A RIO OF CAMERAS WITH SELECTIVE EYES: THE USE OF FACIAL RECOGNITION BY THE RIO DE JANEIRO STATE POLICE
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O Panóptico is a project of the Centro de Estudos de Segurança e Cidadania - CESeC that monitors the adoption of facial recognition technology by public security institutions in Brazil. Since 2018, CESeC has been tracking the effects of the use of facial recognition by police, revealing that about 90% of people arrested using this technology are black.

The project now focuses on presenting the cases of adoption of facial recognition in Brazilian states and municipalities, besides showing the role of governments and companies in the financing and supply of this technology. All the data used by the research will be made available to the general public.

Besides monitoring the projects, O Panóptico also aims to communicate extensively about the risks of using facial recognition and its biases for the black population.
TECHNICAL INFORMATION
O PANÓPTICO: MONITOR DO RECONHECIMENTO FACIAL NO BRASIL
A project by Centro de Estudos de Segurança e Cidadania (CESeC)

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A RIO OF CAMERAS WITH SELECTIVE EYES: THE USE OF FACIAL RECOGNITION BY THE RIO DE JANEIRO STATE POLICE

Team O Panóptico

Centro de Estudos de Segurança e Cidadania

The Government of the State of Rio de Janeiro, through the Secretary of State for Military Police (SEPM), implemented in 2019 a pilot project for video surveillance with facial recognition in Rio de Janeiro. The neighborhood of Copacabana was chosen for the initial test, during Carnival, and more cameras were placed around Maracanã Stadium and Santos Dumont Airport in the second half of that year.

The implementation of the project is surrounded by issues that have not been properly explained to the population, especially regarding the nebulous “Terms of Technical Cooperation” with large companies; bills of congressmen linked to the public security agenda; unclear operational procedures; lack of data transparency and promises of expansion of the technology that is presented as a kind of “solution” to fight crime in Rio de Janeiro. These promises are being made in a context where projects for the use of facial recognition by the police receive numerous criticisms due to operational errors, racial and gender biases and opaque budgets.

Choosing Copacabana for the project’s kick-off is deeply strategic, since the neighborhood occupies an important place in the symbolism and representation of Rio de Janeiro to the world. Understanding the intricacies not only of the choice of this neighborhood, but especially of the political strategies for the reorganization of the public security model in Rio de Janeiro becomes important in face of the failures and abuses of the public agents themselves, such as what happens not only in Copacabana, with the black and peripheral population that passes through there, but also what happens in Jacarezinho, for instance.

The Jacarezinho favela, in Rio’s North Zone, has been the scene of slaughters and, more recently, has been the laboratory of a new contradictory public security policy that has, among other objectives, the deployment of video surveillance cameras using facial recognition as a kind of political platform - similar to what has already happened in previous governments.

In this study, we seek to investigate how the Rio de Janeiro military police used facial recognition cameras in 2019, and their plan to use them again in 2022. These technologies not only bring risks of violating the rights of vulnerable populations, but also have no indication that they help reduce crime, nor that they improve the performance of daily policing. In addition to these reasons that should lead to a more critical stance towards facial recognition technology, there is also the concern with
public spending, since states like Rio de Janeiro have a critical situation in relation to public accounts. This case study is based on public documents and on some requests for information to SEPM.

A partisan political campaign

The year 2019 was not only the one in which we met the COVID-19 virus, but also the one that marked the starting point of policing projects using facial recognition technologies in Brazil. This technology, which was already being deployed in other countries, arrived in Brazil in a manner almost as insidious as the new coronavirus: there were no debates, consultations or transparency. It was a campaign promise of the then candidate for state government Wilson Witzel, who promised that the technology could revolutionize public security.

Translation: “Wilson Witzel proposes installing cameras with facial recognition on the streets to improve security. The PSC candidate campaigned in Jacarepaguá, in the West Zone of Rio, this Saturday.”

Promising to use high technology to undermine crime and violence in the state, Witzel - who at the time caused controversy by advocating a hyper-militarized warfare state and posing for photos breaking the plaque honoring Councilwoman Marielle Franco, who was murdered by militiamen in 2018 - traveled to Israel to learn about the operation of drones that could carry a firearm and be triggered remotely. Witzel had shown interest in acquiring the technology, and within the set of war gadgets promised by the then-candidate were the famous facial recognition cameras, which pledge to recognize criminals from hundreds of meters away and trigger alarms for police officers to detain suspects.

According to the then candidate, the implementation of the camera system with facial recognition would facilitate the solution of crimes and contribute to social order,
especially through the monitoring that could protect both shopkeepers from robbery and pedestrians from muggings. But this would require the deployment of “thousands of cameras in Rio de Janeiro”.

From the political stage to the latent authoritarian desire of more conservative and privileged sectors of the population, facial recognition technologies have been gaining messianic aspects for fighting crime and structuring the social order, as, in 2018, a partnership was announced between Disque Denúncia (a hotline for anonymous crime reporting) in Rio and the British company Staff of Technology to search for criminals with Facewatch technology. At the same time, companies with an interest in facial recognition, such as CyberLabs and Claro S.A., offered their services to SEPM, but the negotiations were terminated without being put into effect.

In January 2019, Military Police Secretary Rogério Figueiredo de Lacerda announced a partnership between the Rio state government and the telecommunications company Oi to implement a video surveillance project throughout the Copacabana Carnival. The neighborhood was not chosen at random. It was a strategic choice in several aspects: the neighborhood is internationally famous, receives thousands of tourists from all over the world every year, and hosts one of the biggest New Year’s Eve parties in the world. The “little princess of the sea”, an affectionate nickname given to the neighborhood, would be an excellent showcase for a security project designed by Wilson Witzel, based on the use of incarceration-oriented technologies.

The beauties of Copacabana not only attract foreigners: the more than four kilometers of waterfront are a leisure area for countless city residents who access the area in an uneven way. Getting to Copacabana has never been an easy task, especially if the buses from the North Zone are the transportation choice. For young black people from Rio’s favelas and peripheries, the postcard Copacabana is more distant and less hospitable than what is shown on TV and in the media. “Protecting” the neighborhood from young black people coming from the outskirts of the city has always been a task of the Military Police, as demonstrated by the articles below, published more than 30 years ago.

In this sense, the use of facial recognition as a new tool to organize the urban space of the capital of Rio de Janeiro, creating almost inaccessible places, differs from the uses, for example, in the American context. Joy Buolamwini, a researcher at MIT, tells in her documentary “Coded Bias” how facial recognition technologies are tested primarily in black majority neighborhoods. She shows that in some housing developments cameras have been installed at the building gates in order to control who enters and who leaves these spaces. Whatever the logic, both Rio de Janeiro and the United States and other countries use cameras with biometric technologies to enforce boundaries and control transit through the city for the black population.

In Rio de Janeiro, the pilot project of video surveillance with facial recognition was signed through the “Technical Cooperation Agreement”, as a proof of concept.
Policía já tem nomes de dez gangues de arruaceiros

Óbitos terão pontos finais marcados

No verão das diretas, a violência invadiu nossa praia
and lasted for 10 days (from March 1 to 11, 2019). The Secretary of State for Military Police (SEPM), at that time, made a point of reiterating that the partnership would not generate any financial burden for the state. However, one has to wonder how the company Oi would benefit from this technical cooperation and why it then decided to participate in this kind of non-transparent technological “exchange”.

An all-seeing machine?

The first thing that comes to mind when we talk about face recognition technology is, generally speaking, a video camera that films recognizing faces. This application, known as live detection, is one of the most common, and most frequently used in Brazil. Facial recognition technology can be described as a system that:

- works by deploying biometric identification to map facial features of a person present in a photograph or video, comparing the information obtained with a bank of known faces to find a match.

Thus, this type of technology can be applied not only to prove an individual’s identity, but also - and supposedly - to prevent identity-related crimes; to promote access control to public and private spaces and services; to recognize criminals; to generate proof of life (widely used by the Brazilian government in applications such as, for example, gov.br); to unlock devices, etc. It is important to note that biometric technologies are not limited to facial recognition technologies - rather, they can analyze fingerprints, retina, iris, voice, gait, and other personal biometric data. In all these cases, the systems process metrics that would be unique to each individual for identification and recognition purposes.

In the case of the pilot project carried out in Rio, the use of facial recognition technologies was specifically aimed at identifying criminals and preserving “public order.” The project was divided into two phases: in the first, cameras were installed only in Copacabana, during the 2019 carnival, and in the second, in the Maracanã neighborhood and around Santos Dumont Airport, with the number of cameras in Copacabana being increased. In both phases, equipment supply and technical
cooperation agreements were established with the company Oi.

The project’s operational structure, in the first phase, consisted of the qualification and training of four military police officers who coordinated the monitors and the access to the 34 cameras in the Copacabana area, including the subway exits at Siqueira Campos and Arcoverde stations. In addition, two civilian police officers would operate the database of license plates, wanted and missing persons. In both cases, that is, in the actions of military police officers and civil police officers, teams from Oi and Huawei provided technical support. It is worth noting, as we will go into further detail below, that the details and the effective technical cooperation between the state government and the companies were not exactly made clear.

Be that as it may, SEPM and Oi signed a new contract for the continuation of the facial recognition pilot project, which would run from June to October 2019, taken as the second phase of the project. In addition, a document showed a technical cooperation agreement between SEPM, the Rio government and Bembras Integração e Engenharia EIRELI, but the company never provided the services.

The system operated 24 hours a day for 10 days, and was coordinated from the Integrated Command and Control Center (CICC), located in Cidade Nova, downtown Rio. The operational protocol used (for more details, see internal police document here) is divided into the steps shown in the infographic below:

![Infographic](image)

Translation:
“Planned Protocol” (from left to right)
System generates match alert
Military Police officer visually checks to see if it is positive or if it was a false positive
Military Police officer takes identification code to Civil Police officer
Civil Police officer raises history and motivation of the identified person or vehicle
Military Police officer transmits to the dispatcher of the 19th Military Police Battalion (System 190) to send a patrol"
Regarding the data collected by the facial recognition system, a document dispatched on September 24, 2019 stresses that:

*The information about people identified in facial recognition is stored and available to public security and criminal justice agencies for planning, investigation and prosecution purposes, with false positives being discarded immediately by the system operator still at the monitoring site.*

(Process in the Electronic Information System - SEI)

The database used to feed the system was that of the State Civil Police Secretariat (Sepol) and of Detran, a database of missing persons, wanted persons, and vehicles, but it is not transparent about how it was produced or how often it is updated. SEPM also informed that the database is encrypted and numbered according to established protocol and that there would be no personal information in the system. The base, however, is managed by military and civil police officers within the CICC.

Although it was sold as highly efficient, the project showed, in its first days of testing, how susceptible it was to the possibilities of failure, by *mistakenly identifying a woman with a person who was already imprisoned*. After the first phase experiments of the pilot project, it was announced that the facial recognition project would be *expanded to a next stage* at Maracanã Stadium and around Santos Dumont Airport.

**Success for whom?**

Announced by then governor Wilson Witzel on March 28, 2019 to begin in June of the same year, the second phase would not only expand the number of surveillance and monitoring cameras from 34 to 140 but would also extend its area of operation to the surroundings of the Maracanã and Maracanãzinho stadiums and the Santos Dumont Airport region. Curiously, the announcement was made by the governor after a meeting, in Palácio Guanabara, with Oi executives, who presented “encouraging” results from the first phase of the project. The former governor stated at the time that public security was a priority of his government and celebrated the “success” of the project, since, according to him, “eight arrest warrants were served in just 10 days”.

Although 140 cameras were planned for this second phase, distributed in the locations covered by the project, SEPM reported that, in fact, 95 monitoring and surveillance equipment were deployed. Along the same lines as Witzel, the then Secretary of Military Police, Colonel Rogério Figueiredo de Lacerda, was optimistic with the announcement of the second phase of the project, since the experience would have contributed with the knowledge and expertise of the military police officers involved.

*Altogether, in the first phase, five search and seizure warrants were served, three arrest warrants were issued*, and three vehicles were recovered, while
no missing persons were found. In addition to this data, the analysis report of the first phase also indicates the total amount of faces and license plates captured by the system, as indicated by the tables in the following image.

Translation:
“Efficiency Measurement - Total March 1st, 2019 to March 10th, 2019
Face recognition
Total of faces captures: 2,993,692
Face matches: 2,465
License plate recognition
Total of license plates captured: 747,391
Plate matches: 892”

However, an important observation concerning such data should be made: the correlation between faces captured and faces recognized corresponds to a rate of 0.082% of matches against the amount of information captured, i.e., a very low number in relation to the project’s goal. This percentage indicates, in fact, a mismatch between the amount of information collected and the expected results.

SEPM’s own presentation says that “facial recognition optimization (false positives and unified database)” would be needed, as we indicate in the image below taken from the SEPM report.
Interestingly, the SEPM reported that it did not collect data on false positives or approaches, even when questioned by our team through LAI (“Law on Access to Public Information”) requests. Although this data has not been collected (according to the SEPM), the preliminary report cites false positives as indicators of the need to optimize the system.

Despite the denials in relation to the false positive data, we questioned SEPM about 11 arrests that occurred in the vicinity of Maracanã during a match. In this small group, only four of the people arrested had warrants in their names and, when we asked specifically if all the others arrested were false positives, the agency limited itself to answering that “the other 07 (seven) people did not have warrants for their arrest, and the BOPM [Police Report] was only made as an inquiry of a person”. After appeal within the scope of the Law on Access to Public Information, the SEPM admitted that among the 11 cases of people arrested with the use of facial recognition technology at the Maracanã games, seven were errors of the machine, i.e.: false positives. Thus, the system was wrong in 63% of the cases.

Other clues of the failure can be extracted from the report of the first phase itself: 1. there were no positive results until the end of the first phase (according to the image below); 2. there were many errors in the recognition of vehicle license plates; 3. the
very indication of the need to improve the system; 4. the lighting issues in the facial recognition cameras; 5. the inability of operational management by the agents in loco and, finally, 6. the warning itself of the urgent need to structure in Copacabana before any expansion\textsuperscript{12}. How, after all, can the report itself indirectly state that this is a revolutionary technology capable of offering a new vision of “preservation of public

![Translation: “OBSTACLES OBSERVED IN THE COURSE OF THE SERVICE
Low probability of the Police Unit completing the approach
No positive results so far
Many mistakes in license plate recognition
Motorcycle patrol units that were dedicated and even other vehicles from the sector, without success and without a clearer view of their participation in the methodology employed
Personnel dedicated primarily to Carnaval”

Despite the loudly proclaimed lack of burden on public funds, a Cecopom document showed that the expansion of the project to the surroundings of the stadiums and the airport had a financial impact on the state. The document, from June 2019, indicates the request for 10 police officers to meet the demands of the operation - which resulted in an expense of R$726,789.00.

**Responding to deaths with cameras**

There are still many doubts about the effectiveness of the video surveillance project with facial recognition technologies in Rio de Janeiro. Even so, the administration of current governor Cláudio Castro, who was Wilson Witzel’s deputy before he was removed from office\textsuperscript{14}, has decided to invest in the technology again. This time, the “strategic” location is the Jacarezinho favela in Rio’s North Zone, which will receive cameras in an election year.
Already during Cláudio Castro’s administration, the Jacarezinho favela was the stage for the most lethal police action in the history of Rio de Janeiro. The operation, executed by the Civil Police, took place on May 6, 2021 and left 28 dead - including one police officer. The action raised several suspicions of illegalities and human rights violations, and despite the gravity of the case and the consequent need for transparency, the report of the operation was placed under a five-year secrecy.

In November 2021, we asked SEPM if the current management was interested in applying facial recognition technology to new policing projects, as the previous management had, and we were told that there were no plans to do so. The answer does not match reality, given the scope of the project *Cidade Integrada* ("Integrated City"), which provides for the acquisition of dozens of cameras, including cameras with facial recognition (of the 22 cameras planned, four should have this functionality), to monitor different points in the favela and access to the favela. The terms of reference of the contract, with a waiver of public bidding, foresees the installation of 22 cameras and technical-operational support. The map with the approximate location of the cameras can be seen below, and the interactive version can be seen [here](#).

![Map of cameras in Jacarezinho favela](#)
The document has several omissions: it does not indicate, among other things, the period of its execution; what methodology was adopted for the study and the technical mapping of the area; nor does it indicate whether there were conversations with residents to better understand the local needs and priorities. The technical instrument is limited to saying, in general terms, that there is an emergency nature to the implementation of the video surveillance system to support operations and intelligence. Although the express objective of Cidade Integrada is to “reduce inequalities”, the technical study does not indicate how facial recognition technologies can contribute to reduce social asymmetries.

The real justification for implementing the video surveillance system presented by SEPM - both in the technical study and in the term of reference - is the production of evidence to corroborate the police report in eventual questioning:

integrated video surveillance system solution, not only in the criminal coercion or reprehension, but, above all in its evidential character for the criminal process, producing evidence that corroborates with the reality and strengthens the assertion of police innocence in a possible lawsuit (emphasis added).

That is: only and exclusively in cases where the images are in line with the police report will they be used in possible legal actions. Such statements raise a number of questions: if the main objective is to produce evidence in favor of the police officers, what is the need for the cameras to have facial recognition algorithms? Why are the images from the cameras only and exclusively available to police officers and not also to the eventual victims of excesses and violations? We have seen the use of cameras in some initiatives that intend to increase control over police work and reduce lethality. Why wasn’t such use put as one of the objectives for the Jacarezinho case?

As a defense of the implementation of facial recognition technologies and the use of artificial intelligence, SEPM says that:

it is essential to use tools that can make police action efficient, even more so if a resource provides concomitant internal control of the police, evidential effectiveness, reduction of resources available to investigate complaints against police officers, data for operational information management, means of training through subsequent analysis of actions, and even police protection. In this way, we seek to add more scientific knowledge and less empiricism to indicate the importance of this use (emphasis added).

If we think about the experience with facial recognition in 2019 from the perspective of police officers, efficiency is not a good word to describe the initiative. Even more so given that the technology has been banned in many parts of the world for its high margin of error and evident racial and gender bias.
These cameras and the monitoring center will be acquired with waiver of the public bidding process. This mechanism allows the state, in certain situations, to make acquisitions without the bidding process, which is usually bureaucratic and time consuming.

4.4. Selecção do fornecedor
4.4.1 Forma de seleção

O fornecedor será definido pelo menor preço global, através de dispensa de licitação, devidamente fundamentada no art. 24, IV, da Lei Federal n.º 8.666/93.

Translation:
“4.4 Supplier Selection
4.4.1 Form of selection
The supplier will be defined by the lowest global price, through a waiver of bidding, duly grounded in the art. 24, IV, of the Federal Law no. 8.666/93.”

At this point, a few observations are in order. The justification for waiving the bidding is found in the term of reference for “Emergency Hiring of a Specialized Company to Implement a Videomonitoring Project (Jacarezinho)”. The hypothesis presented by SEPM is that of “emergency bid waiver”, which is regulated by Article 24, IV, of Law No. 8.666/1993, known as the “Public Bidding Law”. According to the legal provision, the public bidding is not required “in cases of emergency or public calamity, when the urgent need to respond to a situation that may cause damage or compromise the safety of people, works, services, equipment and other public or private property is characterized, only for the goods required to respond to the emergency situation” (emphasis added).

The reading of item IV indicates that an emergency case that authorizes the dispensation of bidding is when there is a concrete and effective urgency in meeting the public need. It must also have the objective of eliminating the risk of damage or risk to the safety of people, works, services, equipment, and other public or private property. Moreover, the waiver of bidding must be the only appropriate means to remove this risk, as pointed out by the Federal Audit Court (TCU).

This case of waiver is applicable to cases in which the lapse of time required for the bidding procedure would prevent the adoption of essential measures to prevent damage resulting from the emergency situation. Thus, in addition to the existence of an emergency situation, the waiver process must demonstrate that direct hiring is the appropriate, necessary and effective way to eliminate the imminent risk of damage or compromising the safety of people, works, services, equipment and other public or private property.

It is not possible to see how, in the case in question, hiring the video surveillance service and, especially, the facial recognition system is an effective measure to remove the risk to which people are subjected in the Jacarezinho favela. This measure is not
adequate, nor necessary or effective to remove the alleged emergency risk, used as justification for waiving the bidding process, which should be carried out as a rule, as stipulated by Law No. 8.666/1993.

Moreover, Rio de Janeiro suffers severe budgetary consequences with the state’s Fiscal Recovery Regime (RRF) approved in 2017. This budgetary picture is largely the result of controversial policies and management plans that have sunk the state into debt since 2014. The state’s public debt is also partly aggravated by the negative variation in annual ICMS (a value-added tax on sales and service) revenues; the increase in personnel expenses (active, inactive, and pensioners) and, to a large extent, the evolution of the state debt.17

More recently, the state of Rio de Janeiro had two opinions against the approval of the new RRF by the Attorney General of the National Treasury and by the National Treasury Secretariat. The scenario is critical given the state’s fiscal health and the need for adjustments in public accounts.

Therefore, it causes concern that in such a delicate moment for the population of the state of Rio de Janeiro, especially for the state taxpayer, it is considered the waiver of bidding for the implementation of a public security project based on proven inefficient and expensive technologies. Moreover, the dispensation of public bidding does not seem to apply given the very picture presented in the preliminary technical study, which was unable to demonstrate the real urgency of hiring companies for this purpose.

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The average cost estimate for the contracting of video surveillance in the Jacarezinho favela alone is R$ 493,288.20, as shown in the following table. This is another concern: the spending of public money. We know that the people who live in Jacarezinho have priorities other than installing cameras in their territory.
Basic public services could be improved with the money set aside for the installation of these cameras. For example, with this average amount it is possible to pay for 103 high school students’ education during one year\(^\text{18}\), and it would also be possible to pay the Auxílio Brasil to 102 families during the same period\(^\text{19}\).

The scenario analysis presented in the preliminary technical study is equally doubtful and not very transparent, since it argues, among other things, that the best market solution is to hire a specialized company to execute the object, observing the “vast expertise found in the market.

The market study, presented in the technical study, indicates as a reference only two companies: GWA Systems and Sunset. The values, polled on the internet, are those foreseen for the three-month contract for “the provision of services for the installation of video surveillance equipment with equipment supply”. Although it talks about “vast expertise”, the company Sunset, for example, was founded in January 2015, despite claiming on its website that it has more than 24 years of experience in services “provided with excellence in the state of Rio de Janeiro.” The company has also provided services for the 2014 World Cup, the 2016 Olympics, and the 2019 Copa America, events held in Brazil.

With regard to the storage of images collected by the video surveillance system, the technical study only mentions the fact that the content will be stored for at least 60 days, without making explicit what treatment it will receive, the ways of eliminating this content or, again, if there will be data sharing with other public or private databases, as indicated in the excerpt below:

3.3.3.7. Armazenamento de imagens

As imagens capturadas pelas câmeras deverão ficar armazenadas por no mínimo 60 dias a contar da data de sua captura.

Translation: “The images captured by the cameras must be stored for at least 60 days from the date they were captured.”

The technical study has many gaps and does not satisfactorily answer some of the basic and fundamental questions for the implementation of such projects: Will the public be warned that they will be under state surveillance? Will the police produce reports on the impact of data protection and the efficiency of the algorithms? What will be the life cycle of the data collected? Will the databases produced be shared for secondary purposes? What is the real purpose of using facial recognition cameras in Jacarezinho? As with the execution of the pilot project in 2019 in Rio de Janeiro, the SEPM staff repeat the methods of lack of transparency around their interest in this type of technology and do not spell out the reasons why they believe that facial recognition would be an important tool to achieve the proposed goals.
The State of Rio de Janeiro State wants to spend R$493,288,20 with facial recognition cameras in Jacarezinho favela.

With all that money, it would be possible to:

- Pay for 103 high school students during one year*

  The average annual cost of a student in high school in the Rio de Janeiro state network, in 2017, was R$4,762.35 [value corrected for inflation using the IPCA for the date of March 2022], according to Interministerial Ordinance No. 8, of 11/29/2017 - Fundeb.

- Pay the Auxílio Brasil to 102 families during the same period

  Monthly amount of R$ 400.00 paid by Auxílio Brasil
Personal data protection and public security in Rio

The Brazilian General Data Protection Law (Law No. 13.709/2018, known by the acronym “LGPD”) was enacted in 2018 and has been in effect since September 2020, with penalties and sanctions applying from August 2021. Both Oi’s Cooperation Agreement and Jacarezinho’s Preliminary Technical Study state that the treatment of citizens’ personal data will strictly follow the LGPD, despite the specific inapplicability of the law in these contexts, pursuant to the provision of item III of its Article 4.

PROVISION THREE - DATA PROTECTION

The PARTICIPANTS undertake to ensure due protection to the Personal Data processed, so that the processing of such data will be exclusively for public safety purposes and in strict compliance with Law No. 13,709/2018 (“Personal Data Protection Law”), in addition to other applicable rules, including but not limited to the European General Regulation (GDPR), the latter when applicable. (Excerpt taken from the Cooperation Agreement with Oi Móvel)

The reference to the LGPD seems to be made because of Section 1 of Art. 4 of the law, but this would be a contradiction, since the principles and foundations of the law (especially those of necessity and purpose) are not observed in practice.

The principle of data purpose refers to the “processing data for purposes that are legitimate, specific, explicit and informed to the data subject, without the possibility of further processing in a way incompatible with those purposes”. This principle determines that the purpose of the processing must be known before the data is collected, and has great practical relevance, since it structures criteria to determine the reasonability of the use of certain data beyond the foreseen purposes, without which the processing would be abusive. Thus, the purpose principle is crucial to avoid secondary use of data.

Another important principle is the principle of necessity, one of the most relevant to the debate about facial recognition technologies. According to Section III of Article 6 of the LGPD, the principle of necessity corresponds to the “limitation of processing to the minimum necessary for the achievement of its purposes, with a scope of data that is relevant, proportional and not excessive in relation to the purposes of data processing”. Especially with regard to data processing for public security purposes, Article 4, paragraph 1, determines that the measures envisaged by the public authority must be proportional and strictly necessary to serve the public interest.

Besides, there is no reason to talk about the application of the General Data Protection Regulation (GDPR), which is the legal framework for the European Union. The mention of the GDPR in the preliminary technical study of the Jacarezinho seems
to be a way to give body to the text and try to appear more credibility or mastery of the subject, without any legal and/or technical consequence for the situation analyzed.

In each case, the purposes of the instruments are clearly presented - that is, it is clear that both the term of cooperation and the technical study are documents whose goal is to explain the purposes intended to achieve: the installation of cameras and the operation of facial recognition systems. However, the purpose of the data processing itself is not pointed out, since at no time, in both documents, are presented the purposes intended to achieve, in fact, with the processing of citizens’ personal data. For example, it could be argued that the purpose is to reduce crime - but the technical or scientific background to justify how/why the use of facial recognition would be a necessary measure for this purpose is obviously missing.

From Copacabana to Jacarezinho

This latest historical period that began with the 2018 elections has brought dramatic consequences for Rio de Janeiro. Wilson Witzel, with his politics based on violence and police deadliness, began a new period of high levels of deaths committed by police officers. In 2019, the year in which Ágatha was killed and several slaughters were recorded, the state of Rio registered the highest number of deaths committed by police officers: 1,814. At the same time that the peripheries of the state were piling up the bodies of young black men after police operations, Copacabana was receiving facial recognition cameras. After years and the record of the most lethal police action in the history of Rio de Janeiro, facial recognition arrives in Jacarezinho with no indications that its use will serve to reduce the deadliness of police actions.

**CRIMINAL RATES IN COPACABANA (19ª AISP)**

<table>
<thead>
<tr>
<th>Numbers</th>
<th>2018</th>
<th>2019</th>
<th>Variation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First degree murder</td>
<td>1</td>
<td>4</td>
<td>300.00</td>
</tr>
<tr>
<td>Robbery</td>
<td>467</td>
<td>506</td>
<td>8.35</td>
</tr>
<tr>
<td>Theft</td>
<td>1890</td>
<td>2135</td>
<td>12.96</td>
</tr>
<tr>
<td>Mugging</td>
<td>277</td>
<td>386</td>
<td>39.35</td>
</tr>
</tbody>
</table>

Therefore, these facial recognition projects in Rio seem to serve as a pretext for technological experimentation without direct consequences for the real problems in the realm of public security. There is no concern with the control of police lethality (despite the Supreme Court’s decision that determined that the state of Rio had a plan to reduce deaths committed in operations), with the transparency of
actions, with the good use of public money and with the protection of the population's data. Not even the reduction in crime rates can be considered a justification for the use of the cameras, since the pilot project in Copacabana eloquently demonstrated that there was no reduction in crimes in the neighborhood area during the use of the cameras in 2019.

The future of public security in Rio de Janeiro will not be built on experimentation with dubious new technologies or for reasons other than the pursuit of a safer society for all citizens. The future must be built through dialogue with the communities to understand their concerns, with intelligence in police actions, seeking to reduce deaths and putting at the center of our concerns the police itself, which should be reduced - not expanded. The key to thinking about the Rio we want is to rethink the police itself.

ENDNOTES

1 SEPM. Activity Report (2020 - 2nd semester)
2 A proof of concept, or PoC, is a term used for a practical model that can prove the (theoretical) concept established by a research or technical paper.
5 The Criminal Code in its articles 307 and 308 defines the basic criteria for the crime of false identity, however, it makes no mention of biometric characteristics to characterize such a crime. Facial recognition technologies have also been used for the purpose of identity validation and anti-fraud systems by various public and private agencies, such as the SPC, which launched in 2019 a tool that allows the verification of retail stores by confirming the real identity of a consumer from images taken at the time the subject has access to certain credit. The system compares these images with others that exist in its databases to, supposedly, inform the shopkeeper of the true identity of who is consuming or accessing credit. The whole purpose of the system is allegedly to provide security for the consumer, but what it actually does is grant the retailer a police power. For more information on this subject see: https://bit.ly/3t7ZOnm. This way of validating identity has been widely used by several public and private institutions, as pointed out by Mariah Rafaela Silva and Joana Varon in a study published in 2021 entitled “Reconhecimento Facial no Setor Público”.
7 08_10_2019___TERMO_DE_COOPERACAO_TECNICA.1 em ‘https://docs.google.com/document/d/1aO4w56V1PrDKniH7943BMf5mGMA-4lg/edit
8 Although the former governor announced at the time (available here) that eight arrest warrants were served in the first phase of the project, the data from the report (available on page 7), indicate that there were three. For this reason, we will rely exclusively on the data in the report, which we consider, therefore, to be official data.
9 Even at several occasions (to obtain more precise information from the data of the first
and second phases) we tried to extract this information from SEPM throughout 2020 and 2021 but we were not successful. The public agency limited itself to answering, sometimes, that “an answer is not possible” or even did not respond to the request at all.

10 The term “false positive” refers to the error that is produced in the process of capturing the face when it is crossed with the information available in the database accessed by the system. In other words: the system accuses a positive correlation between the captured image and the database, but the person recognized is not the one wanted.


12 Id., pp. 5 e 20.

13 Id., p. 21.

14 Wilson Witzel had his term as governor unanimously terminated as a result of corruption scandals during pandemic management. Available at https://bit.ly/3Ja9tIV


18 The average annual cost of a student in high school in the Rio de Janeiro state network, in 2017, was R$4,762.55 (value corrected for inflation using the IPCA for the date of March 2022), according to Interministerial Ordinance No. 8, of 11/29/2017 - Fundeb.


20 “Art. 4 This Law does not apply to the processing of personal data that:

(…) III – is done exclusively for purposes of:

a) public safety;

b) national defense;

c) state security; or

d) activities of investigation and prosecution of criminal offenses;

(…) §1 Processing of personal data as provided in item III shall be governed by specific legislation, which shall provide proportional and strictly necessary measures for fulfilling the public interest, subject to due legal process, the general principles of protection and the rights of the data subjects as provided in this Law.”

21 Secondary use of data, which Kelleher and Tierney (2018) refer to as “control creep,” consists of redirecting collected data to a purpose other than the original one. Kelleher and Tierney illustrate this phenomenon with the following example: road cameras were installed in London with the primary purpose of regulating congestion and implementing congestion charging, but were redirected to safety tasks (KELLEHER, John D; TIERNEY, Brendan. Data Science. Cambridge: The MIT Press, 2018, p. 196).