DOI: 10.5433/2176-6665.2021v26n2p241

What Numbers Do? Production, Uses, and Effects of Quantification in Everyday Life

O que Fazem os Números? Produções, Usos e Efeitos da Quantificação da Vida Cotidiana

*Glaucia Maricato[1]
*Vitor Simonis Richter[2]

Abstract

The Covid-19 pandemic outbreak engendered an intense circulation of tables, graphics, statistics and rankings that seek to narrate the infection`s behavior and deaths. Such "data" became the object of disputes and negotiations, highlighting the centrality and political effects of numerical narratives. For a long time, researchers have been approaching processes of measuring populations and social phenomena as instruments of power and, more recently, they have advanced in the discussion on the political effects of reducing complex social processes to numbers. In this introduction, we outline issues that populate contemporary debates on quantification processes in the fields of social sciences and science and technology studies (STS). More specifically, we address the role of numbers in government and State narratives and we introduce debates on the role of classifications, on scalar effects, and on the use of numbers on technologies of government.

Keywords: Numbers. Quantification. Technologies of government. Scales. Classifications.

One of the many effects of COVID-19's global pandemic outbreak in the beginning of 2020 was the intense circulation of tables, graphs, statistics, rankings and other technologies for visualizing data on infection and death rates. The "curve" in cases, underreporting, vaccination rates, the percentages of severe cases and hospitalizations – all this terminology has become part of our daily lives. Ever since the first months of the pandemic, we have been flooded with a myriad of debates that put the techniques, classifications, regulations, and instruments for producing epidemiological data under the spotlight. In the first quarter of 2020, the Brazilian media published articles about the soaring number of cases of death from

[1] Freie Universität Berlin, Fachbereich Politik- und Sozialwissenschaften, Institut für Sozial- und Kulturanthropologie (ISK-FUB, Berlim, Alemanha). ORCID: https://orcid.org/0000-0002-4318-3850.
[2] Universidade Federal do Rio Grande do Sul, Instituto de Filosofia e Ciências Humanas, Departamento de Ciência Política, Programa de Pós-Graduação em Ciência Política (PPGPOL-IFCH-UFRGS, Porto Alegre, RS, Brasil). ORCID: https://orcid.org/0000-0001-9475-9277.

Recebido em 02/07/2021; aprovado em 13/07/2021.

respiratory disease without an identified cause, bringing to light the entanglement between categories of diagnosis, obituary classifications, and epidemiological control. At the same time, the discrepancy in relation to the data released by the federal and state governments was also under scrutiny. In mid-2021, the unprecedented number of deaths in the country resonated in public debates in both national and international scenarios, followed by alarming attempts by the federal government to deflect responsibility. In parallel with the sanitary crisis, the political crisis in Brazil gave dramatic contours to the theme of statistical data production, making even more evident the centrality of numbers as a technology used to create official narratives.

Quantification technologies are, of course, not limited to the field of health; after all, we are constantly exposed to indicators of violence, poverty rates, illiteracy rates, the rise or fall of unemployment rates, graphs about pollution in large cities, data on which countries have a greater circulation of fake news, just to mention a few examples. For many years, social scientists have stressed the importance of research projects and discussions aimed at understanding the production, use and effects of quantitative data and numerical language. Authors such as Ian Hacking (1990), Michel Foucault (1998; 2008) and Alain Desrosières (1998) have demonstrated how statistics and quantifications serve as an instrument of government and state power — the emergence of statistics methods was closely entangled with the constitution of nation states in the nineteenth century (HACKING, 1990; SCOTT, 1998).

In recent years, authors such as Marilyn Strathern (2000), Sally Merry (2011), Chris Shore and Susan Wright (2015), and Isabelle Bruno (2008, 2010) have highlighted how numbers, indicators and statistics have made rankings a central aspect of the ordering of governance and auditing technologies. This shift is marked by the transformation and reduction of complex and diverse social processes into numbers, which are later transformed in tables and graphs, and organized in rankings that can be compared and ordered. This process creates a moral hierarchy represented by "good indicators", and by the “best practices” that should be followed in order to achieve them. Beyond that, as pointed out by those authors, the proliferation of global indicators and rankings not only has driven the change of national strategies and new forms of (self) government, but it has also allowed for the emergence of new subjectivities (BRUNO, 2008, 2010; SHORE; WRIGHT, 2015).

As they inform the decisions of public administrators, numbers become important mediators of contemporary government technologies. Nikolas Rose (1999) states that, in addition to informing an administration and its representatives, numbers allow plans and diagnosis of reality to be presented as data disconnected from an agenda, and as objective and impartial information, which are qualities often associated with science (HACKING, 1990; HARAWAY, 1995). We draw attention, therefore, to the way in which numbers are frequently perceived as neutral data, free from ideology and human interference, apolitical – true images of “reality itself.” Numbers, as tables, maps and graphs, become instruments through which versions of reality are enacted; here, we invoke Mol (1999, 2002) notion of ontological politics, which underlines the ways in which ‘reality’ and ‘politics’ are mutually implicated.

Statistics are not just products of the official institutional policy of government agencies, transnational companies, and private business organizations. They are also part of, and taken as, engaged forms of activism. Consider, for instance, NGOs and social movements that defend the rights of women, black populations, and the LGBTQI+ community. These organizations produce, compile, and organize indicators and statistical data on domestic, urban, and police violence. Alternatively, we could highlight patient organizations that pressure local and national authorities to produce statistical data in order to draw attention to specific diseases and health conditions that are usually neglected or excluded from public debate. And at last, we could mention groups of ecologists that use numerical language and statistics to try to convey the impact and consequences that deforestation, global warming, fires, pollution, droughts, storms have on life on planet Earth. The use of the language of numbers through the production of statistics in these cases can be seen as an important strategy for making visible the concerns and demands for policies to protect and promote the interests of these groups. Some authors have dubbed this phenomenon statactivism, "[…] a concept that describes a set of statistical practices aimed at emancipation, as a motto that calls on social actors to use the power of quantification in their political action [...]." (DIDIER; BRUNO, 2021, p. 82).

The Role of Classifications

The analysis of the processes of quantification of everyday life is inescapably intertwined with a reflection about processes of classification and categorization. After all, in order to measure the levels of pollution in large cities, for example, it is first necessary to establish the thresholds that distinguish polluted air from unpolluted air. When an epidemic is declared, it means that the number of cases registered in a given period of time has crossed the line between acceptable and a public health emergency. For rates of domestic violence to be compared across regions, what counts and does not count as domestic violence is first established. Therefore, we draw attention to an interesting line of investigation closely linked to the studies of quantification processes, interested in addressing issues such as: i) what are the categories, classifications, differentiations that inform quantifications?; ii) who are the actors involved in defining these categories?; iii) what negotiations and disputes are in place?; iv) what elements stand out or are made invisible in these classification and quantification processes?; v) how do such classifications and categories create what they are supposed to measure?

Social scientists and historians have analyzed local classifications as a means to understand certain cultures, social relationships and historical processes. As we are reminded in the seminal work of Geoffrey Bowker and Susan Star (1999), "to classify is human." Every day, I open my inbox and separate junk mail from important mail; I create folders and subfolders for different subjects; and from time to time, I rearrange everything from scratch. Once a week, I check my own weight on my bathroom scale and log the number into an app on my cell phone which, in turn, informs me of my BMI, letting me know whether I have crossed the threshold between "ideal weight" and "overweight." In the evening, I

call my “half-brother” to organize our father’s “silver wedding” celebration, and together we make a shopping list divided into "essential" items and “we may or may not buy these” items.

Every time we classify the world around us, we do so by using notions that are embedded in socially shaped moral values and hierarchical relations. That is to say that classification and quantification processes are inevitably permeated by power relations – categories, classifications and standards highlight some points of view and overshadow others (BOWKER; STAR, 1999). This issue becomes even more apparent when we analyze bureaucratization processes, or the freezing of categories, by government technologies. Consider, for example, the simple act of registering on a government platform or app. While, for some subjects, filling out the mandatory fields on them is a routine action, for others, this simple practice might be an experience of institutional violence. By offering only two response options for the “sex” field – male or female – this form would make invisible the subjects who identify themselves as queer, trans, etc. In mid-2021, articles on the demographic census that were about to take place in Poland circulated in social networks. As they pointed out, the form to be completed by Polish citizens requested information about the marital status of the subjects, but did not provide adequate fields for those who were legally married to people of the same sex abroad (unlike most countries in the European Union, same-sex marriage is not recognized in the country). In other words, even if the completion was mandatory for people living in other countries, the census proposed by the government promoted an erasure of the number of citizens in same-sex marriages who live abroad. In these examples, therefore, sex and sexuality are categories and classifications deployed by public administrations which, through state bureaucracies and official statistics, promote political agendas. If those fields in the Polish census had not been modified as a result of pressure from local and international organizations, the result of the census would possibly have released data that indicated that the married population of Polish citizens living abroad was entirely heterosexual.

Returning to the topic of the COVID-19 pandemic, we should ask ourselves about its temporality – about its beginning and (still uncertain) end. When will the World Health Organization (WHO) declare the end of the pandemic? When the majority of the world population is vaccinated? What exactly will be considered as the majority – when vaccination reaches 70%, 80% of the global population? When the number of daily deaths has dropped to a specific rate? If so, which rate is that? How will the “end of the pandemic” deal with open questions about the long-term effects of COVID-19? What will the investment in research be once international attention dissipates? While researching the Zika virus epidemic and its relationship with microcephaly in northeastern Brazil, Debora Diniz (2017) pointed out that, although the Ministry of Health of Brazil declared the end of the emergency health situation in 2017, for mothers of children with congenital Zika syndrome, the epidemic will never end as they will continue to experience a lonely motherhood and a life of caregiving. Furthermore, when the WHO’s Emergency Committee declared the end of the Zika virus emergency, this meant the end of international investments in the development of new research regarding the disease (LAKOFF, 2019).

If we are constantly classifying the world around us, and if these classifications are intrinsically shaped by conceptions, hierarchies and power relations, that means that we also produce numerical data that respond – or add a layer of fixity – to those classifications. Drawing on Science and Technology Studies, Glaucia Maricato (2019, 2021) has analyzed the public campaigns to eliminate Hansen's disease (leprosy) in Brazil. She demonstrates how biomedical classifications and political decisions are entangled in the production of epidemiological data that, in the long run, make this disease almost invisible in the global health agenda at the same time that thousands of new subjects are diagnosed with it every year and medical-scientific questions remain without answers. Vincanne Adams (2016) has proposed the notion of "metrics", as technologies of counting, to address the growing centrality of quantitative approaches in the field of global health which shifts our understanding of what should matter most.

Finally, it is also worth noting that classifications play an important role not only in the way we organize the world around us and in how we shape government technologies, but they are also part of our way of living and experiencing the world. An already classic work on the relationship between the classifications of people and subjectivation processes is the one by Ian Hacking (2002), who suggests the concept of "looping effect" to account for what he describes as a kind of dynamic nominalism. If our daily classification of the world is a regular activity, classifications are also part of the way we identify each other and self-identify – whether by using categories that may not have political implications, such as signs of the zodiac, or by operating classifications that give rise to disputes and carry political and social significance, such as "black", "dyke", or "transvestite." Even though discussing this specific topic is not the main goal of this dossier, the analysis of how classifications of people affect the people classified is a relevant research line that intersect with the study of quantification processes – and two of the articles published here approach issues around classifying people and self-classification in contexts of production of official statistics.

Numbers and Indicators Within Government Technologies

The connection between classifications and quantification has had a prominent space in part of the Foucauldian-oriented literature (DEAN, 1995, 2009; DESROSIÈRES, 1998; FOUCAULT, 1987; HACKING. 1990). In this theoretical tradition, classifications and their numerical manifestations, especially statistics, become an object of study to understand the relationship between knowledge and power in government and state practices. From this set of studies, a few authors have turned to the government technologies that are understood as a "the complex of mundane programmes, calculations, techniques, apparatuses, documents and procedures through which authorities seek to embody and give effect to governmental ambitions" (ROSE; MILLER, 1992, p. 273), whose main objective is to organize everyday behaviors and practices, and influence the subjectivity of the people being governed (ONG, 2003). Government technologies often deploy practices and techniques to simplify an extremely complex reality – such as "population," "newborns," "burned area," "homeless people" and "immigrants."

These “simplifications” provide administrators and planners of government interventions with a synoptic vision that transforms an infinite array of details into a finite set of categories that, in turn, favor summary descriptions, comparisons and diverse compositions based on the data produced and compiled in particular ways (DAS; POOLE, 2004; SCHUCH, 2015; SCOTT, 1998).

Thus, the population mapping, accounting and standardization techniques that constitute government technologies make use of the language of numbers to reify and perform the phenomena and realities they seek to stabilize. Numbers, tables, maps, and graphs constitute an instrument and a language - whose goal is to make these descriptions possible, all while carrying in them information such as what should be quantified, how often, and what should not be made explicit by numbers. As these descriptions are most often used in the elaboration of intervention projects and public policies, we can assume that not only are the numbers politically composed and arranged, but also that policies are made and challenged through numbers (DESROIÈRES, 1998; ROSE, 1999).

This type of reflection also finds support and inspiration in the field of Social Studies of Science and Technology, especially if we think of numbers as a specific way to produce inscriptions, to stabilize relationships and objects, and to input realities into "calculation centers" (LATOUR, 2000). Inscriptions, as defined by Bruno Latour (1986) in his research on scientific practice and the laboratory, are those operations prior to the writing of a scientific artifact, which could come in the form of a report, an article, or a communication to the scientific community (LATOUR; WOOLGAR, 1997). Such operations concern the traces, numbers, and graphs used to create the “powerful explanations” elaborated by scientists. Inscriptions do not constitute the act of writing itself; instead, they are “transformations through which an entity becomes materialized into a sign, an archive, a document, a piece of paper, a trace” (LATOUR, 2001, p. 350), and numbers can be included in this list. In this scenario, numbers as inscriptions allow for the increased mobility of information, and for the underpinning of the immutability of materialized entities. That way, they can travel through socio-technical networks in a more protected way, free from interference and destabilization, until they meet their destination: scientific articles, technical manuals, research reports, administrative balances, tables, graphs, and maps that allow those who interpret them and plan to intervene in the lives of populations. The inscriptions to which Bruno Latour refers, therefore, are devices for mobilizing the world, space and time; for building versions of reality, powerful explanations; and for persuading opponents with alternative explanations.

But going back to government technologies: the conjunction between numbers, inscriptions, and the policies that involve them can be noticed in the recent controversy created by the federal government after canceling the Brazilian census in 2021. As Juan Pablo Estupiñan observes in his contribution to this dossier, censuses are government technologies heavily driven by agendas, ideologies, ethics, and morals which are simultaneously important to the involvement of the state in people's daily lives, and to the emergence of identities created in combination with the results from national censuses. In the case of the cancellation of the Brazilian census, there was an immediate reaction from state institutions, scientists, civil society groups, and the press. During the pandemic, the realization of the census that was supposed to take place in 2020 was postponed in Brazil, as occurred in other

countries. Despite the subsequent preparations and measures taken to conduct the census in 2021, the federal government made the survey impossible by approving a 96% cut in the budget for the Brazilian Institute of Geography and Statistics (IBGE). The reaction to this measure occurred amid distrust regarding the death toll recorded during the pandemic and the economic impacts of inflation and high unemployment that could become harmful to the president's reelection prospects.

Recently, studies on the relationship between quantification and government technologies have prompted research on the impact of numbers beyond the nation state (BRUNO, 2008; MERRY, 2011; SHORE; WRIGHT, 2015; STRATHERN, 2000). Cris Shore and Susan Wright (2015) argue that the style of "governing by numbers" imported from the business and corporate world has become a defining aspect of contemporary modes of government, whose main characteristic is the reduction of complex processes to simple numerical indicators and rankings for administration and control purposes. This use of numbers, indicators and rankings for the government of institutions and subjects has been observed in the growing presence of auditing technologies as a mode of remote surveillance and assessment, and access of outsiders to the classified numbers of companies, institutions, and subjects. Sally Engle Merry (2011) analyzes the role of indicators in global human rights governance, and points out that, at the same time that numbers, indicators and rankings reinforce a "corporate" style of government that came to be understood as a "good government" model – which focuses on indicators as a mode of government – they also open up space for public scrutiny and political pressure on governments and administrations. It is in this context that demands for transparency policies and challenges to official figures are strengthened (PORTER, 1995). Isabelle Bruno and Emmanuel Didier (2013) stand out in this line of analysis. Based on their work on benchmarking, an administrative technology for comparing performance indicators that promotes competitive dynamics in spaces and relationships originally oriented by cooperation, Bruno and Didier (2021) make use of the notion of "statactivism" as a way of understanding social movements and the pressure they make on administrations by using numbers to denounce and strengthen their demands. In doing so, these movements also shift the production of numbers from their privileged spaces and relations within the nation state and the capital towards new groups and institutions that come to dispute the 'reality' through numbers. Research on this topic has advanced in very interesting and productive directions in Brazil by authors such as Daniel Hirata et al. (2019), Bruno Cardoso (2019), Eugênia Motta (2019a, 2019b) and Fernando Rabossi (2019).

Among the various effects that the adoption of this type of government technology promotes, one stands out in the recent literature: the consolidation of forms of self-government guided by rankings that could waive the need for control and surveillance organizations and technologies by nation states. Rankings as a mode of government are used to tell good and bad performances apart, as well as to determine possible course corrections based on what is expected of each institution, company, sector, and subject. The assessment, judgment and transfer of risks falls onto the subjects who become even more responsible for the success or failure of their institutions, enterprises and daily life management (CAMARGO et al., 2021; SHORE; WRIGHT, 2015). The "descent" of government technologies via numbers towards companies and subjectivities self-governed by rankings and indicators, as

well as the generalizations that create a "world of indicators" (MERRY, 2001) in global governance, invite us to think about another important role of numbers in our everyday lives: the making of scales.

Scale as an Effect of Quantification Practices

As mentioned before, the daily monitoring of a set of numbers, indicators, and graphs that have come to enact the pandemic in everyday life became an intrinsic part of the COVID-19 pandemic experience. As the number of contaminations, fatalities and affected countries increased, we closely followed the work of these numbers in outlining the scale of the problems caused by the SARS-Cov-2. Ever since it was described as an "outbreak" located in Wuhan, China, the numbers of cases and deaths have supported the definition of COVID-19 as an epidemic, and later, as a highly lethal respiratory disease pandemic that continues to kill thousands of people every day. The use of numbers and the experience of the pandemic help us make sense of how the scales we deploy to account for the phenomena of social life are not predefined nor available for analysts to simply explain the movements between the micro, meso or macro levels; local, regional, national, or global, universal or particular. Among the various relationships, infrastructures, inequalities and sufferings that the COVID-19 pandemic have made explicit, we can list the perception of the processes of scale-making as one of the issues highlighted by the policies of number throughout the pandemic.

In the social sciences, scales have been widely used as a tool for analysis rather than an object of analytical scrutiny itself. However, they have been progressively seen as effects of practices and languages deployed to allow people and institutions to organize, interpret and guide their actions in the world (CARR; LEMPERT, 2016; LATOUR, 2005; STRANTHERN, 2004; TSING, 2005, 2012). As Marilyn Strathern (2004, p. xvi) has already pointed out, scales consist in the organization of perspectives on objects of knowledge and interrogation, and that is why they are created – and in a very laborious way, as Carr and Lempert (2016) argued. Insofar as they are created, they are done by people, groups and technologies that stabilize a situated and particular view of the relationship between qualities and scalable classifications. Therefore, scales become a matter of perspective, a way of looking at and situating an object or a relationship that emphasizes some dimensions and characteristics to the detriment of others – precisely because it is an inherently relational and comparative process.

It is in this process of scaling relationships or objects that disputes are made evident, and politics made explicit: Which scale is used in each situation? Which relationships are stabilized when a scale is outlined? Which perspective is promoted by a particular scale? How does it come to be established, promoted, stabilized and institutionalized? What are the materialities and meanings that compose it? These questions invite analysts to empirically follow the scale creation processes, paying attention to the ability of a group or people to produce a scale, what Anna Tsing (2012) calls "scalability." This skill carries and involves power relations and possibilities to establish, destabilize or perpetuate hierarchical scales of value and power. Thus, scales become a sociological and ethnographic object that must be analyzed to better understand how to guide and signify our ordinary

actions in everyday life, but also in exceptional situations. By placing the emphasis on how scales are created and how they affect people and their relationships, numbers and different forms of quantification emerge as an important form of mediation of scaling practices and of the materialization of scales that emerge as effects of these practices.

Following Carr and Lempert's (2016) invitation to try to understand how scales are assembled, made recognizable, and stabilized through various communicative practices, we might have an easier time understanding the path taken by COVID-19 all the way until its "pandemic" scale. We can also take as an example some numbers that shaped the way Brazilian people experienced and interacted with the scale of fires in the Pantanal wetlands in 2019. Temperatures were between 4 and 6 degrees Celsius above average, and were a factor to be weighed in the explanations for the 334% increase in the number of fires in the region in comparison to the previous year. However, fires in the Pantanal wetlands and in the Amazon region increased exponentially within private properties registered in the Rural Environmental Registry (CAR), according to a report by the National Institute for Space Research (INPE) (QUEIMADAS…, 2021). In other words, these fire spots could indicate the success of the agricultural frontier expansion policies promoted by the federal government. Along with the images of burning animals and the cloud of smoke that darkened cities in the south and southeast of the country, the extent of burned area in the thousands of hectares – usually converted into numbers of soccer fields – creates a different scale for the problem. No longer limited to local vegetation and species, the extent of the burned area, which continues to grow, mediated by the number of hectares destroyed, makes the problem into a national and international concern.

The process of creating scales cannot be circumscribed and reduced to the use of numbers. Metaphors, metonyms and other forms of comparison and juxtaposition are also used in scalar projects. Numbers, however, seem to constitute an important path towards an ethnographic understanding of the scales that populate and guide our daily lives.

The Articles in This Dossier

We open this collection with a thought-provoking article by Natalia Romero Marchesini entitled *Muertes que cuentan: La producción de números sobre femicidios, transfemicidios y travesticidios como una política de Estado*. In this piece, the author analyzes how the official numbers of violent deaths of cisgender, transsexual, and transvestite women are recorded in the Argentinian context. As Marchesini points out, this is an official quantification policy that has just been implemented in the country and is linked to the fight against femicide, transfeminicide and transvesticide. In addition to the analysis of official documents of the public administration, Marchesini carried out participant observation and interviews with members of the National Criminal Information System (SNIC), which belongs to the Dirección Nacional de Estadística Criminal (DNEC) of the Ministry of Security in Argentina. Based on the analysis of these data, the author demonstrates how the construction of the official record of these deaths has taken place, who are the actors responsible for the records, and which categories come into play in its conception. In

addition to that, Marchesini reflects on the conditions of possibility that allowed the establishment of the need to measure such violent deaths, highlighting how this process is due to pressure from women's movements, the academic community, and local organizations of LGBTQI+ activists. Moreover, it is also linked to the broader universe of legislation and international agreements that have been driving policies around this topic in recent years.

The highpoint of this article, if we may say so, is in the author's analysis of the debates and disputes surrounding the implementation of the "gender identity" variable in police administrative records. Marchesini highlights the issues raised when police forces, the first agents to be called to the scene of a crime, are faced with forms that question the gender identity of the murdered person. How to classify these people according to their gender identities? How can police officers distinguish between cis, trans, and transvestite people at the crime scene? Bringing up the negotiations and questions that were raised between agents who sought to reformulate the measurement system, the author offers an interesting glimpse into the decision process that led to the implementation of the "gender identity" variable in the National Criminal Information System (SNIC). As the author explains, this measure was accompanied by a series of technologies of identification and classification of deaths – such as the introduction of testimonies from family and community members of the murdered person – and the implementation of an educational policy aimed at the police forces. It is, therefore, a work that brings to light a debate on the effectiveness of measurement policies, an important issue in the debate on quantification processes; after all, how is data collection carried out? What forms are involved in the process and how are they used? What categories are deployed? What are the disputes and negotiations in place in such cases? What are the actors involved?

If the first article takes us into an analysis of the recent implementation of an official classification and quantification policy, the second article that constitutes this dossier offers a historical reflection on the processes of inclusion and exclusion of census categories. In *¿Negro o Afrocolombiano? Disputas por las Clasificaciones Raciales/Étnicas en los Censos Colombianos*, Juan Pablo Estupiñan analyzes the classifications of race/ethnicity in different demographic censuses carried out in Colombia in order to reflect on how these categories have contributed to the creation, legitimization and update of social representations about the Afro-Colombian populations and the place of race in social relations. In the first part of the article, based on a historical analysis of the censuses carried out in Colombia up to the mid-1930s, the author reflects on how certain population groups were defined and made statistically invisible; this process would be linked to the narratives about race and nation that would follow. Specifically, the author demonstrates the relationship between the emergence of eugenics at the end of the nineteenth century, the development of population whitening projects by the country's conservative elites, and the way in which the category "race" is removed from the Colombian census from 1928 onwards and staying out of it until 1991 when it was reinserted. Next, Estupiñan reflects on the transformations that took place in the 1990s, the political context of official recognition of ethnic and cultural diversity in Colombia, and analyzes the most recent issues and categories of the 2005 and 2018 census in relation to the demands

and actions of the Afro-Colombian movement aimed at fostering self-recognition to the country's black populations.

The article provides a powerful reflection on the way in which demographic censuses are deeply linked to nation projects that respond to the political agendas of their time. In the case analyzed, the author highlights the relationship between the production of official statistics, and the project of constitution of a white nation, a mestizo nation and, more recently, a multicultural nation. Furthermore, Estupiñan proposes an important debate on how the historical marginalization of Afro-Colombian communities reflects until this day in the production of official statistics, considering that many of the subjects do not recognize themselves as belonging to this population. In this regard, the author describes a series of strategies, campaigns and alliances that have formed between Afro-Colombian groups and organizations since the late 1990s with the aim of promoting self-recognition. It is an article that brings a powerful discussion about the processes of erasures and visibilities deployed by the measuring technologies of the state, and about the organization of social actors in the demand for statistical visibility within the framework of the consolidation of a multicultural project.

In the third article that makes up this dossier, *A luta de um comando e o uso dos dados como instrumento para a elaboração de estratégias de atuação de um batalhão da Polícia Militar do Estado do Rio de Janeiro*, Elisângela Oliveira dos Santos discusses how criminal statistics are being increasingly used for the operational planning of Rio's police. Based on her own fieldwork, archival research, and interviews with police officers and the command of one of the city's military police battalions, the author discusses the daily life, planning, decision-making process, and actions performed by the unit's "team." Dos Santos draws special attention to the way in which "evidence-based policing" has become one of the main methodologies for allocating resources, and planning police actions. By analyzing the dynamics of work in the battalion, the author describes the way in which decisions are made, the perspective of police officers in relation to certain topics and approaches, as well as the so-called strategic indicators of criminality in the region where those officers work. The highpoint of this article is the way it draws attention to how "crime statistics," which do not necessarily indicate a reduction or increase in violence, support an approach centered on police goals and productivity. In other words, it is through the numbers of offenses/crimes collected by the battalion that resources are allocated, and it is the fluctuation of these statistics and the achievement or not of specified goals that determine the good performance of the team. This is an important reflection on the circulation of indicators that are produced in particular ways and by specific perspectives, and which, in turn, produce effects on the way policies and actions are performed in daily life by state institutions.

We close the dossier with the contribution of Alexandre Cardoso, Eugênia Motta and Victor Mourão entitled Números emergentes: temporalidade, métrica e estética da pandemia de COVID-19, which addresses the effects of the "avalanche of numbers" and indicators on the collective experience of the COVID-19 pandemic in Brazil. Based on the analysis of articles from news portals, and the public discussions that surrounded them, the authors present an interesting correlation between three dimensions of the pandemic (aesthetics, temporality,

and controversies), and suggest a periodization of the pandemic in Brazil in three different moments using the numbers that have drawn attention and concern in the country as basis.

The authors propose that the first moment of this periodization would be characterized by the abundant circulation of epidemiological forecasting models on the expansion of COVID-19 that created a collective experience of expansion through numbers presented in graphs, curves, and maps of distribution of infected people, hospital beds vacancy, and deaths. In this correlation between numbers, imagery, and predictive models of bed vacancies and contagion, the authors argue that the first moment was defined by skepticism and perplexity in the face of the urgency of "flattening the curve" that ended up feeding the tension between saving lives or the economy.

The second moment is characterized by the compilation, systematization, and circulation of epidemiological data on the growing rates of contagion and deaths, and a movement towards the interiorization of the virus. For the authors, these numbers mediated speculation and predictions about the possibilities of waves and peaks of contagion and death. Therefore, the notion of "waves," "peaks," "plateaus," among others, transformed the temporality of the pandemic: from predictions and models about the future of the pandemic, we moved toward the tragic present with the daily and incessant upsurge in the number of deaths. The third moment characterized by the authors is represented by the beginning of vaccination campaigns, the explanation of geopolitical differences in the face of the hope brought by the vaccines, and the controversies surrounding the exclusionary dichotomy between life and economy – how to measure costs of lost lives against the costs of the quarantine measures necessary to contain the virus. At this point, the authors highlight the emergence of a "pandemic mode of statactivism" that focuses on unraveling state numbers, including new forms of organization between the press, medical, and academic institutions to dispute the reliability of the numbers that have come to inform the debates about the cost of lives lost, the economic costs of quarantine, and the accountability of governments and administrations.

Therefore, the closing article of this dossier presents important contributions about the role of numbers in the enactment of the SARS-cov-2 pandemic and in the collective experience of this unprecedent crisis. The authors' final argument is also thought-provoking in this regard. For them, the pandemic is far from being a totally new rupture in the social experience; instead, it promotes original articulations mediated by indicators, numbers, and their visual expressions, which are deployed to recreate the tensions between life and the economy, data production, and the effects of public numbers on everyday lives.

This special issue brings together a set of articles that reflect on the role of numbers in different fields, for different public policies and involving diverse issues. It is a collection about the way quantification processes and their power relations permeate even the most microscopic areas of everyday life – whether in the constitution of public policies, in the formulation of governmental forms or in the processes of subjectivation of the self. Therefore, we hope to contribute to the current debates on the ways in which numbers, in their various forms and scales, are used in the production of narratives about the world around us. With this in

mind, we thank the journal's editorial team, in particular, all the authors who submitted their proposals to the dossier, as well as the peer reviewers who have contributed to the selection of the texts published here.

Bibliography

ADAMS, Vincanne. *Metrics*: what counts in global health. Durham, NC: Duke University Press, 2016.

BOWKER, Geoffrey C.; STAR, Susan Leigh. *Sorting things out*: classification and its consequences. Cambridge: The MIT Press, 1999.

BRUNO, Isabelle. La déroute du «benchmarking social: la coordination des luttes nationales contre l'exclusion et la pauvreté en Europe. *Revue Française de Socio-Économie*, Paris, n. 5, p. 41-61, 2010.

BRUNO, Isabelle. La recherche scientifique au crible du benchmarking. Petite histoire d'une technologie de gouvernement. *Revue D'histoire Moderne & Contemporaine*, Paris, n. 55, p. 28-45, 2008.

BRUNO, Isabelle; DIDIER, Emmanuel. *Benchmarking*: L'État sous pression statistique. Paris: Zones, 2013.

CAMARGO, Alexandre de Paiva Rio; LIMA, Renato Sérgio de; HIRATA, Daniel Veloso. Quantificação, Estado e participação social: potenciais heurísticos de um campo emergente. *Sociologias*, Porto Alegre, v. 23, n. 56, p. 20-40, jan./abr. 2021.

CAMARGO, Alexandre de Paiva Rio; MOTTA Cardoso, Eugênia de Souza Mello Guimarães; MOURÃO, Victor Kuiz Alves. Números emergentes: temporalidade, métrica e estética da pandemia de COVID-19. *Mediações*, vol. 26, n. 2, p. 311-332, mai/ago. 2021.

CARDOSO, Bruno. Benchmarking et sécurité à Rio de Janeiro. *Statistique et Société*, v. 7, p. 25-30, 2019.

CARR, E. Summerson; LEMPERT, Michael (org.). *Scale:* Discourse and dimensions of social life. Oakland: University of California Press, 2016.

DAS, Veena; POOLE, Deborah (ed.). *Anthropology in the margins of the state*. Santa Fe: School of American Research Press, 2004.

DEAN, Mitchell. Governing the unemployment self in an active society. *International Journal of Human Resource Management*, London, n. 24, p. 559-583, 1995.

DEAN, Mitchell. *Governmentality*: power and rule in modern society. Londres: SAGE, 2009.

DESROSIÈRES, Alain. *The politics of large numbers: a history of statistical reasoning*. Cambridge: Harvard University Press, 1998.

DIDIER, Emmanuel; BRUNO, Isabelle. O «estativismo» como uso militante da quantificação. *Sociologias*, Porto Alegre, ano 23, n56, jan-abr. 2021, p. 82-109.

DINIZ, Débora. *Zika em Alagoas*: a urgência dos direitos. Brasília: Letras Livres, 2017.

ESTUPIÑAN, Juan Pablo. ¿Negro o Afrocolombiano? Disputas por las Clasificaciones Raciales/Étnicas en los Censos Colombianos. *Mediações*, vol. 26, n. 2, p. 272-291, mai/ago. 2021.

FOUCAULT, Michel. A governamentalidade. *In*: FOUCAULT, Michel. *Microfísica do poder*. Rio de Janeiro: Edições Graal, 1998.

FOUCAULT, Michel. *Segurança, território e população*. São Paulo: Martins Fontes, 2008

FOUCAULT, Michel. *Vigiar e punir*: nascimento da prisão. Petrópolis, Vozes, 1987.

HACKING, Ian. *Historical ontology*. Cambridge, MA: Harvard University Press, 2002.

HACKING, Ian. *The taming of chance*. Cambridge: Cambridge University Press, 1990.

HARAWAY, Donna. Saberes localizados: a questão da ciência para o feminismo e o privilégio da perspectiva parcial. *Cadernos Pagu*, Campinas, n. 5, p. 7-41, 1995.

HIRATA, Daniel; COUTO, Maria Isabel; GRILLO, Carolina; OLLIVEIRA, Cecilia. Échanges de tirs. La production de données sur la violence armée dans des opérations de police à Rio de Janeiro. *Statistique et Société*, Paris, v. 7, n. 1, p. 31-39, jun./jul. 2019.

LAKOFF, Andrew. What is an epidemic emergency? *In*: KELLY, Ann; KECK, Frédéric; LYNTERIS, Christos (ed.). *The anthropology of epidemics*. London: Routledge, 2019. p. 59-69.

LATOUR, Bruno. *Reassembling the Social. An introduction to Actor-Network Theory*. Nova Iorque: Oxford University Press, 2005.

LATOUR, Bruno. *A esperança de Pandora: ensaios sobre a realidade dos estudos científicos*. Bauru: EDUSC, 2001.

LATOUR, Bruno. *Ciência em ação. Como seguir cientistas e engenheiros sociedade afora*. São Paulo: Editora UNESP, 2000.

LATOUR, Bruno. Visualisation and Cognition: Thinking with eyes and hands. *In*: JONES, Alun; KUKLICK, Henrika. *Knowledge and Society:* Studies in the Sociology of Culture and Present. Cambridge: MIT Press, 1986. p. 1-40.

LATOUR, Bruno; WOOLGAR, Steve. *A vida de laboratório*: a produção dos fatos científicos. Rio de Janeiro: Relume Dumará, 1997.

MARICATO, Glaucia. Fábulas do fim: classificações e consequências no campo da saúde. *In:* ROHDEN, Fabíola; PUSSETTI, Chiara; ROCA, Alejandra. *Biotecnologias, transformações corporais e subjetivas*: saberes, práticas e desigualdades. Brasília, DF: ABA Publicações, 2021. p. 305-330.

MARCHESINI, Natalia Romero. Muertes que cuentan: La producción de números sobre femicidios, transfemicidios y travesticidios como una política de Estado. *Mediações*, vol. 26, n. 2, p. 256-271, mai/ago. 2021.

MERRY, Sally Engle. Measuring the world: indicators, human rights, and global governance. *Current Anthropology*, Chicago, n. 52, supl. 3, p. 583-595, 2011.

MOTTA, Eugênia. Les favelas: normalité et subnormalité dans le recensement national brésilien. *Statistique et Société*, Paris, v.7, n. 1, p. 9-15, 2019a.

MOTTA, Eugênia. Resistência aos números: a favela como realidade (in)quantificável. *Mana*, Rio de Janeiro, v. 25, p. 72-94, 2019b.

ONG, Aiwa. *Buddha is hidding*: refugees, citizenship, the new America. Berkley: University of California Press, 2003.

PORTER, Theodore M. *Trust in Numbers. The pursuit of objectivity in science and public life*. Princeton: Princeton University Press, 1995.

QUEIMADAS atingiram 4,5 milhões de hectares no Pantanal durante 2020 segundo levantamento do MP. G1, Rio de Janeiro, 23 abril. 2021. Disponível em: https://g1.globo.com/mt/mato-grosso/noticia/2021/04/23/queimadas-atingiram-45-milhoes-de-hectares-no-pantanal-durante-2020-segundo-levantamento-do-mp.ghtml. Acesso em: 28 jun. 2021.

RABOSSI, Fernando. La contrebande au Brésil. *Statistique et Sociéte*, Paris, v. 7, n. 1, p. 17-24, 2019.

ROSE, Nikolas. *Powers of freedom*: reframing political thought. Cambridge: Cambridge University Press, 1999.

ROSE, Nikolas; MILLER, Peter. Political power beyond the State: problematic of government. *British Journal of Sociology*, Oxfordshire, v. 43, n. 2, p. 271-303, jun. 1992.

SANTOS, Elisângela Oliveira. A luta de um comando e o uso dos dados como instrumento para a elaboração de estratégias de atuação de um batalhão da Polícia Militar do Estado do Rio de Janeiro. *Mediações*, vol. 26, n. 2, p. 292-310, mai/ago. 2021.

SCHUCH, P. A Legibilidade como gestão e inscrição política de populações: notas etnográficas sobre a política para pessoas em situação de rua no Brasil. *In*: FONSECA, Claudia; MACHADO, Helena (org.). *Ciência, identificação e tecnologias de governo*. Porto Alegre: CEGOV, 2015, v. 1, p. 121-145.

SCOTT, James C. *Seeing like a state*: How certain schemes to improve the human condition have failed. New Haven: Yale University Press, 1998.

SEGATA, Jean. A pandemia e o digital. *Revista Todavia*, Porto Alegre, v. 7, n. 1, p. 7-15, 2020.

SEGATA, Jean; SCHUCH, Patrice; DAMO, Arlei Sander; VICTORA, Ceres. A Covid-19 e suas múltiplas pandemias. *Horizontes Antropológicos*, Porto Alegre, ano 27, n. 59, p. 7-25, jan./abr. 2021.

SHORE, Cris; WRIGHT, Susan. Governing by numbers: audit culture, rankings and the new world order. *Social Anthropology*, Cambridge, n. 23, v. 1, p. 22-28, 2015.

STRATHERN, Marilyn (org.). *Audit cultures:* anthropological studies in accountability, ethics and the academy. Londres: Routledge, 2000.

STRATHERN, Marilyn. *Partial connections*. New York: Altamira Press, 2004.

TSING, Anna L. *Friction:* an ethnography of global connection. Princeton, NJ: Princeton University Press, 2005.

TSING, Anna L. On nonscalability: the living world is not amenable to precision-nested scales. *Common Knowledge*, Durham, v. 18, n. 3, p. 505-524, 2012.

Declaração de Co-Autoria: Glaucia Maricato declara ter sido responsável pela "redação da parte introdutória da apresentação, do subitem o papel das classificações e do resumo dos três primeiros artigos." Vitor S. Richter declara ter redigido "os itens sobre tecnologias de governo e escalas" bem como ter contribuído para a "elaboração da introdução e da apresentação do último artigo do dossiê." Ambos enfatizam ainda que revisaram, deram ideias e sugestões de redação em relação a todas as partes do texto.

*Minicurrículo dos Autores:

Glaucia Maricato. Doutora em Antropologia Social pela Universidade Federal do Rio Grande do Sul (2019). Pós-doutoranda junto ao Instituto de Antropologia Social e Cultural da Universidade Livre de Berlim. Bolsista do Programa Marie Sklodowska-Curie (Processo nº 886338). E-mail: glauciamaricato@gmail.com.

Vitor Simonis Richter. Doutor em Antropologia Social pelo Programa de Pós-Graduação em Antropologia Social da Universidade Federal do Rio Grande do Sul (2016). Pós-doutorando junto ao Programa de Pós-graduação em Antropologia Social da Universidade Federal do Rio Grande do Sul. Bolsista PNPD/CAPES (Processo nº 88882.316239/2019-1). E-mail: vsrichter@gmail.com.