

The contribution of this position paper is twofold. First, it offers a conceptual framework for understanding augmented lookism as a structural design problem rather than a purely social bias. Second, it outlines intervention points for practitioners to support more inclusive participation in systems mediated by AI.

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