

## Rebuilding a Statistical Apparatus at a Critical Juncture

Argentina and Brazil, from the Great Depression to the Post-World War II Period

*Reconstruire un appareil statistique d'État à un moment critique. Une comparaison des cas argentin et brésilien, de la Grande Dépression à l'après-  
Seconde Guerre mondiale*

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**Electronic version**

URL: <http://>

[histoiremesure.revues.org/5797](http://histoiremesure.revues.org/5797)

DOI: [10.4000/histoiremesure.5797](https://doi.org/10.4000/histoiremesure.5797)

ISSN: 1957-7745

**Publisher**

Éditions de l'EHESS

**Printed version**

Date of publication: 30 June 2017

Number of pages: 161-190

ISBN: 978-2-7132-2701-1

ISSN: 0982-1783

Electronic distribution by Cairn



CHERCHER, REPÉRER, AVANCER.

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## **Rebuilding a Statistical Apparatus at a Critical Juncture Argentina and Brazil, from the Great Depression to the Post-World War II Period**

**Claudia DANIEL** \*

**Abstract.** Amidst the political and economic tensions that culminated in World War II, the Brazilian and Argentine states embarked within a few years of each other on significant reforms of their statistical services. In Brazil, the reform gave rise to a new and completely original statistical institution. Argentina, under the pressure of similar statistical challenges, launched a number of failed reorganization attempts. The goal of this article is to analyze and compare the restructuring of both statistical apparatuses. This paper explores how the pillars of the edifice of public statistics in each country were historically constructed, in order to understand the basis of its social legitimacy and credibility.

*Keywords.* statistical apparatus, statistical reform, Argentina, Brazil, comparative study

**Résumé. Reconstruire un appareil statistique d'État à un moment critique. Une comparaison des cas argentin et brésilien, de la Grande Dépression à l'après-Seconde Guerre mondiale.** Dans le contexte de tensions politiques et économiques qui a précédé la Seconde Guerre mondiale, les États brésilien et argentin ont engagé, en l'espace de quelques années, des réformes importantes de leurs services statistiques. Au Brésil, la réforme a donné lieu à une institution nouvelle et complètement originale. Confrontée à des défis statistiques similaires, l'Argentine a quant à elle vu échouer ses nombreuses tentatives de réorganisation. L'objectif de cet article est d'analyser et de comparer la restructuration des deux appareils statistiques. En revenant sur la façon dont les institutions de la statistique publique se sont historiquement construites dans chacun des deux pays, cet article cherche à mettre en lumière les fondements de leur légitimité sociale et de leur crédibilité.

*Mots-clés.* appareil statistique, réforme de la statistique publique, Argentine, Brésil, approche comparative

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Amidst the political and economic tensions that culminated in World War II, the Brazilian and Argentine states embarked within a few years of each other on significant reforms of their statistical services. In the first case, the reorganization went so deep that it gave rise to a new entity with a completely original institutional physiognomy, which could not be easily categorized within the parameters of the debates current at the time regarding the forms of statistical organization. Argentina, however, under the pressure of statistical challenges similar to those faced by its neighbor, in the early 1940s embarked on a series of failed intents for institutional change that, instead, evidenced a certain impotence of the centralizing efforts of the state. In both countries, the statistical reform constituted just one dimension within a process of a more far-reaching reorganization of the state undertaken by the populist regimes in power.<sup>1</sup>

The imperative to realize a statistical reform—which was already well established in Brazil in the mid-1930s, though in Argentina it reached maturity only in the following decade—emerged at a comparable juncture of economic and political development in the two countries, characterized by a departure from their traditional role in world trade as countries exporting only primary products, the promotion of industrial development through import substitution oriented to the internal market that enriched their economic structure, and a debate between the national governments and the social elites and the established local powers. At the same time, the great influence of the army within national political life accompanied the difficulties these countries faced in constructing (in Brazil) or reconstructing (in Argentina) a “democracy for more complex and more diversified societies.”<sup>2</sup> Within this particular context, coordinating the task of producing official figures and achieving uniformity in the methodology as well as in the results turned into a specific challenge that the national governments had to confront. The question is, what solutions were deployed, within the range of available options, to treat the same problem in the different countries? What were the consequences of the restructuring conceived in terms of the institutional consolidation of government statistics? What social and political conditions made it possible for the statistical apparatuses to become established as legitimate authorities of producing reliable data?

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1. In this text I adopt a broad definition of populism as the singular political experience, represented by the administrations of Getúlio Vargas in Brazil (1930–1945; 1951–1954) and Juan Domingo Perón in Argentina (1946–1952; 1952–1955), that was characterized by the thrust of an economic strategy promoting internal markets and a deliberate politics of state-promoted industrialization of the country, which also implied giving an impulse to, or broadening, social legislation and securing the popular masses’ access to social citizenship, thus gaining their support. There is a vast literature on the phenomenon of populism available in Latin America, where the debate about its exact nature continues.

2. F. DEVOTO & B. FAUSTO, 2008, p. 252.

The goal of this paper is to examine, from a comparative perspective, the restructuring of the statistical apparatus carried out in Argentina and Brazil between the decades of the 1930s and 1950s. For this purpose, we put emphasis on the political, social as well as institutional factors that had an impact on the greater or lesser consolidation of the changes promoted in the two countries. As a hypothesis, we assume that the attention devoted in Brazil to the political-conventional bases of statistical activity played in favor of the perdurability of the statistical reform, while in Argentina the tendency towards a unilateral imposition of a centralized model of public statistics undermined its viability and ran into different obstacles. Brazilian government statistics relied on internal and external sources of legitimation that were disregarded in the Argentine case, such as a broad basis of social allies and an active participation in inter-American statistical networks, which helped strengthen the foundations of Brazil's public statistics.

I wish to reflect upon the relationship between the social credibility enjoyed by public statistics and the historical trajectory of the conformation of a statistical apparatus. At the same time, this article aspires to make a contribution to a field of inquiries that has undergone considerable expansion within the last 15 years, namely the socio-history of statistics in Latin America. The historiography on this topic has not developed on a par in Brazil and Argentina, and the published collective volumes reflect this disparity.<sup>3</sup> Apart from the different institutional frameworks from which this research emerged initially (the government statistics agency itself in Brazil, as opposed to the academic field in Argentina), there are significant differences between the local historiographies that range from the conditions and the breadth of their archives to the lines of research carried out, and the extent and depth of the knowledge generated on the national experiences and their gaps. While these differences affect the potentials of the comparative enterprise, they do not invalidate it, as long as such differences are made explicit and the researcher proceeds with caution in selecting the variables to be analyzed and carries out cross-checks of his/her interpretations to make up for those shortcomings.

Within academic circles where the social history of statistics is more firmly established, such as the French and Anglo-Saxon traditions, the comparative perspective arose in connection to the emergence of certain innovations in statistics, such as the revolution of sampling.<sup>4</sup> Other studies contrasted the schema of the racial and ethnic classification of the national censuses that bore relation to the affirmation of political and social identities.<sup>5</sup> The long-term reconstruction of the unfolding of statistical activity as part of the process of the conformation of modern Western states clearly made possible a comparative

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3. N. SENRA & A. CAMARGO, 2010; C. V. DE CARVALHO JUNIOR *et al.*, 2011.

4. A. DESROSIÈRES, 2001.

5. J. SOUTHWORTH, 2001; D. KERTZER & D. AREL, 2002.

approach between capitalist countries.<sup>6</sup> These studies tended to differentiate between the statistical trajectories of nations in the liberal–democratic tradition (such as England and the United States) and those with a history of strong states (such as France and Germany). The comparative perspective was also used to study the debates concerning the modes of organization of government statistics between the nineteenth century and the first half of the twentieth century.<sup>7</sup> This article specifically engages in a dialogue with these last two lines of research, though it shifts the focus of institutional history and the study of the debates between different models of statistical organization to the specificities of the Latin American region.<sup>8</sup>

The first section of the article describes the dilemmas faced by Brazilian and Argentine public statistics in the critical conjuncture of the pre-war period. The second section lays out important social and political aspects of the statistical restructuring implemented in the two countries, while the third section introduces another factor, the institutional crises and the public debates as instances that put to the test the steadiness and solidity of the government statistical apparatus. Lastly, I will present certain conclusions.

## 1. Different Responses to the Same Problem

### *The challenges in common*

By the 1930s, the difficulties Brazil and Argentina faced in terms of their government statistics showed some similarities. In both countries, certain physical and demographic conditions—a vast territory with a dispersed population with high levels of illiteracy as well as unevenly developed systems of communication—had hindered the states' efforts to complete the tasks of compiling data and producing numbers since the nineteenth century. Other difficulties were related to the tensions generated by the federal political regimes in government statistical activities that required stable commitments between

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6. S. WOOLF, 1989; A. DESROSIÈRES, 1996; L. SCHWEBER, 2006.

7. J.-P. BEAUD & J.-G. PRÉVOST, 1997; J.-G. PRÉVOST & J.-P. BEAUD, 2012.

8. All comparative enterprise implies a series of difficulties when the goal is to systematically examine the same problem through two different national historical–social realities. The possibility of formulating unfounded generalizations, recurring to misleading analogies, or departing from models constructed a priori are some of the risks discussed by the available literature (J. BARROS, 2007). We have proceeded with precaution in our methodology in the face of the risks implied by the comparative approach, seeking to strengthen its virtues (its capacity to transcend parochial perspectives and to highlight the singularities of one case with respect to another) and recurring to a broad corpus of primary sources, in addition to relying on secondary sources. The documental corpus is made up of ministry archives, norms (laws, decrees, and resolutions), official periodical publications of the statistical agencies (journals, bulletins, and annals), official reports, and periodic publications and the press.

statistical agencies of different administrative levels so as to guarantee the uniformity of criteria and of actions at all steps of the statistical chain.<sup>9</sup>

In these countries, the critical conjuncture of 1930 revived the question concerning the relationship between the central administration and the regional powers, a political tension that had manifested in statistics-related matters.<sup>10</sup> The challenge to produce government statistics did not have to do with a total lack of official statistical services, since both countries already counted on such offices at different ministries, of a shorter or longer trajectory.<sup>11</sup> Moreover, many of the political-administrative entities below the national level (the provinces in Argentina and the federal states in Brazil) already had their own organs of statistics. The problem consisted in the dispersion of the state's efforts to register and quantify, the lack of coordination between the agencies already existing at different administrative levels, and the overlap between offices of the same level (such as in the case of two ministries). At the same time, within the framework of a discourse that demanded a certain rationality of the public administration, these difficulties were conceived as a problem of inefficient use of public resources. These complications were accompanied by other issues of a cognitive nature: the duplication of research, difference of criteria and taxonomies, and diversity of procedures, which

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9. Inspired by the North American model, the Argentine and Brazilian Constitutions (1853 and 1891, respectively) consecrated federalism as a principle of political unity and adopted a presidentialist system with a bicameral legislative power (senators and representatives elected in each federative unit). Despite the similarities between the institutional models, dissimilar sociohistoric conditions brought about the conformation in Argentina of a centralized republic with a strong federal executive power, while Brazil exhibited a power more dispersed between the states and the Union. Brazil in general is considered an example of multipolar or fragmented federalism (characterized by disputes for dominance among various states), while Argentina is seen as a unipolar or concentrated federalism (with a single undisputable center of power in Buenos Aires). In each case, the attributions retained by the subnational states are key to understanding the different types of federalism: the subnational states in Brazil retained broader margins of political and financial autonomy. Collecting certain taxes, for example, remained in the hands of the subnational states, while the Argentine Constitution conferred this attribution on the central state. At the time, the Argentine national government had a broad margin to intervene in the provinces, given that their military power was suppressed, while in Brazil the states preserved their police power: some created military forces capable of dissuading attempts at federal intervention. In addition, in Brazil the federal regime recognized the authority of the subnational states to organize their own administrative system. Although between the end of the nineteenth century and the beginning of the twentieth the political system of both countries functioned through intra-oligarchic pacts, Brazilian federalism strengthened the local state oligarchies and weakened the power of the federal government.

10. In Brazil, the *Estado Novo* brought about the strengthening of the central power to the detriment of the state powers, while, as is evident from the earlier comments, in 1930 Argentina had more fertile conditions and a more favorable tradition in terms of imposing central power.

11. H. OTERO, 2006; C. DANIEL, 2011; H. GONZÁLEZ BOLLO, 2014; N. SENRA, 2008; N. SENRA & A. CAMARGO, 2010.

resulted in divergent statistical results that were inconsistent with each other, or even contradictory. The “shadows” cast on the validity of the statistical results affected the social credibility of the official figures and the legitimacy of the government statistical machinery as a whole.

Even though the political revolution of 1930 in Brazil got in the way of realizing the population census programmed for that year, the new government took to the task of resolving the problems of coordination and lack of uniformity that public statistics were suffering from. The former General Administration of Statistics (*Diretoria Geral de Estatística*, DGE) had experienced limitations in exercising its authority over other statistical dependencies, given that the states and municipalities did not commit to following their directives. The faulty access to administrative records in possession of the different entities below the national level during the *República Velha* had as a consequence that Brazilian statistics of that period were irregular, discontinuous, and lacked systematicity.<sup>12</sup> The statistical restructuring consisted in a series of political measures: the creation of the National Institute of Statistics (*Instituto Nacional de Estatística*, INE) in 1934, the realization of a National Convention on Statistics (*Convención Nacional de Estatística*) in 1936 that would provide the basis of the National Council of Statistics (*Conselho Nacional de Estatística*, CNE), and the creation of the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia y Estatística*, IBGE) in 1938, events that laid the foundation for the entire edifice of government statistics in Brazil. The National Council became the key organ of the reform: it was a deliberative organ, composed of a General Assembly, technical commissions, and an executive board, responsible for orienting all statistical activities of the INE. Under the new regulations, the CNE enjoyed full technical and administrative autonomy and subordinated other statistical entities.

Around those years, the necessity of a statistical reform was becoming more pressing in Argentina. The problems of coordination were first brought up at the First National Meeting on Statistics (*Primera Reunión Nacional de Estadística*) held in 1925. Although the lack of uniformity of the national, provincial, and municipal statistics, along with the backwardness of some of them, emerged as a drawback, in that specific context working towards resolving those problems did not imply establishing new organizational principles or setting up new structures. The technical recommendations made at the meeting aimed, on the one hand, at avoiding overlaps, through seeking a more efficient distribution of the tasks and responsibilities among the existing agencies, and, on the other hand, strengthening the coordinating role of the General Administration of National Statistics (*Dirección General de Estadística Nacional*, DGEN), as established by Law #3.180 on statistics,

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12. N. SENRA, 2008.

sanctioned in 1894. The debate concerning the statistical organization arose again at the beginning of the 1940s, given that different proposals were put forth by state officials working in public statistics, economists, and intellectuals from the Faculty of Economic Sciences of the Universities of Buenos Aires and the Littoral.<sup>13</sup>

Although the statistical reform was, above all, a national issue, the discussion about the modes of organization of governmental statistics was also well established at the international framework. The proposals varied as to what level of centralized control should be required over the activities of production and diffusion of official statistics. The diversity of the solutions in practice in central countries, such as those proposed by Robert H. Coats in Canada or Corrado Gini in Italy, was widely known. The discussion over the principles of decentralization, coordination, or centralization found its way into the meetings and the organs of communication of the global community of statisticians, such as the International Statistical Institute (ISI) and the journals of the statistical associations.<sup>14</sup> Through these networks, the ideas and the models of organization of government statistics migrated from one country to another.<sup>15</sup> That is, they constituted schemas that were available both for Argentine and Brazilian statisticians. In fact, the latter ones appealed to the terms of classification of the types of organization of administrative statistics established by the ISI, seeking to make the Brazilian reform fit into one of those types, while they aimed at underlining, by contrast, the innovative character of the reform that they were implementing in Brazil and the fact that it was adapted to their national reality.<sup>16</sup>

Promoted, amidst the worldwide conflagration, by the army generals that seized power in 1943, the efforts towards implementing a statistical reform in Argentina also dialogued with the restructuring of the national statistical systems of developed capitalist countries that was implemented in close connection with the war efforts and the growing state control over economic activities. Given that the experience of the Brazilian statistical reform was already beginning to show its first results, it appeared in the proposals of Argentine specialists and politicians as one possible way forward, above all owing to the fact that the Brazilian model was promoted by international associations (such as the Inter-American Statistical Institute, IASI) as a

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13. R. GARCÍA MATA, 1941; O. LESPIAUCQ, 1943; H. GONZÁLEZ BOLLO, 2007.

14. For more information on these debates and on the reforms of the national statistical apparatuses from the nineteenth century through to World War II, see J.-G. PRÉVOST & J.-P. BEAUD, 2012, p. 74–89.

15. J.-G. PRÉVOST & J.-P. BEAUD, 2012, p. 74.

16. H. PESSOA, 1940; O. MORAES, 1942.



solution to the problem of statistical coordination in countries with a federal political system.<sup>17</sup>

However, it would be rather hard to mechanically translate such models, since the specific characteristics of the different national statistical traditions are expected to have an impact on the course and results of the reforms implemented. In Argentina, the efforts put into unification tended towards articulating the already existing resources (seeking to make compatible the activities of the offices already in existence), while in Brazil the goal was to establish and expand the network for collecting data, as well as to generate local capacities (relying on a specific policy that targeted the statistical services of the municipalities). In Argentina, the existence of already consolidated offices within the ministries, with their own resources, capable of exerting resistance against the centralizing efforts (on account of the possibility of losing their prerogatives), had an impact on the results of the first attempts at centralization.

### ***Testing solutions: The stability of the innovations v. the provisional character of the changes***

Faced with the difficulties presented by the coordination of statistics, in 1938 Brazil completed setting up a new statistical office, a *sui generis* structure of federative scope that was based on the articulation and cooperation of the three administrative levels of the political organization of the Republic. In terms of its institutional design, the IBGE embodied a mixed model of normative centralization and executive decentralization: it had a central organ, responsible for orienting all statistical activities, while it assumed a complete decentralization in the execution of the tasks of recollecting information. The IBGE, as head of the statistical apparatus, was in charge of coordinating the tasks of the federal services of statistics (already in place at the ministries) with the work of the statistical departments of the states and municipalities, seeking to harmonize their statistical practices and unify their results.

The institutional innovation originated in a plan of reform designed by Bahian lawyer Mário Augusto Teixeira de Freitas,<sup>18</sup> a state official with

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17. For evidence of this argument, see the references cited in the documents by W. LOPES, 1952, p. 124 and 127. The Brazilian model of organization received external backing at a moment when international organizations were interested in making sure that federal agencies of statistics provided them with a continuous supply of data. J. DUNCAN & W. SHELTON, 1978, p. 153.

18. Mário A. Teixeira de Freitas (1890–1956) entered the public administration at the age of 18, through a formal job application process, as an intern at the General Administration of Statistics of the Ministry of Roads and Public Works (*Ministerio de Viação e Obras Públicas*). In 1911, he graduated as a lawyer from the Faculty of Law of Rio de Janeiro. In 1920, he became a delegate for the census of Minas Gerais. Later, he worked as head of the Directorate of Information, Statistics and Diffusion (*Diretoria de Informações, Estatística e Divulgação*) of the Ministry of Education and Public Statistics between 1931 and 1952. He

a background in public statistics, who additionally turned out to be an outstanding intellectual who participated in the “space of intimacy” between intellectuals and the political power generated by President Getúlio Vargas, which constituted one of the fundamental differences between the populist experiences in Brazil and Argentina.<sup>19</sup> Freitas’s project of statistical reform was based on the principle of interadministrative cooperation that had been applied successfully in the terrain of education statistics.<sup>20</sup> With the results in evidence and drawing upon his direct ties with high political authorities of the *Estado Novo*, Freitas obtained the political support necessary to implement his proposal.

In Brazil, the integration of the already existing statistical services was implemented through an intergovernmental pact sealed at the National Convention on Statistics, by virtue of which the different political units made a commitment that created ties between them and also with the system as a whole. The statistical organs of the different spheres of the government delegated responsibilities and decisions in statistical matters in a way that, for those who agreed to subscribe to this schema, was compatible with the federal system. This, however, was not quite clear for the states that offered resistance, given that, in their understanding, the initiative was basically meant to achieve centralization, and therefore was contrary to liberal constitutional principles. The schema of the IBGE managed to endure on the basis of this political agreement as the institutional authoritarianism of Vargas’s dictatorship proceeded in modifying the correlation of power between the states and the (national) government of the Union. The “IBGEan model” conferred a central role on the municipalities as spaces that housed the primary unit of the system (the municipal agencies of statistics), which constituted a strategy to circumvent the power matrix of the local state oligarchies in the terrain of government statistics. They had come up with the formula for sustaining a schema of decentralization that would not undermine the bases of the central power of the state.

The broad autonomy bestowed on the National Council of Statistics (*Conselho Nacional de Estatística*, CNE) created at the end of 1936 by the statistical reform responded to the necessity to avoid the preponderant action of the organs of the different spheres of government. In addition, the direct ties of the CNE with the Presidency were a testament to the statistical organ’s great political significance. The CNE had the responsibility of exercising the highest level of orientation of statistical activities, defining the criteria to be adopted in the entire national territory. The challenge faced by the

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was secretary general of the CNE between 1936 and 1948. He rose to the post of vice-president of the International Institute of Statistics; N. SENRA, 2008, p. 507–558.

19. F. FIORUCCI, 2004.

20. For more information on the implementation of intergovernmental cooperation in education statistics, see N. SENRA, 2014.

CNE to bring uniformity to government statistics was such a huge task that it required starting from establishing a common specialized terminology: it was not simply a question of unifying methodologies, but also of establishing a technical vocabulary shared by the actors of public statistics. At the same time, organizing regular statistical campaigns and centrally defining most of the practices. For many of the issues that were systematically surveyed for the first time in Brazil through the statistical campaigns (for example, agricultural activities), the Argentine statistical apparatus already had established procedures. For this reason, in Argentina, the uniform orientation was to be imposed on statistical routines that had been in place for some time. However, the schema of collaborative work that the Brazilian statistical campaigns were based on respected the cognitive interests of the three administrative levels: the nation, the states, and the municipalities. For this reason, Teixeira de Freitas defended his model as one that was to achieve, simultaneously, an “organic unity of its structure and a logical unity of an exact knowledge of the actual reality of the Nation.”<sup>21</sup>

However, one of the first challenges the IBGE faced was to introduce the statistical tasks into the administrative practices of the municipalities. Even though the statistical system was based upon the ideal of joint intergovernmental action, the precariousness of the institutional framework of the local statistical agencies presented the first obstacles to its functioning. Although there had already existed statistical services in some municipalities before the birth of the IBGE, the majority of them were created through the efforts of this institution determined to cover such a vast territory.<sup>22</sup> Nonetheless, there was enormous disparity among the local agencies, with some of them basically existing only on paper. Many municipalities lacked the appropriate conditions for assuming responsibilities over data collection, given the scarcity of their resources and the insufficient skills of their personnel. The IBGE’s efforts to strengthen the local statistical agencies grew into a political project aimed at fomenting municipal life in general, which was embodied in the campaign for the municipalities in the decade of the 1940s.<sup>23</sup> However, soon it led to the expansion of the attributions of the central organ over municipal agencies (for example, the CNE intervened in the organization and the selection of personnel, in their training, as well as in defining their remuneration and the content of their tasks), thereby strengthening its control over those agencies and generating more dependency.

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21. M. TEIXEIRA DE FREITAS, 1940, p. 275.

22. The documental sources analyzed evidence a straight connection between the statistical inquiries and the efforts put into constructing the national geographical space, given the necessity to delimit and specify the territorial configuration of Brazil. This characteristic is not manifest in the work of Argentine statisticians. For more information, see E. PENHA, 1993.

23. The goal of consolidating the statistical tasks at the municipal level never appears explicitly formulated in the Argentine regulations of the time relating to statistics.

The concentration of technical, administrative, and even financial resources at the CNE led to a growing subordination of some of the organs of the system. Although the statistical agencies at the federal level made only a commitment to comply with the technical directives, as time passed, at the other levels (states and municipalities) the subordination was extending to questions related to administrative and financial issues, principally at times when the statistical departments of the states or the statistical agencies of the municipalities faced economic difficulties and it was up to the CNE to ratify the distribution of financial help allocated to sustain those services. For example, the CNE managed the spending of the *Caixa Nacional de Estatística Municipal*, whose funds were collected through a tax on the entertainment industry of each town. The Municipal Agreements on Statistics that were signed beginning in 1942 and promoted specifically under the mandate of Eurico Dutra (1946–1951) extended the conventional aspects of institutional design to the primary units of the statistical system. However, its legitimacy was to be undermined by doubts about whether the municipal agencies acted on the basis of an autonomous commitment or under pressure, by the disputes concerning how the data collection network was financed and, further ahead, by the unilateral decision of some municipal authorities to withdraw from the system, in several cases for political reasons. The demand for more municipal and state autonomy strengthened in the aftermath of the promulgation in 1946 of the Constitution of the Republic, which did not uphold the principle of intergovernmental cooperation that governed the IBGE.<sup>24</sup>

In Argentina in the 1940s, the statistical apparatus was permeated by problems such as the lack of uniformity of the production of statistics and the difficulties experienced in articulating the provincial agencies. However, the need to carry out a national population census, following an extensive 30-year gap (given that the last census was conducted in 1914), impacted in a particular way: those pressures stipulated the absolute and immediate necessity of the measures that aimed at the administrative centralization of statistical activities, promoted by the military government (1943–1946).<sup>25</sup> Research has shown that the rise of authoritarianism or the imposition of military regimes through *coups d'état* constitutes a political factor that might contribute to steering national statistical systems towards centralization.<sup>26</sup> The

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24. N. SENRA, 2008, p. 110.

25. In comparative terms, one developmental paradox of Argentine statistical activities that predated the reform efforts of the 1940s consisted in failing to fulfill the constitutional mandate to take population censuses every 10 years, although the country had made progress in strengthening the state's capacity to re-collect information with sectoral surveys (industrial, mortgage loans, agricultural, educational), surpassing Brazil in this respect. In the 1930s, new proposals for restructuring the national statistical service accompanied the increasing number of requests for a demographical census that had been presented to the National Congress since 1921.

26. J.-G. PRÉVOST & J.-P. BEAUD, 2012, p. 84.

first statistical reform that the military regime attempted basically consisted in renaming offices, reassigning personnel, and trying to reconfigure the ties existing between long-standing statistical agencies. The reform was aimed at reformulating the institutional structure that had consolidated towards the end of the nineteenth century, with offices dispersed among ministries, and which were independent from each other and only had very loose ties. The Argentine statistical apparatus thus gave “the impression of an archipelago.”<sup>27</sup> The modifications implemented were circumscribed to the central level of government and, on the one hand, aimed at concentrating the staff of employees and, on the other hand, at unifying procedures and methods. Although in Brazil the process of reform implied the restructuring of the statistical services at the different ministries, those changes did not constitute the core of the reform. By contrast, the first statistical reorganizations in Argentina involved merging certain preexisting organisms and attempting to subordinate them to a single governing organ that was to supervise all statistical and census activities. However, at different moments, the centralization set in motion was to run into the obstacles created by some of the offices that still had resources at their disposal that allowed them to resist the tutelage of a central organ—whose legitimacy was as yet not quite evident—and permitted them to devise alternative plans of action.<sup>28</sup>

On the other hand, in consonance with the Brazilian model, the Argentine restructuring launched by the military government involved the creation of a National Council of Statistics and Census (*Consejo Nacional de Estadística y Censos*, CNEC), an autocratic body, just like in the neighboring country, with the mission to establish common norms for statistical practices. In 1945, the first president of the CNEC, Juan M. Vaccaro publicly demanded that the provinces and the territories cooperate with the national organism.<sup>29</sup> However, this organism proved to be ephemeral (it functioned only between 1945 and 1946) as it passed through the hands of three different directors. Having failed to fulfill the objective of carrying out the fourth national population census and in the midst of accusations of administrative mismanagement, Vaccaro was ousted by an auditor, Lieutenant Colonel Carlos A. Cattáneo, ex-director of statistics of the army, who in turn was soon replaced by mathematician Carlos E. Dieulefait. This pattern of instability contrasts sharply with the case of the main referents of Brazilian statistics, who continued in their posts from the mid-1930s through the beginning of the 1950s, transcending the change of administration from Vargas to Dutra. In Argentina, during the military government (1943–1946) as well as in the first years of Juan Domingo

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27. H. GONZÁLEZ BOLLO, 2011, p. 208.

28. Among these offices we must mention the Office of Research on Economy of the Central Bank, the statistical offices of the Secretariat of Industry and Commerce and those of the Ministry of Agriculture.

29. República Argentina, 1945.

Perón's presidency (1946–1955), the organ in charge of the coordination of statistics failed to achieve stability, was relaunched several times through new regulations, and was moved from the aegis of one ministry or secretariat to that of others. The first initiatives aiming at military centralization sought to unify criteria, without falling into a concentration of the executive tasks, which incidentally coincided with the recommendation of some specialists. However, as the administrative maladjustments persisted, the balance of the later measures inclined towards an absolute executive and administrative centralization, which in turn sparked internal critiques.<sup>30</sup>

The National Administration of Research, Statistics and Census (*Dirección Nacional de Investigaciones, Estadística y Censos*, DNIEC), the newly created organ that inherited the prerogative of defining norms and coordinating statistical research was financially and administratively dependent on different ministries. This decision contrasted with the Brazilian experience which showed that, on the one hand, the direct dependence on the Presidency (as opposed to a single specific ministry) had bestowed on the CNE a legitimacy of action over all spheres of politics, while, on the other hand, collecting and administering their own financial resources had granted them a certain degree of autonomy to act, although it implied some challenges as well. The Argentine DNIEC hence renewed the ambition to control all the statistical services in order to make up for the lack of unity of methods between them. Under those circumstances, provincial statistics might have been useful for local purposes, but not for the necessities of the national government. Under the government of Perón, the unification of criteria was presented as a way to achieve increased efficiency and rationality within the national statistical service. Politically pressing issues such as the design of a five-year economic plan helped impose (and justify) the high degree of concentration of statistical information as the only viable option. However, in point of fact the first Peronist planning preceded the moment when the government started in earnest with its reform of national statistics.<sup>31</sup> Once the political commitment to carry out the national population census was fulfilled (in 1947), the government took on the task of rearranging dynamic statistics, which was considered to complement the census. In 1949, the call to attend a national Meeting on Statistics in Buenos Aires, with exclusive participation of officials within the area of statistics of the different political–administrative levels of the country, evidenced the pressing necessity to reach technical agreements. So much so that, in his inaugural address, the Minister of Technical Matters Raúl Mendé underlined the importance of speaking the same language in statistics and putting an end to the disparity of criteria between the local governments and

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30. The economist Carlos Correa Ávila, a former state functionary in industrial statistics, criticized the “absolute centralization” and defended the mixed model of technical centralization with executive decentralization. H. GONZÁLEZ BOLLO, 2011, p. 211.

31. H. GONZÁLEZ BOLLO, 2007. On planning, see P. BERROTARÁN, 2003.

the national state. The meeting aimed to define strategies to coordinate statistical research and reach certain uniformity in the methodology. The technical decisions validated at the reunion had to be legitimated *ad referendum* later through bilateral agreements of the respective local governments.

While Brazil established a schema of coordination in statistics that was based on the negotiated acceptance of the parties involved, that is, it was the result of voluntary agreements, the Argentine experience evidenced a tendency towards the national executive branch trying to vertically and unilaterally impose cooperation. The compulsory nature of the concentration of resources and authority exposed the reform to possible demands for autonomy on behalf of the already existing statistical services. In 1951, the Peronist government sanctioned a law (Law #14.046, which abolished the legislative norms of Law #3.180 of 1894) in order to give a legal framework to the new order of statistical and census activities. It created a new office, the General Administration of the National Statistical Service (*Dirección General del Servicio Estadístico Nacional*, DGSEN), which was put in charge of the orientation, systematization, and compilation of all statistics produced in the country (with the sole exception of military statistics). All state offices engaged in statistical work came to depend directly on the DGSEN and had to adjust to the technical norms and guidelines issued by the central authority. It designated the executive branch as responsible for signing agreements with the provinces and the municipalities in order to coordinate the technical supervision and execution of statistical tasks. The figures elaborated by the provincial and municipal statistical services that did not subscribe to those agreements would not be considered official statistics. In addition to merging the responsibilities for the production and coordination of statistical data, the new regulation attributed to the DGSEN the authority to oversee private initiatives to produce statistical information. The reform was actually closer in spirit to a conception of statistics as a service to the local branches of government than to the idea of a system.

Just like in the warring countries, the global situation of war necessitated certain modifications in the national statistical services both in Brazil, a country that intervened in the situation from the field of the antifascist movement, and in Argentina, which declared its support for the Allies near the end of the conflict, which meant losing out on the financial and military advantages that Brazil received later as a supporter of the United States. In terms of international politics, the two countries were transiting different paths: the Brazilian politics of alliance with the United States contrasted with the traditional Argentine antagonism towards North American positions. During the war, questions relating to national security exerted additional pressure on the production of reliable statistics in matters that were directly related to the war effort. In both countries, the regulations passed between the 1940s and the early 1950s reserved special treatment for military statistics

and ensured that those compilations remained under strict military control. While the strategic military view of statistics in terms of protecting national security was pivotal in Argentina, so much so that between 1946 and 1948 all statistical offices of the state were brought under the aegis of the Council of National Defense, in Brazil the country's participation in the conflict lent a certain urgency to the goal of removing the existing obstacles to the functioning of the data collection system, in order to rapidly systematize and regularize the statistical inventories all around the country. It was at that time that the IBGE proceeded to establish the responsibilities for organizing and maintaining the municipal statistical services.

At the same time, the context of war imposed certain restrictions on the public circulation of statistical information both in Argentina and in Brazil. The war was, on another level, an economic conflict. Handing opponents the statistical figures pertaining to the wealth and economic resources of the country became equivalent to giving a strategic advantage to the enemy. For this reason, the figures became, for some time, quasi-military secrets. The diffusion of official statistics was normalized in Brazil before it would occur in Argentina, where the task of overseeing the publication of data remained in effect until 1950 on grounds of national defense, even though it was difficult to ensure that the provincial offices complied with the restrictive measures they defied.

## **2. Bases of Support and Sources of Legitimation of Public Statistics**

### *Statistics and political projects*

In both countries, the initiatives aimed at reforming statistics gained the political support of charismatic leaders such as Vargas and Perón. The populist regimes introduced a new conception of the political organization of society and they broadened the scope of the aspects of economic and social life placed under state regulation. The production of statistics obtained political relevance as technical input of the new social engineering deployed by the state. In addition, statistics were incorporated into the political rhetorics on the modernization of the state and rational planning.

In comparative terms, from the very beginning in Brazil there prevailed the conviction that statistical unification was an inherently political action, both in terms of its origins and its projected horizon. In the first place, as to its political bases, the new institution (the IBGE) emerged from conventional ties between autonomous political entities. The subordination to a central entity was justified as a solidary mechanism of all the elements that



composed a statistical system; the unity of the results appeared as the fruit of the convergence of voluntary efforts.

In the second place, another political dimension of the Brazilian statistical reform lay in the fact that it formed part of a process of political-administrative unification and state rationalization. In fact, the IBGE embodied the transforming spirit of the public administration that had characterized the *Estado Novo* since Vargas had embarked on raising its standards through creating a professional body of public servants and establishing a formal application process and career plans for staff, despite limited results.<sup>32</sup> In the area of statistics, the principle of interadministrative cooperation expressed the organic conception of the state that guided Vargas's project to revitalize the state apparatus.<sup>33</sup>

On the other hand, the IBGE was integrated into Vargas's political project to refound the nation through defining a "civic system of ideas" for the institution.<sup>34</sup> Not only did this body of ideas assign the IBGE a cultural role in society—entrusting it with the promotion of a nationalist ideology—but it also made the institute an active participant in the social transformation of the country, through elaborating studies and working out proposals on the basis of statistical knowledge.<sup>35</sup> Knowledge about the population and the territory was to form the base for the politics of social reform and for the economic development of the country, the colonization of the interior, and the settling down and recognition of the rural worker, which all formed part of the job of national integration projected by Vargas.<sup>36</sup>

The statistical reform of the first Peronist government shared with the IBGEan body of ideas an appreciation of statistics as a source of technical solutions to national problems and instated it as the foundation of government planning. Another common feature was the negation of the liberal experience that Peronism held responsible for the statistical fragmentation that reigned in Argentina. For referents of the Peronist government, the tight bond between aspects of the social, economic, and administrative life of the country called for integrated and unified statistics. In the statistical realm, the disparity of criteria put national unity at risk. The centralized control over statistics that the government aimed at was justified as the way to put national interest above the interests of individuals. It sought to make government statistics into a rational tool of forecasting of the state, which would transcend specific occasional necessities for information. Even though the Peronist government found in statistical information a pillar for its political project of distributive justice, it circumscribed the tasks of the statistical bureaucracy to its routines

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32. K. SIKKINK, 1993.

33. E. PENHA, 1993.

34. A. CAMARGO, 2008.

35. M. TEIXEIRA DE FREITAS, 1945.

36. A. CAMARGO, 2008, p. 383.

of registering and quantification. By contrast, the institutional design of the IBGE, the degree of autonomy that the CNE maintained, as well as the very profile of its principle referents allowed the IBGE to host political proposals that went beyond strictly statistical objectives.<sup>37</sup>

Lastly, the statistical renovation in Brazil was not limited to the technical aspects of the activity, as appears to have been the case in Argentina ; rather it had as its complementary goal to construct a sense of community: to create the “IBGE family.” The purpose of engendering an identity shared by those participating in the production of statistics was consistent with Vargas’s intentions to foment a public spirit and to consolidate a civic awareness in state bureaucracy in general. The instauration in 1942 of the celebration of the “Day of the Statistician,” for example, formed part of a series of initiatives related to creating the institution’s own collective mystique, since it was considered just as fundamental to form agents who were well prepared for carrying out their tasks as it was to shape the disposition of those agents by virtue of a specific *ethos*.<sup>38</sup> Although doubts persist regarding the actual results of the training initiatives of the IBGE (in terms of its impact on raising the skill levels of the statistical bureaucracy), from the perspective of creating and reproducing an institutional culture, a sense of belonging and an identity of the IBGE, its achievements could not be overlooked.

### *The social foundation of public statistics*

One significant difference between the Brazilian and Argentine statistical reforms lies in the degree of openness towards the participation of non-governmental actors in the processes of technical production and validation of official figures. The reconstruction of the edifice of government statistics in Brazil originated in a broad call to all those interested in collaborating with the mission of raising the standards of the country’s statistics. Even though he was of the opinion that the state had more resources at its disposal and enjoyed authority to carry out statistical research, the ideologue of the IBGE, Teixeira de Freitas did not consider the state as the only competent actor in the matter, and valued the parallel and complementary efforts represented by the initiatives of statistical production on behalf of associations of civil society and private entities (that were few at the beginning, but tended to multiply in later decades).<sup>39</sup> In this way, the institutional schema of the IBGE contemplated the integration of “affiliated institutions” into the national statistical apparatus. This opened up channels for the participation of university

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37. The organization of councils was a format not unfamiliar to the Peronist state. However, local historiography has tended to point out that, in spite of its formal attributions, the decisions normally remained concentrated in the sphere of the executive power. D. CAMPIONE, 2007; P. BERRÓTARÁN, 2003.

38. R. PERSSINOTTO, 2014.

39. M. TEIXEIRA DE FREITAS & J. LARA, 1945.

research centers, trade unions, associations representing businessmen's interests, private foundations, institutions, and statistical departments of banks as well as other public entities, such as the stock market, in the destiny of public statistics. Their representatives offered specialized collaboration and intervened in the deliberative spaces of the CNE and its technical commissions; they were even recognized as producers of official figures (such as the Foundation Getúlio Vargas, with its calculation of national income and its measurement of the Consumer Price Index, or CPI). Nothing similar was to be found in the Argentine experience; there was absolutely no sign of any vocation to integrate or capitalize on paragonovernmental initiative (but instead a move to watch over the diffusion of their results, as envisaged by the law on statistics passed in 1951).

In Brazil, integrating multiple social actors in the reform expanded the social base of support for official statistics. During the *Estado Novo*, the degree of openness of the statistical system was consistent with Vargas's intention to build up a corporative structure that would allow for the representation of specific socioeconomic interests within the state, without the mediation of the parties,<sup>40</sup> and with his political strategy of permanent negotiations.<sup>41</sup> Later on, this characteristic of the system proved to be useful for obtaining social recognition and establishing authority once the country's political-institutional life was normalized after 1945. Within the realm of public statistics, the alliances forged with other social actors turned out to be essential for constructing the social legitimacy of the activity and confidence in its institution, but also for its perdurability.

As has been pointed out in the literature, legitimacy and credibility are fundamental values for any public agency of statistics.<sup>42</sup> One of the sources of the credibility of official figures resides in the fact that they are produced by people and institutions with a socially recognized, outstanding scientific and technical profile. As the collegiate organ of the apparatus, formed by several commissions and a body of technical advisers, the Brazilian CNE contributed to building this reputation for the statistics produced in the country. The body of advisers that provided the basis of its decisions was made up of representatives of economic, social, and cultural institutions, as well as specialists in statistics and university professors.<sup>43</sup> This specific

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40. M. PLOTKIN, 2006, p. 485.

41. F. WEFFORT, 1999, p. 145.

42. A. DESROSIÈRES, 1996; S. SCHWARTZMAN, 1997.

43. In Brazil, the integration of the figure of the technical adviser in the composition of the CNE generated channels of interchange between the agencies of public statistics and the university. Many of the advisers were university professors active in the field of official statistics, collaborating as consultants in the elaboration of questionnaires, imparting knowledge through their interventions in the debates or through publishing their reflections in the *Revista Brasileira de Estatística*, edited by the IBGE in collaboration with the Brazilian Society of Statistics. The articles published there were presented as "a prolongation in the scientific and

composition of the deliberative organ of the Brazilian statistical apparatus implied a degree of proximity and interrelation between government statistics and the academic field of statistics that was rare in the Argentine case, at least between the second half of the 1940s and the late 1960s.

Thus, the Brazilian CNE held general assemblies (a tradition that was upheld even in times of crisis), showing an internal capacity of deliberation on the part of the statistical apparatus that was absent in the Argentine case. The dynamics of constructing technical agreements was based on regular meetings at which the different representatives of the organs that comprised the apparatus debated and adopted resolutions, through majority vote. These had the force of law for the collective entity. Far from the tight hermeticism that characterized the decision-making and elaboration of criteria for the uniformization of Argentine statistics—evidenced, for example, by the secrecy surrounding the Meeting on Statistics in 1949—the CNE assemblies were open to the public. We know that no statistical unification proceeds without tensions, since in such processes the question of who actually defines the patterns and who controls the production and validation of the data itself comes into play. For this reason it is important that the decisions be seen as invested with legitimacy. By contrast, the Argentine case shows that the brief experience of the functioning of a Council on Statistics was hegemonized by military functionaries and high-level bureaucrats, thus betraying the idea of those who originally fomented it.<sup>44</sup> The scarce representation of university professors, research specialists, and members of societies related to statistics raised critiques. The discontented voices sought to create a central governing organ whose composition would give it more representation and relative power to specialists.

### *With the endorsement of transnational organizations*

“Brazilian statistics was born, expanded and were consolidated under the simultaneous auspices of two defining ways of thinking, which outlined

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social field of the activities of the CNE” (M. TEIXEIRA DE FREITAS, 1946, p. 523). The sources seem to indicate that the porosity between the worlds of administrative and scholarly statistics was much less pronounced in the Argentine case.

44. The proposal by Professor Julio Acerboni, as adviser of the Senate of the Nation in 1934, included the creation of a permanent collegiate commission that would guarantee the coordination of the production of official figures (H. GONZÁLEZ BOLLO, 2014, p. 177). Professor Dieulefait—director of the Institute of Statistics of the National University of the Litoral—called for the intervention of expert advisers in all phases of the statistical procedure (E. DIEULEFAIT, 1938, p. 274). In the early 1940s, Rafael García Mata publicly defended the idea of articulating the statistical work of the offices through a central advising and coordinating organization, comprising qualified experts (R. GARCÍA MATA, 1941). Oscar Lespiaucq suggested the creation of a collegiate body on statistics integrated by representatives of the federal statistical departments and those of provincial and municipal statistical offices (O. LESPIAUCQ, 1943, p. 255).

its course. While one was that of national renovation, the other was bent on international cooperation.<sup>45</sup> These words, pronounced in 1955 by Teixeira de Freitas at the Brazilian Society of Statistics (*Sociedade Brasileira de Estatística*), allow us to introduce the question of to what degree international orientation formed part, for the IBGE, of the institutional politics defined, revealing even more differences compared to the Argentine case. The mission of bringing Brazilian statistics closer to the international understanding of the specialty was one of its foundational goals. The internationalist standpoint was also evidenced by the publishing politics of its official organ of diffusion, the *Revista Brasileira de Estatística*, which contained specific news sections on the development of worldwide statistics, and disseminated international nomenclature, methods used in other countries, and the resolutions of international conferences. This journal even dedicated some of its editorial pieces to themes such as the international comparability of statistics.

Although we could not detect a similar inclination in Argentine statistics, this fact does not imply a total isolation from the circles and initiatives of statistical cooperation at the continental or even global level, a tendency that gained strength after World War II. The creation in 1940 of the IASI and the initiative for realizing a Census of the Americas (*Censo de las Américas*) expressed this effort for institutionalization and the strengthening of the ties between statisticians in the region. The inauguration of the Inter-American Statistical Training Center (*Centro Interamericano de Enseñanza de Estadística*, CIENES) at the very beginning of the 1950s, under the auspices of the Organization of American States (OAS), demonstrates that these inter-American relations were consolidated enough to support a training project at the regional scale, which responded to a preoccupation of the IASI concerning the professional profile and the skill levels of the staff of government statistics in Latin American countries.

If we look at the ties between the Brazilian or Argentine agencies and transnational organisms, their participations at international events, in initiatives for statistical coordination, or in regional circuits of training, in all of those aspects the former country appears as a steadier, more active, and more influential participant than the latter. Although both countries had representatives, certain key personalities from Brazil were the ones who, at key moments, lead the destiny of the regional institutions. Teixeira de Freitas, secretary general of the IBGE, was president of the first executive board of the IASI. His election is politically significant, since he displaced from this position the representatives of the United States, the country with the strongest tradition in statistics and censuses and the most economic and political weight in the continent. Moreover, Teixeira de Freitas was the only Latin American representative on the board on statistics of the United Nations at

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45. Asamblea General, 1955.

the moment it started its activities as an advisory body in 1946. In addition, Tulio Hostilio Montenegro (former director of the technical division of the National Service of Census, the *Servicio Nacional de Recenseamento*) was elected to direct the recently founded CIENES.

On the other hand, Brazilian statisticians seem to have had firmer pan-American aspirations than their Argentine counterparts. The Brazilian CNE showed a strong commitment towards the circles of meeting and exchange among statisticians of the region and had an active role in stimulating and maintaining scientific cooperation in the area of statistics on the continent (even in financial terms, given that in 1948 it gave its institutional backing to raising the membership dues of IASI countries). With small delegations at the Inter-American Congresses on Statistics and an intermittent presence, Argentina went through periods of “silence” on these transnational scenes, such as between 1949 and 1951, and it got somewhat marginalized in continentwide initiatives, such as the Census of the Americas (1950). Given that Argentina had carried out its population census in 1947, the country’s participation in the reunions and discussions about setting the criteria, as well as its impact on the resolutions adopted by the organizing committee, was scarce.

Lastly, we must point out differences in the participation of these countries in the regional networks of training in statistics that were forming in those years. During 1940, the training of statisticians became a problematic issue not just because of the poor skills of the employees in public statistics, but also because the field of application of this expert knowledge was undergoing rapid expansion (towards the industrial world, market analysis, psychology, electoral forecasts, etc.), which called for training in technical competence and professional specialization. This was the understanding of the members of the IASI that created a specific commission to treat the matter of teaching statistics, with the aim of preparing recommendations for curricula to member countries. The commission was presided by a specialist from Rosario, mathematician Carlos Dieulefait, who had briefly worked for the Argentine apparatus of public statistics and was rather more established in the field of academic statistics;<sup>46</sup> on the commission he was accompanied by Professors Kingston and Da Silva Rodrigues of the Universities of Rio de Janeiro and São Pablo respectively. However, neither the presence of a figure like Dieulefait nor his fundamental contribution to organizing the teaching of the discipline was an expression of a commitment on the part of Argentine governmental statistics to the regional associations or to the strengthening of inter-American relations.

On the other hand, it appears that Argentines took relatively less advantage of the regional circuits of training than Brazilians. During the 1940s, the government of the United States sponsored the specialization of Latin

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46. C. DANIEL, 2012.

American technical staff in the sector of statistics through attending special or regular courses or visiting universities and research centers. Of the 260 Latin American technicians that participated in this circuit of training between 1942 and 1950, only 5 were from Argentina (a number that was smaller than for any other country in the region, except Honduras). The scarce participation was consistent with the Argentine attitude, opposed to the rise of the influence of its North American neighbor over the statistical organisms of the different states in the continent. Brazil, on the other hand, was able to train 16 technicians within this program.<sup>47</sup> Even so, the local specialists were of the opinion that the IBGE could not take enough advantage of the opportunities of cooperation and the existing fellowships.<sup>48</sup> Even though it is true that Argentina had already had, for some time, spaces for teaching statistics at universities, given that the first university degree in statistics in Latin America was created in that country,<sup>49</sup> the IBGE was particularly active in generating proposals on training for its employees: it created the first school in statistics (*Escola Nacional de Ciências Estatísticas*, ENCE), which was molded according to its training interests, although the level of hiring of its graduates by the government statistical apparatus was low.

In general terms, the intervention in the international context consisted in an opportunity (whether exploited or not) to recruit allies to reach a certain position in international statistics, but above all to legitimize government statistics in the local context at times when the mechanisms for the technical validation of the statistical practices and the legitimation of the norms of government statistics were undergoing a reconfiguration.

### **3. Weathering the Crises, Strengthening the Foundations**

At the beginning of the 1950s, the Brazilian public statistical apparatus went through a crisis that had no local precedent, nor was there any parallel in the Argentine experience. We would like to describe this crisis briefly since we understand that getting through internal debates in fact shows the degree of consolidation of an institution in statistics. The crisis began with the public declarations of the then president of the IBGE, General Polli Coelho, which provoked the response of technicians of the General Assembly of the CNE, backed by Teixeira de Freitas, sparking a controversy. The very possibility of a public debate about statistics suggests a certain strength of the institution that puts its social prestige and authority at risk. At the same time, surviving those blows shows the capacity of endurance of the assemblage of

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47. “Especializacão de técnicos latino-americanos nos Estados Unidos,” 1950.

48. T. MONTENEGRO, 1964, p. 24.

49. For more information on teaching the discipline of statistics in Argentina and in Brazil, see R. MENTZ & V. YOHAI, 1991; J. PEREIRA & P. MORETTIN, 1991.

actors, technical instruments, norms, and practices that make up the public statistics of a country. The solidity of the apparatus constructed is a result of the effective integration of the statistical offices into broader networks, both scientific and administrative and political, which contributed to generating and maintaining its social authority.

At the end of 1951 and the beginning of 1952, the critiques of General Coelho—who was in favor of a radical reform of the Brazilian statistical apparatus—had great impact because they focused on points that touched a nerve with public opinion such as the high costs and the lack of updates in official statistics, beyond casting doubt on their precision. In fact, the controversy evidences a crisis of multiple dimensions: it involved financial and structural issues in relation to the IBGE, as well as questions relating to the content of statistical activities that had, up to then, been defined by the technicians through consensus (the division of tasks, the primary interests of research, the techniques to be used, etc.).<sup>50</sup> The internal conflict showed, for the first time, the tumbling of certain fundamental principles that the institution rested on. In the first place, it called into question the legitimate field of competence of the IBGE. The critiques reproached the institution and its supervising organs for having strayed from questions that were considered “appropriate” for the statistical task; they questioned their direct ties with a politically motivated project, seeking to define once more the limits between statistics, as a technical activity, and the programmatic goals of a government. In second place, they denounced the research agenda in statistics as anachronistic and out of touch with national reality. They questioned the criteria for establishing the priorities of the statistical program, which ones had to be considered basic statistics and which ones were to be relegated as secondary. The IBGE was questioned for the broad range of issues covered by its statistical campaigns, given that the design of its instruments for data collection had to respond to the statistical interests of the three levels of government. On the contrary, they suggested that a new statistical program needed to be defined from the center, independently of the informational needs of the municipal and regional governments. In this way, the internal conflict actually put at risk the founding principles of the statistical system: interadministrative cooperation and statistical agreements. This represented the political limits of the critique given the very real possibility that the IBGE would lose its political and social allies, who had proven to be necessary for sustaining the national statistical apparatus.

With the question of the continuity of the statistical apparatus established in the 1930s, as decided by a commission set up by President Vargas (1951–1954), now resolved, the 1951–1952 crisis had immediate consequences as well as longer-term repercussions. At the administrative level, it led to a reorganization

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50. For more information on the crisis, see N. SENRA, 2008, p. 413–486.



of the General Secretariat of the CNE and brought about an exodus of personnel. In parallel with the challenges to the organizational principles and the growing distrust towards its statistical production, the financial problems were becoming more pressing due to falling revenues from the so-called “statistics tax” (*taxa de estatística*). Similarly, the creation of the National School of Statistical Sciences (*Escola Nacional de Ciências Estatísticas*) has been linked in the research literature to this crisis, as a response to the demand to raise the level of preparation of the personnel working in government statistics.<sup>51</sup> However, there are two issues that surface in the long term, producing changes or introducing new orientations in the apparatus: (1) the emergence of projects for administrative reform, which generated opposition among the technicians at the IBGE in 1952, but gained supporters as time passed; and (2) the continuous review of statistical campaigns as a priority goal of the institution, including the designation of special commissions.

By contrast, in Argentina the crisis was not confined to the organ of statistics; rather, it affected the Peronist state in its totality. In 1955, just four years after sanctioning the latest norms regulating public statistics, a new *coup d'état* introduced modifications in government statistics, as part of the project carried out by the military personnel participating in the coup to “deperonize” the state: it renamed the central organism of public statistics (*Dirección Nacional de Estadística y Censos*) as well as its official organ of diffusion (*Boletín Mensual de Estadística*), and transferred it back to the aegis of the Ministry of Finance for administrative and budgetary control. Even though the change of government activated, once more, the pattern of high turnover of public employees that was characteristic of the Argentine state,<sup>52</sup> after the brief mandate of scholar José Barral Souto, the direction of public statistics would be placed in the hands of career state employees (between 1956 and 1969). In terms of statistical practices, Peronism had left established a major part of the routines for elaborating statistics that would be maintained after its overthrow and in spite of the instability of the political regime, due to the succession of civil and military governments between 1960 and 1980. It appears that, from 1955 on, the Central Office of Statistics acquired a certain inertial dynamic, given the continuity of its work routines (based on the compilation of censuses and the update of permanent statistics) and the persistence of the priorities set in its research agenda. In the face of such a conservative inclination, in the sense of maintaining the status quo, the innovating stimulus—that is, an effort to transform the practices, techniques, and the aspects of reality objectified by the numbers—would emerge from other state agencies. Nonetheless, some overlaps and incongruities in the elaboration of official statistics would persist. Critiques concerning the backwardness of the statistical publications, the weakness of their estimations,

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51. N. SENRA, 2014.

52. K. SIKKINK, 1993.

and the general quality of their production were promptly formulated by a state elite in favor of modernization, who worked at the recently created developmentalist organisms of the state. In the mid-1960s, there was a certain consensus regarding the urgency of embarking on a new integral restructuring and regulation of the national statistical service.

#### 4. End of the Institutional Cycle and Final Balance

It is evident that the second half of the 1960s opened a new era of institutional life for public statistics in Brazil and Argentina. With a difference of just one year, both countries embarked on administrative reforms represented by the creation of the IBGE Foundation in 1967 and the National Institute for Statistics and Census (*Instituto Nacional de Estadística y Censos*, INDEC) in 1968. They also transferred their central organs of statistics to the sphere of government planning agencies: the Ministry of Planning (Brazil) and the National Committee on Development (*Consejo Nacional de Desarrollo*, Argentina). The latter country incorporated into the statistical norms the principles of centralized direction and decentralized execution that had been in practice in Brazil since the 1930s; government statistics was finally seen as a system and it posed the problem of technical and economic assistance to the peripheral statistical organs. As for the IBGE Foundation, although it concentrated more responsibilities for the production of statistics, it enjoyed autonomy in administrative and financial issues, characteristics that were conspicuously absent from the law decree that created the INDEC (#17.622).<sup>53</sup> In the words of Simon Schwartzman, even though it is doubtful to what degree the data produced by the IBGE were used systematically by the governments for the purposes of long-term planning, the very imaginary of planning placed the legitimacy of the statistical organ on a new foundation.<sup>54</sup> A similar observation can be made about the Argentine case as well.

The comparison laid out here is relevant in at least two aspects. With respect to the processes of the conformation of the state, the research literature in general coincides in underlining the more pronounced “density” of the Brazilian state as opposed to the Argentine one.<sup>55</sup> This article provides arguments for this thesis by examining the configuration of one of its specific technical bureaucracies. Cases like these represent part of an explanation of “the density of the state” and not the other way around; that is, it is not viable to assume the preexistence of this characteristic to explain the consolidation

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53. At present, this law is still in force, and the question of the autonomy of the INDEC still continues as a matter of public controversy and draws criticism from specialists. See S. TORRADO, 2007.

54. S. SCHWARTZMAN, 1997.

55. G. O'DONNELL, 1984.

of a service of public statistics. In the second place, in relation to the conformation of the statistical apparatus, the contrast between these two national experiences allows us to draw attention to the distance that exists between implementing a technical reform (or an administrative centralization) and constructing a scientific–political network to sustain the legitimacy and credibility of a statistical apparatus on the long run. In any case, we still need comparative studies to incorporate other dimensions and further our understanding of the social and political processes that lead to consolidating the social authority of public statistics in different countries.

The comparison between the two cases under scrutiny showed that the “IBGEan model” encouraged cooperation and executive decentralization, while the Argentine politics of forced concentration of statistical tasks led to merging responsibilities for production and coordination in a single central organ. The series of institutional changes in Argentine public statistics could be interpreted as a manifestation of the difficulties of resolving the statistical challenges of the post-war period. In light of this study, those failed attempts at centralization emerge as a contrast to the dynamics of technical agreements and political accords that became—though not free of tensions—a source of the stability of institutional innovation in Brazil.

Integrating a transnational dimension into the comparison not only shows the effects that the worldwide turmoil brought for the statistical apparatuses of peripheral states, it also evidences the fact that the inter-American connections created a scenario of external legitimation for national public statistics and opened up a channel of professionalization for its staff of public employees, exploited—better or worse—by the countries under scrutiny. Unlike Argentine administrative statistics, less connected to the transnational networks, the pan-Americanist aspirations of Brazilian statisticians and their active intervention in those circuits favored the consolidation of Brazil’s statistical apparatus.

On the other hand, the creation of the IBGE formed part of an integral long-term project to reform the public administration and to modernize the state, which was not the case for Argentina. The IBGE was integrated into the guidelines of a broader political program, which transcended Vargas’s government, and which entrusted the institution both with a technical task and a political–cultural mission. This mission contributed to the fact that the research agenda was principally oriented towards social and cultural issues, to the detriment of economic variables, at least until it gained a new orientation in the 1960s. At that time, the depth of the economical–structural transformation of the country—a product of the development strategies implemented by the different governments, beginning with Vargas’s administration<sup>56</sup>—created a

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56. On the contrary, Argentina lacked such continuity in the implementation of such governmental development strategies. M. PLOTKIN, 2006; K. SIKKINK, 1993.

demand among industrial associations, professional economists, and government planners for data on economic issues.<sup>57</sup> This way, with the reform of the network for data collection, local issues lost their predominance in favor of national and regional interests. Thus, the municipalist approach, which represented an important difference between the Brazilian and the Argentine case, was gradually relegated to the background.

Beyond the specificity of the different national political moments that provided the contexts of opportunity for driving those changes, the fact that the statistical reform in Brazil happened earlier than in Argentina did not play a central role in our interpretations. Nonetheless, our understanding is that the relative celerity of the consolidation of the Brazilian statistical apparatus, just like the international prestige it earned in a relatively short period, reaffirms the role of the density of scientific–political networks of support (the importance of having internal and external allies) in the consolidation of statistical systems, as we suggested in our hypothesis.

The IBGEan model encompassed a broad spectrum of social, political, and technical actors who were integrated into its institutional life, while the central organ of Argentine statistics increasingly resembled a socially isolated bureaucratic niche, but one paradoxically permeable to the vicissitudes of the political situation. During the process of institutionalization, broadening the social bases of the edifice of public statistics allowed Brazil to strengthen the legitimacy of statistical activity and, at the same time, it provided institutional strength. In the medium term, this opening generated differential conditions, with respect to Argentina, for the implementation of the new paradigm that was introduced in the Latin American region in the 1960s, according to which the necessities and data demands of users (of the different areas of the government and of the private sector) had to take center stage in the models of statistical organization.

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57. V. FONSECA, 1968, p. 1.

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