THE DIFFUSION OF THE VIDEO SURVEILLANCE SYSTEM IN THE CONTEMPORARY URBE: ARGUS PANOPTES, ELECTRONIC BRAINS AND THEIR CONNECTIONS WITH THE VIOLATION OF LIBERTIES AND EQUALITIES

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Abstract: Cities are social constructions that clearly transcend any attempt to think them through as inert spaces. In such scenario, video surveillance systems initially used to control traffic are routinely scattered all around cities, magnetizing on promises of safety and despising the violation of rights drawn within the frame of the ideas of positive freedom and substantive equality. On these premises, the article was drafted in four parts. At the first part, the stage is set for further discussion, and some parallels between the city, the fear of living in the city, surveillance, and the Law are drawn. In the second part abound are the relevant aspects for the here taken empirical research, seeking to map information connected to the preoccupations that deal with the installation and operation of video surveillance networks. The third part deals with a critique of the existent model of video surveillance, while the forth chapter seeks to proof the main hypothesis of the paper. The chosen methodology is a hybrid of interviews and critique of the current state of the art in the field.

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Contents: 1. The city in movement: a brief reflection in the guise of preamble. 2. Opening cracks in the phenomenology of social relations: method, methodology and relevant data. 3. The revenge of Argus Panoptes. 4. Inconclusive conclusions: shadows and fireflies.

1. THE CITY IN MOVEMENT: A BRIEF REFLECTION IN THE GUISE OF PREAMBLE

The Urbe is shaped by human hands.
In the city, it’s space as a product and producer of the dynamics that reign its time notwithstanding the experience of urban life [and] the relation of belonging [to its spaces] remains [or not] amidst a myriad of transformations which occur in the technical and technological dimensions, in the social and environmental aspects, in the devaluation of the specter of action of the State, in the distrust of institutional spaces, in the concentration of wealth and anomy of activities, in the impoverishment of the symbolic systems, in social polarization and the retraction of collectives forms of life, [in the] instrumentalization of the spaces of action, [in the] reduction of the public value.

In movement, and exposed to forces that are indeed complex, cities are chaotically and, unceasingly, modeled, modified, reformed, altered, adulterated and corrupted without any control from their inhabitants, which see a significant part of the effects taken in actions that, betwixt the low and high tides from which streets and avenues, backstreets and alleys, parks and plazas, gyms and stadiums, shags, houses, apartments, mansions and high rises emerge, are anything but neutral or unmoved, are apparently perceived by citizens as natural transformations.

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3 SUÁREZ, Carlo Emilio Piazzini. Los estudios socioespaciales: campo de tensiones y caminos recorridos. In RODRIGUEZ, José Exequiel Basini et al (Org.). Cidades,
Thrown in this whirlwind and amongst the continued agitation and transformation at play in these spaces, it seems impossible to overlook one of the most salient appendices in this unceasing process attached to the advances of technique: the propagation (or) systems of video surveillance networks. Public and (or) private, these cameras and mechanisms of transmissions of data are increasingly present elements in contemporary cities. Systems that while promising protection, transform cities into prisons.

Urban areas presently exchange freedom for safety. And yet, its inhabitants, taken by fear, seem not to worry with the fact that (a) existential freedoms are being negotiated and, in this context, usually exchanged for promises – which are as abstract as they are empty – of fighting criminality and terrorism, and with (b) the reality that they are “going with the flow, minding […] their own business […] and apathic regarding the possibility of change”, assuming that they acknowledge this reality at all.

In such scenarios:

CCTV systems appeared in the 1970s in the European context, initially to assist traffic regulation in congested cities. Later on, it began to be used in private spaces menaced by the
supposedly growing criminality, such as banks, shops, and malls. It is to achieve the same goal of improving security of persons and their property that the use of CCTV spread to public spaces, and began to be used by public authorities. The flourishing security market and the incentivizing state policies in the UK at the beginning of the 1990s turned this type of use of CCTV into an unavoidable tool to ensure security in other European cities.

Presently, it is paramount to resort to epistemic lenses, which have been polished throughout the last years and have allowed us to see with outstanding clarity the existence of control networks formed in the conjunction of (a) ever-improved, to the beat of the technological industry’s drum, zoom function in cameras that increase their capturing and recording, with sharpness, scenes in the middle of the night, (b) waves and cables from which more and more information can loseless traffic, its nurturing of the data base of hackers and crakers notwithstanding, (c) monitors and screens which are increasingly bigger, more numerous and capable of rendering ever sharper scenes – regardless of the fact that it is not necessarily used to do so –, (d) bettered storage capability and treatment of the data captured while crossing the nearly incommensurable watchful mirrored pupils ingrained into light posts (or) into the walls fleshed into the Urbe, (e) professionals, which are not necessarily well trained and (or) rested and, why not, (f) systems of facial recognition and (or) license plate-reading software that come and go thru the veins that cross the city, mostly harmlessly, and, still, filtering

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behaviors that could be labeled suspicious. As previously mentioned, the labor of Chronos allows us to infer that the resorting to systems of video surveillance has transcended the preoccupations stated when they were created – which were connected to traffic control –, now controlling, with imperceptible smoothness, the exercise of incommensurable positive freedoms in many of the spaces ingrained into the Urbe, with no legitimate reasons, ethical or juridical, for such conducts.

The inconstant flow of time reveals, still, how in little less than forty years a “large CCTV networks get connected to one another, shaping surveillance webs that remain invisible for the citizens,” creating a social control network which is set inside a fog – as lasting as it is metaphorical – which makes it hard to (a) understand that the systems of video surveillance spread all around the cities which, presently, promote the stigmatization of the existing difference between people, consequently devaluing alterity and the most diverse pluralism, while also obfuscating the decoding of an immeasurable violence – actual in real and symbolic spheres – magnetized in every plane of the city, and into every wound which is opened on the screens on which the constitutional principle of equality should be drawn, time

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9 MELGAÇO, Lucas; VERFAILLIE, Kristof; HILDEBRANDT, Mireille. CCTV and Smart CCTV effectiveness: a meta-level analysis. SIAM - Security Impact Assessment Measures. Brussel: Vrije Universiteit Brussel, 2013. p. 20. “Detection, tracking and classification of targets are the main tasks expected from video analytics engines. Detection refers to the identification of what physical objects exist in the surveillance area, tracking is the understanding of how they move and classification is related to the labelling of objects as human, vehicle, animal and to the interpretation as normal or abnormal objects or behaviours”.


after time.

One has to register, furthermore, that the expansion of video surveillance network seems to have been legitimated by the silence – and, in certain occasions, by the outcry\textsuperscript{12} – of people knocked out by the media buzz of promises to fight criminality\textsuperscript{13} and (or) by the manifested scenes of contempt to life that is broadcast in Brazilian televisions as if they were publicity movies.

Individuals incapable to understand that “the data [transit] in informational society have a set of characters [explicitly] able to identify immanent aspects […] from their affective relationship, familial, patrimonial, phone records, political and sexual convictions” [aspects not only bound to their daily existence, such as equality] claim privacy\textsuperscript{14} and (or) intimacy, hence, claim rights of personality.

In spite of general ignorance, the Law also acts in this process of chaotic construction and reconfiguration of public and private spaces which are increasingly fragmented in contemporary cities.

It furthermore acts, even if at times without perceptible efficiency, in controlling the exercise of positive liberties, the promotion of substantial equity and the daily experiences of personality rights, appealing to – in order to restrict the rights to the civic sphere – inhibitory sanctions, dismantling or imposing the reparation of damages on the phenomenical level.

Finally, one should not forget that it is up to the Law, as praxis magnetized to the lived-life in the Urbe, authorize and forbid architectonic and (or) engineering projects, as well as

\begin{itemize}
\item \textsuperscript{12} Empirical data shows that the citizens, in Canoas, want more cameras on the streets.
\item \textsuperscript{13} DEBAILLEUL Corentin; KEERSMAECKER Pauline De. \textit{Towards the panoptic city: the proliferation of video surveillance in Brussels and Copenhagen}. Thesis (Master) – Université Libre de Bruxelles, Bruxelles, 2014. p. 66-67.
\end{itemize}
allowing constructions, filing licenses and permissions, ordering demolitions, and to modulate, regulate and discipline conducts. The Law, as a matter of fact, while legitimizing these mutations, also seems not to notice the spread of a number of offenses that it itself suffers, while, perhaps simultaneously, failing to identify that by keeping inert, it fails to accomplish its scope: to serve the human person, all of the human persons.

2. OPENING CRACKS IN THE PHENOMENOLOGY OF SOCIAL RELATIONS: METHOD, METHODOLOGY AND RELEVANT DATA

Having described the scenario in which the current scientific investigation takes place, it is time to highlight the most relevant purpose that informs this research were clamped on the necessity to look into the problems provoked – namely, to the liberties and equalities constitutionally guaranteed in Brazil, in the form of principles with normativity which are as pulsating as they are explicit – while video surveillance systems multiplied within Brazilian cities.

The research was thought and executed in two steps. Initially interviews were conducted aiming to understand the reasons that justify and inform the investment required to the implementation phase of such technological systems, and, the empirical approach was revealed – at least, apparently – as the only way that could allow mapping, for example, (a) how the managers thinks, (b) what guides their actions, (c) which prejudices overshadow their world perception or, still (d) if there were any concerns with the protection of the captured data by the cameras.

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that are spread among the cities of Porto Alegre and Canoas.

These cities were not elected only because they were pioneeer, in the State of Rio Grande do Sul, on the use of the technological tools mentioned through this paper, but, also, because they are the largest cities in the State. Besides, as far as the proposed outline in this scientific investigation is concerned, it is unnecessary to extend the empirical mapping to other locations. It is also important to stress that both elected cities have (a) large government budgets, (b) very large population and (c) high levels of violence.

Once we obtained the empirical data – through of the second stage of this research – the juridical and non-juridical literature, the subsidies and elements needed to the reflection and critics aligned through this paper were reviewed.

While tearing some veils – among them, that of ignorance – the empirical research led to identify that in both cities (a) the main justification to the substantial investment in surveillance is connected to the promise of betterments in public
security levels, although, (b) nothing has indicated, during our interviews, any noteworthy case – connected, for example, with the number of crimes with elevated offensive potential – which had been brought forth with the support of technological systems. Both cities nevertheless kept, at the time of our empirical survey, (c) twenty-four hours, seven days a week operating systems and (d) its operators – many of whom are retired police officers, army reserve officers and (or) municipal guards, have their eyes trained – in many occasions, trained during a whole life dedicated to the work of ostensible policing –, to identify any situations of risk –, (and) acting between eight to twelve hours per day, sometimes, in front of a computer screen with 16 distinct frames in which images passes incessantly and repeatedly.

Credits: Sara Dotto

In both interviews, and with stern matter-of-factedness, s (f) the outcry of the population and the municipal interest in the system’s amplification through installations of more cameras and (or) more integration between the agents and (or) departments provided with information that flows through the Eyes of
the Angel were reported.

Other coincidences can be identified on the interviews. They emerge from the silence achieved by unspoken words. In both interviews, it was not revealed – apparently, these data do not exist – (g) the number and (h) the profile of the people daily recorded, (i) the total cost of inputs and (or) the mensal costs for the public safes on the maintenance of control centers. Moreover, while in Porto Alegre (j) access to the information mapping regarding cameras allocation, under the justifications that “the bad guys” should not know where they are, was not allowed, in Canoas city (k) the desire to expand the video surveillance up to the city’s exits and an appeal to a technology capable of identifying vehicles license plates while they enters and leave the city was revealed and, more, (l) the existence of cameras able to capture the interior of houses, a practice that would be justified by the need to fight dengue virus.

At no point during our interviews concerns for privacy rights, such as the one we have expressed so far in this research, have emerged. No word regarding the violation of rights or tangential worries with the construction and enlargement of stereotypes and the consequential denial of equality and privacy. And, even if (m) the process that allows access to recorded images for interested people hold some safety debriefing – as the need of formal requirements – no practice that promotes, for example, the de-identification of persons captured in the registered scenes were reported nor any concern with the potential action of hackers and crakers that could have access to the waves and cables through which the imagens transit from the capture points to the control’s centrals.

The table below may show further data useful to the reflection:
<table>
<thead>
<tr>
<th></th>
<th>Porto Alegre</th>
<th>Canoas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
<td>1,409,000 (2010)</td>
<td>323,827 (2010)</td>
</tr>
<tr>
<td><strong>Municipal annual budget</strong></td>
<td>R$ 6,949,142.987,00 (2017)</td>
<td>R$ 1,700,417.940,00 (2017)</td>
</tr>
<tr>
<td><strong>Relevance in Rio Grande do Sul</strong></td>
<td>1º</td>
<td>4º</td>
</tr>
<tr>
<td><strong>Cost per camera</strong></td>
<td>R$ 20,000.00</td>
<td>R$ 20,000.00</td>
</tr>
<tr>
<td><strong>Total cost of the system</strong></td>
<td>-</td>
<td>R$ 8,000,000,0018</td>
</tr>
<tr>
<td><strong>Cameras managed by the public power</strong></td>
<td>1800</td>
<td>186</td>
</tr>
<tr>
<td><strong>Relation of inhabitant per camera</strong></td>
<td>782</td>
<td>1,795</td>
</tr>
<tr>
<td><strong>Number of occurrences registered</strong></td>
<td>-</td>
<td>1,400 (2015)19</td>
</tr>
<tr>
<td><strong>Data transmission system</strong></td>
<td>-</td>
<td>Radio e optical cable.</td>
</tr>
<tr>
<td><strong>Technology for facial recognition</strong></td>
<td>Available, but not activated20.</td>
<td>Under analysis.</td>
</tr>
<tr>
<td><strong>Zoom</strong></td>
<td>-</td>
<td>250 meters</td>
</tr>
<tr>
<td><strong>Daily recorded people</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Profile of the recorded people</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Image storage</strong></td>
<td>There are records and the register is maintained for 30 days.</td>
<td>There are records and the register is maintained for 30 days.</td>
</tr>
<tr>
<td><strong>Access to images</strong></td>
<td>Any interested party can do it. Juridical authorization is required.</td>
<td>Any interested party can do it. Juridical authorization is required.</td>
</tr>
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One should be aware, nevertheless, that there are no data that allows us to map the numbers or costs of installation and maintenance for the private video surveillance installed in Porto Alegre and Canoas. Neither have we been able to, with the

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17 Older cameras may be acquired with lower costs, in Brazilian Reais.
18 Data regarding the last substantial input. Previous inputs or monthly costs for video surveillance maintenance were not reported.
19 There are no reports on how many may be considered crimes or crimes with elevated offensive potential.
20 Regarding the high costs to access the software.
21 We asked which kind of image calls more attention from the operators? Who begs more attention from the watchers? The questions were not answered.
elected methodology, been able to discover any particular precautions or preoccupations in the capture, transport and (or) storage of these data.

3. THE REVENGE OF ARGUS PANOPTES.

The myth of Argus Panoptes came to contemporaneity in the shape of a giant with a hundred eyes who because of these, even while sleeping, was capable of keeping half of them opened. Killed by Hermes, before mythology stopped conducting human affairs, he is reborn amidst the chaos of contemporary cities, now, not as a myth, and with much more eyes than before. Eyes, supposedly, capable of registering the past, domesticating the present and remediating the future. Eyes that spread betwixt the Urbe, legitimizing the diffusion of violence and that in merging with the architecture of pseudo- legality.

24 CARR, Robert. Political economy & the abbott government’s CCTV programme in australia. University of New South Wales: unpublished manuscript. Not available anymore apud DEBAILLEUL Corentin; KEERSMAECKER Pauline De. Towards the panoptic city: the proliferation of video surveillance in Brussels and Copenhagen. Thesis (Master) – Université Libre de Bruxelles, Bruxelles, 2014. p. 12. “I have rationalised CCTV as: a component in the cultivation of patron-client ties between the Federal Government, its agents (MPs) and local councils/communities; a mechanism for government to facilitate the flow of public funds to private companies through arrangements that are virtually unchecked and non-evidence based; a mechanism for government to facilitate profitable opportunities for the security technologies industry, technical consultants and news media; and, a mechanism for reproducing political and social hegemony by working to normalise these relations at the level of discourse”.
enhance the disrespect to the multiple dimensions of private life, unbearing it\textsuperscript{26}.

And, though the eloquently spread silence captured in our empirical mapping does not allow us to say so with any precision, we dare to imagine that the actual situation would probably resemble this:

Eric Heilmann reviewed a 1999 study detailing the practices of CCTV operators in three different cities for 600 hours. It shows that prime targets of the operators are the teenagers, representing 47% of the targeted persons but only 15% of the local population. Men are more often targeted than women (89% vs. 11%), and in a prosperous provincial town where ‘black’ people compose 6% of the population, although 15% of CCTV targeting is aimed at them. Among all the people specifically monitored by the operators, 30% were suspected (rightly or wrongly) to be involved in some kind of crime or offence, and 22% suspected to disrupt public order. For all the others, “no obvious reason” could justify their monitoring. Voyeurism represented 1% of the cases generally and 10% when it came to monitoring women\textsuperscript{27}.

Notwithstanding a relevant role that such networks could acquire given that

as presented, video surveillance, whether traditional or “smart”, functions through a series of mechanisms that can be classified into three main effects: “past”, “present” and “future”. The “past” effect, that is to say, the capacity of video surveillance to serve investigation purposes appeared as the one in which both CCTV and Smart CCTV are more effective in reducing crime\textsuperscript{28},

\textsuperscript{27} DEBAILLEUL Corentin; KEERSMAECKER Pauline De. \textit{Towards the panoptic city}: the proliferation of video surveillance in Brussels and Copenhagen. Thesis (Master) – Université Libre de Bruxelles, Bruxelles, 2014. p. 28.
it is important to notice, in the emptiness in which the unknown data is found – and (or) not revealed – that, as proved in other tangential research to the subject explored here, “the main result of the study is that no serious decrease in crime can be attributed to CCTV”\textsuperscript{29} –, what can occur, also, because “watching video surveillance can be tedious and boring [and] often there can be hours or days of video from multiple sources where very little of interest actually happens”\textsuperscript{30}.

These remarks demand, at least, a consideration on whether the political engagement, and the public investment needed for its execution – particularly in light of its potentially harmful effects on liberty and equality – should not be reconsidered.

Such reflection should not disregard (a) the relative uselessness of the process of capture, registering and rendering of the images that go through the many glassy irises of the cameras spread around cities\textsuperscript{31}, (b) the absence of any minimally reasonably level of materialization of the promises that inform the utilization of video surveillance networks, (c) and the obviously high economic cost, as well as, (d) the disregard with the fundamental rights\textsuperscript{32} uncovered by the rhetorical fog that tries to

\textsuperscript{29} DEBAILLEUL Corentin; KEERSMAECKER Pauline De. Towards the panoptic city: the proliferation of video surveillance in Brussels and Copenhagen. Thesis (Master) – Université Libre de Bruxelles, Bruxelles, 2014. p. 22.


\textsuperscript{32} Given the impossibility of empirical proof we resort to data produced in Europe. See: PAISSAN, Mauro. La privacy è morta, viva la privacy. Milano: Ponte alle
socially legitimize the exchange of liberties for high tech domi-
nation.

It is valuable to bring forth, once again, in the acknowl-
dgement that [when] utilized for security purposes, surveillance cameras can be broadly classified according to three principal mechanisms, which can be explained in terms of the “past”, “present” and “future” functions of the criminal activity. In relation to “past”, cameras have the intention to record events and serve as a data bank for investigation and later identification of the criminal. The images can also be used in court as evidence. In the relation to the “present” function, the camera has the aim to serve as an extension of the eyes of the police or private security guards. The agent behind the cameras identifies a suspected activity or a crime already in the process of being committed and acts in real time, preventing it from being accomplished. The third goal, which turns to “future” time, refers to the capacity of the camera to prevent a crime from occurring by inducing a sensation into the criminal that he is being continuously monitored. Thus, a running camera, when connected to a system of data storage, responds to “past”, “present” and “future” purposes as described. In other words, it permits investigation, detection and deterrence. However, a connected camera, that does not store images, only meets “present” and “future” functions. And finally, a false camera in which images are neither produced nor stored, has only a function in the “future”, since its sole purpose is to induce the feeling of being monitored33.

Useless or nearly so, to the ends which they are paradox-
ically addressed to, video surveillance systems, more and more,

Grazie, 2009. p. 10. “Altro fronte delicato, la videosorveglianza. Le nostre città sono piene di telecamere, poste in luoghi a rischio di reati, ma anche davanti a palazzi, su pianerottoli condominiali, in giardini pubblici non così pericolosi. Le telecamere possono talvolta essere effettivamente utili a dissuadere i male intenzionati o a individuare responsabili di reati. Ma la loro proliferazione a dismisura rischia di essere contropro-
ducente. [...] Abbiamo speso miliardi di sterline, ma solo nel ter per cento dei casi di furti e rapine in strada i responsabili sono stati catturati grazie alle telecamere”.

intelligent — and, maybe, more and more expensive – are scattered along cities amplifying – instead of avoiding – its different risks.

Risks as (a) the ones suggested in the possibility, told in the interview conducted in the city of Canoas, of one being filmed within a space that should have been the last bastion of resistance of the individual against the demands of a Prince that we believed deposed with the rise of contemporary constitutions or, (b) those attached to the “abuso de la información; bien sea por compartir los datos sin autorización; por integración de bases de datos por varias compañías para desarrollar un perfil extremadamente detallado de una persona o por su divulgación y utilización no autorizada”.

4. INCONCLUSIVE CONCLUSIONS: SHADOWS AND FIREFLIES.

The rules that deal with the data protection – even in countries where they exist – seem to not to solve problems overlooked by tired eyes or that insist in not seeing that the authority of intimacy emerges from the individual rebellion against the moralistic oppression that, for a long while, had conducted human behavior or that “el proceso de inmunización de la vida

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34 MELGAÇO, Lucas; VERFAILLIE, Kristof; HILDEBRANDT, Mireille. CCTV and Smart CCTV effectiveness: a meta-level analysis. SIAM - Security Impact Assessment Measures. Brussel: Vrije Universiteit Brussel, 2013. p. 20. “Detection, tracking and classification of targets are the main tasks expected from video analytics engines. Detection refers to the identification of what physical objects exist in the surveillance area, tracking is the understanding of how they move and classification is related to the labelling of objects as human, vehicle, animal and to the interpretation as normal or abnormal objects or behaviours”.
37 ROBL FILHO, Ilton Norberto. Direito, intimidade e vida privada: paradoxos
ciudadana ha sido un proceso de domesticación, normalización y artificialización progresivo, que ha ido acompañado de un proceso de privatización y de homologación no solo de los espacios, sino de los modos de vida”38.

The Ágora is being, slowly, surrounded. Amongst this movement, their inhabitants, slowly, are deprived of their rights. Without noticing maybe – although with expected docileness39 – they have their liberties, continuously and smoothly, thinned in the urban spaces of coexistence.

Here is the moment to recast the Pascalian bet40: if liberty and equality win, great. If they are defeated, nothing will be sacrificed, as it seems that it is unfeasible to believe in a more absurd world41 than one where humanity is found itself contained in the time to come. If it is certain that there is no algorithm that may solve the problem reported in this research, ot sounds feasible to defend that the silence is the worst choice. Even though random, “the bottled message is a testimony of the impermanence of frustration and the pertinence of hope, the indestructibility of chance and the fragilities of the contingencies that avoid their implementation”42.

Hopefully fireflies once again will hover the Brazilian sky43.