




## CRIMINAL FORENSICS AS A TECHNOLOGY OF RACIAL SURVEILLANCE: BETWEEN FORENSIC EPISTEMOLOGY, NECROPOLITICS AND RACIALIZED ALGORITHMS

### PERÍCIA CRIMINAL COMO TECNOLOGIA DE VIGILÂNCIA RACIAL: ENTRE EPISTEMOLOGIA FORENSE, NECROPOLÍTICA E ALGORITMOS RACIALIZADOS

### LA CIENCIA FORENSE CRIMINAL COMO TECNOLOGÍA DE VIGILANCIA RACIAL: ENTRE LA EPISTEMOLOGÍA FORENSE, LA NECROPOLÍTICA Y LOS ALGORITMOS RACIALIZADOS

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#### ABSTRACT

This article offers a critical analysis of Brazilian forensic science as a technology of racial surveillance, highlighting how forensic practices contribute to the technical-scientific legitimation of institutional violence against Black and marginalized populations. Drawing on an interdisciplinary literature review, the article articulates critical criminology, sociology of science, and decolonial studies to demonstrate that forensic knowledge—far from neutral—is shaped by historical structures of racialization, penal selectivity, and epistemic exclusion. Special attention is given to the role of algorithmic technologies and artificial intelligence in the production of forensic reports and judicial decisions, revealing how such systems, when trained on biased datasets, exacerbate racial inequality under the guise of objectivity. The research underscores the urgency of an antiracist forensic reform, grounded in epistemic justice and in the pluralization of truth regimes regarding death and violence.

**Keywords:** Criminal Forensics. Racial Surveillance. Algorithms. Forensic Epistemology. Necropolitics. Epistemic Justice.

#### RESUMO

Este artigo propõe uma análise crítica da perícia criminal brasileira como tecnologia de vigilância racial, evidenciando como práticas forenses operam na legitimação técnico-científica da violência institucional contra populações negras e periféricas. A partir de uma revisão bibliográfica interdisciplinar, articula-se a criminologia crítica, a sociologia da ciência e os estudos decoloniais para demonstrar que o saber pericial — longe de ser neutro — está atravessado por estruturas históricas de racialização, seletividade penal e exclusão epistêmica. Em especial, discute-se o papel das tecnologias algorítmicas e da inteligência artificial na produção de laudos e decisões judiciais, revelando como esses sistemas, ao serem treinados com bases de dados enviesadas, ampliam a desigualdade racial sob a aparência de objetividade. A pesquisa aponta para a urgência de uma reforma pericial antirracista, pautada na justiça epistêmica e na pluralização dos regimes de verdade sobre a morte e a violência.

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**Palavras-chave:** Perícia Criminal. Vigilância Racial. Algoritmos. Epistemologia Forense. Necropolítica. Justiça Epistêmica.

## RESUMEN

Este artículo propone un análisis crítico de la ciencia forense brasileña como tecnología de vigilancia racial, destacando cómo las prácticas forenses operan en la legitimación técnico-científica de la violencia institucional contra las poblaciones negras y periféricas. A partir de una revisión bibliográfica interdisciplinaria, se articulan la criminología crítica, la sociología de la ciencia y los estudios decoloniales para demostrar que el conocimiento forense, lejos de ser neutral, está permeado por estructuras históricas de racialización, selectividad penal y exclusión epistémica. En particular, el artículo analiza el papel de las tecnologías algorítmicas y la inteligencia artificial en la producción de informes y decisiones judiciales, revelando cómo estos sistemas, cuando se entrenan con bases de datos sesgadas, aumentan la desigualdad racial bajo la apariencia de objetividad. La investigación destaca la urgencia de una reforma forense antirracista, basada en la justicia epistémica y la pluralización de los regímenes de verdad sobre la muerte y la violencia.

**Palabras clave:** Pericia Criminal. Vigilancia Racial. Algoritmos. Epistemología Forense. Necropolítica. Justicia Epistémica.



## 1 INTRODUCTION

Criminal expertise occupies a central place in the architecture of contemporary criminal justice, operating as a technical link between the materiality of facts and legal decisions. Its epistemic authority is built on the promise of neutrality, objectivity, and scientific rigor — attributes that give it credibility both in the institutional sphere and in the social imaginary. However, several authors have already demonstrated that the science that operates in the courts is far from neutral. As Jasanoff (2004) observes, forensic production is crossed by institutional pressures, social asymmetries and historically situated regimes of truth. In Brazil, these dynamics acquire even more complex contours, given that forensics is part of a criminal field strongly marked by racial selectivity, institutional violence, and tacit pacts of impunity. Technical-scientific action, in this context, cannot be understood apart from the structures that organize access to truth and justice – nor as a universally accessible resource.

The critical literature in criminology and sociology of science has insisted on the need to denaturalize the technical-legal devices that operate within the penal system. Authors such as Latour (1994) and Foucault (2003) draw attention to the productive character of expert knowledge, that is, to the fact that it not only describes reality, but constitutes it. The expert report is not a mirror of the facts, but a codified interpretation, crossed by methodological choices, omissions and symbolic frameworks. This is particularly sensitive when it comes to the production of evidence involving violent deaths, police stops, or suspicion of illegal practices by state agents. In these situations, forensics often acts to confirm official versions, consolidate narratives of culpability about racialized bodies, and make dissenting voices invisible. As Mello (2019) argues, technical silence is also a form of violence — a violence that hides under the mask of technicality.

The hypothesis that guides this work is that the Brazilian criminal forensics acts, in a systematic way, as a technology of racial surveillance. This action occurs both through selective omission — the refusal to examine certain bodies, territories, and crimes — and through the mobilization of technical-scientific discourses that reinforce the culpability of already stigmatized populations. The idea of "racial surveillance," as developed by Browne (2015), refers to the use of state technologies to monitor, control, and punish black bodies, under the guise of public security. In the field of forensics, this vigilance is expressed in the prioritization of certain cases, in the asymmetrical use of technological resources and in the very language of the reports, which often disqualifies popular knowledge, omits state violence and transforms victims into suspects. This process is



reinforced by a legal epistemology that gives forensic science a status of unquestionable truth, making it almost impossible for victims or their legal representatives to contest the expert results.

In addition to human action, the growing incorporation of digital technologies — such as facial recognition algorithms, criminal prediction, and automated analysis of forensic patterns — has deepened the effects of racial surveillance in the forensic field. Research shows that systems based on artificial intelligence reproduce racial biases present in training data, leading to mistaken identifications and intensified surveillance of black and peripheral populations (BUOLAMWINI; GEBRU, 2018; EUBANKS, 2018). In Brazil, cases of unjust arrests motivated by flawed facial recognition have already been recorded by institutions such as the Institute for the Defense of the Right to Defense (IDDD) and the Public Defender's Office of Rio de Janeiro. The uncritical application of these technologies, added to the opacity of their algorithms and the lack of social control over their operations, contributes to the consolidation of a "racialized science", which legitimizes discriminatory practices under the appearance of mathematical precision.

Another relevant axis of this analysis concerns the epistemic dimension of expert production. The theory of epistemic justice, formulated by Fricker (2007), points out that certain social groups are systematically disqualified as legitimate sources of knowledge, either through the discrediting of their testimonies (testimonial injustice) or by the exclusion of their references from the institutional repertoire (hermeneutic injustice). In the field of criminal forensics, this means that the knowledge produced by mothers of victims, community leaders or social movements tends to be disregarded in favor of the technical authority of the experts. This asymmetry is aggravated when we consider the predominantly white, male, and technocratic training of forensic professionals, and the absence of content on structural racism, decoloniality, or racial ethics in the curricular guidelines of forensic sciences. Expertise, in this sense, participates in the reproduction of a colonial epistemology, which defines who has the right to the truth and who remains under the sign of suspicion.

Given this scenario, this article proposes a critical and interdisciplinary approach to the role of forensic examination in the perpetuation of racial inequalities in the Brazilian justice system. Articulating critical criminology, decolonial studies, algorithmic critique, and the theory of epistemic justice, we seek to understand how technical-scientific knowledge, far from being neutral, is deeply imbricated in structures of domination and



exclusion. Expertise will be analyzed here as a field in dispute, in which different projects of justice, memory and reparation confront each other. At the same time that it recognizes the importance of forensic science in the elucidation of crimes and in the accountability of violating agents, this work calls for an anti-racist forensic reform, which is capable of listening to the dead and their living, recognizing the plurality of knowledge and democratizing the production of technical-legal truth in Brazil.

## 2 THEORETICAL FOUNDATION

The traditional conception of forensic examination as a purely technical-scientific field, free from ideological or social influences, has been widely challenged by various critical currents. Forensic science, as in the sciences in general, is not carried out in a vacuum: it is constituted by historical devices, institutional practices and socially situated subjects. Authors such as Latour (1994) and Jasanoff (2004) demonstrate that the production of scientific knowledge in judicial environments is permeated by negotiations, disputes and criteria that go beyond empirical truth, incorporating normative values, institutional pressures and cultural beliefs.

In the Brazilian context, marked by a history of slavery, colonialism and structural racialization, criminal expertise does not escape the racialized logic of truth production. The modern Brazilian State was constituted on a matrix of racial domination (ALMEIDA, 2019), and this structure is reproduced in justice institutions through criminal selectivity and the technical-scientific legitimization of violence against black and peripheral populations (RAMOS, 2021). Thus, the expert report is not only a technical artifact, but a political act. The notion of racial surveillance is particularly useful for understanding how technologies of security and control are disproportionately applied over certain bodies. Browne (2015), in his seminal work *Dark Matters*, demonstrates that modern surveillance inherited colonial practices of racialized marking, control, and punishment, and that devices such as biometrics, facial recognition, and criminal mapping reproduce racial inequalities under the guise of algorithmic neutrality. In Brazil, this surveillance materializes both in overt police action and in forensic processes that naturalize violence against black bodies.

Forensics operates as a privileged field for the production of "acceptable truths" about violence, as Foucault (2003) argues. This occurs through discourses that transform the materiality of bodies into technical evidence, capable of being incorporated into the



criminal process. However, as Sheptycki (2020) and Loveland & Sheptycki (2020) show, this production is not transparent: it is selective, situated, and often shaped by institutional expectations and tacit pacts with other spheres of public security. Brazilian critical criminology has emphasized the function of forensics as a component of the selective punitive system. Zaffaroni (2007) argues that the criminal justice system acts as a mechanism for the unequal administration of bodies, punishing those already punished and acquitting those already acquitted. Forensics, in this context, are not a mere auxiliary instrument, but a legitimizing link that transforms suspicions into technical certainties, reinforcing the culpability of racialized individuals.

The selectivity of the forensic action is manifested in the choice of which cases deserve technical-scientific attention, in the way the traces are interpreted, and in the tendency to confirm official versions, even in the face of evident contradictions. As Mello (2019) shows, reports that analyze deaths in police operations often reproduce a language that naturalizes violence, omitting evidence of summary execution and ignoring patterns of systematic abuse. Based on Mbembe's theory of necropolitics (2018), it is possible to understand criminal forensics as an instance of death administration, which decides which bodies deserve to be investigated and which will be reduced to forensic silence. The absence of adequate forensics in marginalized communities, the refusal to apply advanced technologies in certain cases, and the systematic archiving of deaths classified as "autos de resistência" reveal a pattern of racialized epistemic abandonment.

Epistemic justice, a concept elaborated by Fricker (2007), allows us to understand how the production of legal and scientific knowledge disqualifies certain subjects as valid sources of knowledge. In the forensic field, this is expressed in the disregard of testimonies of black victims, in the institutional distrust of poor family members and in the centralization of knowledge in white middle-class experts, generally trained in Eurocentric epistemologies. Decolonial epistemology, represented by authors such as Santos (2010) and Mignolo (2017), denounces the epistemological monopoly of modern Western science and proposes the valorization of peripheral and local knowledge. In the context of forensic investigation, this critique implies recognizing that other forms of reading violence — such as those produced by mothers of victims, human rights collectives, and affected communities — also constitute practices of truth and memory production.

Hybrid governance, a concept increasingly used in public security analyses (SHEPTYCKI, 2020), describes the simultaneous and sometimes conflicting performance



of state, parastatal, and private agents in the production of social control. In this model, forensics can function both as a brake and as an accomplice to violence. The forensic silence in the face of massacres, the absence of standardized protocols, and institutional capture by political interests indicate that technical knowledge is inserted in arenas of dispute. The insertion of algorithms in forensic practices adds a new layer of complexity. Facial recognition, crime prediction, and behavioral pattern tracking programs have been increasingly used by security and forensic agencies in Brazil and around the world (GARVIE; BEDOYA; FRANKLE, 2016). However, studies have shown that these algorithms reproduce racial biases present in training data, leading to systematic misidentification of black people and to the amplification of surveillance over already stigmatized populations (BUOLAMWINI; GEBRU, 2018).

In particular, Buolamwini and Gebu (2018), in the Gender *Shades* study, showed that facial recognition systems from leading companies had error rates of up to 34% in black women, while for white men the error was less than 1%. This reveals that algorithmic coding embeds racial and gender hierarchies, challenging the notion of algorithmic neutrality. Applied to forensics, such technology can legitimize false evidence, reinforcing racist practices under the appearance of mathematical precision.

In Brazil, the Public Defender's Office of Rio de Janeiro has denounced several cases in which the use of facial recognition led to the unjust imprisonment of black people based on low-quality photographs (IDDD, 2021). Although such tools are presented as "advances" in technical-scientific expertise, they operate from biased databases, often fed by police records contaminated by racist practices (CARDOSO, 2020). The racialization of forensic algorithms is aggravated by the lack of transparency and the difficulty of auditing the systems used. As Eubanks (2018) points out, "automated exclusion systems" operate in an opaque way, making accountability and legal challenge difficult. This contradicts the principles of due process and puts at risk the fundamental rights of vulnerable populations.

The training of experts must also be problematized in this context. The absence of disciplines on structural racism, epistemic justice and the ethics of technology in forensic training courses contributes to the reproduction of racialized practices. As Ribeiro (2019) argues, racism in Brazil is structural because it is naturalized in institutions, including those of a technical-scientific nature, which are intended to be separated from politics. The articulation between necropolitics, epistemic justice, and algorithmic technology



allows us to understand how forensics can become one of the most sophisticated devices of the racial administration of justice. The scientific legitimization of inequality operates not only by omission, but also by action — through biased reports, by the selection of what is considered relevant, and by automated technologies that consolidate racially asymmetric decisions (RICAURTE, 2019).

In addition, the language of expert reports, often hermetic and inaccessible to victims, works as an epistemic filter that excludes popular participation in the interpretation of the truth. This reinforces the technical monopoly on the narrative of the facts, denying the symbolic, affective, and community dimension of violent deaths, especially in contexts of massacres, massacres, or femicides in racialized territories (PINHEIRO, 2021). Citizen science and community expertise initiatives have emerged as critical alternatives to this hegemony. Projects such as "Forensic Architecture", in the United Kingdom, and actions by the Network of Mothers and Family Victims of Violence in Brazil have shown that the production of evidence can be decentralized, collective and sensitive to the pain of the victims (WEIZMAN, 2017). Such experiences challenge traditional expert epistemology and broaden the field of dispute for justice.

The critique of forensics as a technology of racial surveillance does not deny its importance in the justice system, but proposes its displacement to an anti-racist and plural paradigm. This implies rethinking protocols, revising algorithms, democratizing access to technical knowledge, and incorporating popular knowledge into the production of evidence. It is necessary to ensure that forensic science does not act as a machine for confirming inequality, but as a tool for confronting institutional racism. In summary, criminal expertise should be understood as a field in dispute, whose neutrality is an ideological construction that can cover up violent and racialized practices. From the contributions of the sociology of science, critical criminology, decolonial studies and algorithmic critique, it becomes possible to glimpse an expert justice committed to human rights, the memory of victims and the historical reparation of racial inequalities.

### **3 METHODOLOGY**

This article adopts a qualitative and critical approach, with an emphasis on theoretical-conceptual and documentary analysis, based on the intersection of fields such as critical criminology, sociology of science, studies on algorithmic surveillance, decolonial epistemology, and epistemic justice theory. The methodology is based on the



constructivist perspective, which understands forensic production as a socially situated practice, influenced by power relations, regimes of truth and technological devices (LATOURE, 1994; JASANOFF, 2004). It is based on the assumption that forensic examination is not only a technical field, but a symbolic and political arena, in which narratives about life, death and the legitimacy of the use of force by the State are disputed.

The research is developed through bibliographic and documentary analysis on two fronts. The first consists of a review of national and international specialized literature, focusing on authors who discuss the racialization of security technologies (BROWNE, 2015; BUOLAMWINI; GEBRU, 2018; EUBANKS, 2018), criminal selectivity (ZAFFARONI, 2007), epistemic criticism of forensic science (FRICKER, 2007; SANTOS, 2010), and hybrid governance (SHEPTYCKI, 2020). The second front consists of the analysis of public documents and institutional reports produced by bodies such as the Institute for the Defense of the Right to Defense (IDDD), the Public Defender's Office of the State of Rio de Janeiro, the Brazilian Forum on Public Security, as well as by collectives of mothers and family members of victims of state violence. These materials were selected based on their relevance to the theme of forensic work in racialized contexts, especially when associated with the use of digital technologies such as facial recognition.

A critical and interpretative cartography of the discursive and institutional practices of criminal forensics is chosen, with the objective of identifying patterns of epistemic exclusion, racialization of procedures and naturalization of state violence. The methodology does not aim at the statistical generalization of phenomena, but at an in-depth understanding of their symbolic, political and technological dynamics. For this, the data are treated in an inductive way, with emphasis on content analysis, qualitative inferences and hermeneutic interpretation of narrative structures and omissions in technical documents, reports and opinions. In this sense, it is assumed that the absence of expertise in certain cases, or its methodological superficiality, also constitutes a relevant empirical fact — an indication of strategies of necropower and institutionalized exclusion.

The methodology employed here is compatible with the proposal of denunciation and critical reconstruction of racialized legal technologies. Instead of seeking scientific neutrality as a starting point, a position committed to social and epistemic justice is adopted, as proposed by Harding (1991) and Fricker (2007). This implies recognizing that



the researcher's place of enunciation matters, and that the field of expertise must be analyzed not only for what it shows, but above all for what it silences. The expected result is the production of a substantive critique of forensic work in racialized contexts, capable of subsidizing future methodological, epistemological and institutional reformulations of technical knowledge applied to criminal justice.

## **4 RESULTS AND DISCUSSIONS**

### **The historical racialization of criminal expertise in Brazil**

Brazilian criminal expertise was born under the sign of racialization. Since the nineteenth century, the consolidation of forensic sciences in the country has been intertwined with State projects aimed at identifying, classifying, and containing groups considered deviant, especially blacks, poor, and mestizos. The reception of Lombrosian thought and European criminal-anthropological theories was made in a context of transition between slavery and the republican regime, which demanded new forms of social control to replace the slave system. As Misse (2006) and Farias (2017) observe, the birth of criminology and forensics in Brazil took place under the logic of social defense, and not the guarantee of rights, consolidating the image of certain bodies as "dangerous by nature". Forensic practices, then, were instrumentalized to give technical support to selective criminalization, reinforcing racial hierarchies under the appearance of scientificity.

This heritage is prolonged in current forensic institutions, which, although they have undergone processes of technological modernization, maintain operational, epistemological and symbolic patterns that reproduce the logic of racial suspicion. The territorial distribution of forensic institutes, the absence of adequate equipment in the peripheries, and the systematic lack of interest in the deaths of young black people in favelas are not mere administrative failures, but indications of a logic of selective prioritization that has operated since the foundation of the system. Even in the curricula of expert training courses, there is an almost complete absence of discussions about racism, structural inequalities or critical epistemologies – which contributes to the naturalization of a technocratic performance that is blind to the very social conditions that determine its performance. Thus, criminal forensics continues to operate, in practice, as a technical arm of a State that historically treats security as a mechanism of racial ordering.



## **Forensics as a necropolitical device: what is (not) investigated**

The selectivity of the forensic examination is clearly manifested when we analyze its performance in the face of lethal violence practiced by agents of the State. Reports by *Human Rights Watch* (2019) and the Public Defender's Office of the State of Rio de Janeiro (2021) reveal that, in peripheral communities, crime scenes are often not preserved, reports are written in a standardized way and without in-depth investigation, and traces are ignored. In many cases, the forensic investigation is not even activated – or, when it is, it is limited to ratifying official versions presented by the police forces. This dynamic highlights a strategic use of inaction: the non-functioning of forensics, when systematic, is equivalent to the institutional decision not to investigate certain deaths, especially when they involve young black people killed by police officers. The absence of technical knowledge, in this case, is not neutral: it is a form of death management, in which silence becomes a language of power.

Necropolitics, as conceptualized by Mbembe (2018), is not restricted to physical death, but involves the administration of which lives matter, which deserve to be investigated, and which can be discarded without consequence. Expertise, as an authorized instance of legal-technical truth, is a fundamental part of this process. By deciding where to examine, how much to invest in certain cases, which methodologies to employ and which reports to produce, she builds a cartography of dignity — where certain bodies are worthy of investigation, and others are not. Death without expertise, expertise without rigor, or refusal to examine are forms of institutional refusal of mourning and reparation. Thus, technical-scientific knowledge, instead of functioning as a mediator of justice, becomes a mechanism of selective impunity, reinforcing the cycle of structural violence that marks the daily life of racialized populations in Brazil.

## **Algorithms and artificial intelligence as technologies of automated racialization**

The introduction of digital technologies in the forensic field — such as facial recognition, predictive analysis of traces, and criminal data mining — has been widely celebrated as a technical advance, but little has been debated about its social and racial impacts. Research by Buolamwini and Gebru (2018) reveals that the main facial recognition algorithms have much higher error rates for black faces, especially women. These errors are not accidental: they stem from biased data sets, in which white bodies are overrepresented, and from the absence of diversity in technology development teams. When applied to forensics, these tools amplify the risk of wrongful incrimination,



while strengthening the epistemic authority of the technology — making it difficult for lawyers, family members, and human rights defenders to challenge the results.

In Brazil, the cases documented by IDDD (2021) demonstrate that the indiscriminate use of facial recognition has already led to the arrest of several innocent people, almost all of them black men, based on low-quality images and matching flaws. These errors are not treated as systemic failures, but as individual exceptions, which contributes to the perpetuation of blind trust in technology. By incorporating such systems into its procedures, forensics begins to operate under a new logic: that of the automation of racial selectivity. The risk is that the algorithm, presented as neutral and objective, serves to naturalize decisions deeply marked by historical inequalities. What was once a racial suspicion based on a "subjective factor" is now presented as "technical data", giving discrimination a new status of scientific truth. Forensics, in this scenario, ceases to be just an accomplice and becomes a vector of the algorithmic racialization of criminal justice.

### **Disputes for epistemic justice: peripheral knowledge and citizen expertise**

In response to the hegemony of institutional technical knowledge, social movements, collectives of victims' families, and human rights organizations have built alternative ways of producing truth. Groups such as Mothers of May (SP), Mothers of Manguinhos (RJ) and the Marielle Franco Institute have been leading parallel investigations, reconstructions of crime scenes, collective mappings and public denunciations that challenge the state's monopoly on forensics. These practices are based on popular knowledge, community narratives and accessible technologies (such as photographs, georeferencing, social networks), and constitute what Fricker (2007) defines as insurgent epistemic justice: the claim of the right to produce, dispute and be heard in the construction of truth. What is at stake, in these cases, is not only the contestation of a report, but the recognition that state science fails – and that other ways of knowing can and should be taken seriously.

These initiatives echo international experiences, such as Forensic Architecture, which proposes an "archaeology of remains" from multiple sources, with a focus on state accountability through visual, sound, and spatial evidence. In Brazil, "popular expertise" has revealed hidden scenes, ignored bodies and violence documented outside the official records. In doing so, he reconfigures the field of forensic science itself, transforming it into an arena of epistemic dispute. Citizen expertise does not replace official expertise,



but highlights its limits, its absences and its pacts of silence. At the same time, it points out ways to build a more democratic, plural science committed to human rights. Listening to this insurgent knowledge is a condition for any proposal for expert reform that is intended, in fact, anti-racist.

## 5 FINAL CONSIDERATIONS

The analysis undertaken throughout this article allows us to affirm that criminal forensics in Brazil operates, in a systematic way, as a technology of racial surveillance. Far from fulfilling only an auxiliary technical function of justice, it participates in the structuring of racialized regimes of truth, in which death, suspicion, and invisibility fall disproportionately on black and peripheral bodies. This action is manifested both by the selective omission in the investigation of cases and by the mobilization of expert knowledge that reinforces the official narrative of public security, silencing state violence and criminalizing victims. Forensics, therefore, does not only interpret violence: it organizes, distributes and normalizes it within a technical-legal framework that legitimizes racial inequality as if it were the result of neutral scientific criteria.

The growing adoption of digital technologies — especially facial recognition algorithms and artificial intelligence systems — not only does not break with this logic, but radicalizes it. By operating with biased databases and under non-auditable statistical logic, these tools transform criminal selectivity into an automated machine for the reproduction of inequality. The scientific legitimacy conferred on artificial intelligence, when devoid of critical analysis and democratic control, reinforces a model of justice that combines necropolitics, technical opacity, and epistemic exclusion. Instead of expanding access to truth and justice, such technologies tend to reinforce the monopoly of racialized and elitist knowledge, disguised as innovation.

Given this scenario, it is urgent to rethink the epistemic foundations of forensic investigations. Scientific neutrality can no longer be taken as an axiom, but needs to be interrogated in light of its social, political, and racial effects. This requires a profound reform of forensic training, incorporating content on structural racism, epistemic justice, technological ethics, and epistemologies of the South. It also demands the creation of mechanisms for social control of forensics, the review of protocols for the use of algorithms and the democratization of the production of evidence, recognizing popular knowledge and community practices of documenting violence.



The construction of an anti-racist expertise is not only a technical demand, but an ethical and political imperative. It requires the displacement of the epistemological center of forensic science, from the State to the margins, from institutions to victims, from the technical monopoly to the plurality of knowledge. It means reconfiguring the very idea of truth in the legal field, recognizing that objectivity is not the opposite of the commitment to justice, but its prerequisite — if it is built with openness to dissent, listening and historical reparation. Only in this way can expertise cease to operate as a cog of death and effectively become a technology at the service of life.

## REFERENCES

- Almeida, S. (2019). *Racismo estrutural*. São Paulo: Sueli Carneiro; Pólen.
- Browne, S. (2015). *Dark matters: On the surveillance of blackness*. Durham, NC: Duke University Press.
- Buolamwini, J., & Gebru, T. (2018). Gender shades: Intersectional accuracy disparities in commercial gender classification. In *Conference on fairness, accountability and transparency* (pp. 77–91). New York, NY: PMLR.
- Cardoso, R. (2020). *Racismo algorítmico e reconhecimento facial no Brasil*. In *Movimento Negro Unificado (Org.), Dossiê: Racismo algorítmico no Brasil* (pp. n/a). São Paulo: MNU.
- Defensoria Pública do Estado do Rio de Janeiro. (2021). *Relatório sobre reconhecimento facial e prisões injustas*. Rio de Janeiro: DPERJ.
- Eubanks, V. (2018). *Automating inequality: How high-tech tools profile, police, and punish the poor*. New York, NY: St. Martin's Press.
- Farias, J. (2017). *Corpos marcados pela violência: Um estudo das mães de jovens assassinados pela polícia na Baixada Fluminense*. Rio de Janeiro: Apicuri.
- Foucault, M. (2003). *Sociedade punitiva: Curso no Collège de France (1972–1973)*. São Paulo: Martins Fontes.
- Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford: Oxford University Press.
- Garvie, C., Bedoya, A., & Frankle, J. (2016). *The perpetual line-up: Unregulated police face recognition in America*. Washington, DC: Georgetown Law Center on Privacy & Technology.
- Harding, S. (1991). *Whose science? Whose knowledge? Thinking from women's lives*. Ithaca, NY: Cornell University Press.



- Human Rights Watch. (2019). *Você matou meu filho: Homicídios cometidos pela polícia militar na cidade do Rio de Janeiro*. São Paulo: HRW Brasil.
- Instituto de Defesa do Direito de Defesa. (2021). *Reconhecimento facial: A ponta do iceberg racial*. São Paulo: IDDD.
- Jasanoff, S. (2004). *States of knowledge: The co-production of science and the social order*. London: Routledge.
- Latour, B. (1994). *Jamais fomos modernos*. Rio de Janeiro: Editora 34.
- Loveland, I., & Sheptycki, J. (2020). Technologies of justice and the criminalization of the racialized poor. In A. Sarat (Ed.), *Studies in law, politics, and society* (Vol. 83, pp. 23–50). Bingley: Emerald Publishing.
- Mbembe, A. (2018). *Necropolítica*. São Paulo: n-1 Edições.
- Mello, D. M. de. (2019). *Laudos periciais, práticas policiais e reprodução de iniquidades raciais*. In F. Silva et al. (Eds.), *Criminologia crítica e racismo: Contribuições para a justiça criminal* (pp. n/a). São Paulo: Tirant Lo Blanch.
- Misse, M. (2006). *Crime e criminalização: Estudos sobre práticas e representações sociais*. Rio de Janeiro: Revan.
- Mignolo, W. (2017). *Colonialidade: O lado oculto da modernidade*. In B. de S. Santos & M. P. Meneses (Eds.), *Epistemologias do Sul* (pp. 384–420). São Paulo: Cortez.
- Pinheiro, L. (2021). *A cena do crime e seus silêncios: Uma crítica à linguagem pericial*. *Revista Brasileira de Ciências Criminais*, 156, 129–158.
- Ramos, S. L. de A. (2021). *Justiça racial e sistema penal: O desafio da igualdade no Estado democrático de direito*. In F. L. de Oliveira Silva et al. (Eds.), *Criminologia crítica e racismo: Contribuições para a justiça criminal* (pp. 21–45). São Paulo: Tirant Lo Blanch.
- Ribeiro, D. (2019). *Pequeno manual antirracista*. São Paulo: Companhia das Letras.
- Ricaurte, P. (2019). *Data epistemologies, the coloniality of power, and resistance*. *Television & New Media*, 20(4), 350–365.
- Santos, B. de S. (2010). *Para além do pensamento abissal: Das linhas globais a uma ecologia de saberes*. In B. de S. Santos & M. P. Meneses (Eds.), *Epistemologias do Sul* (pp. 23–71). São Paulo: Cortez.
- Sheptycki, J. (2020). *Hybrid governance and global policing*. In T. Jones & T. Newburn (Eds.), *Plural policing: Theory and practice* (pp. 139–158). London: Routledge.
- Weizman, E. (2017). *Forensic architecture: Violence at the threshold of detectability*. New York, NY: Zone Books.



Zaffaroni, E. R. (2007). Em busca das penas perdidas: A perda da legitimidade do sistema penal. Rio de Janeiro: Revan.