ABSTRACT

The provision of water in the municipality of São Paulo depends on a system of reservoirs, of which two are particularly important: Cantareira, located in the north, and Guarapiranga-Billings, in the southern part of the city. Preservation of the headwaters of both systems is at present in conflict with the urgent need for housing, especially in the case of poorer sectors of the population that depend on informal settlements or social housing systems. This article derives from research carried out in the region where the headwaters of the Guarapiranga reservoir are located. It has a double aim. On one hand, it traces how environmental protection of the reservoir area has become a governmental issue; on the other hand, based on interviews and ethnographic approaches, it aims to discuss how environmental protection issues are dealt with on a day-to-day basis.

Keywords: environmental policies, headwater reservoirs, social housing, discursive practices, urban poverty

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INTRODUCTION

The provision of water for the metropolitan region of São Paulo depends on a system of reservoirs that come together in the Alto Tietê Basin. Two of these reservoirs are particularly important for water management for the municipality: Cantareira in the north, and Guarapiranga in the extreme south. The areas of protection of the headwaters (mananciais), created by law in 1976 (Lei 1.176/76), comprise 54% of the total area of the metropolitan region (São Paulo, 2007/2009). These areas include six sub-basins, one of which—Cotia-Guarapiranga—is the focus of this article. The protection program, especially in densely populated areas of the Billings and Guarapiranga reservoirs, has been at the center of an imbroglio of laws, urban and environmental policies, and social movements battling for more social housing.

The Guarapiranga reservoir is a manmade lake. It was built in 1906 by the Light and Power Company (known as Light) for the purpose of generating electricity for the city. According to Jacobi, Fracalanza, and Silva-Sanchez (2015), the 1924 drought generated a deficit in the provision of drinking water in the city of São Paulo, and by 1929 water was already being drained from the Guarapiranga reservoir, following an agreement between the state government and Light.

At that time, the reservoir was located in the municipality of Santo Amaro, which was incorporated into the São Paulo municipality in 1935. Incorporation was part of urban planning, which designated the area for leisure. At its left margin, various amenities were created: sailing clubs; a racetrack still in operation.
for Formula One and other events; a planned site, modelled on the English garden cities, for upper market houses (Interlagos), and another for workers (Cidade Dutra).

The right margin was mostly occupied by small holdings used as weekend retreats, or for the production of vegetables and other farm products. Starting in the 1970s, pressed by rising property prices and a lack of social housing provision schemes, a steady trickle of people, most of them migrants from Minas Gerais and the northeast of the country, started to either buy or build in informal settlements in the area.

Life in those bygone years was full of challenges, according to the narratives of older residents (Giavarotti, 2012; Tavares, 2013): mud roads, lack of adequate public transport, no electricity or water supply, and, of course, no public health provision or schools. As a result, various social movements were active in the region. Stories by older residents tell of the stamina needed to mobilize residents, hire buses, and participate in sit-ins at governmental departments in the center of town (Oliveira, 2015). At present, a lot has been achieved, but this is still a region with many needs, especially in the areas adjacent to the Guarapiranga reservoir belonging to the Jardim Angela district, which is the focus of the research discussed here (Sposati, 2013).

Among the many problems in the region, this article focuses on tensions regarding settling down in an area that is protected by law because of the many rivers that feed the reservoir. Removing people for environmental protection reasons is not always viable, as alternative housing solutions are hard to come by. Solutions, therefore, inevitably have to be negotiated around rights, and this issue takes us to a different sort of problem. Residents that have been in the area for longer have bought their land under two misguided assumptions: that the purchase was legally binding, and that there were no restrictions regarding environmental protection.

This article has a double aim. On one hand, it traces how environmental protection of headwater systems has become a governmental issue; on the other hand, based on interviews and ethnographic approaches, it aims to discuss how environmental protection issues are dealt with on a day-to-day basis.

DATA SOURCES AND ANALYTICAL APPROACHES

Understanding meaning in everyday life has been the focus of the framework for analysis of discursive practices developed by the research group led by Mary Jane Spink at the Graduate Program in Social Psychology at the Pontifical Catholic University of São Paulo (Spink, M.J.P., 1999). Discursive practices, in this approach, concern language in use, following in the footsteps of philosophers (for example, Austin, 1962), historians (Foucault, 1987, 1991), and literary theorists, especially Bakhtin (1994).

Language in use is context bound and best understood as versions enacted in specific settings (Mol, 2002). Thus, if settings are multiple, and if a diversity of actors (both human and non-human) are present, the world of versions is necessarily complex, and their coordination not always feasible. From a dialogical point of view, coordinating versions depends on sharing linguistic repertoires. However, as repertoires are developed and/
or used in specific settings (health, policies on environment and art, among others) and circulated by a variety of means (texts, newspapers, television, etc.), they are not necessarily readily available to everyone. Therefore, a problem, such as the tension between environmental protection and the right to a roof over one’s head, will be enacted differently by different actors.

Mol (1999) warns that a multiplicity of versions is not equal to perspectivism. Different ontologies are in operation. In perspectivism, the different points of view concern a single object. It is a realist position. However, if ontology is reconfigured as ontologies (plural), then reality is not fixed and the research task is to understand how versions are coordinated in practice. In this article, practice concerns modes of inhabiting a territory—more specifically, an area of preservation.

This specific case study is part of a larger project concerning living in areas at risk of flooding and landslides, carried out with a grant by CNPq in the M'Boi Mirim Local Administration of the São Paulo municipality. There were two reasons to choose this specific area for research purposes. One concerns the objectives of the project funded by the CNPq, whose focus is on people living in areas at risk of flooding or slippage. According to a 2010 survey of risk areas in the municipality, 50 of the 407 areas mapped at the request of City Hall by the Instituto de Pesquisas Tecnológicas are located in this region. The second reason stems from previously established links with the Sociedade Santos Martires, which has been active in the region for some 25 years and, in its monthly meetings, brings together many of the leaders and activists in the region.

In order to understand the problem from the point of view of public policies, the first step was to locate documents pertaining to the various strands of problem definitions and potential solutions: the creation of the Mananciais Project; legislation on civil defense and data on risk areas in the region of M'Boi Mirim; urbanization plans for the area, as well as media reports during the so-called water crisis throughout 2014 and 2015. These documents chronicle the emergence of environmental protection as a governmental problem.

Documents are taken here as discursive practices. As proposed by Peter Spink (1999, p. 136):

Public domain documents are social products that become public for one reason or another, or that are produced for public use. Ethically they are open for analysis because they are part of the public sphere, they have been made public in a way that implies accountability and direction. They may reflect the slow transformations in institutional positions and postures that are present in the day to day or, in the public spaces of the social media, pamphlets and networks, of the different groupings and collectives that give form to the informal, can reflect the toing and froing of arguments and positions on public issues.

In order to understand environmental protection from the point of view of people who live with this problem on a day-to-day basis, data was gathered through establishing a presence in the area, starting in 2013, by conducting observations, conversations, and interviews. In this article, the focus of analysis will be on
the versions of two local leaders in environmental issues who, in terms of Actor-Network Theory, are positioned as spokespersons for the community (Latour, 1987). One, Dona MA, has acted as a councilor on various advisory bodies: the local health council, the participatory council of the sub-mayorality, and others. The other leader, Dona Z, has acted mostly on issues related to the removal of people from at-risk areas.

Environmental protection of headwater systems as a governmental issue

At present, it is widely recognized that the Guarapiranga system is in a critical position. The World Bank’s analysis concerning its loan for the “Integrated Water Management in Metropolitan São Paulo” project stated the following:

Among the pressing problems facing MRSP, the region’s water supply and demand balance is a critical issue for the city’s competitiveness and economic growth. MRSP’s extremely low per capita water availability is comparable to that prevailing in the driest areas of the Brazilian Northeast. Half of the city’s potable supply is imported from neighbouring river systems, which is contentious given the demands of other conurbations vying for the same water. The remainder comes from headwater-reservoir systems (mananciais) within MRSP itself. The Guarapiranga and Billings reservoirs make crucial contributions, together providing potable water for 28% of MRSP’s population (or some 5.4 million people). (World Bank, 2006)

The reservoir’s waters are polluted by sewage as a result of both inadequate provision of sanitation by the Cia. de Saneamento Básico do Estado de São Paulo, (SABESP) and the disorderly occupation of its headwaters. Acknowledgement of the importance of its protection dates back to the 1970s, when the first laws for the protection of the mananciais were issued by the state government (Lei 898/1975 and Lei 1.172/1976), with new legislation approved in 1997 (Lei 9.866). These laws applied to the vast region that includes the Guarapiranga and Billings reservoirs and spans various municipalities of the greater São Paulo conurbation known, as stated before, as the Alto Tietê Basin.

More recently, in 2006, another law was issued, pertaining specifically to the Guarapiranga reservoir (Lei 12.233):

Artigo 1º - This law declares the Hydrographic Basin of the Guarapiranga as a headwater of regional interest for public supply and hereby creates the Area of Protection and Recuperation of the Mananciais of the Hydrographic Basin of the Guarapiranga – ARPM-G – situated at the Unit for Management of Water Resources – UGRHI of the Alto Tietê.

With this law, three areas of intervention were defined. Area 1 has occupation restrictions, including those of special importance for the preservation, conservation, and recuperation of natural resources of the basin. Area 2 applies to occupation for urban/rural use and the maintenance of environmental conditions for the supply of water in the quantity and quality that is required. Area 3 concerns environmental recuperation of degraded areas in need of urgent intervention.

This more recent law has many objectives:
fostering concerning: participative management involving government and civil society; establishing conditions for water management to ensure the provision of water with adequate quality for the population; and regulating the forms of occupation of this territory, as well as promoting environmental education.

The protection laws are complemented by other initiatives for the recuperation of the area that can be broadly included in the Mananciais Project. This project proposes interventions in five sub-basins in the metropolitan region: Guarapiranga, Billings, Alto Tietê-Cabeceiras, Juqueri-Cantareira, and Alto e Baixo Cotia. Its main aim is to contribute to the protection of metropolitan headwaters, including regulating territorial occupation and providing a better quality of life for the local population (São Paulo, 2007/2009). Given the impact of occupation of the territory at the sub-basins of Billings and Guarapiranga, the program aims to develop integrated actions for the expansion of the public infrastructure, social-environmental preservation, and caring for the quality of the water. Thus, the program involves structural and nonstructural actions to be carried out in the short, medium, and long term concerning environmental, social, and land use interventions, understanding that there is an overlap of problems involving urban poverty and occupation of the territory that often compromises water quality.

In July 2009, the World Bank approved a loan of US$ 100 million for the development of Integrated Water Management in Metropolitan São Paulo, with the overall objectives to protect and maintain the quality of water resources, improve the quality of life of the poor population residing in the targeted area, and strengthen the institutional capacity for water management. The loan is directly linked to the Mananciais Project, which has now entered its third and final phase.

Both the World Bank analysis and the Mananciais Project are full of good intentions when viewed from a bird’s eye view. From the ground, things look very different. The project lies at the crossroads of a variety of governmental and non-governmental problem solvers. Its focus is the vast watershed systems that are vital for providing water for the more than 20 million people who live in the greater metropolitan region of São Paulo. However, the area is quite densely populated and has been occupied in a disorderly manner, especially since the middle of the 20th century. Disorderly occupation for housing purposes provides a very different perspective on the problem.

The Mananciais Project is part of a broad set of interventions carried out by both the state government and the municipal Town Hall that includes Plano da Bacia do Tietê; Plano Metropolitano de Desenvolvimento Integrado; Plano Diretor de Abastecimento de Água da SABESP; and Plano de Macrodrenagem da Bacia do Alto Tietê (São Paulo, 2007/2009). This broader set of activities includes the following:

- The Guarapiranga/Billings Program involves a diversity of actions for urban development, including infrastructure, building houses for those who have been removed due to environmental protection or risk, and land tenure regularization. The Guarapiranga Program started during the Luiza Erundina government (1989–1993)
at the municipal level, with funding from the Word Bank, Town Hall, and SABESP. It continued in the governments of Paulo Maulf (1993–1997) and Celso Pitta (1997–2001). With Marta Suplicy (2001–2004), its name was changed to “Projeto Mananciais” and it was expanded to include the Billings headwaters.

- Programa Córrego Limpo is an initiative of SABESP and the Town Hall aimed at correcting deficiencies in the existing water flow systems. As these deficiencies concern mostly areas of disorderly occupation, the interventions often involve removing houses built at the margins of streams, the urbanization of slums, and the implantation of linear parks.
- Pro-Billings, an intervention program for environmental improvement of the mananciais areas of the Billings reservoir in the São Bernardo do Campo municipality, is being financed by the Japanese Cooperation Agency.
- The Guarapiranga Shoreline Project is aimed at the recuperation of tourism, sport, and leisure activities through the creation of parks interlinked by bicycle and walking paths in areas ceded by the Empresa Metropolitana de Águas e Energia, a state company that owns the reservoir and its margins.

These many interventions have incorporated the constitutional principle of public participation in public management, with a variety of councils created for their implementation. However, the number of governmental agencies involved that traditionally do not interact with each other, and the obvious threats of expropriation and forced removal of those living in protected areas or areas that are at risk of flooding and slippage, generate tensions that create participation difficulties.

*Environmental protection in the day-to-day for people living in the district of Jardim Angela*

Jardim Angela and Jardim São Luiz belong to the Regional Administration of M’Boi Mirim, located on the south side of the Pinheiros River in the municipality of São Paulo. Together they account for a 602 km territory where some 700,000 people live. These were rural areas, forgotten by City Hall until the 1970s when, due to the massive arrival of workers for industries in the area and the lack of housing policies, people started to “buy” land or just settle, first in the São Luiz area and later in Jardim Angela. Very basic infrastructure (water, sewage, power) was provided as a result of intense protest movements, and other amenities (health and child care centres, for example) were provided by voluntary actions associated, initially, with the Catholic Church’s social commitment in the aftermath of Liberation Theology (Oliveira, 2015).

This is a region where self-build houses in occupied areas intermingle with middle class houses built on irregular allotments. Therefore, building in areas at risk of flooding and landslides when removal is a constant threat, striving to acquire land tenure regularization in protected areas, and a very aggressive housing rights movement that is constantly invading unoccupied areas, and even invading the reservoir through illicit landfill sites, creates intense turmoil in which the absence of effective control and action by the government generates frustration and a lack of perspectives for the future.
Based on discourse analysis (Spink, M. J. 1999), two themes concerning environmental protection emerged from the interviews with the two community leaders. The first is the contrast between those who built their houses on what they thought was legally acquired land, and those who they consider unlawful occupiers. The second theme is the truncated dialogue between local leaders and government representatives.

The disorderly occupation of the territory: Tensions between buying and occupying land

The analysis of documents regarding the headwater reservoir systems of the municipality, known as the Guarapiranga reservoir, suggests that until the 1970s this was not even seen as part of the municipality. Forgotten until the first environmental protection law issued in 1975, which was so restrictive that smallholding owners opted to sell their land to incorporators who sold plots without legal binding, this land was the location of the infamous selling and buying contracts (Sales, França, & Filardo, 2000).

As stated by Dona Z,

Most of the plots of land in our region are all buying and selling (informal contracts). So, my plot is also a contract of buy and sell. There is a large stairway here, where I am is Capela 1 and from these steps onwards is Capela 2. In the Association (referring to a neighborhood association active locally), long time ago, meetings were held for the regularization of the plots of land in this neighborhood, with the presence of two lawyers. One lawyer for Capela 1 and the other for Capela 2. I know that from the steps to here most people got the right to land deeds. But from the steps to there, which is where I live, they were not able to get the deeds for their land.

On and off there have been efforts to legalize land bought in this informal manner. Some residents were able to get their land title, but Dona Z was not one of them, because her plot is within the mananciais area, with the aggravating factor that it is considered an area of high risk for flooding and landslides.

Dona Z’s family built on either side of a small river that is now in the midst of a judicial imbroglio. Her father was not able to buy a plot of private land and built in public land hoping that, as was typical then, he would acquire ownership through usucapion (usuocapião). As she stated in the interview, “At that time the question of the mananciais did not exist.” In the process of urbanizing this particular river, the family was removed. In her words,

Because by then the discussion on the areas of headwaters (mananciais) was strong. At this time as the lawyer went away, gave up and went somewhere else saying he would keep on fighting, but it came to nothing. So my husband went to the town hall. And they said “No, where you live is a mananciais area, you have no right to land deeds.” So we continue with a buy and sell contract. And then they came with this story about drainage which was to be done in all this region. And what is not a mananciais area is an area of risk. Where I live is considered an area of risk 4 (the highest degree of risk for the Civil Defense system).

Both Dona MA and Dona Z see their situation differently from the more recent occupiers,
whose claim to ownership is somewhat more complicated. In their perspective, they bought their land legally, but in their advocacy for environmental protection they are often confronted with governmental actors who state that they are illegally occupying a protected area. Curiously, this situation favors their work with the local population.

Interviewer: now, it seems easier to organize local leadership with regards to health and education. What about the environment (“o verde”? And the mananciais?
MA: Well, the environment (“o verde”) is complicated because when we try to organize the population, we don’t work with divisions, we work summing up. So we get in touch with people wherever we go, people from here above, from all sides, we invite them to unite, to sum. And when we talk about the environment (“o verde”), most of those that live there below don’t want to discuss it because they are already inside the reservoir. When we say they are wrong, I can say they are in the wrong because so am I, because I am also inside the mananciais.

Interviewer: now, it seems easier to organize local leadership with regards to health and education. What about the environment (“o verde”? And the mananciais?
MA: Everyone was informed. M. has been here.
A (Dona MA’s husband joining in): they stay neutral
MA: they made an overflight here
A: they only want money
MA: But we never know how these things are being negotiated because I think, I am not sure that it is as I think, but I, MA, think they are doing this because of this political time (meaning elections). I think, and hope it is this, right? That they are waiting for this phase to end in order to take action.

Invasions in the area are frequent and many local leaders are torn between defending the right to a house and the protection of the environment. As in the case of Dona Z and Dona MA, they see themselves as rightful owners and yet as illegal occupiers of protected areas whose value they respect.

Interviewer: Now, this situation must be very complicated, because whoever is invading must get very angry with you
MA: They don’t fight with me because they know they are in the wrong. Because I go there and talk to them. I explain to them. But you know that those who are there are not the invaders; it is those who bought from who invaded.

The latest tale concerns an area in front of her house, a small holding that until recently was covered in trees and local vegetation. Now she wakes to the sound of falling trees and frightened macaws (araras) whose
nests have been destroyed. As usual, she gets in touch with the local regional administrator, the local city councilors, and whoever else might take action. As usual, there is no action. At the same event, the Guarapiran-ga embrace, I meet MR, who is a technical advisor to the deputy mayor. She says a meeting between the Secretary of the Environment, the Secretary of Urban Affairs, and local representatives has been set but local residents do not believe that there will be action against the criminal cutting of trees.

Besides the issue of invasion of protected areas, there is also the problem of building in areas that are at risk of flooding and landslides. That has been Dona Z’s main preoccupation until recently, when disillusion and threats have caused her to give up her advocacy. Without doubt, the issue of removal from risk areas is emotionally charged and judicially complicated. Dona Z battled on both sides: to provide information to local residents and to prove to the governmental authorities that these people were indeed in at-risk areas and were entitled to rental subsidies.

Interviewer: so, your project (of neighborhood watch) did not involve removals?
Z: In a way there would have to be removals because many houses…there was on top (of the stream), some were being built right on top of the stream. But our issue with these removals was because many local residents were running risk for their life inside these houses, and were marked for being removed and were not going to get any compensation. So, the issue of removals, that we were fighting for, was because they (government officials) were saying that the residents would have to be moved and would not get more that 5.000 reals and we started to fight for the right to have social rental subsidies. It was a fierce battle and that is when we had the public civil action.

Battle is indeed the right word, as government authorities rarely gave credence to local leaders like Dona Z. In the meetings, they were called liars as government authorities dismissed their tales of people being removed and not getting social rental subsidies. At some point, one of the state prosecutors who was helping them suggested they start taking photos. In her words, “So we started taking photos to show them that there were many houses in the region that were in danger of collapse.” The welcome received by the public prosecutors did not extend to the local regional administration, where meetings were frequently cancelled and their presence was only tolerated through the intervention of one of the state prosecutors.

Z: we continued doing our job. We were called liars. When there was a representative of the Town Hall they would say that the residents had been payed to leave and that work was being carried out in the region and were almost finalized. We would say “no”, and they would say “yes”. So the public prosecutor said to us: “Know what you should do? Start to take photos.” So we started to do so (...) to show them that there were many houses in the region that were at risk of collapse. Then I and D (another activist), we started to go everyday to the public prosecutor office to show the situation of that house, in this photo.

Interviewer: the people at the regional administration, of the housing sector, of civil defense, they did give you any support?
Z: Often we would set up a meeting and they would cancel it. Once or twice we participated in a meeting because the promoter set it up saying she needed a meeting with the local administration and saying she would take two local residents, but didn’t mention our name, and then I and D would participate.

SOME CONCLUSIONS

Why has there been no action? Brazil is rich in legislation; almost too many laws have been passed with good intentions: environmental protection, rights for housing, rights for health, for education, for leisure. This proliferation of rights reminds one of Bobbio’s considerations about the age of rights, when the discourse on rights becomes more complex and rights compete among themselves. The classic era of rights, as proposed by Bobbio (1996), incorporates basically three generations of rights that have their inception at specific moments in the history of occidental societies. A first generation stems from the bitter fights for religion and civil liberties. They concern rights that “restricted the power of the State and provided an area of freedom from the State to an individual or to specific groups” (Bobbio, 1996, p. 18).

A second generation is concerned with social rights, stemming from social transformations related to work, health, and education and, according to Bobbio, it is in this setting that the proliferation of rights occurs. It occurs in three directions: through the increase of materialities that require protection; through granting rights to entities not previously considered, such as social minorities, animals, and the environment; and through recognition of the specificities of human beings: children, women, the aged, mental health patients, and so forth. This proliferation can be attested by the various declarations of rights approved at the United Nation Assemblies since 1948, as well as through national policies in democratic countries.

How does one decide hierarchically which rights are more important? Does one fight for preservation of the environment? Can the housing shortage be solved in the absence of rigorous urban planning? How can control be exerted over territory when the interests of corrupt city councilors, drug lords, and social housing movements like the Workers without a Roof Movement (MTST) collide with other collective interests, such as the need for water management? Hence we arrive at the title of this paper: too many diverging meanings at a crossroads with public management.

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