Social effects of data processing and regulation of personal data in Latin America

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1. EXECUTIVE SUMMARY

The initial objective of this Project was to carry out the first step in the promotion of a public debate and influence in public policies, relative to the protection of personal data in Latin America. In this first stage, the project has been centered in two countries: Brazil and Mexico, and has had as its objective the identification of the main institutional, legal, academic, social and technological actors in three spheres: a) National identification documents, b) video surveillance in public spaces, and c) surveillance of data in the Internet.

In the framework of the new national identification document in Brazil, there exist laws, law projects and discussions in the Congress since 1991, but mainly, they refer to this document in an uncritical and non reflexive way, without participation and public debate with respect to the theme in the country. The research also brings up the point that scientific production borders the theme of biometrics and identification by the exact disciplines or those interested in suggesting more efficient technical systems. From the humanities there are fewer critical studies that reflect on the theme. In this way, the implementation is characterized by a technocratic aspect or a better technique that erases its political characteristics. The analysis of the law projects and of existing laws indicates that the application of the unique identification document in the country does not pass in Brazil due to legal mechanisms for the control and supervision of the document itself outside of groups who use it. In the same way, there are no clear legislative dispositions on the access and use of personal data that will be part of the document and its database. In connection with the display of the new document, today the country is seeing a large investment in forms of identification and construction of databases of the population that include forms of access to government benefits, the electoral system and the transit system.

In regards to video surveillance and electronic monitoring systems in Brazil, it was possible to identify growth tendencies and interest in two main areas: in the technology market for the employment of electronic surveillance and in the studies related with the same theme. In relation to the market, it is noted that there is a large number and variety of businesses concentrated in the manufacturing, commercialization and personalization of surveillance systems, with local and multinational companies, and with the increasing employment in these areas, not only in public spaces with a large affluence of people, but also in private spaces. This increase is propelled by the expansion parallel to the interests and the profitability of the real-estate market in closed residential condominiums, such as one of the most sought after urban subdivision forms, with repercussions in practically all social classes. In these cases, the relation between the real-estate market, security equipment and monitoring companies is latent and symptomatic. In the case of the growth in academic and scientific interest, the recent evolution of the number of articles and works done on subjects related with the use of CCTV is notable. It must be emphasized that a large part of the production of critical works on the theme are theoretical studies, to the detriment of case studies and works with ample empirical support. Finally, this growth in two directions is accompanied by a "vacuum" in the legislation and in discussions on law projects. This study points toward the absence of legislation worried by the implications of the proliferation in the use of CCTV for monitoring citizens and public and private spaces, and even the lack of interest in detailing the terms of application and manipulation, as well as the responsibilities linked to the data produced by the use of these technologies.

The mapping of the Internet in Brazil indicated that the personal data of surfers is more vulnerable to collection, monitoring and classification by businesses and corporations that produce or operate "trackers" on their websites, than the surveillance and treatment of the data by the State and governmental institutions. Efforts were identified in the Brazilian government in the last five years in the sense of promoting the participation of civil society in the public debate on the regulation of personal data, with special attention in the area of the circulation of this data on the Internet. Aong thes efforts the proposal by the Brazilian government, in cooperation with the Getulio Vargas Foundation, the personal data protection bill (2010) and the Brazilian Civil Framework construction bill (2009), stand out, both open to the consultation of the public and collaborative construction. However, these strengths are in conflict with a series of law projects that are currently found in process in the Chamber and Senate of Brazil. We have identified that a large majority of these projects anticipate ways that prohibit anonymity, demand internet surfer identification, and control access and use of the Internet. Furthermore, we observe that these projects threaten those even small advances of digital inclusion in Brazil, given that the Internet tends to be used as a means for carrying out criminal acts, and not as a means of communication, production of knowledge and democratization of content. The emergence of these conflicts represent the urgent need to encourage the participation of Brazilian society in the public debate around the treatment and regulation of personal data in the context of the Internet, given that this debate, in accordance to that which also could be identified in the research, has not even been warned about.

As can be seen, the research done in Brazil indicates that the participation of private and industrial companies is very strong in the spheres of Internet and video surveillance, being important actors in the expansion of video surveillance in public and private spaces, as well as following this data through the Internet. It can be observed also that the lack of laws destined to protect personal data, reflects both the sphere of video surveillance as in the new national identification card. This scenario is not repeated entirely in the sphere of the Internet, where there is a context of conflict among a large part of law projects that challenge the anonymity in navigation and demand identification and the following of Internet users; as well as a minority of law projects that try to guarantee privacy and protection of personal data on the Internet. The latter, although numerically less, have a relatively strong effect, even though they were Brazilian government proposals, being able in this way to face a majority of projects of intrusive laws. The academic production shows, both in the sphere of video surveillance as well as in the Internet, a significant increase in articles published in the last ten years, emphasizing a strong presence of the humanities and social sciences, as well as legal sciences (in the case of the Internet). Also emphasized in the study of these two themes, video and internet surveillance, is the critical nature of these academic works, which is not perceived in the studies on the new national identification document in Brazil, in its majority concentrated in the area of exact sciences and with a small significant critical production. In the three themes there was evidence, with small differences of scarce public debate in Brazil on the central theme of the investigation, which shows the necessity to spread the data presented in this report with the objective of contributing to the growth of this debate in Brazil and Latin America.

In general, the legal debate on data protection in Brazil is almost exclusively dedicated to questions related with the Internet, being much more limited in the cases of video surveillance or identification cards.

For the case of Mexico, in the study it was found that the proliferation of video surveillance is linked to a governmental posture of security in which it is considered that this surveillance technology is effective for combating crime, identifying the subjects and actions that are considered to be linked to crime. But its proliferation not only is presented as a strategy of public security. In private security, it is also present in the formation of isolated spaces, both residential as well as commercial. What is argued in the study is that this strategy has not only contributed to discouraging crime, but has reinforced the existence of prejudices against sectors of society that are considered to be inclined toward delinquency: the marginalized sectors.

In the academic sphere, there is not an extensive production of reflection about this problem and in the sphere of the federal government, there is no normative framework that explicitly authorizes or limits the use of CCTV. Regrettable to this absence, we are behind the elaboration of normative proposals in the sphere of federal institutions. This panorama is especially important for this investigation, given that it makes up a situation in which our research is of special relevance since it contributes to the knowledge and spreading of the experiences that have been linked to the use of video surveillance. This way, in the Mexican research, it is possible to see that the implementation of CCTV has been derived into three large groups of problems. The first of these is a financial type since the costs of implementation, operation, maintenance and evaluation are very high, especially when the crime statistics indicate that it has no effect on the decrease in crimes by the installation of the video cameras. The second group of problems that we can call attention to is what is referred to as a reinforcement of prejudices against certain sectors of the population, a fact that we consider, the diversion of the attention of the real causes of insecurity in our country. Lastly, the question of the protection of personal data is presented as crucial in the panorama of institutional weakness in which the lack of regulation can leads to an inadequate handling of the collection of data by these technologies.

In relation to identity cards, in the case of Mexico, the citizen identity card has been investigated. In the research, the evolution that has been presented in its implementation has been detailed, signaling that in the beginning, the proposal suggested a project of identity for all citizens, which has been transformed into a project of personal identity for minors, due in a large way, to the controversy that resulted between opposition parties to the party that is governing and between public and autonomous institutes like the Federal Electoral Institute and the Federal Institute of Information Access.

In this sense, this document indicates that in Mexico, there exist more specific norms around the population data that the Federal Government can gather, unlike the lack of federal regulation that exists in the case of CCTV. These norms are found in the history that goes back to the second half of the XIX century, when the efforts to guarantee the identity of the citizens, and to construct a modern state were initiated.

For that reason, it is possible to think that, when in 2009 when the project of a new citizen identity document was announced, it was clearer that institutions had the ability to plan, regulate and

administer the project. Also, one can suppose that there existed an ample discussion on the official ways that the adequate use and protection of the data collected for the card was guaranteed. The controversies that were raised indicated the contrary and were showed that the theme of managing personal data in Mexico has an interesting political element that is linked to the institutional weakness in the country. The actors that questioned the project warned of its weakness, signaling three critical points: a) the real necessity of a new citizen identity document before other existing forms of identification; it warned of the duplication of documents, as well as the unnecessary expenditure of resources, b) the instances of public and private character that would be the right ones for the handling and control of the management of the card, above all in a context of the questioning of the handling of the data that has been fulfilled in the country by public and private organizations and c) the adequate or inadequate modifications to the existing norms to allow the collection of a quantity of biometric data that different actors have signaled as excessive, unnecessary, and even, violation of the right to privacy.

In the development of the investigation it can be seen that the discussion in the academic area about the implications of a new card project and the realization of the same in the figure of the personal identification card for minors is even weak in construction, in some ways, at the same time that it has passed from the announcement to this project (June, 2009). In fact, even when the registry and accreditation of Mexican's identity has been a process that has accompanied the consolidation of the State of Mexico, the discussion around the protection of data is relatively recent, emphasizing the area of Rights as pioneering this discussion.

In relation to the protection of personal data on the Internet in Mexico, data presented points out that this problematic has generated different aspects in its study. However, the production of documents and of information about the topic, may not appear to be very solid in its scientific construction. Mainly, the contributions to the theme come from publication categories like a blog article, journalistic articles of opinion, etc. Then, it may seem that the study on the protection of personal data in Mexico is found isolated from the production of scientific knowledge that should be given in universities and investigation and teaching centers. The results of the mapping indicate that 76% of information sources are provided from blogs, editorial groups or electronic portals; while 24% come from some of the investigation project is taken place in some investigation centers and authored by a researcher. Also, the theme of personal data protection in Mexico is a problem that doesn't achieve consolidation as a debate on the construction of the governmental public agenda.

The production of information with respect to the theme appears to come from agents considered public. The public character of these agents comes from its own nature. In other words, the construction and updating of different blogs, web pages, civil association portals, editorial groups etc, take place from the contributions of individuals interested in the theme. However, the debate on the protection of personal data in Mexico continues to be volatile. The data indicates that the debate is intensely heterogeneous in the definition and attention of the problem.

In regards to the norms, there is a growing interest for debating the necessity for a specific regulation, given that, as in the case of Brazil, in the Senate, there are discussions around the need to establish criteria for the monitoring of users activities with the goal of slowing cybernetic crime,

while in some public forums, such as internet pages and blogs, there are alerts about themes such as privacy, creation of profiles, etc.

In this way, and as stated earlier, the discussion about the Internet is just beginning, for which we consider that a study such as this one is a useful tool for calling attention in regards to the necessity to systematize specific problems resulting from the use of this technology and to link these discussions to the definition of more specific regulations directed to framing the use and treatment of personal data. The advantage observed in this sense is the existence of a Federal Data Law in possession of individuals that, along with international agreements of which Mexico has been participating in, can be a base for this statement.

2. INTRODUCTION

The social-political context that motivated this research is formed by two central characteristics. On one hand, the growing presence in Latin America of actions and technologies that focus forms of collecting, storing and management of citizen's personal data. The implementation of unique national identification documents, video surveillance of public spaces and forms of collection and control of personal data on the internet are presented as examples central to this process. On the other hand, the Latin American context is characterized by the precariousness and even, absence of legal norms that regulate the collection, storage and management of personal data, as well as by the limited public debate with respect to the capability of stimulating citizen participation.

In this way, the objective of this research has been to become the first step in the promotion of a public debate and influence in public politics, relative to the protection of personal data in Latin America. We begin this path identifying fundamental knowledge in academic research and collection of data about the use and regulation of personal data in two countries, Brazil and Mexico, with the intention of identifying its social effects. The effects of interest for this project relate to processes of social classification that impact in the definition of forms of inclusion/exclusion of the subjects in the participation of public life, shaping the criminalization of groups or specific populations, segregation and social and cultural exclusion for physical features or of conduct, restriction of rights and civil, political and social liberties based on profiles constructed by the governments and corporations.

Therefore, it is focused in three spheres of analysis: a) National identification documents, b) video surveillance in public spaces, and c) Internet. The choice of these three spheres has specific justifications.

In the context of the identification documents, in Brazil, they are implementing technologies for the generation of a unique civil identification registry while in Mexico; they are in the process of implementing an identification card for minors. In the sphere of video surveillance, already considerably present in public spaces, both in Brazil as in Mexico we have recently seen a view of its expansion in public spaces. Concerning the sphere of cyberspace, in Brazil and in Mexico there exist an increase in pressure towards corporations and national and foreign governments for them to establish and exercise forms of collection and control of data in the Internet, which are directed to safeguard intellectual property rights in the consumption via cyberspace; the security of financial transactions, the providing of public services and the fight against pedophilia and "digital" crime.

Such a panorama is specifically worrying, considering the Latin-American context, especially the precariousness of legal norms that regulate the collection, storage and management of personal data, and the limited public debate with respect to the capability of promoting public participation.

The above assumes that in different spheres such as civil identification; the installation of closed circuit video surveillance; as well as the collection and control of data in the Internet, the actions of the treatment of data has been justified, almost in a unilateral way, from reasons of public security or arguments whose logic is technocratic, oriented toward administrative or management efficiency, and where there has not existed thought of the effects that the precarious or absent regulations of such actions set out by its high invasive potential.

In Brazil, the lack of personal data treatment regulation allows control over the less educated population and with less ability to identify the negative effects of the use of their data, for example, the ease in which employers are able to deny employment to people that had been registered as bank credit debtors or of some private service, allowing those whose employment is denied to know how the employers have obtained this information or the possibilities of denying this type of usage.

In Mexico, different actions and technologies for obtaining and treating personal data are linked to population security policies, public and national, for which it is possible to see the development of different interconnected databases whose objective, among others, consists in the collection of information contained in driver licenses, cell phones, license plates, debit and credit cards. The impulse of these technologies has been marked by the development of relationships between private business and public institutions. This has implicated a process determined by the implementation of control devices over those sectors that is thought to be responsible for criminal violence: Those excluded or marginalized from urban spaces of large cities. In this sense, identification technologies (biometrics, identity cards, passports, among others) also have served as surveillance technologies, since they localize, classify and profile both the movement as well as the accessing of certain sectors of the population to spaces, services, rights or specific obligations, related to health, employment, security (public and private) or consumption.

In this way, the research and the public debate around the treatment of data is a question that has taken a turn toward being a priority in the Latin American agenda, in the cases of Brazil and Mexico, countries in which this research is focused on. In Brazil, they are in a stage of implementing the RIC (Unique Civil Identification Registry) that consists of the unification, in a central databank, of the civil identity of all Brazilians, to which will be added other identifiers such as fiscal number and electoral identification, also containing a chip with citizen's biometric data. The RIC is presented as a complete and unified platform for diverse products and services that depend on the identification and facilitating the crossing of data of its citizens. Parallel to this in the field of personal data control by the Internet, where one can find the process of constructing the Brazilian Internet Civil Regulatory Framework, a law project that has the objective of determining the rights and responsibilities linked to the use of digital media and that is found in a public consultation phase for later submission to the legislators. We consider the area of research and discussion to be fundamental as well as a thoughtful accompaniment in the construction of these types of regulations so that principals such as freedom of expression, respect of privacy and human rights are contemplated to preserve the character of the Internet as a space for supporting the activity of humanity. The research, discussion, and participation in this process becomes more relevant, while, as mentioned before, the lack of an adequate regulation affects in a special way the less favored population that historically has been criminalized by governments, corporations and some social sectors.

In the sphere of video surveillance in public places, its expansion in Brazil is in part, linked to the program National Public Security (Pronasci) whose finances have been, in some way, destined for the installation of closed circuit video surveillance in public spaces, including public schools and the shanty towns of Rio de Janeiro, without the existence of regulations that guarantee the protection of liberty and protection of private life of the citizens in these places.

In Mexico, different actions for the treatment of data are related with national and international agreements (such as the Merida Initiative and Platform Mexico) which tend to bring about the installation of advanced surveillance technology: localization through GPS systems, Closed Circuit Television, biometrics, gamma ray scanners, tracking software, and the administration of data, among others.

This class of actions and their connection with public security policies have encouraged a certain debate around the necessity to revise the existing rules on the protection of data in possession of the government and individuals, above all, because some of these actions have been bid on by private companies, much of which function under not only police logic but military as well. In other cases, the businesses offer database system security administration services, guaranteeing the protection of computer systems, electronic transactions, as well as the backup and recuperation of information, particularly electronic multimedia. These companies offer services such as industrial counterespionage, tapped phone line detection, electric monitoring systems, as well as "electronic sweeps" for detecting information leaks, analysis of telephone calls and satellite monitoring (GPS). Even some companies offer systems based on the development of artificial intelligence that, from the algorithm NMD (Non-Motion Detection), allows the analysis of video of suspicious behavior.

All of these actions put on the discussion table the problem of the regulation of the coordination between security that is provided by the State and that which comes from private organizations, such as the prevalence of authoritarian, discriminatory and unclear practices that worsen in a context like ours, with a significant institutional weakness. That is to say, the discussion on the effects of classification that the actions of collection and treatment of personal data have, are imperative in a context in which the State directs its intentions to combat organized crime and of delinquency in jurisprudence, since it is necessary to rethink the criteria for the evaluation of limits between what is legal and what is not legal, what is ethical and what is not ethical and that which safeguards civil and human rights of the people and those that attempt against these.

For that reason, taking into account these particularities of the Brazilian and Mexican context, this research was focused on three domains particularly sensitive to the presence of actions and technologies of personal data treatment: a) the implementation of unique national identification documents, b) video surveillance in public spaces, and c) forms of personal data control on the Internet.

The methodology that directed this investigation was made jointly by all of the teams that made up the research project, who searched to established common parameters for the compiling of data and analysis, without losing the vision of the specifics of each theme and country. Taking into account the mapping and the reaching of the discussions and practices over the themes covered, we were centered in identifying, in each one of these spheres, the following elements: studies and research, legislation (valid and planed), actors (individual and collective), social movements, manifestations in the media, and technologies. For the collection and analysis of data, we counted on the collaboration of scholarship holders connected to the universities participating in the project, contributing in this way, to the formation of undergraduate and post-graduate students in the sphere of surveillance studies.

In this way, the report that follows this introduction will describe, with the help of examples and graphics, the data found mapped in the three spheres researched, always focusing on Brazil and Mexico. The first part (item 3) describes the mapping referring to the proliferation of CCTV in Brazil and in Mexico with its respective methodologies and resulting analysis. The same structure is applied to the other two themes. The second part (item4) is dedicated to the mapping of identity cards and identification systems for the two countries, and the third part (item 5) maps the context relative to personal data on the Internet. The report ends with the global considerations about the studies done and a general reflection in relation with the results found in the two countries researched.

The presentation and discussion of the data are complemented with information graphs and graphics that have as an objective to give a better visualization of the results and more relevant themes.

Also, besides mapping, this project has as a goal to consolidate and strengthen the Latin-American Network of Surveillance Studies created in 2009 with the goal of being a medium for academic and professional exchange on surveillance studies in Latin-America. With this aim, we have created a website centered in the spreading of the actions, research and publications of the Network (http://www.labjor.unicamp.br/vigilancia/). It is supported that this site will be strategic, not only for the spreading of the network, but also for the widening of alliances with Latin-American institutions and researchers.

It is expected that the investigation's resulting information stated here forms debate and implementation of public policies related with the treatment and personal data regulation in Brazil and Mexico. With this report, we also have the proposal of giving the first pass in the formation of this debate in the Latin-American context.

3. SECTION ON CCTV

3.1 Introduction: The proliferation of video surveillance in the context of the development of Latin American cities

In our daily lives we often observe various devices that are used to monitor the behavior of individuals and populations in general. These devices have flourished as one of the principal responses to the growing insecurity of a great number of countries. Their expansion is also due to the development of digital technology, which allows for more effective systemization, as well as the fears raised by possible risks of phenomena such as terrorism and organized crime.

Surveillance is closely linked to the issue of security, since both public and private entities acquire tools to face the insecurity generated by the increase in crime. What is important to remember is that, although video surveillance and the related data-management are used as part of the effort of governments to confront crime, this does not exclude them from the possibility of being used to manage and control social behaviors.

In developing countries, when discussing the issue of surveillance, there is emphasis on the link between this issue and the authoritarian practices of governments, primarily by unconsolidated democracies. This relationship has brought the issue of security to the forefront; so much so, that in the nineties, it became a principle of organization of Latin American society. The presence of democratic institutions in the process of consolidation (in having to control authoritarian practices) represented perhaps one of the principal reasons for the security policies (particularly with regard to public security) not being sufficiently effective. As a result, it was likely for the first security measures, organized largely by urban and rural communities, to be structured as neighborhood protection strategies.

This strategy, obviously unplanned, was implemented first by the middle and upper classes to achieve isolation in large urban centers in closed enclaves. Some neighborhood spaces, such as residential areas in Mexico, are characterized by being closed and having access control mechanisms based on video surveillance, fingerprint and ID card systems (Arizaga, 2000; Giglia, 2001); the architecture of the houses is homogenous and reminiscent of the ideal of North American suburbs (Ellin, 1977). Middle class sectors, due to their inability to access housing of this kind, have opted to close off vehicle transit in their neighborhoods, even though this goes against the traffic laws of many cities.

By closing off neighborhoods, beyond simply establishing physical barriers to maintain security, the inhabitants bring into play the idea of insecurity in open spaces that have no barriers and are vulnerable to criminal activity, which also gives rise to the sensation of sharing the same way and expectations of life (García and Villá, 2001). In this way, closing off residential areas represents, to a great extent, a political manifestation of various social sectors aimed at defending a position of privilege that is threatened not only by the increase in crime, but also by the economic transformation that occurred as of the eighties and in the first half of the nineties.

A mechanism of exclusion has also been established based on the principle of security throughout the commercial and business districts, in the nodes of globalization in Mexican cities, the purpose of which is to organize services, build buildings, streets and avenues in such a way as to guarantee the optimal development of the business and commercial operations carried out by the middle and upper classes. Following Zukin's (1995) line of thought, these spaces seem to be conformed of a kind of aseptic urbanization modeled after Disneyworld-type urbanizations. The same phenomenon occurs in the proliferation of shopping centers (malls) in the style of those that emerged in the United States in the seventies. The focus of these shopping centers on the consumption of products that tend to foster

the identity of the middle and upper classes tends to slowly undermine the diversity of the downtown areas of the cities of the country.

Based on this logic, closed or regulated residential areas, business districts, shopping centers and workplaces have created an environment of security that is separated by streets and avenues. However, the logic of security has also expanded to the principal means of communication of the cities, especially through the installation of closed circuit television systems. The purpose of this is ultimately to consolidate the idea that the population must be under surveillance to avoid the circulation of danger and, in this way, guarantee that within an enclosed location (whether a mall, school, neighborhood, etc.) it is possible to move around without fear. In this environment, as Rotker (2000) points out, society has generated so-called "safe routes" to work or other locations for pastimes or consumption.

The exponential growth of private security organizations is also evident. Today, private security services cover not only office guard services, but also activities that include the installation and maintenance of alarms, research, handling of goods and valuables, consulting services and the installation of electronic surveillance and security systems.

In Brazil, Kanashiro (2006a; 2006b; 2008) has now described in three subsequent and consecutive works the scenario of the installation of surveillance cameras as "rapidly growing" in the interests of the real estate market, which consequently reflects the growing interest in asset and individual security. This profile of growth was then focused on areas with a large influx of people, whether in public spaces such as parks, plazas and urban centers, or in private spaces such as shopping centers, stadiums or event centers.

Added to this application is the one related to the processes of gentrification of vast residential areas in medium- and large-sized cities and metropolitan areas in Brazil. This last behavior of the market is linked to the expansion of closed residential condominiums as a form of urban subdivision and a highly-valued market of contemporary real estate. As though the use of immense plots of urban land for high-class condominiums, as traditionally occurs in various countries of Latin America, were not enough, in Brazil, this phenomenon has been accompanied by an ever-increasing interest of all of the social classes in this form of using land in cities.

The most visible consequence of this expansion in condominiums as a valuable product and a form of subdividing urban land is the close relationship formed with the physical security structure they give rise to: from their individual architecture to the urban design of the environment and internal spaces. Personal security systems in this way become part of this valued product and therefore become perceived as a standard obligatory element of this new type of city property. Security cameras, CCTV systems, security procedures and space control form part of the current urban architectural products as necessary construction elements.

The reflection of this situation is indirect support (and sometimes direct, primarily promoted by the press and pressure by security companies) of CCTV systems as important tools for preventing and

solving crimes and violence in Brazilian cities. This diagnosis is not different in other Latin American countries, especially Mexico, as we will see in this report.

Added to this is the fact that little is known and nothing is discussed with regard to the issue of the surveillance, monitoring and control of individuals, groups and spaces in these countries, or to the particular relevance of the recent history of political and economic repression in the past four or five decades. This perhaps gives special shades to the relationship between monitoring systems such as CCTV and the societies located in Latin America, primarily in Brazil and Mexico, two of the most important countries of this region.

Also, with the aim of generating conditions for speculating about possible predictions regarding this reality in Brazil and Mexico, issues such as the following are discussed in this study: regulation and control of the use and proliferation of CCTV in those countries; the academic discussions and conclusions under development by the Brazilian and Mexican scientific communities concerned with the issue of CCTV systems; the technology used and the market for electronic image monitoring equipment; and the principal social players and forms of manifestation and presentation such as blogs and websites. The items below describe and analyze, separately for each of the two countries, the situation with regard to several of these issues based on the information gathered from September 2010 to May 2011 on the proliferation of CCTV in Brazil and Mexico.

3.2 The proliferation of CCTV in Brazil

3.2.1 How the mapping of the proliferation of CCTV in Brazil was performed

The search methodology and organization of the information for each issue and in each national context was distinct, but there were also many transpositions, as will be seen throughout this report. That is, there are many stages of common research for each issue, which represent a certain kind of methodological standardization in the descriptions below, a fact that does not negatively affect the content of the information gathered or the manner of communicating the results of the research.

It is important to point out that all of the information found was organized in tables for each subject and country, and this information was available for analysis by the researchers involved in the project. The relevant aspects of these tables were later organized in such a way as to serve as examples for the descriptions contained in this report and for the purpose of facilitating visualization of the evidence for this project. To this end, the data visualization services of the renowned provider Medialab/Sciences Po (Paris, France) were contracted. This organization is headed up by Bruno Latour and Dominique Boullier and is inspired by the structure created by Medialab of the Massachusetts Institute of Technology (MIT) of Cambridge.

In view of the above, the gathering and organization of the data regarding the proliferation of CCTV in Brazil was carried out in stages, respecting specific areas of interest in turn related to the research elements described in the objectives of the methodology contained in the original research project. A description of the search processes for each of these elements/areas related to the proliferation of CCTV in Brazil is as follows:

i. Legislation

Objectives: a) Find bills, laws, speeches and debates at the national (Senate and Congress), state (for the Brazilian states of São Paulo, Rio de Janeiro, Paraná and the Federal District) and municipal (for the capitals of the referred states) legislative levels

- b) Identify the legislators, their parties and region of the country
- c) Identify the year of the proposition; the summary and the link in the database
- d) Determine whether there is a direct relationship with CCTV; i.e., if it aims to directly address the existence, forms of application and context of use of these systems.

Databases consulted:

- a) Online search systems of the Senate
- b) LexML: Network of Information on Legislative and Legal Issues
- c) SINCON: Congress Information System
- d) Online search system of the Chamber of Deputies
- e) Online search system of the State Chambers of Deputies
- f) Online search systems of the Municipal Chambers

Observation: This stage took into consideration the laws and bills related directly or indirectly to the use of CCTV and the implications of such. The information found in each case was described as follows: Party who proposed the project or law; name/number of the law or bill (with link to its text); approval (in the case of approved laws); summary of the text of the law or bill; keywords used for the search; source of the search; observations, environment of the law or bill (federal, state or municipal), and relationship to the primary issue of CCTV (direct or indirect).

ii. Studies and investigations (academic production: theses, dissertations, articles)

Objective: a) Verify the presence of the research, studies and publications in Brazil on this issue

- b) Identify researchers interested in the subject and the institution they belong to
- c) Identify the year of the academic product; the summary and the link in the database

Databases consulted:

- a) Scielo (.org) Scientific Electronic Library Online: contains publications on various areas of knowledge from the following countries: Argentina, Brazil, Chile, Colombia, Cuba, Spain, Mexico, Portugal, Venezuela
- b) Scielo (.br) Scientific Electronic Library Online: contains publications on various areas of knowledge from Brazil
- c) Redalyc Network of Scientific Publications from Latin America, the Caribbean, Spain and Portugal: contains publications on various areas of knowledge
- d) Capes (La Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) An institution that forms part of the Brazilian Ministry of Education that evaluates the postgraduate courses in the country and provides funding for these courses and the research performed by such. The institution keeps a database of the theses published in Brazilian universities.

Observation: General and specific keywords were used to have a greater chance of finding studies on the issue of CCTV. The relevance of the data found was indicated in the table for studies, with highlight on the following fields: Database used for the search; keywords used; title of the study; summary; specific keywords of the study (defined by the authors); authors; location of the publication; year; institutional link of the authors; specific relevance with regard to the issue of CCTV (A = direct; B = indirect).

iii. Surveillance technologies in CCTV

Objective: a) Verify the principal types of technology related to the proliferation of CCTV in Brazil

b) Identify companies and forms of use of CCTV in Brazil

Databases consulted:

- a) Internet search mechanisms, particularly Google and Google Scholar
- b) Folha newspaper of São Paulo
- c) O Estado newspaper of São Paulo

Observation: In this section, priority was given to the information on the supply, origin, characteristics, type (hardware or software) and application of the technologies. Once again, there were difficulties in the searches due to the enormous number of companies and technologies present in the CCTV market. The presence of CCTV systems of broad application was verified, as was the participation of large groups and small companies.

iv. Players and blogs/websites

Objective: a) Verify the principal social players (individuals or groups) related to the proliferation of CCTV in Brazil

- b) Identify individuals, groups and principal forms of introduction of the issue of CCTV
- c) Identify the most visible forms of manifestation on the Internet, in blogs and websites, of the issue of CCTV in Brail

Databases consulted:

- a) The same sources of information were used as for legislation, where the players are those related to proposing laws and bills
- b) Internet search mechanisms, particularly Google and Google Scholar
- c) Folha newspaper of São Paulo
- d) O Estado newspaper of São Paulo
- e) Networks of links and references on the blogs and websites consulted

Observation: In these cases, the search was hindered by the varied way in which in information on the players is presented and the manifestations of such. In this preliminary mapping project, the aim was to identify the main groups and individuals related to the legislative projects and the expressions of academics, artists and activists with the most visibility on the Internet. The results in these cases were not as satisfactory as in the preceding elements (studies/ researchers and legislation), which became the principal elements of this mapping project. As a result, the data related to these searches will not be discussed in the content sections presented below.

We created specific tables with the organization and classification of the information obtained for all of the elements mentioned in the above lines of investigation (studies/researchers, legislation, players, blogs/websites, and technologies). In the case of the proliferation of CCTV in Brazil, the searches on the studies/researches and legislation were more significant with regard to the quantity and quality of the data obtained. Most of the search efforts were concentrated on these two aspects, since based on these points, other elements can be investigated more in-depth in future research. In the case of the studies/researchers component, for example, the results obtained from the four databases (Redalyc, Scielo, Capes and Tesis) gave back a total of 26453 results for all of the key words and expressions, of which (due to their direct and indirect relevance to the issue of CCTV) only 280 works were selected. This fact illustrates the difficulty of working with words and expressions related to the studies on surveillance, where only 1% of all of the results obtained from the searches represent works directly related to issues such as electronic surveillance, videosurveillance, CCTV, CFTV (the Portuguese version of the term CCTV), privacy, etc. Upon completion of the tables, the services of the French institute Medialab were contracted to construct graphs and other methods for visualization and valuation of the data and the research moved on to the stage of interpretation and organization of results.

iv. Search parameters

In all of the research databases, the following keywords or key expressions were used as parameters for the searches (in Portuguese):

- a) video surveillance
- b) video-surveillance
- c) surveillance + electronic
- d) surveillance + fear
- e) surveillance + video
- f) surveillance + camera
- g) camera + monitoring
- h) camera + crime

- i) camera + visibility
- j) camera + control
- k) camera + violence
- 1) CFTV
- m) CCTV
- n) video + security
- o) image + right
- p) image + privacy
- q) privacy + crime
- r) panopticon

In almost all of the cases, the mapping was performed using the booleana search method in order to make the search more selective. The operator "AND" was the most used (all of the words), represented in the tables by "+", to combine various keywords and obtain broader results. The search for the words in "quotation marks" was also used to obtain results that contained the exact words in the order entered, with no changes. It is important to point out that all of the results obtained when using the "exact phrase" search also gave back a list of results using the "AND" operator, which was important during the process when the list of results was very large.

The searches were performed using only words in Portuguese and, in general, using the Internet systems of the Pontificia Universidade Católica do Paraná, which provides its members with free access to electronic journals (complete text in SagePub, for example) and Portal Capes.

v. Problems and solutions related to the search parameters

The immense amount of the results obtained in the case of research studies/researchers and the low level of representation of the issues of specific interest to this analysis shows, as has already been mentioned, the great difficulty of performing searches with certain keywords in databases and Internet search engines with regard to, primarily, electronic surveillance. The case of the studies/researches, together with the search for legislation (invariably, for example, presenting results related to other uses of the word surveillance in Portuguese, such as "sanitary vigilance"), were the most representative of this problem. However, these difficulties were present in all of the searches and investigations. The relevance of the information found in the specific searches points

to another basic characteristic in these cases: the indirect relationship of the issue of CCTV to the studies and legislation found. In many cases, for example, the focus of the study or the regulation (in the case of the laws and bills) is not the use or the implications of CCTV, but rather, these are complementary elements of the principal information. For example, reference is made to these systems in the case of certain laws that govern security for financial establishments and set standards for creating and operating private companies that exploit surveillance and armored transportation services.

With regard to the studies/researchers, there is a fundamental difference between the gross total works found and the total included in the final table of studies. That is: of the 18 keywords and key expressions used for the searches, a total of 304 works were selected including articles in newspapers, works from events and academic works (theses, dissertations and other end-of-studies projects), which can be called the "gross total". In some cases, the search for different key words or expressions results in repeated studies. For example, it is possible to find the same study with a search for the keyword "panopticon" as with the word "video surveillance", which is a false result, since it is the same work. Therefore, in these cases, the decision was made to eliminate the repetitions in the final table of studies, resulting in a total of 239 works.

Lastly, it is important to highlight the relevance of these two types of results. In the case of the "gross total", the pertinence of the key words or expressions was verified on an individual basis for the classification of the works found; that is, that these expressions occurred in the context of works on CCTV in Brazil. In the case of the total used for the final table of studies, the importance of the number of works found for each category of study (newspaper, scientific event or academic work) is highlighted, where there can be no repetitions. In this case, the relevance comes from the type of communication or publication of the works on CCTV in Brazil.

In spite of the difficulties, all of these situations are expected in a study that proposes to perform a preliminary mapping of the situation in any specific subject. These difficulties could be easily overcome or verified through more in-depth research through the use of longer and more complex studies, such as case studies, which could be effectively be taken up again in future research project.

3.2.2 Analysis of the proliferation of CCTV in Brazil: Framework of regulatory standards, implications, problems, gaps and players

As was clarified in the introduction to this chapter on the proliferation of CCTV in Brazil, there is an immense gap between the absolute diffusion of this practice and the technologies associated with it, on the one hand, and the studies, discussions and, primarily, the legislation on the subject in the country, on the other. In view of the above, below is a discussion of several of the most visible aspects of the information gathered on CCTV in Brazil with regard to the studies/researchers

dedicated to the issue, the legislation consolidated and under construction in the country in this regard, and the perspective of the discussions on the issue of the indiscriminate proliferation of this system in the states and municipalities analyzed. A hypothesis can be made with regard to two important factors: a latent lack of interest in the "collateral effects" of the proliferation of CCTV in the country, without the appropriate debates, and the explicit favoring of its use and the increase in applications as a tool for crime control and as an instrument of public security policies (in the broad sense, since they play a central role in several initiatives of this kind), as well as the corresponding appropriation of these "tools" by common citizens and private security companies.

i. Legislation

The characteristic factor of the lack of laws protecting the personal data of Brazilian citizens at all levels (as will be seen in the chapter on personal data on the Internet) reflects the lack of care or interest of Brazilian society in debating issues such as privacy and the responsibility for monitoring spaces and people at the three levels of government in the country (federal, state and municipal). Obviously, this same behavior is shown in the use of cameras and electronic image monitoring systems that, in general, are seen as "technical solutions" to the problems of 1) preventing urban crime and 2) solving crimes in the main cities of Brazil.

The legislative panorama (i.e., the nature and number of laws approved and proposed that directly or indirectly address the issue of CCTV) shows two main aspects: first, there is an environment or posture that is extremely favorable and partial to the use of these systems insofar as they contribute to the function of preventing and solving the problem of violence and a series of urban crimes. It is important to highlight here that various studies and reports of an independent (see, for example, SURVEILLANCE STUDIES NETWORK, 2006) and governmental nature (see GILL and SPRIGGS, 2005) in countries that have been implementing these systems for a longer period of time (such as the United Kingdom) have proposed various responses, one of the most common of which is that the efficiency of CCTV systems is limited, in most cases, to the production of proof against crimes that have already been committed, and that in general, after a long period of

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¹ It is important to highlight two factors. The first is the differences between violence and crime, and specifically the differences between the types of violence and the types of crime. In general, the reports on CCTV in Brazil tend to focus dubiously and uncertainly on the "border" of differences between these two ideas, treating in the same way, for example, cases of prevention of domestic violence and mistreatment (such as nannies caught mistreating children) and situations of flagrant crime against assets (such as robberies of banks or gas stations). There is no moral or social hierarchy in these cases, but the different circumstances in which various situations of crime and violence occur or are socially construed cannot be ignored. The second factor comes from the simplicity with which the application of CCTV systems is treated when related to, for example, different ideas and cases aimed at (deliberately or not) building a function and sense of the CCTV socio-technical artifact as a consequence of the assumption that these systems are effective in preventing crimes and decreasing violence.

² The use of CCTV images as legal evidence in solving crimes or even in identifying criminals is still questionable because of the specific configuration of the legal system of each country, in this case, Brazil. As will be seen below, in some countries with more diffusion of CCTV systems, this application is limited to specific cases determined by the applicable legislation.

implementation of surveillance cameras in public areas, there is no suppression of crime or decrease in the feeling of insecurity of the population.

Related to this first aspect is the treatment of violence in cities as list data of a numeric and indistinct nature for which there is an attempt to find practical and technological solutions. Therefore, the initial information gathered suggests a connection between the use of cameras and a specific model for addressing the issue of violence and crime. In other words, the debate about CCTV in Brazil moves away from the idea (at least in the case of public policies) of violence as a social factor or a network of relationship and situations build on historical and social elements, and approaches the issue based on specialized statistics that require tools to be controlled. Unfortunately, this report cannot go beyond simply speculations in this regard, since its main purpose is not to perform an in-depth analysis, but to estimate what specific elements of surveillance are under debate or application in the countries analyzed.

The second aspect observed in the current of legislation on CCTV in Brazil, which is clearly related to the first aspect, is a lack of interest in discussing the monitoring *per se* (why monitor, how to monitor using images and the responsibilities of each social player) and the substitution of this debate by the assumption that these systems are merely applied technologies aimed at a functional aspect (solving and preventing crimes), which diverts the legal discussions towards situations that regulate merely the manner of their application (how and where to monitor from an operational point of view). This situation was documented in the works of Kanashiro (2006a, 2006b, 2008) through a historical collection of the repetition of the issue of CCTV in Brazilian legislation, where the author classifies the set of laws studied at three different dates: 1982-1995: emergence of the use of cameras; 1995-2003: period of reconfiguration where cameras become obligatory in certain institutions; and 2003-2005: second period of reconfiguration where the issue comes to be discussed as necessary for international commerce (international large capital), personal and private security, and survival. The situation described by Kanachiro in several of her works has not changed and CCTV systems continue to be treated simply from the point of view as tools necessary for security.

Therefore, with regard to the legislation, it is still common to see laws and bills that address, for example, the obligatory use of CCTV in state and municipal schools or penitentiaries, stadiums and sporting arenas, police vehicles, hospitals and other public or private spaces (see Table 1 for examples of the state and municipal environments). Most of the texts of the laws and bills found provide guidance on surveillance using cameras as a necessary and obligatory element for a series of situations with the goal of regulating their implementation. Of the more than 60 texts from laws or bills that were found, none refer to the act of surveillance or monitoring with cameras in and of itself, and none propose to regulate issues related to privacy or guaranteeing the rights of the citizens being monitored.

State	Law or Bill	Date	Summary
Municipality: Rio de Janeiro	Law No. 4133/2005	18.07.05	The Executive Power authorizes the installation of Monitoring Systems with Video Cameras in units of the municipal network of learning institutions, and

			establishes other measures.
Municipality: São Paulo	Law No. 13.541 24/03/2003	24.03.03	Addresses the display of a sign informing that an area is being recorded and establishes other measures.
Municipality: Brasilia	Law No. 4.062	18.12.07	Addresses the installation of electronic surveillance in shopping centers, nightclubs, clubs and other similar establishments, in the Federal District.
State: Paraná	Bill No. 278/2007	18.04.07	All of the maternity and neonatal units and other similar units located in the hospitals in operation in the state of Paraná must adopt video-monitoring systems, especially in the infant nurseries and access hallways.

Table 1: Example of municipal and state legislation (Brazil)

Therefore, rather that representing the presence of laws governing the use of CCTV that address the responsibilities of monitoring, the use of the images, the rights of the individuals and groups being monitored, as well as the characterization of the specific situations of monitoring and the restrictions of the system and its use, the laws are used to require the installation and use of these systems in public and private spaces. No mention was found, for example, of the usage rights for the images obtained from the CCTV monitoring, or the manipulation of such data, or the responsibility for the monitoring and its procedures.

The legislation that guarantees rights with regard to the personal images is found specifically in the federal constitution and, in general, is applied in cases of undue use of images by the press (newspapers, magazines, television news programs, etc.) and even to guarantee commercial usage rights for common citizens, celebrities and public figures³. This information points to a serious gap in Brazilian legislation with regard to the protection of the privacy of individuals and groups or guarantees for the rights of the individuals when they are the object of monitoring by video cameras. As will be seen below, this gap is recurring in the other studies performed, whether with regard to the protection of personal data on the Internet or in identification systems and identity documents. In the other cases, if there is no gap, there is at least a discernable conflict between the recent actions taken by the government with regard proposing bills that guarantee the protection of

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³ One of the important discussions regarding the right to privacy or the protection of personal data is supported by Article 5 of the Federal Constitution that establishes, in general, the individual rights and guarantees for Brazilian citizens and foreigners resident in the country. This article includes several points that relate to this discussion, such as paragraph V that guarantees the right to a response in the case a citizen's image is damaged; or paragraph X that addresses the inviolable right to intimacy and private life and the honor and image of individuals; as well as paragraph XII that defends the privacy of correspondence and communications and telephone and telegraph data, except in specific legal cases. Therefore, issues related to a right to privacy and personal data protection are disperse and limited to the interpretations of this specific article and, as already mentioned, there is no specific legislation in this regard.

personal data and an overwhelming majority of bills in process aimed at security and fighting crime, in detriment to the defense of privacy and data protection.

ii. Studies and investigations (academic production: theses, dissertations, articles)

With regard to the studies and researchers involved in the issue of CCTV in Brazil, several interesting aspects can be inferred that point to two main trends.

On the one hand, the number of research projects on the subject in Brazil has grown in recent years, driven strongly by the first event on the subject held in the country, the International Symposium on Surveillance, Security and Social Control in Curitiba, Brazil, in 2009. This increase in numbers is also accompanied by a larger diversity in the areas of science from which the study of this issue is approached. In the search performed, works from various Brazilian universities were found that are focused on (but not limited to) the Southern and Southeastern regions of the country, and that have their origin in different areas of study such as communication, sociology, architecture and urbanism, urban management, law, administration, medical sciences, political sciences, history and psychology. This first relevant point represents a visible and important growth in the debate on the issue in the country that, as seen primarily in the lack of legislation, is lacking major discussion even in the academic field.

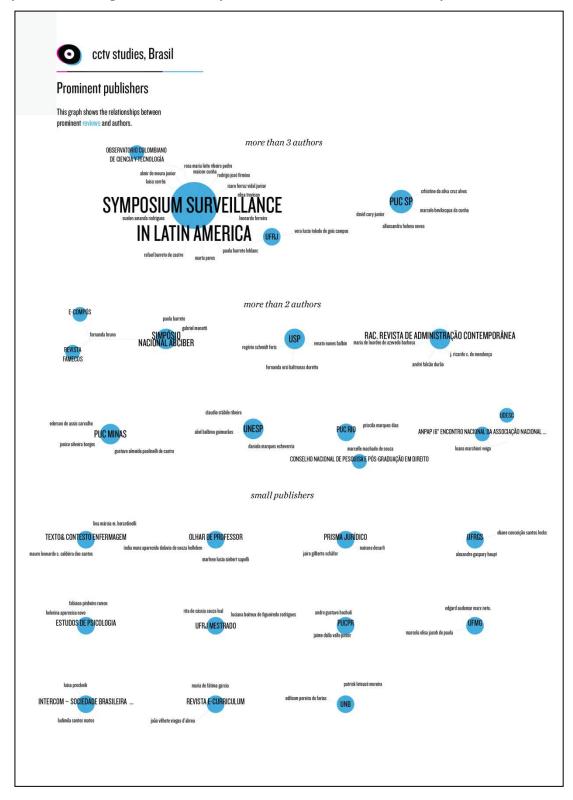
In addition, upon visualization of the data collected in this first mapping of the studies in Brazil, there is an obvious difference between the amount of theoretical and empirical works performed by the different centers and areas of research. Most of the studies found (newspaper articles and annals of scientific events, academic theses and dissertations) address conceptual discussions of trends as reference to the study of the available literature and, in more of these works, the international literature. There are, for example, innumerable works that discuss the means of expression or phenomenon of "surveillance society" or even "disciplinary society" or "control society" from the original works of David Lyon, Michel Foucault, Gilles Deulleze, or even other French or Anglo-Saxon authors of renown in the field of surveillance studies.

In a time of little reflection on the issue in the country, this conceptual debate has been fundamental to facilitating the definition of references and platforms of study on which future and relevant empirical works can be based. In the end, it is advisable to understand the issue before performing applied works: from observation of the specific locations. At any rate, these two points illustrate the initial effervescence that the issue of CCTV has caused in the academic environment from which the quantity and quality of the studies start begin to stem off (although with a long delay compared to other more consolidated issues and fields).

Therefore, it is not a surprise that the overwhelming majority of these works are academic works (theses, dissertations and other end-of-studies projects) compared to the newspaper articles and works presented at scientific events. Of the total 239 studies considered in the final table (without repetitions, see item "Problems and solutions related to the search parameters" above), 171 are

academic works (71.5%) compared to 39 publications in newspapers or scientific journals (16.3%) and 29 works presented at academic events (12.2%). Graph 1 shows the distribution of the studies by method of revelation. It is important to point out the importance of the International Symposium on Surveillance, Security and Social Control event and that the expressions referring to universities and research centers represent academic works, primarily theses and dissertations. The importance of this event is especially clear in the production of studies on the issue of CCTV. A missing piece of data in the graph is the fact that 23 of the total of 29 studies presented at scientific events were presented at the International Symposium on Surveillance, Security and Social Control; i.e., they represent 79.3% of the total. It is also important to point out the use of university acronyms in the graph, which represent, as mentioned above, the many academic works such as theses and dissertations. Thus, acronyms such as UFRJ, PUC-SP, USP, PUC-Minas, UNESP, PUC-Rio, UDESC, UFRGS, PUC-PR, UFMG and UNB represent the academic works of these institutions. This does not mean that there is necessarily a definitive link between the authors of the studies and these institutions, but rather that it is the locations at which their works (theses, dissertations and end-of-studies projects) were defended and/or published. Lastly, in graph 1 it is important to observe how the locations of presentation or publication of the works relate to other authors and vice-versa. The image below shows, as mentioned above, the academic works, newspaper publications and works presented at events all together in one graph.

Graph 1: Visualization of the distribution of the works by method of revelation (newspapers – by title of the magazine; events – by title of event; academic works – by name of institution)



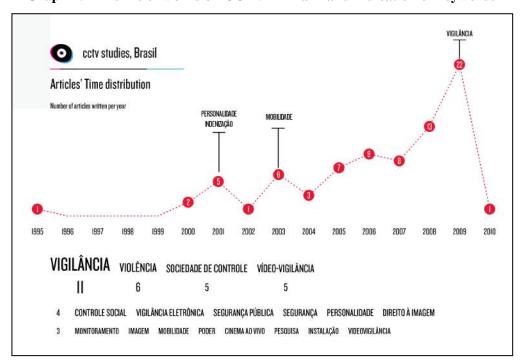
Another aspect that is important to highlight in this report is the repetition of the keywords in the

searches and data found. The set of 18 words or expressions selected for the search was discussed internally by the project teams both in Brazil and Mexico, and the selection was made based on the experience of the researchers with prior works and other references related to the issue of CCTV. It represents the best possible option, in the opinion of the authors of this research project, for finding works, legislation, social players and technologies in the Brazilian environment.

Also, in the final table of studies, there is a very close correlation between the keywords used for the searches and the keywords of the works found that were chosen by the authors themselves.

There are two important elements with regard to this relationship. First, the recent growth in the number of works that contain the key words or expressions related to the issue of CCTV in recent years is notable. Graph 2 shows the distribution of these works on a timeline, with special emphasis on the most common words or expressions. It is possible to observe, for example, the beginning of the increase in the number of works in 2009, which can be interpreted as deriving from the influence of the International Symposium on Surveillance, Security and Social Control, which was held that same year. There is a difference in the number of works shown in graph 2 and the final table of results. The former contains 22 works in 2009, while the table shows 23, as mentioned above.

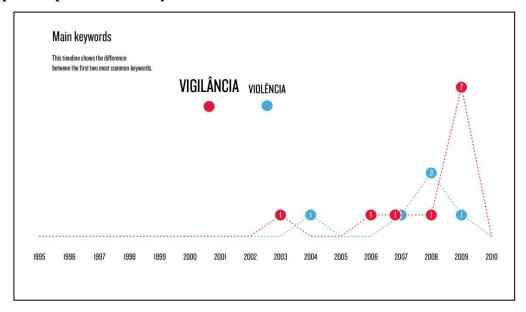
This difference is explained by the fact that one of the works found does not contain any keywords defined by its authors. Therefore, this article was not considered in the preparation of graph 2. Another important piece of information that must be highlighted with regard to the graph is the sudden decline of the number of works in 2010. This can partially be explained by period for assembly of data for this project, which mostly took place as of September 2010. It is also important to consider the possibility that some works do not appear in the databases reviewed, a limitation that falls outside of the control of the authors of this mapping project.



Graph 2: Timeline of works on CCTV in Brazil and indication of keywords

The second relevant aspect refers to the incidence of the keywords in the works found. This result is not surprising and shows the two most common keywords in the studies on surveillance, especially with regard to CCTV; that is, the word "surveillance" itself, one of the broadest terms in this subject, and "violence", which in Latin American countries has a special significance because of the relationship between the economic situation of the countries of this region, their recent experience with dictatorial regimes, and the recent histories of their large cities, which have high levels of poverty and crime. It can be speculated that the word "violence" in the search for studies related to this subject in Latin America has a similar incidence as the use of the word "terrorism" in searches for related studies in the developed countries of the Northern Hemisphere.

Graph 2 shows the repetition of the words, where the words "surveillance", "violence", "control society" and "video surveillance" had the most hits (with 11, 6, 5 and 5 works, respectively). Graph 3 shows the repetition of the two most common words (surveillance and violence) distributed by work over time.



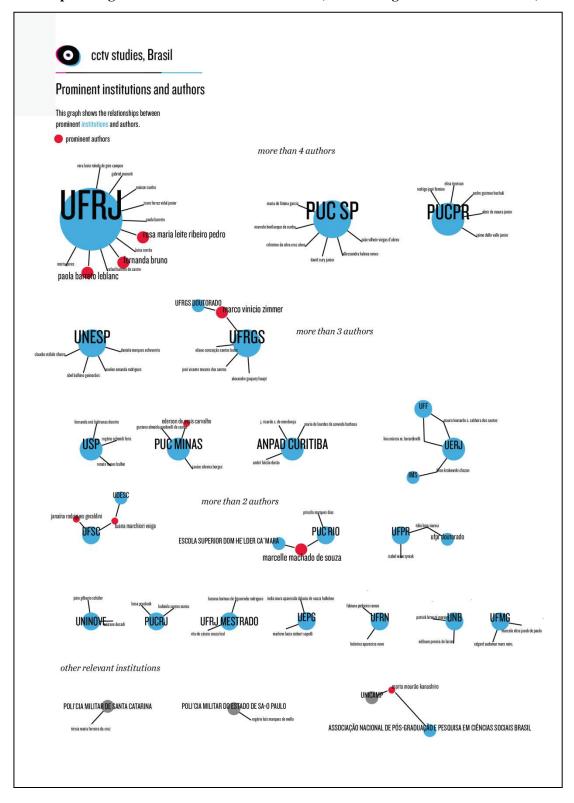
Graph 3: Repetition of the keywords "surveillance" and "violence" distributed in a timeline

One last relevant inference that can be made based on the data obtained from this first mapping of studies on surveillance in Brazil, where there is an obvious proliferation of CCTV, is the importance of the institutions and research centers related to the authors of the studies and works found. In this case, the source of the data is the affiliation of the authors and their functional link to such, unlike the results shown in graph 1, which were based on the location of revelation or publication of the works.

Graph 4 therefore shows the locations of origin of the various authors of the 239 works included the final table of studies. The correlation is between the institutions and the authors and the graph highlights (in red) the most prominent authors with the most works. It is important to point out that the information shown is separated by the number of authors related to each institution (more than four authors, more than three authors, and more than two authors, as well as other relevant institutions). For example, the clear leadership of UFRJ in the works found (with 11 authors and 3 prominent authors) can be noted, followed by the PUC-SP, PUC-PR, UNESP and UFRGS (with 6, 5, 4 and 4 authors, respectively).

The graph (and, consequently, the data in the tables) clearly shows the distribution of the works at various universities from different cities and states, most of which are located in the Southeastern and Southern regions of the country. The Southeastern region, for example, is represented by 13 institutions, taking into account that some of the them are repeated in the graphs with more than 4, 3, and 2 authors, which are: a) from the state of Rio de Janeiro, UFRJ, UERJ, UFF, IMS, PUC-Rio and Escola Superior Dom Helder Câmara; b) from the state of São Paulo, PUC-SP, UNESP, UNICAMP, PMSP and UNINOVE; and from the state of Minas Gerais, PUC-Minas and UFMG. Eight institutions from the Southern region of Brazil are represented, as follows: a) from the state of Paraná, PUC-PR, ANPAD, UFPR and UEPG; b) from the state of Santa Catarina, UDESC, UFSC and PMSC; C) and from the state of Rio Grande do Sul, UFRGS. Lastly, there are two institutions from other states and regions of Brazil: the UFRN from the state of Rio Grande do Norte and the UND from the Federal District.

Graph 4: Significant institutions and authors (with the highest number of works)



It is also evident that, based on the information shown in graph 4, the prominent authors, that is, those with the highest number of works found related to the issue of CCTV in Brazil, are not

necessarily directly related to the centers and institutions with the most researchers. With the exception of the UFRJ that, as already mentioned, has the highest number of researchers, three of which are prominent researchers, other institutions of less relevance can be observed to have more active researchers in the subject, such as the UNICAMP of São Paulo, the PUC-Rio of Rio de Janeiro, and also the UDESC and UFSC of Santa Catarina.

iii. Surveillance technologies in CCTV

With regard to the information gathered related to technologies applied to the CCTV market in Brazil, it is important to highlight the primary difficulty of mapping an area with such a high number of available companies that includes the principal companies, which are usually multinational and dominant, and secondary companies, which are usually responsible for selling the technologies on the retail market, thus opening up the possibility of dispersion and percolation of the systems to various day-to-day applications, usually related to private and individual security and private security companies.

Private security is a growing and economically active field in the current environment of mediumand large-sized Brazilian cities, with various companies that offer property security technologies and services to commercial establishments and, primarily and in rapid expansion, residential security.

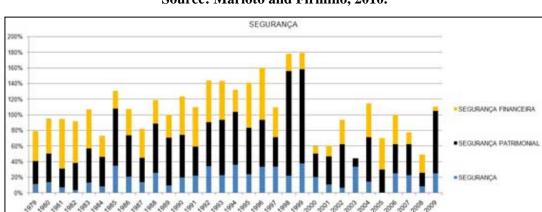
In 2010, the market survey company IMS Research published a report on the market potential for CCTV and video surveillance in Latin America⁴, indicating the Brazilian market as the biggest and fastest growing market in Latin America, and highlighting the new opportunities generated by the Soccer World Cup in 2014 and the Olympic Games in 2016. The report also indicates that the country is not very attractive for new companies, since it has an established market in the field of CCTV with an "ecosystem of multinational and local suppliers". The report also contains interesting numbers that support the importance of this market, representing an estimated 35% of all of the sales of CCTV equipment in Latin America, and the possibility of this figure reaching 45% in 2014.

With the increase in purchasing power of the Brazilian population in recent years and the increase of the sectors representing the middle-class population, there is a proportional increase in the interest of the press and, primarily, of the real estate market, in the sale of security as a commercial and strategic advantage. It is therefore common to see how private property and individual security became, as of the 1990's, one of the most advertised items in real estate marketing strategies.

A recent survey on the history of closed residential condominium sales in Curitiba, Marioto and Firmino (2010) points to "comfort" and "security" as principal strategic factors. Graph 5 shows, for example, how the word "security" (with different connotations: financial security, property security, and security in general) has occupied space in this type of marketing from the 1970's, and how, as of the mid-1990's, with the stabilization of the Brazilian economy, the concern with selling (buying) a property in a closed condominium has gone from valuing financial security (guaranteeing a property as an investment) to valuing property security (preservation of the physical integrity of the property from the increase in violence in large cities, etc.).

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⁴ IMS Research. *Brazil is Not The Only Nut to Crack in Latin American CCTV Market*. Obtained on 10/02/2011 from: http://bit.ly/ims_cctv, access on 10/02/2011.

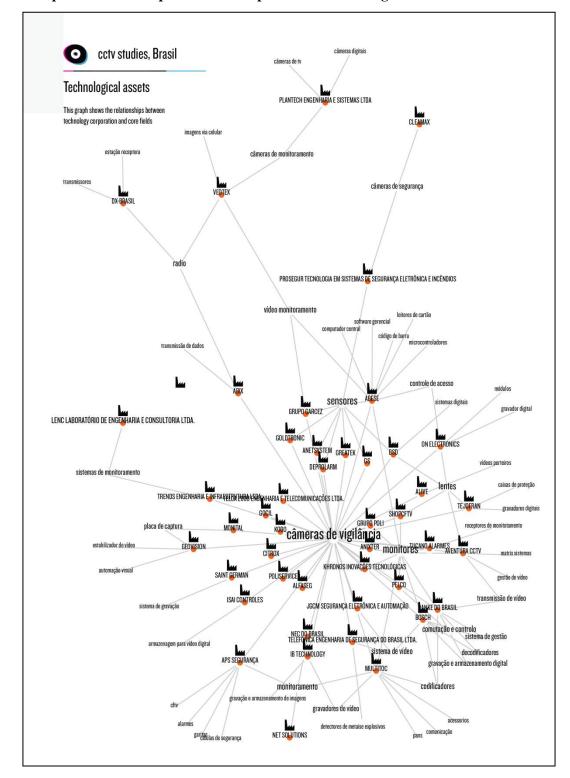


Graph 5: The importance of security in marketing closed condominiums in Curitiba Source: Marioto and Firmino, 2010.

Obviously, this socioeconomic context establishes the bases for a proportional increase in the economy related to the technical items linked to property and private individual security, in which the relevance of CCTV systems is clear. The primary sources for the search for technologies and companies related to the proliferation of CCTV in Brazil were magazines specialized in this subject (including the "CFTV guide" and the "Video, sound and technology magazine") that include many advertisements and summaries of the technologies in use and in implementation in the country. The Brazilian Association of Electronic Security System Companies was also consulted. It is necessary to highlight the fact that this study is a preliminary mapping of the overall trends present in the two countries under analysis, and it does not cover all, or even a considerable sample, of the CCTV security or technology companies in the country. Priority was therefore given to the specialized publications on this subject and the association of these companies themselves for an initial approach to this matter.

Of the 53 related companies, only four (7.5%) were found to be manufacturers of electronic security systems. All of the companies are engaged in the sale and installation of systems, and the vast majority (34 or 64.15%) focus on the sale of security cameras and the installation of intrusion detection or access control systems. Many of these companies (40 or 75.47%) also offer maintenance and planning services related to the application of the systems, and therefore sell products and services related to CCTV. Graph 6 shows the very close relationship between the various companies with the item "security cameras", which also appears expressed as "surveillance cameras" or "monitoring cameras".

All of the companies work at levels of more or less detail with CCTV systems, with a focus on the sale and installation of cameras, monitors and recording systems for image surveillance, and in certain cases with the control of these systems through the use of their own or adapted software. The tables constructed based on this data show the name of the company, its location (headquarters) the technologies sold, the type of technology (hardware or software) and the use or service offered. Once again, it is fundamental to clarify that there are innumerable companies in the retail market that focus their activities on offering security services (such as rounds and monitoring of alarm and CCTV systems) that also sell the technologies related to the service offered. In addition to these companies, which are not covered by this investigation, the information gathered does not include companies that sell CCTV technologies as part of their products when this is not their principal market focus.



Graph 6: Relationships between companies and technological CCTV fields in Brazil

3.3 The proliferation of CCTV in Mexico

3.3.1 How the mapping of the proliferation of CCTV in Mexico was performed

i. Researchers and lines of research

Objectives:

- a) Explore the existing research, studies and publications prepared by Mexicans that address the issue of video surveillance in: a) a country other than Mexico; b) in Mexico; c) about Mexico from another country.
- b) Identify in the search, databases that include information on video surveillance.
- c) Identify the nationality of the authors of the texts and the publication date, publishing companies and institutions and the central lines of research on the issue of the state of regulation of personal data and its relationship to social classification through video surveillance.

Databases consulted:

- a) Elton B. Stephens Company (EBSCO)
- b) Network of Scientific Publications from Latin America, the Caribbean, Spain and Portugal (REDALyC)
- c) Mexican Supreme Court (SCJN)
- d) Alfa-Redi (Site dedicated to Information Law)
- e) Banda Ancha (Forum and community of users of ADSL/VDSL, fiber FTTH and mobile internet connections. News from operators, current promotions and analysis)
- f) Blog Teoría Jurídica Contemporánea (Contemporary Legal Theory Blog)
- g) Catarina (Internal publications of the UDLA)
- h) Ciber Cultura (Informative blog)
- i) Dialnet (Notification service for publication of scientific content)
- j) El País (Spanish newspaper with national circulation)
- k) Expansiva (Digital magazine)
- 1) Informationweek (Digital Magazine)
- m) Informaworld (Library of the Universidad de Granada)
- n) Journal Storage (JSTOR)
- o) Portal Galego da Língua (Galician information portal)
- p) Publicaciones FLACSO (Latin American Faculty of Social Sciences)
- q) Razón y palabra (Bi-monthly electronic magazine specializing in communication in Latin America)
- r) Segu-Info (Information Security News)
- s) Surveillance Studies Network (International network of information on surveillance)
- t) Universidad Autónoma del Estado de México (UAEM)
- u) Ventas de Seguridad (CCTV sales portal)

Keywords used in the search:

- a) Camera, Video camera
- b) Monitoring, Video surveillance technologies and devices
- c) Social classification, Discrimination
- d) Exclusion, Categorization, Profiles
- e) Regulation of video surveillance technologies (legislation, law, civil framework)
- f) Civil freedoms
- g) Human rights
- h) Citizen rights
- i) Surveillance (Panoptic, Synoptic, Electronic surveillance, Surveillance system)
- j) Surveillance devices
- k) Security (Public security, private security, security approach, insecurity red flags)
- 1) Social control (Control)
- m) Intromission capacity (space under surveillance)

Nationality of the authors:

A total of 36 documents were found and a breakdown of the nationalities of the authors is as follows: 2 from Canada, 1 from Venezuela, 1 from Chile, 3 from the United States of America, 8 from Spain, 1 from France, 2 International, 3 from the United Kingdom and 15 from Mexico.

Observations

Of the 36 documents found, 20 are directly related to the project, as they address or make an issue out of the object of study of this research project; that is, the state of regulation of personal data and its link to social classification. There are 16 with an indirect relationship to the project and these documents address issues such as regulation and social classification but they do not discuss them together or they address issues that are related to a tangent of such.

The lines of research found have been grouped into 14 central themes, which, in turn, cover 27 subtopics:

- 1. Auto-surveillance through morphing and post-imaging (1 text)
- These relate to the issues of:
- a) Video surveillance technologies
- b) CCTV
 - 2. Social classification through video surveillance technologies (7 texts)
- These relate to the following issues:
- a) Surveillance
- b) Social classification
- c) CCTV, video surveillance technologies and data regulation, discrimination
- d) Exclusion
- e) Categorization and control
 - 3. Social control through video surveillance technologies (1 text)
- These relate to the issues of:

- a) Surveillance, surveillance technologies and devices
- b) CCTV
 - 4. Social control through video surveillance technologies and use of personal data (6 texts)
- These relate to the following issues:
- a) Surveillance
- b) Social classification
- c) Video surveillance, video surveillance technologies and devices
- d) CCTV
- e) Regulation of video surveillance technologies
 - 5. Crime (1 text)
- This relates to the issue of: Video surveillance
 - 6. Right to privacy (10 texts)
- This relates to the following issues:
- a) Intimacy
- b) Private life
- c) Video surveillance and civil freedoms
- d) Human rights and citizen rights
- e) Video surveillance
- f) Regulation of video surveillance technologies
- g) Citizen rights
- h) CCTV
- i) Capacity of intromission
- j) Regulation
- k) Law
- 1) Right to Privacy
 - 7. Laws that protect personal data in Mexico (1 text)
- This relates to the following issues:
- a) Law
- b) Right to Privacy
 - 8. Reconfiguration of security policies against Crime and Delinquency (1 text)
- This relates to the issues of: Surveillance, CCTV, social classification, civil freedoms and security policies
 - 9. Regulation (1 text)
- This relates to the issue of: Surveillance, CCTV, Social Classification
 - 10. Regulation of personal data (1 text)
- This relates to the issue of: Video surveillance and civil freedoms

- 11. Regulation of crime (1 text)
- This relates to the issue of: Video surveillance, social control, privacy, citizen rights and video surveillance technologies
 - 12. Relationship of fundamental right to data protection (2 texts)
- This relates to the following issues:
- a) Regulation of video surveillance
- b) Regulation of video surveillance technologies and civil freedoms
 - 13. Security (2 texts)
- -This relates to the following issues:
- a) Video surveillance, social control and classification
- b) Panopticon
 - 14. Video surveillance in closed reality show spaces (1 text)
- This relates to the issue of: Video surveillance

With regard to the sub-topics, the following graph shows the weight of their presence through an image indicating the frequency with which they appear in the texts found.

Graph 7: Repetition of key subjects in the mapped texts

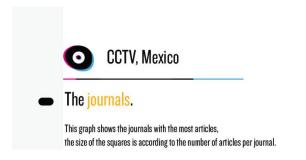


OCTV / Videovigilancia

- 9 Vigilancia
- 6 Clasificación social
- 5 Libertades civiles / Regulación de tecnolog as de videovigilancia
- 4 Derechos ciudadanos
- 3 tecnologias / tecnologias de videovigilancia
- 2 Derecho de Privacidad / Discriminación / Dispositivos de vigilancia / Exclusión / Ley
- Capacidad de intromisión / Categorización / Control / Control social / Derechos humanos /
 Dispositivos de videovigilancia / Intimidad / Panóptico / Políticas de seguridad / Regulación de datos /
 Privacidad / Regulación de videovigilancia / Vida privada / Videovigilancia clasificación social

Lastly, the publishing companies and institutions of the texts found are presented in the following graph.

Graph 8: Publishing companies and institutions consulted



El Coditano	Revista de Derecho Informàtico	Associacao Galega da Lingua	Canadian Journal of Sociology	Editora Sulina	Información independi- ente sobre internet móvil	Ponencia Protección de datos personales	Proyecto colectivo de construcción de una teor a juridica	Revista electrónica en América Latina Especializada en Comunicación	
3 arricles Surveillance and	Zanicles Universidad de las Américas Puebla	Associacao Portuguesa de Psicologia	Cuadernos de información y comunicación	Espiral	Information- week	Porrua	Revista Argentina de Sociologia	Revista sobre la sociedad del conocimiento	Sociedad
Society	Americas Fueura	Boletin Mexicano de Derecho Comparado	Department of Sociology, Social Policy and Social Work Studies, University of Liverpool	Expansiva y la Facultad de Derecho de la Universidad de Chile	Perfiles Latinoameri- canos	Portal para la industria de la Seguridad en Latinoamé- rica	Revista de internet, Derecho y Politica	Segu-Info News	Universidad de Málaga

ii. Revealing agents in the public and private sectors; collective and relevant action in the aforementioned environments, and Tensions / cooperation between players, policies and technologies

Objective:

- a) Identify the agents involved in actions related to the regulation of personal data and their link to social classification through the presence of video surveillance in Mexico.
- b) Identify in the search, databases that include information on the agents and their actions
- c) Identify the location of the agents and their actions, as well as the types of actions performed.

Sources consulted:

- a) IFAI (Federal Institute of Access to Public Information)
- b) PROFECO (Federal Consumer Agency)
- c) SCJN (Mexican Supreme Court)

- d) CONDUSEF (National Commission for the Protection and Defense of Users of Financial Services)
- e) INEGI (National Institute of Statistics and Geography)
- f) International Privacy (NGO from the United Kingdom that oversees invasions of privacy by governments and corporations)
- g) United Nations (UN)
- h) Surveillance in Latin America (International network of information on surveillance)
- i) Department of International Law

Keywords used in the search:

- a) Camera, Video camera
- b) Monitoring, Video surveillance technologies and devices
- c) Social classification, Discrimination
- d) Exclusion, Categorization, Profiles
- e) Regulation of video surveillance technologies (legislation, law, civil framework)
- f) Civil freedoms
- g) Human rights
- h) Citizen rights
- i) Surveillance (Panoptic, Synoptic, Electronic surveillance, Surveillance system)
- j) Surveillance devices
- k) Security (Public security, private security, security approach, insecurity red flags)
- l) Social control (Control)
- m) Intromission capacity (space under surveillance)

Locations of the agents and actions: A total of 18 actions were found, of which 3 took place at the international level, 1 took place in Latin America and 14 took place in Mexico.

Observations

All of the 18 actions are directly related to the project; that is, they are actions linked to the objective of our research project.

The actions identified were classified into 10 types of actions and they are shown below together with the agent(s) who performed them.

- 1. IFAI (Federal Institute of Access to Public Information) and CONDUSEF (National Commission for the Protection and Defense of Users of Financial Services) and Privacy International (NGO from the United Kingdom that oversees invasions of privacy by governments and corporations) Provides information for users to protect their personal information.
- 2. Mexican Supreme Court (SCJN) Creation of Network of Studies on Surveillance
- 3. PROFECO (Federal Consumer Agency) Issued two articles that discussed guidelines for regulating the use of personal information. Emphasis on the issues of social classification, discrimination, exclusion, categorization.

- 4. United Nations (UN) and the American Convention for Human Rights Issued an article that discussed guidelines for the regulation of personal data, arguing their importance for the issue of human rights.
- 5. PROFECTO (Federal Consumer Agency) This is the agency responsible for ensuring user information is not misused. Emphasis on the importance of this protection for safeguarding citizen rights.
- 6. IFAI (Federal Institute for Access to Public Information) Reports on the protection of personal data due to video surveillance technologies.
- 9. IFAI (Federal Institute for Access to Public Information) Shows the different laws, documents, actions and deficiencies of regulating video surveillance technologies.
- 10. INEGI (National Institute of Statistics and Geography) Shows results of the National Survey of Government, Public Security and Municipal Justice 2009 and Statistics on availability and use of information technology and communications in homes, 2006.
- iii. Technologies implemented or in the process of implementation

Objective:

- a) Describe the technologies implemented or in the process of being implemented related to the issue of video surveillance in Mexico.
- b) Identify in the search databases those that contain descriptive information on the functions of video surveillance technologies
- c) Identify the place of origin of the video surveillance tools

Sources consulted:

- a) Wikipedia Security in America
- **b)** INEGI (National Institute of Statistics and Geography)
- c) Google
- d) Axis (Worldwide leading company in network video)
- e) Financial Times (United Kingdom Newspaper)
- f) Informador (Newspaper)

Keywords:

- a) Camera, Video camera
- b) Monitoring, Video surveillance technologies and devices
- c) Regulation of video surveillance technologies (legislation, law, civil framework)
- d) Surveillance (Panoptic, Synoptic, Electronic surveillance, Surveillance system)
- e) Surveillance devices
- f) Security (Public security, private security, security approach, insecurity red flags)

Place of origin of the technologies:

A total of 16 cases of video surveillance tools were found: 5 are present at the international level, 1 is located in the United States and 10 are located in Mexico.

Observations:

Of the 16 cases of technology, there are 15 that relate directly to the project; i.e., the technologies and tools located are for video surveillance; while one is a group of technologies.

The technologies were grouped based on their relationship to the object of the study of the project, and 8 types of cases were identified:

- 1. Cases in which there is a link between video surveillance technologies and capacity for intromission (1)
- 2. Cases in which there is a link between CCTV, video surveillance, security (2)
- 3. Cases in which there is a link between regulation of technologies and video surveillance and capacity for intromission (1)
- 4. Cases of video surveillance technologies (2)
- 5. Cases in which there is a link between video surveillance technologies and CCTV (7)
- 6. Cases of TICS (1)
- 7. Cases in which there is a link between video surveillance, social classification, technologies and video surveillance devices (1)
- 8. Cases in which there is a link between video surveillance technologies and cameras (1)

3.3.2 Analysis of the proliferation of CCTV in Mexico; framework of regulating standards, implications, problems, gaps and players

i. Researchers and lines of research

The electronic surveillance devices that are proliferating include a wide catalog of products that range from simple metal detectors to scanners and iris ocular recognition systems, thermal sensors, and television circuits, which have recently been strengthened by the development of various biometric systems and equipment. Their use has been linked to facing the problems related to public security, to strengthen the "fight against crime" or guarantee the establishment of safe spaces in

buildings, shopping centers and residential areas, and it is therefore possible to always be under surveillance⁵.

Closed circuit televisions (CCTV) are those that, from the entire range of security devices available, have experienced the most expansion in Mexico⁶. In most of the capitals of the states of Mexico and highly-urbanized municipalities, not to mention the Federal District, at the most-transited streets and crosswalks, it is possible to see cameras the record the movements of the pedestrians and vehicles. CCTV's are also present in department stores, banks and government offices, and are used to observe the customers and workers or simply those who move through these spaces. The purpose of this technology is to try and decrease the risks faced in various social settings, such as vehicle traffic, theft, drops in worker productivity, among others⁷.

Although various surveillance systems, particularly video surveillance, have been introduced to social life in Mexico, modifying the idea of public and private, individuality, risk, and mechanisms of social classification, this is not reflected in the number of academic works seeking to explain and understand the development and impact of the society of surveillance in the country. The limited development of studies on this subject in Mexico is due to the fact that the development of a strong line of academic work on public security has predominated. In spite of the above, two indicators are encouraging, as can be seen in graph 9; i.e., of the scant 38 texts of an academic nature that were located, the most recurring issues are precisely the right to privacy, social classification using video surveillance technologies and social control through video surveillance technologies and the use of personal data. In addition, graph 10 shows that the academic production on video surveillance has increased in recent years.

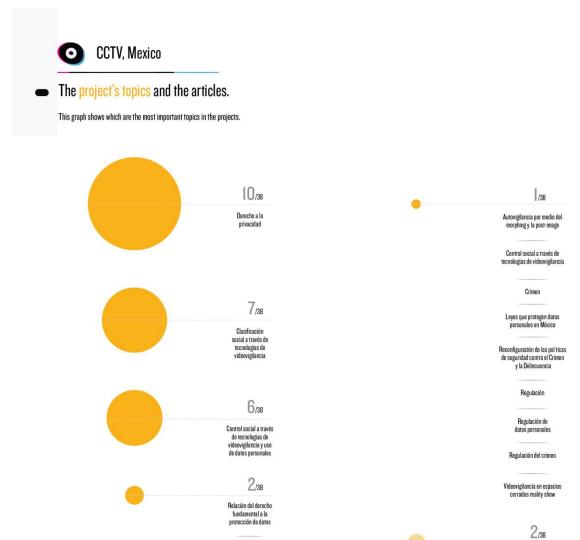
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⁵ The information presented below was obtained from the analysis of 18 documents from the same number of private security companies that provide their personal and electronic protection and surveillance services in various Latin American countries.

⁶ The idea of surveillance has recently been tightly tied to common practices such as the use of Google Street View, which provides a city observation service through cameras in two countries in Latin America, one of which is Mexico. This is a Google Maps and Google Earth application that provides panoramic street-level views (360 degrees of horizontal movement and 290 degrees of vertical movement), allowing users to see parts of the selected cities and their surrounding metropolitan areas.

⁷ For example, the installation of 60 surveillance cameras in 32 hospitals of the Mexican Social Security Institute (IMSS) distributed in eight municipalities of the country for the purpose of supervising personnel activity and providing the necessary security and protection to the patients of the hospitals.

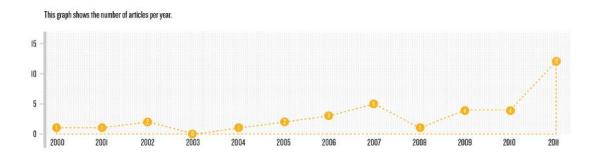
Graph 9: Repetition of key subjects in the mapped texts



Seguridad

N/A

Graph 10: Texts on video surveillance and society 2000-2011



As previously mentioned, there are very few academic works that discuss the impact of the society of surveillance in the country, with a predominant focus of academic work on public security. As shown in graph 9 above, reference to the subject of security is minimal; however, it is important to specify that the texts recorded are those linked to the issue of security and the issue of video surveillance and the right to protection of personal data. Therefore, when we say that the issue of public security has been central, we want to indicate that, in this discussion, there has been little probing into the issue of video surveillance as a relevant factor for social change.

This has caused the surveillance processes to be observed as a lateral subject that is not explained in and of itself, but rather based on the problems related to security policies or the analysis of violence

and insecurity. The recent tradition of security studies does not see surveillance as a subject of study, as it consider it to be an element dependent on the analysis of security and the police. Since it considers it to be a technical problem, the surveillance processes become natural (the systems are considered normal and, therefore, irrelevant) contributing to the dissolution of this issue as a significant social phenomenon.

Maybe because of this, one the first works that directly discussed the implications of CCTV is that of Lajud and Quiroz (2007) who established the necessity of regulating and establishing standards in response to the expansion of video cameras. Works that explore the implications of CCTV in a more theoretical and broad sense are those of Cunjamá and Loría (2010), who focused their reflections on the effects of the implementation of the new technologies in exercising social controls. The work of Gaytán (2010) has the same focus and aims to highlight the problems of the new social classifications made on a discriminatory basis through the visual aspects provided by the video camera images. The possible uses of the images and cameras where the identities of individuals and social groups are deterretorialized and bifurcated is that they may be, in this sense, placed on a continuum of identities. Lastly, the works of Arteaga (2011a, 2011b, 2010a, 2010b, 2010c, 2010d, 2009a, 2009b, 2007) address these issues and most importantly develop works of an empirical nature that try to show how the authoritarian political practices come into tune with the processes of social classification, risk management and administration of public and private urban spaces.

ii. Surveillance in CCTV: Technologies, actions and relevant players

In spite of the limitations of there not being a wide range of research on CCTV in Mexico, what is clear is that these technologies continue to grow. The metropolitan area of the Valley of Mexico (which covers the Federal District and 27 municipalities of the State of Mexico) can be considered to be one of urban zones with the most surveillance in the country, as each district of government has established different and varied mechanisms of surveillance through CCTV. It can therefore be seen that, although video surveillance has expanded significantly, it is fragmented.

In the case of Mexico City, for example, the program "Ciudad Segura" (Safe City) was implemented, which revisits the experience and results of the technological developments in locations as varied as Seoul, London, Jerusalem and Chicago. Currently, Mexico City has 10,500 security cameras distributed on the busiest avenues and streets, downtown, and in the city metro system (the latter has a specialized facial recognition software). At the end of September 2011, the government of Mexico City is expected to have installed a total of 11 thousand security cameras as part of the "Bicentennial Video surveillance program." If the various video surveillance systems of

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⁸ Rodríguez, Yadira. (2011, June 13). Vigilarán 11 mil cámaras principales calles del DF. (11 thousand cameras will provide surveillance of Mexico City's streets) *W Radio.* Obtained on June 16, 2011 from http://www.wradio.com.mx/nota.aspx?id=1488591

the municipalities of the State of Mexico that form part of the greater metropolitan area of the Federal District are added to this figure, the number of cameras could be much higher. Unfortunately, there is no data that makes it possible to clearly know how many video cameras may currently be in operation in the greater metropolitan area of the Valley of Mexico. All there are is data on government programs, such as in the State of Mexico, where there is a clear trend of investing in purchasing more video surveillance cameras. Based on the information of the State Security Agency on the video surveillance system in the State of Mexico, in March 2011, there were 908 cameras in operation as part of this program in 16 municipalities of the Valley of Mexico. However, there is a planned investment of an additional 96 million pesos to reach a total of 1,172 cameras, and the future plan is to reach 2,000.

In the case of the most important municipalities of the Valley of Mexico, as is the case of Tlalnepantla and Huixquilucan, there are already documented experiences of video surveillance. The residential areas with the highest income of the metropolitan area of the Valley of Mexico are concentrated in these two municipalities. In the case of Tlalnepantla, the video surveillance system was implemented jointly, in 2001, with the installation of an automatic traffic light control system with the objective of visualizing the conditions of municipal traffic in real time. However, it has slowly started to perform other activities, especially related to public security. For example, it is also used to oversee social protest demonstrations that approach the municipal palace, which allows the government to put transit operations in place, reorganize the sequence of the traffic lights and, of course, monitor the demands of the protestors, as well as review how they organize themselves to protest, which direction they move, who their leaders are or identify certain protesters.

In the case of Huixquilucan, the municipal CCTV system was installed in September 2004, even though the municipal authorities had indicated that the crime indicators were low compared to other municipalities of the metropolitan area of Mexico City (Arteaga, 2007). The municipal president decided to install a CCTV system with objective of establishing a strategy to "protect the municipal borders" inhabited by a large population in transit. Based on the information provided by the municipal security office, 66% of the house robbers operating in the municipality do not live there. Therefore, there is an idea that the criminal violence that occurs in the municipality does not originate there, but in the neighboring municipalities.

The identification of the problem, seen as the "protection of the border", is one of the factors that drives this type of surveillance policies. Since it is only possible to enter the municipality of Huixquilucan by three important streets, the local government finds an effective justification for the implementation of this border protection. As indicated by those who installed the CCTV system,

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⁹ Jímenez, Rebeca. (2011, March 24). Invertirán 96 mdp en videovigilancia de Edomex. (96 million pesos will be invested in video surveillance in the State of Mexico) *El Universal*. Obtained on June 16, 2011 from http://www.eluniversal.com.mx/notas/754273.html

this creates the sensation that the municipality is a "kind of island". Based on this principle, it is considered that the municipality is a space where people live who, regardless of their social or economic differences, do not behave in ways that are contrary to normal social interactions or tranquility, at least not in a pre-political sense, such as certain forms of criminal violence. This cannot be understood if what is attempted to be shown from the other side of the camera; i.e., protection, is ignored. In fact, a system of this kind is considered to allow adequate strategies to be established against risks linked to the wellbeing of the residents within the municipal boundaries: such as fires, medical emergencies, traffic accidents or even the detection of failures in public services (water leaks, potholes or traffic lights).

In this specific case, the problem faced by the municipal government in installing the CCTV system was always a financial one. To overcome the financial issues, an independent agency was contracted to perform the work: a private company called Seguritech. In this way, a public-private mechanism was created through a decentralized organization responsible for controlling the system. For this coordinated work, the municipality had to use 17% of its annual budget over three years to start the project. This combined project was not only an economic problem, it was also considered that the municipal police did not have the technical capability to take responsibility for the system that would be used since they would use the information produced in an unethical manner and much of it would end up in the hands of organized crime. As a result, the municipality considered the private company to be reliable, with the goal of not "dirtying" the current surveillance project. However, the problem of financing a project with these characteristics forced the municipal government to cancel the project on May 6, 2007 and to design a public CCTV system with no private intervention.

The cases of Huixquilucan and Tlalnepantla are examples of what is happening in other municipalities of Mexico with regard to the origin of CCTV systems: they are usually installed to support the traffic work performed by automatic traffic light systems. This trend can generally be observed in the capital cities of the states of Mexico. The process that occurred in the capital of the State of Mexico is one example. In Toluca, the video surveillance system began being used in 2005 as a tool to support the transit management and road control mechanisms. Over time, the CCTV was reassigned to other functions: to reconstruct, when possible, traffic accidents for the judicial authorities; for public security; to try to stop pickpocket activity on the city streets; but also to observe and control sociopolitical protests.

One of the problems faced by video surveillance in Mexico is the lack of regulatory standards to govern the installation of cameras at the federal level. This causes the information obtained from them to be used by government bodies in many cases for political reasons. The Federal Institute for Access to Information does establish guidelines regarding the Protection of Personal Data for the purposes of guaranteeing the security of information of a personal nature and thereby avoiding the alteration, loss and misuse of such, but there are no specific standards for the use of the images and

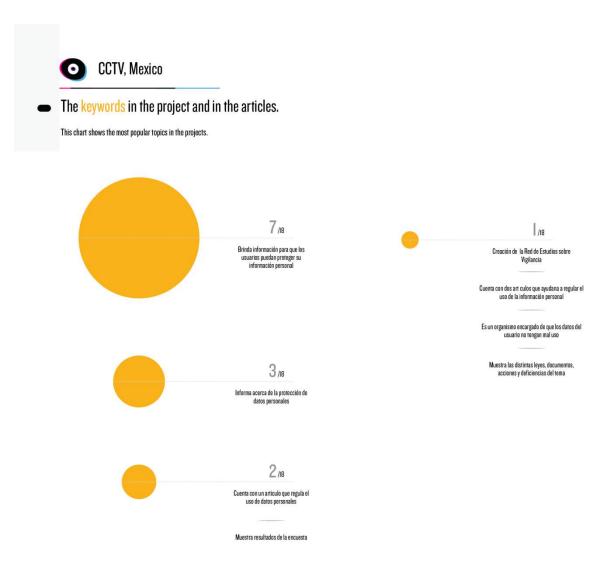
information that can result from the use of video cameras used for the surveillance of public and private spaces. However, two bills have currently been proposed in this regard: one in the State of Queretaro and the other in the State of Mexico. It is important to mention that only the municipality of Guadalajara will soon issue Regulations for Video surveillance to govern this activity in the municipality. These regulations will guarantee, for public security purposes, access by the authorities to all images captured, but give priority to citizen rights with regard to their identity and the privacy of these visual records. Another relevant purpose of the video surveillance regulations in Guadalajara is the project of creating a bank of information for the Ministry of Citizen Security that specifically marks all of the cameras installed in the municipality, both those that are publically and privately owned. This is interesting given the social context of this municipality: it is the third most important city in the country because of its economic activity, the capital of the state of Jalisco, with 105 video surveillance cameras installed for a population of 494, 252 inhabitants over an area of 187.9 square kilometers. In the country because of the population of 494, 252 inhabitants over an area of 187.9 square kilometers.

In this context of proliferation of video surveillance and the absence and weakness in the regulation of such, actions have been taken in the country by several different elements of society. As can be seen in Graph 11, these actions are primarily aimed at spreading information on the protection of personal data.

Graph 11: Actions by the mapping agents

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¹⁰ Redacción. (2011, March 15). Conectarán cámaras públicas y privadas para ampliar vigilancia. (Public and private cameras will be connected to increase surveillance) *El Informador*. Obtained on May 16, 2011 from http://www.informador.com.mx/jalisco/2011/277745/6/conectaran-camaras-publicas-y-privadas-para-ampliar-vigilancia.htm



Without a doubt, these actions are in a field where they can thrive, and the generation of regulations, which has been low, can be expected to increase and be taken up in various municipalities of the country, especially if the growth in video surveillance devices continues to follow the current trend. For example, the installation of the "Safe Transit" program in the municipalities of Ecatepec and Valle de Chalco of the State of Mexico contemplates the installation of a video camera in each of the 3 thousand units of public transportation and these cameras would be connected both to the police of aforementioned municipalities and the Agency of State Security and the State Justice Department. Each camera is to have a global positioning system (GPS) that allows the exact location of the vehicle to be tracked. In principle, this program is expected to operate only in the municipalities mentioned above before being applied to the rest of the state.

¹¹ Fernández, Emilio. (2010, May 14). Camiones tendrán videocámaras. (Busses will have video cameras) *El Universal*. Obtained on May 10, 2011 from http://www.eluniversaledomex.mx/ecatepec/nota2519.html

Another area of expansion of video surveillance is in indoor shopping centers in Mexico. At the end of the sixties, in other large cities and in the Federal District, different types of shopping centers that emulated American malls began to be established. Usually created by a series of anchor stores (such as *Sears, Liverpool* and *Palacio de Hierro*) the first shopping centers were built: Plaza Universidad and Plaza Satelite (López, 1999). In the metropolitan area of Mexico City, over the last thirty years, more than forty commercial centers and plazas have been established, primarily aimed at medium-class consumers, although not exclusively so.

However, in practically all of the capitals of the various states of Mexico there is a similar process of construction of shopping centers, although with different dimensions in the various capitals. In the capital cities of several states, as well as in their metropolitan areas (Villahermosa, Tampico, Monterrey, Cuernavaca, Puebla, Cancun, Guadalajara, Merida, Queretaro, Aguascalientes, among others), these consumer spaces, driven by large department store chains such as *Palacio de Hierro, Liverpool* and *Sears*, can be seen to be flourishing. In the same way, the construction of movie theaters has played an important role in guaranteeing the growth of these plazas.

Important differences can be seen in the organization of surveillance inside these spaces. There are cases in which there is only one CCTV with 80 cameras, while in others, more than 500 cameras are used. However, they operate on two different principles: some divide surveillance into two control centers – one aimed at the shopping area and the other at the parking lot; while the rest keep watch through a single control center. Of course, the type of stores, size, architecture, affluence, structure and organization of each shopping center contributes to the type of system used, as these factors define a series of specific risks. In addition to surveillance of the shopping activities, the CCTVs in shopping centers have also been found to be used to control employees and their activities. In addition, the information obtained from these devices is used by federal, state and municipal police organization as support in criminal investigations. All of this occurs without a regulatory framework, as indicated above, that defines how these systems can be used.

iii. Standards and legislation

In the context of Mexican legislation, a legal framework is emerging to protect and safeguard the fundamental and human right to the protection of personal data.

The steps in this regard have doubtlessly been transcendental to guaranteeing intimacy and personal privacy; however, there is no absolute understanding of the need for legal regulation of CCTV, national identity documents and the Internet.

For the first, there is no federal legal framework that explicitly authorizes or limits the use of CCTV. However, this lack of existence is apparent. As per usual in cases of this kind and in other

legal matters, there is expected to be a legal institution with a certain name. One example of this is the case of criminal behaviors that use or target information technology. As a general rule, these types of behaviors are called information crimes; nevertheless, in reviewing the national penal codes, only the Penal Code for the State of Sinaloa lists these conducts under this name. The rest of the penal codes have used other names to denominate these behaviors, but this does not mean that there is no legislation for the issue. The case of video surveillance is similar.

In reviewing the legal text on public security at the federal level, the term video surveillance is absent; however, this absence does not mean that this practice is not addressed and authorized.

The Federal Police Law establishes in Article 8 that, among other attributes and obligations, there is an obligation to:

XXXVI. Exercise, for public security purposes, the <u>surveillance</u> and inspection of the entry and exit of merchandise and people at airports, marine ports authorized for international traffic, customs offices, in-bond warehouses, customs area, customs booths and checkpoints, as well as for the same purposes of the handling, transportation and possession of such merchandise at any location in Mexico.

The Federal Police shall act at in-bond warehouses, customs offices, customs areas, customs booths and checkpoints in support and coordination with the tax or immigration authorities responsible, in conformity with the provisions of this Law and the other applicable legal provisions.

XLII. Perform actions of **surveillance**, identification, monitoring and tracking on the Public Internet Network of websites to prevent criminal conduct.

XLIV. Include in the Administrative Registry of Detainees and other criminal and personal databases the fingerprints and other elements in addition to photographs and **videos** to identify an individual, asking the authorities of the three branches of government for the information they possess.

Notwithstanding the above, the Federal Police is authorized to participate in the preventive intervention of communications only in the cases of the crimes referred to in Article 51 of the applicable Law.

What is of interest is that, in exercising this power, the authorization granted by the competent judicial authorities establishes that, upon conclusion of each intervention, a record must be prepared that contains a detailed inventory of the audio or **video information that contains the sounds or images captured during the intervention**, and that a report must be submitted on the results of such in order to confirm due compliance with the authorization granted.

Also, the General National Public Security System Act, which contains the regulations regarding Article 21 of the Mexican Political Constitution for Public Security, governs the composition, organization and operation of the National Public Security System and establishes the distribution of powers and the bases for coordination between the Federation, the States, the Federal District and the Municipalities in this regard.

Based on the provisions of Article 21 of the Mexican Political Constitution, the Public Security Institutions of the Federation, the Federal District, the States and the Municipalities, must, with regard to their power and in the terms of this Law, coordinate among themselves for, among other actions, participating in the protection and surveillance of the Strategic Facilities of the country in

the terms of this law and the other applicable provisions; an act that undoubtedly involves the use of CCTV systems.

Also, the referred law creates the National Conference of Ministries of Public Security, which is responsible for, among other functions, proposing rules to assist in the surveillance and execution of joint actions to protect the strategic facilities of the country, in conformity with the provisions of the applicable legislation.

In regulating a constitutional precept, the General National Public Security System Act recognizes the concurring nature of the powers of the Federation, the Federal District, the States and the Municipalities in this regard and establishes that it is the Federation that must, through the competent authorities, coordinate the actions for surveillance and protection of the Strategic Facilities.

To this point, there is no clear legal grounds whatsoever for the security bodies or police to use CCTV systems to comply with their state responsibilities. Through Article 75 of the General Act, the police, surveillance and safeguarding bodies of penitentiaries, preventive custody or detention centers and, in general, all the bodies responsible for public security at the federal, local and municipal levels that perform similar functions are authorized to perform actions to prevent crime and administrative infractions and to perform inspection, security and road actions in their constituencies.

As indicated above, there is an emerging legal framework at the state level that attempts to guarantee the right to intimacy and privacy of individuals in response to social demand and the State's essential purpose of providing security.

In a comparative exercise of this state legal framework, there are clearly several similarities: definitions, general principles regarding the capturing and recording of images for purposes of video surveillance, criteria for the installation of video surveillance systems in public areas, authority and power of such with regard to video surveillance, formation of video surveillance committees, notification of areas under video surveillance, use of cameras, fixed and portable and remotely controlled video cameras, collection, treatment and safeguarding of the information resulting from video surveillance, citizen rights regarding the images captured or recorded in real time using video cameras, installation of control centers and testing measures.

In this regard, on March 24, 2011, Luis Antonio Gonzalez Roldan, Deputy of the "LVII" Legislature of the State of Mexico and member of the Nueva Alianza party of the parliamentary group, in exercising the powers conferred upon him through Article 51 of section II of the Political Constitution of the Free and Sovereign State of Mexico and in conformity with the provisions of Article 28 section I of the Organic Law of the Legislative Branch of the Free and Sovereign State of Mexico, on behalf of the Nueva Alianza, Partido Revolucionario Institutional and Partido Verde Ecologista de Mexico Parliamentary Groups and submitted for the consideration of the referred Honorable Legislature, presented a bill for a decree on the "regulation of video surveillance and the application of technologies in public areas in the State of Mexico" to be added as the Seventeenth Title of the Preventive Public Security Law of the State of Mexico.

This bill for additions to the Preventive Public Security Law of the State of Mexico recognizes that security is an essential function of the State. Its general purpose is to create a local legal framework regarding public security aimed at increasing the level and improving the efficiency of citizen security through the use of video surveillance and other technologies, as well as the use, collection

and treatment of the information obtained through the use of surveillance cameras and technological public security devices.

This bill recognizes that several municipalities of the State of Mexico currently use various video surveillance mechanisms under a legal framework that is in some cases insufficient and, in others, absent. It therefore aims to meet the need for regulation of video surveillance to, on the one hand, make it compatible with the fight against crime and, on the other, guarantee the citizens' right to privacy when their images are captured in real time or recorded on video and for this information to receive due legal protection as personal data.

In the text of the description of intent section of the bill, a series of legal provisions are established in an attempt to describe "correct" policy for public security of the information captured through video surveillance cameras and technological devices. To this end, part of the premise is that all images of citizens collected or recorded by video cameras is personal data *per se* and therefore must enjoy the broadest legal protection; that is, the images and voice of an individual recorded through video surveillance activities are considered to be personal information that constitutes a means of identifying individuals.

Therefore, the bill aims to standardize the *de facto* use of video surveillance by the state and municipalities that has been occurring for several years through the application of video surveillance for public security purposes without having any specific legislation in this regard. As a result, the proposed legislative additions aim to govern the state and municipal actions regarding the implementation of surveillance cameras exclusively in public areas of the State of Mexico.

In view of the above, the legislative body plans to regulate the following basic points of video surveillance in the State of Mexico:

- a) Regulation of video surveillance in public areas in the State of Mexico by the State Security Agency
- b) Minimum definitions and scopes of the terminology related to video surveillance
- c) General principals regarding the capturing or recording of images
- d) Local authorities for video surveillance
- e) Powers of the local authorities for video surveillance
- f) Creation of municipal video surveillance committees
- g) Notification of areas under video surveillance
- h) Use of video cameras
- i) Use of portable video cameras
- j) Gathering, treatment and safeguarding of the information obtained through video cameras or technology
- k) Citizen rights regarding the capturing in real time or recording of images using video cameras
- 1) Telematic public security centers
- m) Use of technology in public security
- n) Means of evidence obtained through video surveillance or other types of technology
- o) Coordination mechanisms for sharing information obtained through video surveillance or other kinds of technology

Notwithstanding the above, the summarized bill, in addition to being grounded on statistical data on criminal activity and perception of security, is also grounded on recommendation number 14/06 issued by the State Commission of Human Rights of the State of Sinaloa, which recognizes video surveillance systems as a positive measure for the intended purposes but considers it reprehensible

that there has been no previous legal framework to govern the operation of these systems, and allowing the administrative authorities to arbitrarily operate them in the legal sphere affecting the governed individuals by discretionally using the information obtained without having any defined principles to be observed in the programs already in operation.

Also, in proposing the bill, there is recognition of the emerging legal framework that has been generated at the national level by other federal entities for regulating the CCTV systems used in surveillance and citizen security activities. This legislation includes: The Public Security Law for the State of Aguascalientes, the Public Security Law for the State of Sinaloa and the Law governing Video surveillance of the State of Colima.

In general terms, these three sets of state legislation represent not only the emerging legal framework for the protection of individuals in the installation of CCTV, but also support for guaranteeing public security and the effectiveness of the state of law.

In addition to the summary of the bill in question, it is also important to recognize the existence of the Video surveillance Law of the State of Aguascalientes that governs the use by the state and municipal public security bodies or private security service providers of video cameras for recording or capturing images with or without sound in public locations or private locations with public access, as well as the subsequent treatment of this data, or their use by other authorities in the properties at their disposal.

Notwithstanding the above, the bill recognizes the importance of international advisory boards for the protection of personal data including, among others: Agreement 108/1981 of the European Counsel regarding the protection of individuals in the automatic treatment of personal data; the Federal Information Law of Germany from 2001; audits 34/99 and 3/2000 issued by the Belgian authorities responsible for personal data protection, the first of which addresses the treatment of images and the second of which addresses the use of video surveillance systems through video cameras at the entry to apartment buildings.

4. IDENTITY CARD SECTION

4.1 General introduction to Brazil/Mexico research:

The Brazil and Mexico national identity document modification projects have been in an accelerated progress during the past few years, without the effective participation of society within this process. The following text centers on cartography done in these two countries, historically situated in the matter of identification, the analyzing of legislation, as well as the actors involved.

Both countries share a common situation in the sense of using devices based on both registration and identification of the population. However, what calls attention to current projects is the intention of governments to collect personal data including them in unique identification systems, which, if perceived properly have the potential make the bureaucracy of each country more efficient, as well as confronting the problem of the adequate usage and treatment of data, above all in a context of development of diverse technologies through which this data could be shared, such development converges with institutional contexts which today are questioned because of the bad authoritarian aftertaste they present.

In the case of Mexico, a new personal identity project has been highly questioned in the public sphere. The advantages of this questioning is what reveals a rich field for debate, the disadvantages are that this debate has been until this moment, guided by partisan and political inclinations, which are called upon to influence a discussion from other environments such as non-governmental and academic agencies.

4.2 Identity cards and identification systems in Brazil

Brazil is located between countries which traditionally grant, or demand of their citizens an identification document as a way to allow or facilitate their recognition before public or private organizations. Known as the RG or General Register card or identification card, the document has characteristics which allow it to be called an identity document and not one of identification.

There are various documents which are accepted as proof of identity of an individual: the RG for Brazilians and the RNE or Foreigner National Registry for non-Brazilians. Currently, official identity credentials expedited by professional organizations and a drivers licenses are also accepted which are also valid nationwide and are the responsibility of the Federation States through their Departments of Transportation (Detrans).

Although these documents exist, the General Registry (RG) is the main form of identification. This document was established in Brazil after the Proclamation of the Republic ¹² in 1889, when it was created by the "Cartorios" ¹³. Since then, the document contains different personal characteristics

¹² The question of identification and its documents in Brazil is linked to the ideas of Francis Galton, Juan Vucetich and Alphonse Bertillon. Finger prints presented in the document are related to the 4.764 law of February 5, 1903. The possible relationship or distinctions with the thinking of the XIX and the beginning of the XX century makes up an important part of the analysis as the simple idea can go farther that today we have to advance only one technology for the same process. The history of identification in Brazil is strongly marked by criminal identification, which can be seen up to this day. Maybe here this is specifically Brazilian:

the increasing clash of the identification as a criminal matter, or the citizenry as an historic question.

13 *Cartórios* are government or private agencies which have custody over documents (cartas), and also are responsible for

and data, such as marks and scars, front and profile picture, skin color, blood type, use of beard or mustache, fingerprint, signature, affiliation, birth date, profession, etc.

The initial period of identification in Brazil, especially in the XIX and beginning of the XX century is marked by the creation of State identification institutes through the 4764 Decree, February 5, 1903, which regulated the 7947 Federal Law, whose objective was the reorganization of the Federal District Police (Río de Janeiro in that time). It was in that moment that it was decided that the finger prints of criminals as a method of identification would be used over other available identification methods. The presence of finger prints in identification documents is not that common in many countries. In Brazil, however, this information is an integral part of the document from its beginnings up to current times, and highlights the legal and medical thinking in terms of criminology of the time with civil identification. Therefore, to give fingerprints to obtain a civil identification document is an idea deeply rooted and common in the country and is not exclusively associated with suspicious ideas, of a repressive State or totalitarian regime.

Even if this document was valid in the entire country, only 100 years after its institution, the first Federal Law for insuring the national validity of the document through the 89.250 Decree went into effect December 27, 1983.

The responsibility of the expedition of these documents falls on the Department of Security¹⁴ of each one of the States in the Federation (currently 26 states plus the Federal District). Each one of the states has its own data base which is not integrated with other states. The absence of a coordinated registry system between departments of security allows a person to obtain more than one identification document (RG) in different states with national validity, but each one with its own distinctive identification number.

This way, the main arguments of the federal government for the institution of a new document (Civil Identity Card) are based mainly on the following thesis: 1) the modernization and national coordination of this system for combating fraud or identity duplication, and 2) on the proposal that this document functions for the promotion of citizenship and democracy.

4.2.1 How the mapping of biometric identification took place

The collection of data for the Civil Identity Registry (RIC), the new unique document in Brazil was developed in stages, and in each one, the document research was done for these specific areas as follows.

The documentation generated is available as attached files (ANEXO 1, ANEXO 2 and ANEXO 3) in the following report:

i. Legislation

birth and death registries, general civil registries of persons or businesses, and property among others. These agencies are known as notaries (*notários* in Portugal for example) or "tabelionatos" in different countries, have the same distinct functions.

¹⁴ A situation which maintains a police character for the question of identification in the country.

Objectives: a) Look for law projects, laws, discourses and debates on a national legislative level (Senate and Congress);

- b) Identify legislators, their parties and country region;
- c)Identify the year of proposition; its summary and data base link;
- d) Evaluate if there exists a direct relationship with the RIC, or if it directly interferes in its existence, format, and content.

Data bases consulted:

- a) Senate online search system
- b) LexML: Legislative and Legal Affairs Information Network
- c) SINCON: Congressional Information System
- d) Chamber of Deputies Online Search System

Observation: In this stage of the legislation research, data relative to the expedition of identity documents by other federal agencies, such as the Marine Ministry, the matter of the identification of foreigners and the validation of certain professional documents as proof of identity (press documents for example) were not considered. The focus remained on the use of the Civil Identity Registry (RIC).

ii. Mass Media, Blogs, Internet Sites, Events (Congress, Presentation, etc)

Objectives:

- a)Observe the presence of the RIC theme in this media, from 12997;
- b)Identification of persons, groups, organizations, businesses and other interested parties in participating.

Data bases consulted:

- a)Chamber of Deputies news agency
- b)Senate News Portal
- c)Supreme Electoral Tribunal News (website)
- d)National Transit Department News (website)
- e)Federal Police News
- f)Folha de São Paulo newspaper
- g)O Estado de São Paulo newspaper
- iii. Studies and research (academic production: thesis, dissertation, articles)

Objective: a) Verify the existence of research, studies and publications in Brazil and Latin America on the subject;

b)Identify researchers interested in the subject and their institution;

c)Identify the year of academic production; their summary and link in the data base.

Data base consulted:

a)Scielo (. Org) Scientific Electronic Library Online: contains magazines in various areas of knowledge of the following countries: Argentina, Brazil, Chile, Columbia, Cuba, Spain, Mexico, Portugal and Venezuela.

b)Scielo (. Br) - Scientific Electronic Library Online: contains magazines in various areas of knowledge in Brazil.

c)Redalyc – Network of Latin American Scientific Magazines, The Caribbean, Spain and Portugal: contains magazines in various areas of knowledge.

d)Capes – The Coordination of Personal High Level Improvement (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) is an institution linked to the Ministry of Education in Brazil, which evaluates post-graduate courses in the country and allocates funds for said courses and the research they develop. The institution maintains a data base of theses produced in Brazilian universities.

Observation: The theme of biometrics is also investigated in the area of health, such as medicine and biology. The results of these areas are not considered.

From the data collected in the previous sections (I,ii and iii) it was possible to identify the key actors involved in the topic of identification documents (RIC) in Brazil. With this data a table was designed in which the following are identified: 1) Legislators; the project, law or relative speech; the link in the data base for this document; an evaluation on the link (direct or indirect with the RIC topic) and a score on the position of this legislator (if he agrees or questions the topic). There are slight differences between the commentaries that are in agreement or those which question, which will be better detailed in the following text. 2) People linked to government; link with more information on that person and their institution; their connection (direct or indirect) with the topic; and their attitude with respect to the topic (if they agree or question the topic); 3) Governmental institutions connected with the RIC topic; how this connection takes place (if the institution is responsible for drivers licenses for instance); link with more information; its connection (direct or indirect) with the topic; and its position with respect to the topic (in agreement or questioning the topic); 4) private institutions connected with the RIC topic; how this link occurs (if the institution is responsible for providing software and hardware to collect finger prints for example); link with more information; its connection (direct or indirect) with the topic; and its attitude with respect to the topic (in agreement or disagreement);5) Organizations linked with the RIC topic; how this connection occurs; link with more information; its connection (direct or indirect) with the topic; and its attitude with respect to the topic (in agreement or disagreement); 6) Researchers linked with the RIC topic, their area of investigation and country (only Latin American researchers were considered and only in areas connected to human sciences); how this link occurs (if the researcher is a professor, doctor and which institution they are connected to for example) their connection (direct or indirect) with the topic; their attitude and their attitude with respect to the topic (in agreement or disagreement).

iv.Search parameters

In all of the research data bases the following key words or expressions where used as parameters (all in Portuguese):

- a) Carteira de identidade
- b) Documento de identidade
- c) Registro de Identidade Civil
- d) Registro de Identificação Civil
- e) Documento de Identidade Civil
- f) RIC
- g) Documento único
- h) Biometria
- i) Antropometria
- j) Vigilância + identidade
- k) Vigilância + documento
- l) Vigilância + identificação
- m) Controle + identidade
- n) Controle + documento
- o) Controle + identificação

In almost all of the cases, the mapping was created using the Boolean search method with the goal of doing a more selective search. The operator AND was used the most (all of the words) and was represented in the tables with "+" for combining different key words and to obtain larger results. Also, search terms between quotation marks were used in order to obtain results that contain the words in the exact order without changes. It is important to emphasize that all the results obtained with the "exact match "search also appeared in the list of results using the operator AND, which was important during the process when the list of possible results was very large.

All of the material presented in the search results that where more than one key word is conveniently marked with all of the key words that accompany it. For example, the same article that has been obtained through the following parameters: "El registro de la identidad civil", "registro de identificación civil", "documento de identidad civil", "ric".

The searches were done utilizing only words in Portuguese and, in general, done with the "Universidade Estadual de Campinas Internet system", which provides its members free access to electronic magazines (complete text in SagePub, for example) and the Capes Portal.

v.Problems and solutions related with search parameters

Some difficulties which deserve to be noted:

A)Some degree of complexity was noted in the search with key words in the case of biometrics and anthropometry due to its relation mainly to health issues (doctors give information on the clinical histories of newborns). In order to help with this search process, other combinations in the Boolean search where used, to know: biometric data (+ID+identity+control,+registry,+document) and with anthropometry (+ID+identity+control+reg;+document).

b)Taking into account these two key words - la antropometría and datos biométricos (anthropometry and biometric data) it is interesting to observe in particular, that within the research on legislation, there is a predominance of results in medicine and health. Medical exams (to obtain licenses; the possession, to exercise, the verifying of a disability; the systematic proof of health and exam control, etc.) for public employees are more common. In the search of technology, the results related to biometrics also have a multitude of applications in medical and agriculture research which are not related with the identification of people. These were excluded.

c)An investigation under the word RIC was more difficult within the mechanisms of selected search and as a consequence, the search for documents and material that contain "ric" in a syllable, for example "Richard", "empírica", "América", etc. For this case, combinations of words or expressions where used in order to filter out results in a more efficient manner.

4.2.2Analysis of the Identity Registry in Brazil: Norms which regulate it, implications, problems, things missings, and actors¹⁵

The attempts to implement a unique identification document in Brazil have a long history. Known as the Registro Civil de Identidad (RIC), (Civil Identity Registry in English) but also known in the press as a unique document, was created by the 9.454 law, approved on April 7, 1997. In accordance with this law, the unique RIC number should be the mechanism for the identification of all Brazilian citizens, in all relations with society, the government and private organizations.

The law which established the unique document has anticipated its regulation within 180 days after its publication, and its implementation for the first time in 360 days. This regulation should be done by the executive power and cannot exceed the effects proposed by the legislature. It is a crucial action for determining the legal and practical aspects necessary for the effective application of their precepts.

The period for the current regulation ends in Brazil after five years from when it was approved by the legislation body. However, the regulation was not fulfilled until December of 2010 when it was decided, under presidential decree, that a committee was to be created to administer the document.

In the collection of data on the Brazilian legislature, it is possible to see diverse requests to extend the time period. It is important to point out that during these periods, there have been moments in which different documents (that today are unified in RIC), such as the identification (RG) and the document for personal finances (Cadastro de Pessoa Física - CPF), have lost their validity in the country totally.

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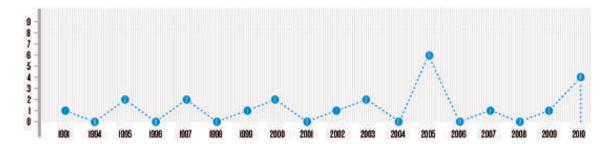
¹⁵ See the conclusions in this report, other indications on legislation, comunication media, studies and research in Brazil.

Also, without due regulation of the law, it is impossible to understand the beginning of the practical usage of the RIC in 2004, the year in which finger print collection equipment was acquired for the federal government. At that time, the federal government invested 35 million dollars in the acquisition of the Automated Finger Print Identification System (AFIS, in English), to begin the collection of information necessary for the new document. The system, which today is under control of the Justice Ministry (MJ), allows the digital scanning, recording and classification of information in data bases, plus the verification of correspondence between this information and other data. As can be seen in graphic 12, in the following year there was a greater presence of discussions in the Brazilian legislature on the subject. The second moment in which these discussions intensified is in 2010, due to the creation of a committee to oversee the document.

Graphic 12: Distribution of laws, bills and legislative debates in Brazil between 1991 and 2010.

Timeline of laws.

This graph shows how many laws are written per year,



The implementation process of the new Brazilian document were officially announced in 2008, and began their actions in states in the northern, northeastern and central-western zones far away from main centers and so, where the news has a lesser impact and reverberation. It can be seen that without transparency, public debate and proper regulation, the unique document project was implemented little by little almost invisibly.

In accordance with articles published by the Rondônia (north zone) State government portal in 2008, this state was one of the pioneers in the application of the steps necessary for the implementation of the new document, since it has a very small population. The Porto Velho Civil and Penal Rights Institute of identification (the capital of the state), began in December of 2008 the process of digitizing around one million one hundred thousand existing identification cards, one of the steps in the application of the RIC. The same occurred in four Brazilian states and was simultaneous to the expansion of the structures of the identification institutes, linked to the secretaries of security and state identification institutes for the new system.

i.Description of the RIC unique document

Originally, the RIC substitutes and combines various documents into one, such as the identification document (RG), the Cadastro de Pessoa Física (CPF, as known in Portuguese), and the voters registry, but also includes the national drivers license (CNH), the work document (known as the

Carteira professional), the inscription into the Social Integration Program and Formation of Active Managers (PASEP) and the inscription into Social Security (INSS).

The document (Image 1) looks like a bank or credit card, made from polycarbonate (a type of plastic), with similar dimensions (height, width and thickness). Its thickness allows the insertion of a memory chip to store data about the person. This data can be provided in the document in electronic form, such as name, affiliation, date of birth, sex, including information about other documents, such as the previously mentioned work document.

FRENTE REPUBLICA FEDERATIVA DO BRASIL 0 Anti-scanner especial MINISTÉRIO DA JUSTICA REGISTRO DE IDENTIDADE CIVIL Formado pelo mapa do Brasil Anti-scanner reagente a impressão a laser Composto pela sigla RIC ESTADO DE UTOPIA 1234567890-2 Imagem escondida Chip de memória MARIA DA SILVA OLIVEIRA Contém informações sobre a pessoa, como Fotografia data de nascimento, cor da pele, altura e Gravada a laser no material do peso. Feito para ter longa duração e resistir cartão e protegida contra violação a extensa faixa de temperatura Imagem de fundo integrada Sobreposição da borda da foto com OÃO DA SILVA OLIVEIRA Relevo tátil -DE OLIVEIR o fundo de segurança, em degrade de John Olis Tinta invisível Dispositivo Ótico Variável (DOV) Composta pelo brasão da República Elemento holográfico transparente artisticamente desenhado **VERSO** 123,456,789-39 30.123.456-7 / UT 0123456789123 UTOPIA-UT CN1VA187 / FLS. 12 / N.01245 Material Microletra como linha XXXXXXXXXXXXXXX O cartão é feito de policarbonato, de alta Composta pela expressão resistência e durabilidade, especialmente República Federativa do Brasil UTOPIA, UT 02/05/2006 preparado para a gravação a laser das Imagem fantasma IDBRA123456789712345R00F456912 7006012F02123110T0<<<HDFDTR0910 OCR lmagem de segurança oculta Código de leitura ótica É visível apenas pela refração da luz OLIVEIRA<<MARIA<SILVA<<<<<<

Image 1: Civil identification registry. Source: Rondônia State Government Portal (Brazil)

On the back of the document is the reproduction of the finger print, right index finger, preferably taken by the Automated Fingerprint Identification System (AFIS in English). Although this system is utilized by the federal government for the collection of data, and the ten fingerprints of all Brazilians, there exist the possibility that the Secretary of Public Security of the states have collected them using other systems, using outside services and technology contracted by private companies in the electronic security sector.

As will be seen later, there exist in Brazil multiple cases of fingerprint registries of Brazilians, such as for driver permits, voter documents and documents for participating in social programs. Also, there is a general effort of digitizing criminal records and the documents of the Secretary of Security of the states. Each one of these projects has not been done under the coordination of only one system, but the data can be interchangeable as they are being set in a more concrete way. Independent of this scenario, there is a specific route for the collection of data, specifically for the RIC, which when done can add new data which comes from other data bases or projects.

For the implementation of the RIC, the National Civil Identification System (SINRIC in Portuguese) was created. Under its control is the "Comissão Nacional de Identificação" (CONID); "Instituto Nacional de Identificação" (INI) and Institutos de Identificação dos Estados y Distrito Federal; and Cartorios. For sending information from one to the other, there is a system of interconnected information. The SINRIC has a unique data base, national, that contains data on citizens born in Brazil, or naturalized, identified by automatic fingerprints. This system is under the responsibility of the Brazilian Ministry of Justice. The SINRIC provides every citizen with a unique civil identification number, the RIC. The process of automating fingerprinting is the responsibility of the National Civil Identification Registry (CANRIC in Portuguese). According to the implementation of the RIC project, the data of this registry (CANRIC) is property of the states.

Each State Identification Institute has the freedom to set their own rules of negotiation and development of bidding processes for companies to collect data of their citizens. This data is then sent to the CANRIC and SINRIC. The identification projects are administered and reported by institutes and identification institutions of the State, according to the national established guidelines.

The Ministry of Justice states that in 9 years the gradual stages of RIC implementation will finish. The stages of computerizing the state identification institutes and cartorios are taking place. This is part of the adjustments of the procedures and routines of the agencies involved in the process. Some Brazilian citizens are chosen to receive the RIC and it is not possible that just any person goes to ask for their new national identification document. The cities of Salvador (BA), Brasilia (DF), Hidrolândia (GO), Itamaracá (PE), Rio de Janeiro (RJ), Nísia Bosque (RN) y Rio Sono (TO) will be the first localities in which citizens receive the RIC, but not all of the residents of these localities are included, because at this moment, the RIC is issued through a data base that already exists in the state identification institutes through data from the Tibunal Superior Electoral (citizens who are registered for biometric voting).

ii.Cases of biometric identification in Brazil

In April of 2006, in an interview done on research in Brazil (Kanashiro, 2008) a Brazilian businessman in the area of electronic security showed some of the advantages that this sector makes out in the country. For this businessman, who has invested in fingerprint recognition technology and has been involved in the development process of the Brazilian passport, the success of the collection of fingerprints is something that contributes to what the country has seen as a privileged place for investment on a large scale (considering its ample population). He has emphasized that in Brazil the collection of fingerprints or the providing of personal data is not exclusively linked to criminals and to the idea of being suspicious. He said that in many countries in which this link is present, the population rejects digital collection. For him, it is common that in Brazil personal data of a more varied nature is required for many different operations or the access of goods and services. Also, fingerprints are contained in the country's main identification documents. The minor Brazilian rejection is considered important by those who invest in the country's biometric technology. The businessman concluded his reflection saying that São Paulo, one of the largest cities in terms of population, is a place very coveted by the Electronic Security sector, and can serve as an experimental place for the implementation of an ample design utilizing this technology, which can be an example for the future expansion in other cities in the world.

Currently in Brazil, it is not uncommon the use and proposals of using biometric technology in everyday life. They are present for access and registry control of users in places such as gyms, universities and private schools; for controlling the use of services such as renting videos and DVDs, for accessing personal computers or buildings, houses and businesses, for appointments and tests in the private health system, such as the case of Unimed Paulistana.

The recent development of national technology also evokes the possibility of using biometrics in accessing financial services or for the control of workers attendance and hours worked. Also, there are cases of its use (or the intention of establishing its use) in public services, voting systems, or transit control.

The new Brazilian identity card (el Registro Civil de Identidad - RIC) cannot be spoken about without talking about other cases of data base construction on the Brazilian population and the use of biometric data for identification. Only change in the identification card for the feeding of a national data base covering the entire population is too slow. It is important to realize that we are talking about a population of approximately 190 million people, distributed in an unequal way over about 8.514.876 square kilometers. Also, there exist different regions in terms of development and distribution of the rich.

The examples of biometric use and the construction of Brazil's population data banks goes beyond an illustration of cases in the country, given the fact that they are connected one to another. They are important because there is interchange of information and data, so that afterwards, it can be provided to the Civil Identity Registry or the Justice Ministry who conduct the various processes for the document.

First case: The Education Ministry (MEC in Portuguese) announced that at the beginning of August 2004, there was a project in collaboration with the Federal Service of Data Processing (SWEPRO in Portuguese) that proposed the collection of public school student's biometric data for the control of their attendance through their fingerprints. On that occasion, the communication services (news agencies), borrowed from SERPRO, informed that the Education Ministry declared that the biometric system had as its objective the creation of "a civic identity that should pass only from primary and secondary school, and allowing the planning of education policies with secure data and adequately distributed in the geography of the country." (Jacinto, 2004)

The term "civic identity" (identidade cidadã) can be understood more clearly when it is taken into account that the proposal is going further than just the control of attendance and planning of school meals. This project was aligned with other Brazilian government social programs.

Later in 2005, the MEC announced a pilot program to try out the control of biometric frequency on 230 thousand students of 350 public schools (primary and secondary) in 6 districts of 5 regions of Brazil: Río Verde (GO), São Carlos (SP), Parnamirim (RN), Boa Vista (RR), Gravataí and Capón de Canoa (RS). Integrated in the Attendance Project was the objective to improve the collection of school census information, this program being designated as the School Frequency Monitoring System (SAFE in Portuguese). Recently in 2011, biometric systems for the control in schools was implemented and financed by another project, the Direct School Financing Program (PDDE in

Portuguese) that helps financially public schools in state and municipal systems or special education private schools and without the goal of financial profit.

This case shows some of the discussions that have been focused on and the spreading of this technology in public services. Here, it is correct to emphasize the link between the idea of creating a civic identity (or citizen identity) and the use of control and identification technology, such as biometrics. On the other hand, the project shows the connection between identification and a type of support for government social programs. In other words, to gain visibility and to be under control is a requirement for being part of government social programs.

It is interesting to see that in general, government social programs always promote ways of population identification such as Firmino and Wood (2009) describe: "In other words, it is undeniable that in spite of it being a social program, the "Programa Bolsa Familia" was never to be characterized also as a way for the Brazilian state to acquire personal data and to identify people normally excluded from traditional forms (in documents such as Cadatro de Pessoa Física- CPF) of identification and social classification". In this format, the inclusion necessarily implies identification and control.

The "Bolsa Familia Program" was created in 2003 to join federal government social programs. In general, it tries to transfer money to families in a situation of poverty, or extreme poverty, who have made a commitment to complying with certain conditions such as vaccination of children under seven years of age, prenatal care during pregnancy, matriculation and minimal school attendance of all children and adolescents from six years old up to seventeen years old. To be a beneficiary of social programs, families and their members are enrolled in the Unified Registry (CadÚnico). This is the data base used the most by the three spheres of government –federal, state and municipal – to identify possible beneficiaries. Biometric control of school attendance is linked to a larger data base and is related to the fulfillment of the government's demands for anyone who would benefit from the social programs.

Another three projects also indicate a larger national effort to achieve the goal of identification of people using biometric technology in integrated documents and the creation of data bases on the population which are: the drivers license (Carteira Nacional de Habilitação - CNH), the voter registeration (Título Electoral) and the passport.

With respect to the CNH, the initiative of using biometrics is present in the application of the Drivers Administration Training System (Gefor in Portuguese) of the Director General of Traffic (Detrans) in the state of Sao Paulo. The system is designed for the administration of Gefor, the control and supervision of all of the processes of driver permits and driver education, change of category and renewal or expedition of driver licenses. This system was implemented with the use of biometric reading of fingerprints for all of these procedures in various cities in the state. Three communiqué's sent in August 2005 (Prensa Gefor), announced a new system for all medical exams done in units of Poupatempo. The offices of Poupatempo concentrate the services of various governmental agencies, among them citizen's documentation. This office began to collect from the year mentioned, fingerprints and their storage in the Detran-SP data bank and the Compañía de Procesamiento de Datos de São Paulo (Prodesp in Portuguese).

In June of 2008, a resolution (number 68) of the National Transportation Committee (Contran) regulated the obligatory use of biometric technology with the goal of collecting fingerprints from all of the Brazilian states and the Federal District (Brzilia).

Already present in various Brazilian states, the biometric system was justified with the necessity to fight against fraud in the procedures set in place for obtaining a driver license.

Another project that adopted biometric technologies in Brazil came from the High Electoral Tribunal (TSE in Portuguese). On June 9, 2005 the "Master Plan for bringing up to date its registries and improvement of voter and election credential systems" was approved, which predicts change in the documents of 135 million voters in the country. In accordance with the plan prepared by the Election Work Group, the updating of registries began in October of 2005. This new registry for biometric identification is still active and in 2011 the second phase of the process began with the official launching in cities of states such as Goiás, Alagoas, Sergipe y Paraná, among others, with the goal of putting it in practice during the 2012 municipal elections.

On the occasion of the launching of this phase of electoral system modifications in Goiania, the president of the High Electoral Tribunal (TSE), Richard Lewandowski stated that within the advantages of the new inscription was the priority of the citizens receiving a new national identity card (RIC), the Civil Identification Registry (RIC). Lewandowski referres to the agreement between the TSE and the Ministry of Justice (MJ) for providing voter data to the MJ which controlled the implementation of the new Brazilian identification document.

"Not only to help simplify the electoral process, the prevention of fraud and deception, but also from the point of view of public security is very important. Given that practically all citizens, with the exception of minors who don't vote, are going to be identified biometrically" (Electoral Justice, 2011).

The program will anticipate that new voter registration cards are made of special paper that contains biometric data (fingerprints, photograph, and signature), voter's personal data and bar code with title number.

In the second semester of 2008, the Supreme Electoral Tribunal carried out the first phase of this program with a test vote in three municipalities, Fátima do Sul, in the state of Mato Grosso do Sul; São João Batista, in Santa Catarina; and Colorado D'Oeste, in Rondônia, all with around 15 thousand inhabitants in each. In these places, biometric registry of the vote and voters was carried out with biometric data in October's municipal elections. From this pilot project, the government made a calendar for the renewal of the national voter registry estimated to be within a period of 5 to 10 years. Giuseppe Janino, Secretary of Information Technology, of the Supreme Electoral Tribunal, said there exists the intention of combining the biometric system of elections with the technical development of digital certification in Brazil, which in theory allows voting through the internet. Janino says that this can be technologically possible, but he is considering the possibility of a problem in how viable the development is, especially due to coercion at the time of voting.

Lastly, the design of the new Brazilian passport is an innovation which allows the use of biometrics. Among 20 elements of security, the new passport in Brazil includes biometric data support which makes up a national data base which in accordance with the project, serves to facilitate the looking

up of data in border posts. A news bulletin from the Brazilian Federal Police says that these changes follow the latest demands and international security regulations established by the International Civil Aviation Organization (OACI), linked to the United Nations in charge of regulating the matters relative to the validation of civil documents, permits and trips.

iii. Relevant Actors

Taking into account the previous exposition, a follow-up of the main actors who participate in the application of the Brazilian national identification document (RIC) is emphasized. It is necessary to emphasize that these actors are understood as public or private entities; also, they are public figures who are linked to the Legislative bodies researched. It is understood that these actors represent spheres of influence for the implementation of the document, concentrating the articulation of common interests and of disputes and tensions that make up the scene:

Pedro Simón, Senator: Senator who proposed the law project which brought about the 9454 Law of 1997, which instituted the Brazilian national identity document. He was not only involved with the law project but with the fulfillment of the project in the Congress.

William Woo, Federal Deputy: Vice-president of the Public Security Commission and fighter against organized crime, representative who has acted firmly for the implementation of the document.

Marcos Elias Araújo, Director of the National Identification Institute: author of the project that was the foundation for the law project of Pedro Simón (It is important to mention that this institute is linked to the Federal Police Department).

National Association of identification Institute Directors (ANDI): participated in the redesign of the project for the application of this document.

Brazilian Association of Digital Identification Technology Businesses (ABRID): has stimulated the implementation of the document and to the businesses which are participating in projects related with the use of biometrics in government systems, whether it is the RIC or others. Among the businesses which are worth mentioning are NEC Brazil (linked to the AFIS national identification system, and Akyiama Soluções Tecnológicas, related to the use of biometrics by the Supreme Electoral Tribunal).

State Institutes of Identification and Public Notaries: Currently the 27th State institutes are provided information with the goal of participating in the issue of the RIC.

State Transit Departments (DETRANS) and Contran (National Transit Council): currently all of the DETRANS extract digital data of Brazilian citizens for the expedition and renewal of the National Housing Department. It is technically possible for personal data to be sent to the RIC database, but there are no formal agreements for this.

Supreme Electoral Tribunal (TSE): currently the process of changing election heads which includes biometric data is being carried out in the entire country. There exists a formal agreement for the transference of said personal data to a data bank system of the RIC, but with technical differences in

the way in which fingerprints are captured (with a roller or with a digital scanner). Such differences can make the use of TSE data inaccessible to the Ministry of Justice databanks.

Unimed Paulista: a private health service which uses biometrics to register users, control of appointments and tests. According to information from the business, it has 16 million clients and 73000 registered businesses in all of Brazil.

Executive Committee of the National Civil Identification Registry Commission: established by the 7166 law of may5, 2010 for the regulation of law 9545 in 1997, and put in practice the implementation of the document. Although the meetings are not public and public audiences have not taken place, the indirect contacts with this committee appear to be an interesting avenue for the design of strategies for the creation of public policies. Its creation had as an objective to achieve the dissolution of tension present in the implementation of the RIC due to the dispute between considering the identification as something criminal or civil. From the announcement in 1997 until the creation of this executive committee, the implementation of the document was almost strictly linked to the area of security. With the creation of the commission, ministries in social areas began to participate. It is in this sense that 14 years after the creation of the law which establishes the RIC document, today is an opportune moment for it to influence public policies, not only because the implementation of it is progressive, but because for the first time it appears to have an aperture into the political space in order to do so. Next, the composition of this commission is highlighted: Ministry of Justice, will coordinate the committee and is responsible for the RIC databases; the Defense Ministry; Tax Ministry; Planning Ministry; Budget and Administration; Work and Employment Ministry; Social Security Ministry; Social Development and Hunger Combat Ministry; Minister of Health; Minister of Cities; Agriculture Development Ministry; Secretary of Human Rights of the Presidency of the Republic; Civil House of the Presidency of the Republic, and the National Information Technology Institute – ITI. Also, the right to the participation of a geographic regional representative of the civil state and local identification bodies, members of the National Civil Identification Registry System and the National Identification Institute of the Federal Police is guaranteed by law. The committee also can invite representatives of the bodies or public and private entities to participate in their activities.

iv. Technology

There are various technologies involved in the national identification document (RIC). In general, the documents that have used biometric technology, previously referred to (RIC, Detran and TSE), work with fingerprint or facial recognition identification, not considering other possibilities such as iris scanning for example.

The Civil Identification Registry is also characterized by being a smart card. This will contain 2 chips in its interior, one functioning as an interface without contact with an information machine reader (via RFID) and the other with contact. The biometric data for example will be fed to the chip with contact, such as with the face, the four flat fingerprints and the signature. With respect to the treatment, the chip without contact serves as a simple identification of citizens and can be used in situations such as passing through electronic turnstiles for entering commercial centers, football stadiums, or use in transportation systems. The second chip functions as a stronger identification (called strong authentication), relative to match-on-card issues (a technology in which the biometric

verification takes place within a smart card). In this case, the RIC can be used for signing digital documents or contract changes regulated by the Central Bank, among many other uses. The contact interface follows the ICAO (Civil Aviation Organization) norms, which are used for passports and can be used in international requests. For all these RIC procedures, the card has a digital certification and encryption system. The digital certificate is a procedure that certifies the identity of a person or institution on the Internet and in Brazil is used by law by the Brazilian Government. The Institute of Information Technology of the federal government is responsible for this certification through the ICP-Brazil (Public Key Infrastructure).

4.3 Identity cards and identification systems in Mexico

4.3.1 How the project mapping and expedition of the personal identity card in Mexico was carried out

i. Researchers and lines of investigation

Objectives:

- a) Explore the existing research, studies and publications created by researchers that deal with the project theme and expedition of the Personal Identity Card in Mexico, whether they settle in Mexico, are Mexicans and write outside Mexico, or are foreigners and write about Mexico.
- b) Identify databases which contain information on the theme of biometric citizen identification, specifically about the project and the expedition of the Personal Identity Card in Mexico.
- c) Identify lines of investigation about the project and expedition of the Citizen Identity Card and identify if they are of direct or indirect importance to the current research.

Sources consulted:

a)Network of Latin American, Caribbean, Spain and Portugal Scientific Magazines (Redalyc) – Databases with scientific magazines of different areas of knowledge.

b) Spiral. Studies about State and Society – Magazine of the Centro Universitario de Ciencias Sociales y Humanidades de la Universidad de Guadalajara¹⁶. (The Guadalajara University Center of Social and Human Sciences)

c) Centre for Latin American Research and Documentation (CEDLA) - An inter-university institute founded by the University of Amsterdam with the goal of developing social research about Latin America in anthropology, economy, history, political science, human geography and political science ¹⁷. One of the publications of the Center is the magazine *European Review of Latin American and Caribbean Studies*.

d)Scielo (.org.ve) – Scientific Electronic Library Online: a virtual library which covers different areas of knowledge.

¹⁶ http://www.publicaciones.cucsh.udg.mx/pperiod/espiral/index.htm

¹⁷ http://www.cedla.uva.nl/10_about/institute.html

- e) Surveillance and society (.org) Magazine focused on the publication of innovative and transdiscipline works about surveillance studies¹⁸.
- f) Duke Law School Institution dedicated to the education in law accredited to Duke University¹⁹.
- g) Connections with history Weekly collaboration of the National Institute of Mexican Revolution Studies (INERM) from the newspaper Excélsior on the history of Mexico.
- h)Dianlet Foundation Platform for document resources from the University of Rioja.
- i) Agrarian Tribunals Magazine Quarterly publication edited by the Superior Agrarian Tribunal of Mexico.

Key words used in the search:

The search was done through the introduction of key words in Internet search engines, as well as specific virtual libraries. The words with which the search developed were partially:

- a) Biological identification : Identificación biológica
- b) Identification Card : Cédula de Identidad
- c) Citizenship: Ciudadanía
- d) Security: Seguridad (Public security, private security, focus of security, focus of insecurity)
- e) Surveillance: Vigilancia (Panoptic, Sinoptic, electronic surveillance, surveillance system)
- f) Identity registry: Registro de identidad
- g) Civil registry: Registro civil
- h) Personal data: Datos personales
- i) Monitored, Technologies and video-surveillance devices : Monitoreo, Tecnologías y dispositivos de videovigilancia
- j) Social classification, Discrimination: Clasificación social, Discriminación
- k) Exclusion, Categorization, Profiles: Exclusión, Categorización, Perfiles
- l) Regulation of video-surveillance technologies (legislation, law, civil framework) : Regulación de tecnologías de videovigilancia (legislación, ley, marco civil)
- m) Civil Liberties: Libertades civiles
- n) Human Rights: Derechos humanos
- o) Citizen's Reights: Derechos ciudadanos
- p) Social Control: Control social (Control)
- q) Capacity of interference : Capacidad de intromisión (Space being watched : Espacio vigilado)

Observations: With the goal of obtaining a panoramic idea about the academic work in regards to the Personal Identity Card in Mexico, a search of the researchers that have published on the theme was carried out. In this sense, and as described with more detail later on, the general observation that is possible to see is that in the academic environment the studies done in regards to the Identity Registry are still scarce. For the specific case of the project dealing with the personal identity card and its expedition, the academic efforts that have been done offer a description on the theme, however not deeply within this analysis, the latter occurred due to the short time that has passed since the official announcement of the project and the putting in place the expedition of the card.

ii: Relevant Agents

Objectives: a) Identify the relevant agents in the implementation of the Personal Identity Card in Mexico in order to locate its position within and the form in which it interacts.

b)Identify and search databases in which information is found about the project and expedition of the Personal Identity Card in Mexico.

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¹⁸ http://www.surveillance-and-society.org/ojs/index.php/journal/about/editorialPolicies#focusAndScope

¹⁹ http://www.law.duke.edu/about/mission

In Mexico, the Personal Identification Card has been a controversial theme since it was first mentioned in 2009, the agents involved in this controversy have been people and public institutions. The following are the main ones identified:

- a) Felipe Calderón Hinojosa, President of the United Mexican States. President of the Republic elected for the 2006 -2012 period, member of the National Action Party (PAN).
- b) SEGOB: Secretaría de Gobernación (Secretary of the Interior). Department of the Federal Executive branch responsible for the political development of the country and contributing to the leadership of the relationship between the Federal Executive branch with the other branches in the Union.
- c) IFAI: Federal Institute for Public Information Access (Instituto Federal de Acceso a la Información Pública). Institution created to guarantee the right to public information for citizens and the protection of personal data that are in the hands of the Federal Government.
- d) IFE: Federal Electoral Institute (Instituto Federal Electoral). An autonomous body in charge of the federal election organization and expedition of the Voter Registry Card with Photograph.
- e) COLEF: Northern Border College (Colegio de la Frontera Norte). The Northern Border College is a research center whose mission is to generate scientific knowledge about the regional phenomenon from the border between Mexico and the United States.
- f) Chamber of Deputies. LXI Legislature: Chamber within the Congress made up of National Representatives chosen every three years.
- g) RENAPO National Population Registry: Institution for the registry of personal data that is brought out by the Interior Secretary granting identity to its citizens.

Locating these actors has been a product of the following communication media written about the Personal Identity Card. The key words with which the information was found are the following:

- a) Cédula de identidad (Identification Card)
- b) Datos biométricos (biometric data)
- c) Renapo, Registro Nacional de Población (National Population Registry)
- d) Ley General de Población (General Law of the Population)
- e) Padrón Electoral (Electoral Role)
- f) Manejo de datos personales (personal data management)
- g) Confidencialidad de datos personales (personal data confidentiality)
- h) Diario Oficial de la Federación, decretos (Official Diary of the Federation, decrees)
- i) Registro de menores de edad (registry of minors)
- j) Credencial para votar (voter card)

The seven agents that were found are public entities and mainly of a political nature, backed up by Government institutions, non-government organizations or universities.

iii Technology. Description of the Citizenship Identity Card

Objectives:

a) Describe the technological and technical characteristics of the Personal Identity Card and steps of its expedition.

Sources consulted:

a) Interior Secretary website (SEGOB) Department of the Federal Executive branch responsible for the political development of the country and contributing to the leadership of the relationship between the Federal Executive branch with the other branches in the Union.

- b) Federal Institute for Public Information Access website (IFAI) Institution created to guarantee the right to public information to citizens and the protection of personal data that are in the hands of the Federal Government.
- c) Federal Electoral Institute webpage (IFE) An autonomous body in charge of the federal election organization and expedition of the Voter Registry Card with Photograph.
- d) Chamber of Deputies LXI Legislature website : Chamber within the Congress made up of National Representatives chosen every three years.
- e) National Population Registry website (RENAPO) authority of personal data registry that is brought out by the Interior Secretary granting identity to its citizens.

Key words searched for:

a) Cédula de identidad : Identification Card

b) Datos biométricos: Biometric data

c) Renapo, Registro Nacional de Población: National Population Registry

d) Ley General de Población : General Law of the Population

e) Padrón Electoral : Voter Role

f) Manejo de datos personales : Personal data management

g) Confidencialidad de datos personales :confidentiality of personal data

h) Diario Oficial de la Federación, decretos : Federal Official Diary, decrees

i) Registro de menores de edad : registry of minors

j) Credencial para votar : Voter card

Observations: For the creation of the citizen identity card, a national database of 84 million birth certificates was put together by the civil registries of all of the country's states. This database has been made to discourage the forgery of identity and to have the birth certificate information verified, and which in 2001 was linked to the CURP as a unique identification for every person.

The official objective of the Card has been to procure the unified identification of all citizens, concentrating the data that forms their legal identity, linked with biometric data in order to incorporate fingerprint registry, face and iris of every Mexican.

The goal of the Interior Secretary was to form a unique, secure identification document free of duplications. In this sense, it was argued that the identity of a subject can be plainly accredited while unifying data with biometrics, so that the SEGOB assures that the data is totally protected.

As will be analyzed later with more detail, news of the project gave way to different controversies in the country, nonetheless, even though it was questioned, on January 20, 2011, the Interior Secretary released a communiqué that informed about the legal conditions to begin the expedition of the Identity Card.

However, under the climate of questioning to which the project got off the ground, it is not the entire population that will be involved in the expedition process, only minors in some of the Federal entities. That is to say, due to the controversy of duplicate credentials, among the IFE and the SEGOB, the decision was taken to begin the expedition of the card only to minors.

From this then the National Population Registry (RENAPO²⁰, provides information about the Identification Card and how to obtain one.

To point out, the Card considers unique data to be:

- Confirmed data from the birth certificate (complete name of the child, birth date, complete names of the parents)
- Unique Population Registry Key (CURP)
- Photograph of the face
- Expiration date
- Unique Identification Card Number
- Iris scan of one eye, in a coded image²¹.

As the document is planned to be unique, the Card incorporates specific security measures in order to impede its duplication and with it the forgery of identity:

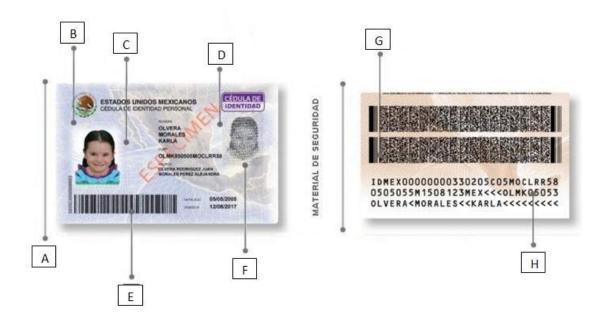
- A. Specialized design and HIGH SECURITY MATERIALS
- B. Invisible personal information (IPI)
- C. Security elements with HOLOGRAPHIC EFFECTS
- D. Recorded in the mica allowing BRAILE CODE
- E. Bar code with CURP
- F. RELIEFE PHOTOGRAPH formed with the CURP
- G. Double bar code with IRIS SCAN
- H. AGIL CODE READING for travelling²²

Image 2: Personal Identity Card for minors Source: National Population Registry page. Mexico

22 http://www.renapo.gob.mx/swb/swb/RENAPO/MedidasCEDI

²⁰ http://www.renapo.gob.mx/swb/swb/RENAPO/renapo

²¹ http://www.renapo.gob.mx/swb/swb/RENAPO/cedi



iv Norms and Legislation

Objectives:

- a) To explore the current state of norms about the forms of citizenship identity, specifically the case of the Personal Identity Card project and its expedition for minors in Mexico.
- b) Identify databases which contain information about the regulation of citizen identification, specifically for the case of the Personal Identity Card in Mexico.

The sources where it was possible to find the norms are the following:

- a) Interior Secretary website (SEGOB) Department of the Federal Executive branch responsible for the political development of the country and contributing to the leadership of the relationship between the Federal Executive branch with the other branches in the Union.
- b) Federal Institute for Public Information Access website (IFAI) Institution created to guarantee the right to public information to citizens and the protection of personal data that are in the hands of the Federal Government.
- c) Federal Electoral Institute webpage (IFE) An autonomous body in charge of the federal election organization and expedition of the Voter Registry Card with Photograph.
- d) Chamber of Deputies LXI Legislature website: Chamber within the Congress made up of National Representatives chosen every three years.
- e) National Population Registry website (RENAPO) authority of personal data registry that is brought out by the Interior Secretary granting identity to its citizens.

Keywords used in the search:

- a) Biological identification: Identificación biológica
- b) Identification Card : Cédula de Identidad
- c) Citizenship: Ciudadanía
- d) Security: Seguridad (Public security, private security, focus of security, focus of insecurity)
- e) Surveillance: Vigilancia (Panoptic, Sinoptic, electronic surveillance, surveillance system)
- f) Identity registry: Registro de identidad

- g) Civil registry: Registro civil
- h) Personal data: Datos personales
- i) Monitored, Technologies and video-surveillance devices : Monitoreo, Tecnologías y dispositivos de videovigilancia
- j) Social classification, Discrimination: Clasificación social, Discriminación
- k) Exclusion, Categorization, Profiles: Exclusión, Categorización, Perfiles
- l) Regulation of video-surveillance technologies (legislation, law, civil framework) : Regulación de tecnologías de videovigilancia (legislación, ley, marco civil)
- m) Civil Liberties: Libertades civiles
- n) Human rights :derechos humanos
- o) Citizen rights: derechos ciudadanos

4.3.2 Analysis of the identity registry in Mexico: norms that regulate, implications, problems, vacancies and actors

i. History of the project and of the expedition of the Personal Identity Card in Mexico.

In Mexico, the beginning of the consolidation of a modern state can be considered to originate from the "Laws of Reform", the legal framework for the expropriation to the Catholic Church the registry of persons, land and assets in the second half of the XIX century (González, 1988). The State took this responsibility with the expedition of the birth certificate by the Civil Registry, a document which became the official guarantee of personal identity (González, 1981).

There were basically three feasibility problems presented by the registry:

- a) Administrative differences among state and municipal governments
- b) Political difficulties in the entire country with War Reform and
- c) Widespread illiteracy in a territory with scarce communication media (Espinosa de los Monteros, 2009).

During the Porfiriato (1876-1910) it was possible to exceed previous difficulties since communication media and an internal market were constructed according to the dictatorship. A sector of the police was created to stop those who did not register in the Civil Registry, which was institutionalized in 1870 (Villegas, 1973). In 1890 there were Civil Registry offices in each of the federal entities, where the procedure was free. This allowed the development of what Dandeker (1990) calls the bureaucratic supervision of the population.

The Mexican Revolution (1910-1917) makes it difficult for the registries again, which were resumed at the end of the conflict. The post-revolutionary State implements obligatory registry and penalization for lack thereof. The records were filled out on standardized forms, which lasted until 1979. The implementation of the record not only created a tool for calculating the number of people and in this way guaranteeing an effective administration, but also legalized the protection of applicants and their decedents (Espinosa de los Monteros, 2009). In summary, as Torpey (2000) says, the nation state organizes the registry of its inhabitants with the purpose of controlling and safeguarding them, at the same time, allowing the possibility to divide national and foreign inhabitants. (Giddens, 1987).

In 1933 the Personal Identification Law was created which can be considered to be the first instance of the National Population Registry. This law had the effect of facilitating the registry and identification of all the country's inhabitants as well as their classification in criteria such as nationality, sex, age, occupation, marital status, citizenship and place of residence through the creation of a document that functions as proof of this data (Nieto, 2007).

In 1947, the General Population Law was created and gave the Secretary of the Interior the power to register the identity of the country's inhabitants and nationals who lived outside of it. With this then, the offices of the Population and Personal Identification Registry was established which was in charge of the emission of the Personal Identity Card. (Nieto, 2007).

During the 50's and 60's the Military Service Card was implemented for all males 18 years of age, which functioned as an official identification for the solicitation of documents or to carry out certain procedures. At one time, it was necessary to carry it at all times, since it could be required by official police as identification (Interior Secretary, 1982b). The driver license also was considered an official identification; however the lack of regulation in expediting it allowed the falsification of names and identities (Hernández, 2008).

In 1974, the General Population Law was created which was the basis for the creation of the General Director of the National Population and Personal Identification Registry on August 20, 1980, both left in the hands of the Interior Secretary for the emission of an identification called the Personal Identification Card (Nieto, 2007).

On the other hand, the voter card was implemented. In the beginning, it did not have a photograph or biometric data, and so it was easy to generate credentials with the goal of committing election fraud (Gómez, 1986). For the decade of the 90's, the Federal Electoral Institute (IFE) was created, and they implemented the photograph and fingerprint registry in order to reduce the risk of falsification. With it, the Voter Card with Photo was converted into a mechanism of official identification, a status reflected by the fact that 98% of the citizens were registered with the voter rolls (Becerra, 1997).

Political and electoral scandals, financial fraud and activities related to drugs led to the questioning of the voter card as a means of faithful identification. In fact, an individual could have more than one card with different data since the filters for avoiding duplicate credentials were weak. In response, the present century saw the implementation of the Unique Population Registry Key (CURP).

In 1996, a Presidential Agreement was signed in which the CURP is recognized as an obligatory personal identification element. The CURP is a key composed of letters and numbers associated with a national base of certified birth certificates. This characteristic has been a sign of its main weakness since it does not have biometric backup and is simply a numerical reference for procedures and not a mechanism of identification (Figueroa, 2003). Therefore, the voter card continues to be the most popular form of identification, even with the possibility of falsification and the misuse of its data, giving rise to the questioning about the capacity of the State and society to guarantee the identity of the population.

ii Relevant agents, actions and technologies involved in the project and expedition of the Personal Identity Card in Mexico

In the second half of the first decade of this century, the question of citizen identification goes back to being in the national debate, now in the context of security measures adopted by the United States since 9/11. The center of these policies has been the fear of new terrorist attracts, which has caused the United States to sign border agreements both with Canada as well as Mexico. Like that, in 2005, Mexico, the United States and Canada increased the existing agreements in the matter of security and created the North American Alliance for Security and Prosperity (ASPAN). This agreement considers the implementation of common strategies for achieving border security among

which is found an improvement in infrastructure and mechanisms of modernization linked to the answer before emergencies in the spheres of air and sea, as well as in the sphere of intelligence (Chabat, 2010).

In 2007, the worry of new terrorist attacks summed up the theme of drug trafficking and the increasing violence that in this area has been presented. The position in this sense is that the trafficking of drugs is an activity that by its informal and illegal characteristics, as well as the tendency toward criminal violence, constitutes a threat to the national security of both the United States as well as Mexico. It is in this context that negotiations on what is known as the Merida Initiative between the United States and Mexico begin. Approved in 2008, the Merida Initiative is a plan of collaboration which includes the delivery of 1.4 billion dollars to Mexico during three years. The objectives of this help would be directed to improving and modernizing security and justice institutions, as well as intelligence work in Mexico in three areas: 1) combat drug trafficking, terrorism and border security; 2) public security and application of the law; and 3) institutional construction and state of rights (Chabat, 2010:6)

The Merida Initiative expected to put a framework around the problem of trafficking drugs and the violence that goes with it. On the same level, in the sphere of internal policies, the form and way in which the measures of this type contribute to facing organized crime, modernizing justice and security institutions was problematic.

One of the main worries in this sense was the impact criminal violence had among the population. For example, of the most representative cases can be mentioned the one of Fernando Martí, son of one of the main businessmen in Mexico, who was kidnapped and killed in 2008. The case received lots of national media attention and was known by the population in general, given the social position of the Fernando's father.

Authors such as Arteaga (2001) point out that even this event can be seen as a detonator for decision making on the part of Mexican authorities, who consented to signing the National Agreement for Security, Justice and Legality. In August of 2008, the Federal Executive and State branches, the Congress, Federal Judicial Branch, representatives of the Municipal Presidents associations, communication media and civil society organizations, businesses, unions and religious groups signed the agreement.

In the agreement the necessity to reconstruct a tie between society and the authorities in order to confront problems such as impunity, corruption, institutional deterioration of the organisms in charge of public security, the lack of coordination between authorities in the matters of insecurity and violence is discussed, and with that, to contribute in eradicating crime. The intention of the agreement was to have an effective influence in the creation of policies in the matter of crime prevention, procurement and delivery of justice, readjustment into society, citizenship participation, intelligence and legislative analysis, control of trust and communication²³.

To reach these goals, the Federal Executive Branch has committed to reaching different objectives. Among these, the expedition of an Identity Card framed by its integration, in one system, the National Personal Identification Service. The difference between this card and other previous forms of identification consists of the incorporation of the iris scan to the biometric data already obtained.

The Interior Secretary was committed to moving forward on the expedition of the card within a three year period from the signing of the agreement. However, it wasn't until July 2009 when Felipe

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²³ Looked up on August 11, 2011 in: http://dof.gob.mx/nota_detalle.php?codigo=5057719&fecha=25/08/2008

Calderón Hinojosa, President of Mexico, announced the Project for having a system of unique identification, arguing that the main objective is to allow absolute certainty of identification of all Mexicans, which is the right of the citizens and an obligation of the State established in the Constitution and the General Population Law²⁴.

News of the project gave footing to diverse controversies in the country, mainly in the political sphere. The discussions turned around several themes, and for one part, it was warned about the duplication of work invested in the expedition of a citizen identity card, since it was argued that the current Voter Card (expedited by the Federal Electoral Institute, IFE) serves as one of the main identifications in the country.

The position of the IFE was to delegitimize the figure of a new identity card and to oppose the Interior Secretary showing that it was not advisable to have two citizen identification cards with such similar data as the present voter card and the projected citizen identification card. The argument for this opposition was that the possession of the unique identification card could discourage the inscription of the citizens in the voter rolls. The Election Advisers considered that this could negatively impact the influx of citizens to the elections.

In a tone similar to the IFE in the Chamber of Deputies, the relevance of the new card and its possible negative effects to the voter rolls and the 2012 federal elections was argued. The question of the card was argued by the representatives of the opposition parties to the government: Institutional Revolutionary Party (PRI), Democratic Revolution Party (PRD), Green Ecology Party of Mexico (PVEM) and the Workers Party (PT).

The second issue was of an administrative character and turned around toward what instances of public and private character would be the ones to carry out the management and control of the administration of the card, in the case of issuing it. Different representatives of the political parties as well as the IFAI, expressed their disagreement before the choosing of a transnational business who was awarded the bid since it was assumed to be higher in cost, at the same time impacting negatively in the federal budget²⁵. On the other hand, a rejection is presented before the suggestion of creating a new autonomous organism which would handle the expedition of the cards. The IAFA opposed to this proposal arguing that in Mexico there exist institutions whose end is to insure the proper use and management of confidential data.

Linked to the administrative issues and as the worries that go with them, another group of themes circling around the controversy of the card can be found. The common thread of this group of themes was the possession and protection of personal data; the central problem which is noted was the use and control of personal data in a context in which the protection of data within the hands of the government, yet was a discussed theme while an adequate regulation for the possession of private data did not exist. In both cases the guarantees were questioned that citizens had with relation to the safeguard and use of their data. Like that, soon the signs emerged before the Interior Secretary, about the confidentiality with which data obtained for the identity card was managed,

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²⁴http://www.gobernacion.gob.mx/es/SEGOB/Sintesis_Informativa?uri=http%3A%2F%2Fwww.SEGOB.swb%23swbpress_Content%3A1549&cat=http%3A%2F%2Fwww.SEGOB.swb%23swbpress_Category%3A1

http://www.jornada.unam.mx/2009/11/25/index.php?section=politica&article=011n1pol,

since in the media information leaked about the fact that one of the businesses which was awarded a contract to bring out the card was investigated in the United States for having incurred faults in cybernetic security²⁶.

The position of the IFE in this point coincided in alerting to the importance of the confidentiality of personal data suggesting that by carrying out a new card, such data was guarded by the National Population Registry (RENAPO). However, emphasizing the national scene of the federal government, at the end of 2009, there were advances in the project for the identification card (for example, bidding of businesses), even when the opposition in different spheres was evident, and even when the Congress had not approved funds for financing the card, and even when the Federal Institute for the Access of Information still had not finished its analysis on the topic of personal data protection.

The response of the Interior Secretary, before the series of signs referred to earlier, consisted in defending the card project, even when from the IFAI it was considered that this institution had not taken in consideration the process of guaranteeing the confidentiality of the data. Facing this statement, the Interior Secretary declared to the media that it was in communication with the IFAI.

In this context of issues, the media began to circulate information on the possibility of an agreement between the Interior Secretary and the Federal Electoral Institute for the emission of only one mica which serves as an identity card and a voter card, in order to eliminate the duplication of citizen identification cards.

The main reaction to this type of information was the call of some legislators to include the Senate Interior Commission and the heads of the National Commission on Human Rights, as well as the commissioner president of the Federal Institute for the Access of Information (IFAI) in the conversations between the Interior Secretary and the IFE.

The perception among legislators was that the fusion of the election card with the biometric data that the Interior Secretary was expected to gather, was a delicate theme. With that, representatives of the opposition political parties such as the PRD (Democratic Revolutionary Party) and the PRI (Institutional Revolutionary Party), questioned the possible usage by the police of information gathered by the government through the identity card and in reference to the PRI manifesto, its rejection for the inclusion and concentration of what was considered to be an excessive and unjustified amount of biometric data in only one official identification card²⁷.

The opposition parties outlined different points, among them, the emphasis on the fact that the IFE could lose autonomy and independence if the elector card was conditioned to be included in the Interior Secretary database. At the same time, it would be the Secretary who would have control of the voter rolls database, which would not guarantee good use of the data. In this context of unanswered questions, the IFE advisers and the majority of the political parties agreed to suspend

http://www.jornada.unam.mx/2010/01/20/index.php?section=politica&article=008n2pol http://www.jornada.unam.mx/2010/02/17/index.php?section=politica&article=007n2pol,

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²⁶ http://www.jornada.unam.mx/2009/12/15/index.php?section=politica&article=003n1pol

talks with the Interior Secretary and not agree to the agreement for the elector card with photo to be converted into the identity card²⁸.

At the beginning of 2011 and even though there was an environment of criticism to the project, on January 20, the Interior Secretary spread a communication in which it informed of the existence of legal conditions for beginning the expedition of the Identity Card. This was possible due to the publication of the "Decree for that which reforms and the addition of different dispositions of the General Law of the Population Rules" published in the Official Diary of the Federation one day earlier²⁹.

This decree consisted of reforms to the General Law of the Population Regulations, which made it possible to collect the iris image and more than one fingerprint by the National Citizens Registry. However, as referred to earlier, under a climate of issues which resulted in the creation of the card project and the unification of the elector card with it, the total population will not be involved in the expedition process, only minors in some federal entities. Still, the Card will not be a document which threatens the voter roll citizen's registry, but will only include Mexicans between the ages of 4 to 17 years old.

The designation of the Federal Government in this sense is what the Personal Identity Card for minors would be the first official identification that clearly is accredited before any Mexican authority, which will allow procedures and services such as education, health and passport expeditions run smoothly. The card for minors is presented to public opinion as a mechanism of security, given that the biometric data (10 print, iris photo of both eyes and photograph of the face) is linked, through the CURP (Unique Population Registry Key) to the legal identity data (birth certificate or naturalization letter), and guarded by the National Population Registry (RENAPO) avoiding with it the forgery of the identity of minors, besides it identifies the parents of children under 18³⁰.

Without a big explanation, it was also announced that the Federal Government would begin the expedition of the card only in some states (Baja California, Colima, Chiapas, Guanajuato, Jalisco y Nuevo León) and will later expand the coverage to the rest of the country. The RENAPO stated that the registration of infants is not obligatory, however, it is planned that the project will have ample coverage through the registration process of minors free of charge and in their own public education schools as well as in the offices of the Civil Registry.

The reactions to the announcement of the expedition came quickly, the critics turning on different points, but it may be hazardous to state that there exists a generalized perception that the expedition of the card was a decision not taken into account, in a serious way, from the different positions of the agents that questioned the project from its announcement.

On the other hand, the IFAI continued to point out the possibility of an invasion of privacy in the mechanism of the Card. However, facing these points also were opinions around the possible benefits of this resource. For example, UNICEF (United Nations Children's Fund) stated that a good use of the card would strengthen the right to the identity of minors³¹. In a similar tone, the civil association "Citizens For a Common Cause" said that the card is necessary for strengthening

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²⁸ http://www.eluniversal.com.mx/nacion/176153.html

²⁹ http://dof.gob.mx/nota_detalle.php?codigo=5174983&fecha=19/01/2011 Checked July 17, 2011.

http://www.renapo.gob.mx/swb/swb/RENAPO/Beneficioscedi

³¹ http://www.milenio.com/node/621419

³² According to the internet page: http://www.causaencomun.org.mx.Citizens for a Common Cause is an independent

the security of the entire population, in particular, children. The president of the association said it was necessary to eliminate the resistance to the card in order to insure the "right of identity" of the people. Just like that, the approval of the card came from diverse agents; even academic institutions such as the Northern Border College (COLEF) were involved in moving forward with the card. In the case of COLEF, its participation would consist of delivering the document in the city of Tijuana in the state of Baja California³³. Even the IFAI recognized that the adequate handling of the card for minors would be something that will help avoid kidnappings of minors since identification can be proved in a way that today, is not totally possible without the card. The repeated designation was necessary to count on a normative framework that allowed the adequate use of data in which the IFAI assured, as well as the recent approval of the Federal Law for the Protection of Personal Data, requiring regulation corresponding to the law, for which in June 2011, expedited this regulation³⁴.

At the same time, representatives of the political parties PRI, PVEM and PT continued to criticize the iris registry for minors, considering that this action is not secure due to the misuse that could be done to the data obtained. At the beginning of March, 2011, a constitutional controversy was interjected in the Chamber of Deputies because of the Executive decree which modified the Population Law Regulations in order to allow the registration of ten fingerprints and iris image. The designation of the legislators is that the Executive exceeded his authority since the General Population Law does not take into account an identity card for minors and its expedition violates the rights to personal data protection of this group in the population. The controversy was based on the proposals of deputies Jaime Cárdenas (PT) and Pablo Escudero (PVEM), who denounced legal violations in the identification project, also that there is an unresolved sector of problems operating in the area of guarding personal data³⁵.

A short time after different non-governmental associations met the Interior Secretary, the Subsecretary for Legal Affairs, the Sub-secretary for Human Rights and the Sub-secretary of the Population, Migration and Religious Affairs. The argument of these officials is again, the defense of the card process and the argument is the same one used on other occasions: the data of the minors is secured by all means that the National Population Registry and the Card have.

At the end of the writing of this project (September, 2011) the President of the Republic had given the first identity cards in states such as Guanajuato, Baja California and Sinaloa stating that the document is safe and not forgeable, as criticized with the arguments within the Chamber of Deputies. In its defense the President, accompanied by the Interior Secretary, Francisco Blake Mora, who also had established communication with the IFAI and the Chamber of Deputies, tried to convince about the effective protection of the minor's personal data.

Finally, as mentioned earlier, the President of the Republic gave the first identity cards and it is planned that for the final term in 2012, 26 million children will have the document, involving

association, without political affiliation that promoted the participation of citizens in topics of public issues of national interest, seeking to create a more active and prosperous society as well as more democratic institutions. It is presided over by Ma. Morera de Galindo and presents a proposal bassed on three things: Deelopment of the Citizen, The DEmanding of Transparency and Surrendering of Accounts, and Promotion of a State of Rights. Founded in 2010.

³³ http://www.eluniversal.com.mx/notas/739734.html

³⁴ http://www.eluniversal.com.mx/notas/740779.html

³⁵ http://www.eluniversal.com.mx/nacion/184095.html

sectors of civil society such as the association Common Cause for the spreading of information about the Card.

Although it appears to be that the goal is a bit too far remote to what exactly occurred, The First Supreme Court of Justice of the Nation rejected the controversy that came out of the Chamber of Deputies against the creation of the Identity Card. The reason is that the anticipated proceedings by law for the presentation of resources before the maximum court of the nation, since it only had the signature of the president of the Chamber at the time Carlos Ramírez Marín³⁶.

ii Legal framework of personal data protection in Mexico and the Personal Identity Card

With the protection of data, there exists a revision of the existing norms, allowing it to state that as mentioned in the case of CCTV in Mexico, there exists diversity in federal and state laws that make up the legal framework in the matter of the protection of personal data.

In Mexico, the legal framework that regulates personal data is general; however, contrary to the case of cameras for video surveillance, in the case of the identity card, the norms are more specific since the identification of people in Mexico is a theme that today acquires a momentous relevance in the development and execution of different public policies. The same as all nations, Mexico has the urgent obligation of offering public and national security; attend efficiently to the immigration problem; as well as the necessity of making legal and technological guarantees directed to the electoral certainty in the democratic processes of renewal of governmental authorities. That is why there has been a special emphasis on transparency, being held accountable to the public, the combat of corruption and the protection of personal data.

In the last decade, Mexico arrived in concert with the countries that have experienced a democratic transition and as a result, acquired a larger participation and expectation with respect to the political phenomenon.

The weakening of a political regime not only because of the passage of time brought with it the achievement of the renewal in the implantation of public policies. A notable example of this concerns transparency, the being held accountable to the publec, the combat of corruption and the protection of personal data, in whose development the design of a legal structure is required and to put forward an institutional-administrative model.

Initially, the legal structure needed constitutional fundamentals on which the new institutional machinery could be supported; however, this supposition wouldn't be fulfilled thoroughly until after a certain time, since the latent concern of the new government was centered in the operational capacity of its agenda.

It is important to state that the legal framework of transparency and the protection of personal data was debated and fully consulted, however, its implementation stayed connected and confused in the same law; but after which personal information in possession of individuals was regulated.

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³⁶ http://www.informador.com.mx/mexico/2011/320634/6/corte-desecha-juicio-contra-cedula-de-identidad.htm

In regards to national identity documents, it must be stated that in Mexico, several official documents for the purpose of personal identification of individuals and Mexican citizens are issued. In this sense, some examples are the voter card with photo, the passport and national identity card.

The Federal Electoral Institute is in charge of issuing the document which authorizes the exercising of political-electoral rights of the citizen, the State Department does the expedition and processing of the passport and the Interior Secretary is in charge of issuing the National Identity Card.

It is important to point out that in Mexico there exists diversity in federal and state laws which integrate the legal framework in the matter of personal data protection that frames the specific norms of the registration and identification of the population such as:

Political Constitution of the Mexican United States.

- Articles 6, 7, 16, 20 and 73, section XXIX-O

International Treaties signed by the President of the Republic ratified by the Senate of the Republic.

- Articles 12 and 19 of the Universal Declaration of Human Rights, proclaimed by the Parliament of the UN in its Resolution 217 A (III) of December 10, 1948.
- Articles 14, 17 and 19 of the International Pact of Civil and Political Rights of December 16, 1996, approved by the Senate of the Republic of December 18, 1980, according to the decree published in the Official Diary of the Federation on January 9, 1981, coming into effect on June 23, 1981.
- Article 4 of the International Pact of Economic, Social and Cultural Rights of December 19, 1966, approved by the Senate of the Republic on December 18, 1980, according to the decree published in the Official Diary of the Nation on January 9, 1981, coming into effect on June 23, 1981.
- Articles 11 and 13 of the *Pacto de San José de Costa Rica* American Convention for Human Rights of November 22, 1969, approved by the Senate of the Republic on December 18, 1980, according to the decree published in the Official Diary of the Nation on January 9, 1981, coming into effect on March 24, 1981.
- Articles 12, 13, 16, 17 and 40.2, paragraph b) section VII of the Convention for Children's Rights of November 20, 1989, approved by the Senate of the Republic on June 19, 1990, according to the decree published in the Official Diary of the Nation on July 31, 1990, coming into effect on October 21, 1990.
- Articles 1302.5 and 2105 of North America Free Trade Agreement, approved by the Senate

of the Republic on November 22, 1993, according to the decree published in the Official Diary of the Nation on December 20, 1993.

- Relative understanding of commitments in regards to financial services from April 15, 1994, as well as article III bis from Appendix 1B, included in the final Act of the Uruguay round of multilateral commercial negotiations, and therefore, the agreement through which the World Trade Organization was established, approved by the Senate of the Republic on July 13, 1994, according to the decree published in the Official Diary of the Federation on December 30, 1994.
- Article 14 of the International Convention for the protection of migratory workers and their families rights, approved by the Senate of the Republic on December 14, 1998, according to the decree published in the Official Diary of the Federation on August 13, 1999.
- Articles 20, 41 and 50, as well as the appendix for the Agreement for Economic Association, Political Coordination and Cooperation between the Mexican United States and the European Community and its Member States, the Decision of the Joint Council for such agreement, and the Decision of the Joint Council for the interim agreement on Commerce and issues related to Trade between the Mexican United States and the European Community for June 26, 2000.
- Article 11-03.5 of the Free Trade Agreement between the Mexican United Sates and the Oriental Republic of Uruguay, approved by the Senate of the Republic on April 28, 2004, according to the decree published in the Official Diary of the Federation on August 14, 2004.

Federal secondary legislation

Administrative laws.

- Organic Law of the Federal Public Administration.
- Law for Press Crimes.
- Federal Radio and Television Law
- Statistic and Geographic Information Law
- Federal Law of Transparency and Access to Public Government Information.

- Federal Law for the Protection of Personal Data stored by Private Institutions (2010)
- Law for the verification, adjustment and computing of the Mexican Army services.
- Federal Law for the control of chemical precursors, essential chemical products and machinery to manufacture capsules, tablets and/or pills.
- Federal Rights' Law
- General Law of Ecological Balance and Environmental Protection
- Law for the promotion of book reading.
- Federal Telecommunications Law
- General Law of the Population
- Federal Law for the administration and alienation of goods of the public sector.
- Law of acquisitions, leasing and services for the public sector.
- Law for the rights of people of age.
- General Law of Social Development.

Regulations in the administrative field.

- Internal regulations for the Interior Secretary in regards to the National Registry of the Population.
- Regulations for the General Law of the Population
- Federal Law for the administration and alienation of goods of the public sector.
- Internal regulations for the Federal Competence Commission.

- Internal regulations for the Federal Telecommunications Commission.
- Internal regulations for the National Commission for Human Rights.
- Regulations for the General Coordination of Thesis Compilation and Systematization for the Supreme Court of Justice of the Nation.
- Regulations for the General Law of Ecologic Balance and the Protection of the Environment in regards to ecologic legislation.
- Regulations for Naval and Electronic Schools, Mexican Navy and Army Infirmary Schools, Mexican Army and Navy Engineering Schools, Naval Machinery Schools, Air Force Machinery Schools, Naval Medicine Schools and the Heroic Military Naval School.
- Internal regulations for the Treasury and Public Credit Department.
- Internal regulations for the Secretary of Public Function.
- Internal regulations for the Secretary of Environment and Natural Resources.
- Internal regulations for the Secretary of Labor and Social Prevision.
- Regulations for the Executive Secretariat for the National Social Security System.
- Regulations for the Federal Law of Transparency and Access to Public Government Information.
- Regulations for the Organic Law of the Attorney General's Office of the Republic.
- Regulations for the Transparency and Access to Information for the National Commission of Human Rights.
- Regulations for the Federal Court of Administrative Justice.
- Internal Regulations for the Dr. Alfonso Quiroz Cuarón Center of Special Attention
- Regulations for Publications and Illustrated Magazines.

- Regulations for the Federal Law of Radio and Television, in regards to concessions, permits and content of radio and television transmissions.

Agreements in the administrative field

- Presidential agreement for the adoption and use of the Clave Unica de Registro de Población (CURP) from October 23, 1996, by the Federal Public Administration.
- Agreement which establishes the guidelines for the operation of the Commerce Public Registry.
- Coordination agreements signed between the Interior Secretary and each of the States.

Agreements in the administrative field

- Coordination agreements for the operation of the Commerce Public Register signed between the Secretary of Economy and each of the States.
- Collaboration agreement to participate in registry modernization and digital economy programs, signed between the Secretary of Economy and the National Association of Mexican Notaries.
- Coordination agreements signed by the Interior Secretary with each of the States, in order to contribute to the constitution of the National Testimony Registry, with the objective of having the possibility of using the information it contains
- Coordination agreements signed between the Interior Secretary with each of the States, as well as with the Metropolitan Autonomous University, the Supreme Court of Justice of the Nation, the National Commission for Human Rights, the Electoral Court of the Judicial Power of the Federation, the Chamber of Deputies and the National Polytechnic Institute, for the implementation and development of the Compilation and Consultation System for the National Legal System.

Guidelines in the administrative area

- Guidelines for the Transparency Commission and Access to Information for the National Supreme Court of Justice.

- Guidelines for the Transparency Commission and Access to Information of the Federal Judiciary Council, the Circuit and District Courts, in regards to classification criteria.
- Guidelines to be observed by institutions and organizations from the Federal Public Administration in the reception, processing, handling, outcome and notification of correction requests in regards to personal data produced by them.
- Guidelines to be observed by institutions and organizations from the Federal Public Administration in the reception, processing and handling of requests for the access of government information produced by them, as well as the outcome, notification and delivery of information if it is the case, with the exception of those requests for access to personal data and its correction.
- Guidelines to be observed by institutions and organizations from the Federal Public Administration in the reception, processing and handling, outcome and notification of access requests in regards to personal data produced by them, with the exception of those requests for access to personal data and its correction.
- Guidelines to be observed by institutions and organizations from the Federal Public Administration to present the Institute with their list of their personal data systems.

Civil and Commerce Laws

- Federal Civil Code
- Federal Code of Civil Procedures
- Commerce Code
- Federal Copyright Law
- Industrial Property Law
- Federal Labor Law
- Federal Consumer Protection Law

Civil and Commerce Regulations

- Federal Regulations for the Copyright Law
- Regulations for the Code of Commerce

Stock Market Laws

- Federation Fiscal Code
- Market Value Law
- Tributary Administration Law
- Saving Systems for Retirement Law
- Law for Bank Savings Protection
- Customs Law

Fiscal and Stock Market Regulations

Internal Regulations for the National Banking and Value Commission

Criminal Laws

- Federal Criminal Law
- Federal Law against Organized Crime
- Federal Law for the administration of insured, confiscated and abandoned goods
- General Law that establishes the bases of coordination of the National System of Public Security

Laws on Health

- General Health Law

Electoral Laws

- Electoral Institutions and Procedures Federal Law

Electoral Regulations

- Internal Regulations of the Electoral Federal Institution *State Legislation*
 - Criminal Codes for the States of Aguascalientes, Baja California, Colima, Distrito Federal, Estado de México, Guanajuato, Guerrero, Jalisco, Morelos, Nuevo León, Quintana Roo, Sinaloa, Tabasco, Tamaulipas, Yucatán and Zacatecas.
 - Public Security Law for the State of Aguascalientes
 - Video Surveillance Law for the State of Aguascalientes
 - Public Security Law for the State of Sinaloa
 - Law that regulates Video Surveillance in the State of Colima

(OCDE)

Guidelines on the Protection of Privacy and Transborder Flows of Personal Data, for September 23, 1980.

Declaration on Transborder Data Flows, for April 11, 1985.

Guidelines for Cryptography Politics, for March 27, 1997.

OCDE Guidelines for Security Systems and Networks of Information: towards a culture of security, for July 25, 2002.

(UE)

Agreement number 108 for the protection of people regarding the automated treatment of personal data, for January 28, 1981.

Modification to the Agreement for the protection of people regarding the automated treatment of personal data (ETS number 108) allowing access to European Communities, for June 15, 1999.

Additional protocol to the Agreement number 108, for November 8, 2001.

Guideline 95/46/CE of the European Parliament and the Council of October 24, 1995 in regards to the protection of people and the treatment of personal data and their circulation.

Guideline 97/66/CE of the European Parliament and the Council of December 15, 1997, regarding the treatment of personal data and the protection of intimacy in the telecommunications sector, which is regulated along with the Guideline 95/46/CE, through the Regulation (CE) number 45/2001 of the European Parliament and the Council of December 18, 2000, regarding the protection of people and the treatment of personal data by community institutions and organisms, and their free circulation.

(UN)

Resolution 45/95, the guidelines or directive principles for the regulation of computer files for personalized data, for December 14, 1990.

In that context, the norm about personal data protection in Mexico goes back to the Political Constitution of the Mexican United States, which would recognize the right to intimacy and privacy specifically in personal and familiar areas, as well as in those regarding property and possessions (address and papers)³⁷ and private communications.

³⁷ Así, el artículo 16° constitucional, en su párrafo primero, establece que: Nadie puede ser molestado en su persona, familia, domicilio, papeles o posesiones, sino en virtud de mandamiento escrito de la autoridad competente, que funde y motive la causa legal del procedimiento.

Within this general normative frame, the personal Identity Card for underage citizens did not contravened the general dispositions of identification of the population, on the contrary, it responded to that expressed in the Political Constitution of the Mexican United States (article 36), in the General Law of the Population (article 86 and 87) and the Organic Law of the Federal Public Administration (article 27) in regards to acknowledging the personal identity of each individual constituting its population. In addition, as it can be observed in the previous list, Mexico has signed international commitments with the UN and the OAS in defense of the Right for Identity.

The ways of guaranteeing this right vary, that is the reason why the Mexican government reformed the regulations of the General Law of the Population in order to issue the Identity Card for underage citizens. This is possible due to the publication of the "Decree through which several dispositions to the regulations of the General Law of the Population are reformed and added".

Such Decree consists of reforms on section i) of article 47, section g) of article 54, articles 59, 62 and 63, as well as the addition of a paragraph to article 52 to the regulations of the General Law of the Population, being described as follows:

Table 2. Reforms on the regulations for the General Law of the Population	
Rergulations before the decree ³⁸	Regulations after the decree ³⁹
R E F O R M S	
Article 47: About the citizens data stated in the	Article 47: About the citizens data stated in the
National Citizens Registry Office:	National Citizens Registry Office:
i) Photograph, fingerprint and signature of the citizen.	i) Photograph, fingerprint, iris scan and signature of the citizen.
Article 54: The Identity Card must include:	Article 54: The Identity Card must include:
a) Applicant's full name	a) Applicant's full name
b) Sex	b) Sex
c) Place and date of birth	c) Place and date of birth
d) Parents' full names	d) Parents' full names
e) Clave Única de Registro de Población (CURP)	e) Clave Única de Registro de Población (CURP)
f) Applicant's photograph	f) Applicant's photograph
g) Applicant's fingerprint and signature if	g) Codification of the image of the iris

 $[\]frac{^{38}}{\text{http://www.imldb.iom.int/viewDocument.do?id=\%7B4E02258C-8466-4A4F-AD72-DFADC0E4F602\%7D}} Consultado el 16 de julio de 2011$

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³⁹ http://www.diputados.gob.mx/LeyesBiblio/regley/Reg_LGP.pdf Consultado el 16 de julio de 2011

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possible	h) Date and place where the document is being
h) Date and place where the document is being issued	issued
Article 59: For their registration in the National Citizens Registry, all Mexicans over 18 years of age, as well as those under it who request their Personal Identity Card, must present the application form for such effect, in the National Citizens Registry Office.	Article 59: For their registration in the National Citizens Registry, all Mexicans over 18 years of age, as well as those under it who request their Personal Identity Card, must present the appropriate application form and carry out any other procedure determined by the National Citizens Registry Office for such effect.
Article 62: When turning in their application before the National Citizens Registry Office for their registration in the National Citizens Registry, citizens must include their signature and fingerprints, in accordance to the techniques issued by the Office, as well as proof of address. In the case of underage citizens, at least their fingerprints must be included.	Article 62: When turning in their application before the National Citizens Registry Office for their registration in the National Citizens Registry, citizens must include the following in accordance to the techniques issued by the Office: I. Signature and fingerprints II. Iris scan III. Proof of address under oath
	In the case of underage citizens, they must include their fingerprints as well as the image of their iris.
Article 63: Applications must be turned in at the offices assigned for that effect. There will be at least one National Citizens Registry Office in each state to attend to all the requests. Federal or local authorities will be able to assist, as long as there is an agreement.	Article 63: Applications must be turned in through the mechanisms determined by the Office for that effect. There will be at least one National Citizens Registry Office in each state to attend to all the requests. Federal or local authorities will be able to assist, as long as there is an agreement.
ADDITIONS	
Article 52: To register underage citizens, it is necessary to collect data for Mexicans under 18 years of age from the Civil Registry Office, consisting on the following:	Article 52: To register underage citizens, it is necessary to collect data for Mexicans under 18 years of age from the Civil Registry Office, consisting on the following:
a) Full name	a) Full name

- b) Sex
- c) Place and date of birth
- d) Date and place where the document was issued
- e) Parents' full names and their nationality
- f) Information about the location of the birth certificate in the Civil Registry Office
- g) Clave Única de Registro de Población (CURP)

- b) Sex
- c) Place and date of birth
- d) Date and place where the document was issued
- e) Parents' full names and their nationality
- f) Information about the location of the birth certificate in the Civil Registry Office
- g) Clave Única de Registro de Población (CURP)

In addition, such a registry will have the photograph, fingerprints and image of the iris that the National Citizens Registry Office collects for that effect.

iii Studies and research.

As it can be observed in section ii, the information used comes from national newspapers and news bulletins or official press releases. It is this way because there are practically no academic texts about the identity card, due to the short time it has been in use.

Amongst the academic publications available, a Mexican researcher, Nelson Arteaga Botello was located, as well as two Canadian ones: Colin J. Bennett and David Lyon, whose publications have a direct relation to the topic in regards to the creation of identity cards which incorporate biometric data, with possibilities of social classification.

Within the field of academic production, three other descriptive articles were found. One about the origins of the registry office, by Roberto Espinoza de los Monteros Hernández, another on the topic of national population registry, by Héctor Nieto Araiz and a last one on legislation for data protection by Teresa M. Geraldes da Cunha Lopes. All three texts have a direct connection with the research, since they provide a general historic context. Finally, a last article by Beatriz Figueroa Campos was found. She is carrying out an analysis on population register in Mexico, and the necessity of a total register. The importance of such analysis is quite meaningful since it deals directly with the topic matter.

Summarizing, 11 publications by 9 authors were found, 5 of which are Mexican working in Mexico, 2 are Canadian working outside Mexico and 2 are Americans also working outside Mexico.

The lines of research of these authors are numerous, but it can be noticed that the publications found have no direct conflict of interests amongst them in their problematic. However, it is possible to identify at least 3 different lines of investigation, each with diverse secondary topics:

Line of investigation 1: Security mechanisms in Latin America and the United States (4 texts). Secondary topics:

Identity registry
Fight against delinquency and terrorism
Biometric records

Line of investigation 2. Surveillance systems (2 texts)

Secondary topics:

Structural violence and social exclusion Social classification

Line of investigation 3. Public health and society of control (1 text)

Line of investigation 4. Personal data protection (1 text) Secondary topics:

Data protection legislation

Line of investigation 5. Official Registers in Mexico (3 texts)
Secondary topics:

Identity registry
Underage citizens