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‘FAILURE’ AS A SPACE OF CRITIQUE AND IMAGINATION: THE CASE OF FACIAL RECOGNITION TECHNOLOGIES

Luisa Lobato

Pontifical Catholic University of Rio de Janeiro (PUC-Rio)

Thallita Lima

Federal Rural University of Rio de Janeiro (UFRRJ)

Introduction

Facial recognition (FR) has been promoted worldwide as a modern security solution. In Brazil, its expansion has taken place experimentally, through unregulated pilot projects and opaque public-private partnerships. With its widespread, fast implementation, errors and failures appear : wrongful arrests, technical flaws, systemic biases. A 2025 report shows that more than half of police stops triggered by facial recognition software were based on mistaken identifications (Nunes et al., 2025). These failures are advocated as integral to the bettering of the technology and thus tolerated. Our work explores the critical spaces that these failures produce. Inspired by biometrics artworks, we show that grappling with the failures of FR allows for a mode of experimentation that privileges both critique and alternative modes of interrogating and imagining the world.

The failures of facial recognition

The expansion of FR in Brazil has unfolded through strategic partnerships between public authorities and private companies, often in the form of pilot projects and temporary trials before full-scale adoption. Between 2018 and 2019, cities such as Rio de Janeiro, Salvador, and Campinas implemented FR pilots using Huawei’s technology (Lobato et al., n.d.). These trials exposed fundamental flaws, leading to wrongful arrests (Nunes et al., 2022; Edler, 2022). Since 2019, at least 18 cases of errors have been documented, including technical malfunctions, procedural failures, and database inconsistencies (Lima et al., 2024). Despite these failures, authorities have consistently framed FR as a symbol of modernization, cost efficiency, and enhanced security. A high authority from Rio de Janeiro celebrated the technology: “The tool is fantastic. It is long overdue for the Military Police to modernize” (Lacerda cited in Araújo, 2019). This enthusiasm has materialized in initiatives like PMERJ Tech in Rio de Janeiro and

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large-scale surveillance projects such as Muralha Paulista in São Paulo and Muralha Digital in Curitiba.

Nowadays, 351 projects are active across all Brazilian states (O Panóptico, n.d.), yet there is no official data production or public reporting on operational impact, false positives, or security indicators. Standardized procedures, regulations, or legal frameworks for FR use are lacking. FR widespread adoption, framed as a security policy, coexists with the absence of basic accountability, proportionality, and transparency mechanisms.

This landscape of failure – computational, social, and governance-related – demands a critical interrogation of what failure means. Rather than a mere technical limitation, failure serves as an analytical lens, exposing the fragility of techno-solutionist narratives and opening a space for political imagination. The errors of FR reveal systemic biases, the erosion of civil rights, and the risks of unchecked surveillance, inviting broader discussions on alternative approaches to security beyond automated biometric identification.

The power of continuous experimentalism

Continuous experimentalism, as discussed by Hoijtink (2022) makes room for perpetuating facial recognition technologies and has serious political implications. It makes experimental practices immune to failure, since failure itself becomes an opportunity for learning and improvement (see also: Lima, 2024). Every result becomes valuable for its potential to provide data about the technology itself; about the strategies of policing in place; about the possibility of increasing arrests by using FR; and about potential suspects. Almost tautologically, failure becomes a space for experimentation.

Interest in what happens after experimentation is often limited, unless the technology is effectively implemented in policing routine. When this happens, experimentalism leads to opacity. For example, the early implementation of FR in Brazil has followed an experimental logic, with tests and pilot projects being conducted by state authorities supported by corporations such as IBM, Huawei and Clearview AI (Nunes et al; 2022; Lobato et al., s.d). These tests and pilots hardly take part in the State's bureaucratic engine of transparency and data production, and so information on how technology is used, the results (positive *and* negative) they generate, and the potential violation of individual and collective rights associated with their use remains out of the public's reach. This opacity is potentialized by an absence of information on how police surveillance systems usually operate - an inheritance of the persisting authoritarian ethos in Brazilian policing, - which makes it harder to properly hold these institutions accountable for their excesses.

Failing, critiquing, refraining, imagining

The current experimentalist paradigm in FR privileges experimenting as an opportunity for the quick implementation and spread of the technology, and as a strategy to overcome legal and bureaucratic barriers. Experimentation becomes synonymous with the infamous motto 'move fast, break things', privileging quick implementation and avoiding regulation.

We propose to look for another way of experimenting, one that works against experimentalism by slowing down instead of accelerating, that pauses it instead of pushing it forward at any cost.

Biometric art gained reach with the publicization of FR kits beyond academic and corporate research labs (Schiller, 2020). This is neither a new art genre or new -ism, but a strategy of engagement with technology where artists experiment with FR as an instrument and tool for artistic creation. These experimental practices may adopt a more ludic attitude towards FR, such as CV Dazzle (Harvey, n/d), or use FR to subvert it, critique it or disrupt it, as is the case of Joy Buolamwini 'Coded Gaze' unveiling of bias in FR datasets.

Failure can be conceived of from multiple angles. Technical failures involve software error, bias or glitch, such as when FR fails to detect and identify a face due to a lack of precision, accuracy or to bias in its training data. It has been shown that error and false positives are disproportionately high for demographics underrepresented in the datasets, with FR performing better on lighter, male faces (Buolamwini and Gebru, 2018). But the issue is not simply one of data representation. Bias can be social, too. In policing, where FR is advertised as a technical solution to support suspect identification and arrest, it is about marking certain faces and behaviors as suspect. This echoes the early military funding for FR development, which anticipated applications for the identification of enemy combatants and terror suspects (Gates, 2011). When paired up with FR, social bias creates space for confirmation bias, where someone 'said to be a criminal' in the past can be repeatedly targeted in the future (Schiller, 2020).

The world imagined by FR rests upon a logical fallacy. It assumes that physiological behavior corresponds to physiological phenomena -- that it can tell how one feels or what type of person one intrinsically is. Artwork such as the 2016 STATE of Emotion, or the 2017-2018 THE FACE use FR to make explicit and problematize this one-to-one correspondence, while interactive experiences such as GenderCrusher and the practices of queer influencers mobilize queer theory to challenge FR fixed identity classifications (Eklund; Back, 2025; Bridges, 2021). Others, such as the Brazilian exhibition "Por Trás das Câmeras" (Behind the Cameras), dive deep into the social implications of this correspondence in FR and the discrimination it produces.

The above artistic interventions experiment with FR not to accelerate the implementation of FR, but to unveil the trouble with it. These interventions for slowing down and resisting the rush of technological solutions, pushing for alternative modes of thinking and doing with technology. Following Stengers (2008), slowing down makes room for the proposal of collective practices that break with the dominant logic of progress - a reorientation which requires "prioritizing equity over efficiency, social good over market imperatives...slower, more socially conscious innovation." (Benjamin, 2019:183).

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