

Theoretical-empirical Article

Environmental Governance that Emerges from Action: Pragmatist Studies in Protected Areas

Governança Ambiental que Emerge da Ação:
Estudos Pragmatistas em Unidades de Conservação



Jorge Stürmer¹
Maurício Serva^{*1}

ABSTRACT

Objective: the main objectives of this work are to contribute to reducing the gap in studies on the management of protected areas in the field of administration, and to understand how environmental governance is performed in action. **Theoretical approach:** the theoretical basis was composed of approaches to environmental governance, pragmatist-inspired sociologies, and pragmatist analysis of organizations. **Methods:** the research strategy adopted the general premises of ethnography in organizational studies, with daily *in situ* monitoring of the situations experienced by the actors in the organizations and their interactions with the other actors in their environment. In-depth interviews, bibliographical research, and document analysis were also carried out. **Results:** the results of the research primarily indicate that the environmental governance that emerged from the action in the two protected areas is a process characterized by conflicts, controversies, and contradictions. **Conclusion:** environmental governance can be characterized as processes of creating shared governance and management mechanisms, establishing institutional arrangements and partnerships, building territorial assets, and monitoring actions. What stands out in all these processes is the cross-cutting nature of managing conflicts, controversies, and confronting contradictions.

Keywords: environmental governance; protected areas; organization studies; pragmatism.

RESUMO

Objetivos: os objetivos principais deste trabalho são contribuir para reduzir a lacuna de estudos sobre a gestão de Unidades de Conservação (UCs) na área da administração e compreender como é performada a governança ambiental na ação. **Marco teórico:** a base teórica foi composta pelas abordagens da governança ambiental, das sociologias de inspiração pragmatista e da análise pragmatista de organizações. **Métodos:** a estratégia de pesquisa adotou as premissas gerais da etnografia em estudos organizacionais, com o acompanhamento cotidiano *in situ* das situações vivenciadas pelos atores das organizações e de suas interações com os demais atores de seu ambiente. Também foram realizadas entrevistas em profundidade, pesquisas bibliográficas e análise de documentos. **Resultados:** os resultados da pesquisa indicam prioritariamente que a governança ambiental que emergiu da ação nas duas UCs é um processo caracterizado por conflitos, controvérsias e contradições. **Conclusão:** a governança ambiental pode ser caracterizada como processos de criação de dispositivos de governança e gestão compartilhada, de estabelecimento de arranjos institucionais e parcerias, de construção de ativos territoriais, e de ações de fiscalização. Destaca-se em todos esses processos a transversalidade da gestão de conflitos, de controvérsias, e enfrentamento de contradições.

Palavras-chave: governança ambiental; unidades de conservação; estudos organizacionais; pragmatismo.

* Corresponding Author.

1. Universidade Federal de Santa Catarina, Florianópolis, SC, Brazil.

Cite as: Stürmer, J., & Serva, M. (2024). Environmental governance that emerges from action: Pragmatist studies in protected areas. *Revista de Administração Contemporânea*, 28(5), e240105. <https://doi.org/10.1590/1982-7849rac2024240105.en>

JEL Code: Q2

Editor-in-chief: Paula Chimenti (Universidade Federal do Rio de Janeiro, COPPEAD, Brazil)
Reviewers: Anderson Luiz do Espírito Santo (Universidade Federal do Mato Grosso do Sul, Brazil)
Gustavo Matarazzo Rezende (Instituto Federal de Educação Ciência e Tecnologia de São Paulo, Brazil)

Peer Review Report: The Peer Review Report is available at this [external URL](#).

Received: May 03, 2024

Last version received: August 25, 2024

Accepted: September 08, 2024

Published: October 14, 2024

of invited reviewers until the decision:

	1	2	3	4	5	6	7	8	9	10	11	12
1 st round		(X)										
2 nd round												

INTRODUCTION

The ecological issue has generated one of the biggest controversies in contemporary society. Socio-environmental degradation, the increasing destruction of the Earth's resource base, and the ecosystem imbalances caused by these processes have led the environmental issue to become a "generalized social and ecological problems of planetary scope, which globally affects social organization, state apparatuses, and all social groups and classes" (Leff, 2006, p. 282). However, the dominant economic paradigms resist incorporating the environmental principles necessary to transition to a new productive paradigm. Scientific projections indicate that if trends of environmental degradation persist and global actions to mitigate risks are insufficient, we may face drastic consequences (Beck, 2010).

These uncertainties put Brazil at the heart of this debate. The country is considered special for managing climate demands and protecting global biodiversity. Brazilian territory is home to high-value natural resources that are sources of essential environmental services for planetary society. Brazil is a signatory to the 1992 Convention on Biological Diversity, which establishes the system of protected areas (in our country, they are legally called Conservation Units) as an efficient solution for biodiversity conservation, indicating in situ conservation as the best way to conserve biodiversity. Such areas are considered the central pillar in developing biodiversity conservation strategies worldwide (Barreto, 2014). Brazil has 2,446 protected areas¹, totaling 2,506,199 km². Thus, protected areas have become a well-established instrument for biodiversity conservation and one of the most widely used environmental governance 'dispositif'. Still, they pose a significant challenge to their management (Matarazzo, 2017).

The magnitude of this challenge can be estimated by looking at the issues related to the risks that these areas face, already identified in the relevant literature (Bernard et al., 2014; Cook et al., 2017; Forrest et al., 2015; Kroner et al., 2019; Mascia & Pailler, 2011; Mascia et al., 2014; Nuttall et al., 2023; Qin et al., 2019; World Wildlife Fund [WWF], 2019) under the name 'protected area downgrading, downsizing, and degazettement' — PADDD. Such literature considers downgrading to be the decrease in the number, magnitude, or extent of legal restrictions on human activities within the protected area. Downsizing is the event in which a protected area has its legal boundaries changed, resulting in a reduced area without changing the type or category of use, and the degazettement process occurs when the territory completely loses its legal protection status. PADDD risks have become increasingly

common, constituting a global phenomenon that can undermine efforts to conserve biodiversity and ecosystem services and mitigate climate change and, therefore, have direct implications for managing these areas.

Studies in 73 countries show that between 1892 and 2018, 3,749 PADDD events were recorded, affecting approximately 2 million km², an area equivalent to the territory of Mexico (Bernard et al., 2014; Cook et al., 2017; Kroner et al., 2019; Mascia et al., 2014; Nuttall et al., 2023; Qin et al., 2019). These areas include territories recognized by the UN and UNESCO as essential for environmental protection. These studies demonstrate that PADDD is a historical phenomenon that affects conservation policies and reveals the dynamic and conflictual nature that characterizes protected areas. Seen as socially constructed governance regimes, these areas and, consequently, their management respond to political and socioeconomic pressures, including conservation demands on global and local scales. The aforementioned research reports that 78% of PADDD events were enacted after 2000, and 64% were concentrated between 2008-2018. In general, there are three main factors in these occurrences: production and extraction of commodities (especially oil and minerals) on an industrial scale; infrastructure works; and local land claims and human settlements (Kroner et al., 2019; Mascia & Pailler, 2011).

In Brazil, between 1981 and 2012, 93 PADDD events were identified. 74% of the events occurred between 2008 and 2012, which were mainly attributed to the generation and transmission of energy in the Amazon, which is the most affected biome, with 42% of the enacted PADDDs (WWF, 2019). According to Bernard et al. (2014), approximately 7.3 million ha of protected areas were affected by such events, and projects currently being processed in the Federal Congress could cancel 2.1 million ha of protected areas in the Amazon. The authors state that none of the recent PADDD events in Brazil were based on technical studies that considered their impact on the respective protected areas, in addition to the fact that there were no public consultations with civil society; on the contrary, the Legislative Chambers have been sensitive to political lobbying from the agribusiness, construction, and energy sectors. The PADDD phenomenon also affected the two protected areas that were part of our research. The Lagoa do Peri Municipal Natural Monument, created in 1981 as a municipal park, was recategorized by Law 10,530/2019, allowing a greater number of human activities in the territory. Meanwhile, the São Joaquim National Park is at risk of having its boundaries reduced by 20%, according to Bill 208/2018, whose proposal is still being processed by the National Congress.

This context of increasing risks to protected areas and, at the same time, the need for environmental protection, environmental governance, especially when it involves protected areas, can be an open space for innovative forms of management and development of practices and power relations between the state, civil society, and the market concerning this issue (Câmara, 2013; Jacobi & Sinisgalli, 2012). Consequently, we believe that environmental governance plays a decisive role in effectively managing protected areas. Undeniably, protected areas provide crucial services to the country in tackling environmental issues, but despite their importance and territorial extension, there is a gap with few studies in the area of administration in Brazil regarding the complexity of their management (Matarazzo & Serva, 2019). There is a debate surrounding its regulatory framework, but we believe it is not possible to understand the Brazilian environmental governance process based solely on this debate. The instruments that provide legal support for environmental governance are limited by territorial factors that influence decisions and actions, subjecting them to local dimensions. Therefore, it is urgent also to develop studies on concrete management practices.

Therefore, this study aims to broaden the understanding, primarily in our country, of how the phenomenon of environmental governance in the management of protected areas is performed, analyzing it directly from the actions developed by the actors in the territories and presenting as evidence the cases of two protected areas in Santa Catarina: the São Joaquim National Park (PNSJ) and the Lagoa do Peri Municipal Natural Monument (MONA).

THEORETICAL FRAMEWORK

Governance, a polysemic concept

Etymologically, the Anglophone term 'governance' originates from an ancient Greek verb transcribed as 'kubernao', 'kybernan', 'kubernan' (Cozzolino, 2014; Maserumule, 2011). Its original application was attributed to the Latin and Greek expressions that meant steering boats and to variations of the word that referred to piloting, directing, and governing (Jessop, 1998). According to Cozzolino (2014), the first references to the term, meaning to give direction to a state policy, were made by Plato in 'The Republic'.

In his essay 'Democratic governance: A genealogy', Bevir (2011) analyzes the socioeconomic changes that influenced the social sciences in the 20th century and their implications for democracy. For the author, the concept of governance emerges from the rupture of 'modernism' with 'developmental historicism,' undermining previous visions

of state and nation. The debate on governance intensified after the crisis of the modernist state, when governance and state reforms were discussed as responses to the crisis, notably from 1980 onward. In this process, governance proposals adopting normative concepts were launched by international organizations, such as the World Bank, the IMF, and the OECD. The one with the greatest impact was expressed by the World Bank (World Bank, 1992), in which 'good governance' is presented as fundamental to creating and maintaining an environment conducive to strong and equitable development. Although without the power to directly intervene in the sovereignty of nations, by intensifying discussions on governance, international organizations influenced public policies adopted by several countries. After the World Bank's proposal, the term 'governance' began, in several cases, to justify reforms of the state's bureaucratic apparatus.

Subsequently, the debate on governance was expanded, becoming part of the analyses of general problems that affect the state and the social bases of democracy, the strengthening of civic cultures, and the confrontation of social inequalities. Thus, the term has been used with various approaches associated with various themes. Ansell and Torfing (2016) find that:

Today, governance is one of the most frequently used social science concepts in the world, as any internet search will readily confirm. A vast array of researchers, research centers, journals and conferences are devoted to the study of governance, and many new theories of governance have been promulgated over the last two decades (p. 1).

This appropriation of the term by different areas of knowledge and its breadth made the concept polysemic. Rhodes (1996) states that "the term 'governance' is popular but imprecise. It has at least six uses, referring to the minimal state, corporate governance, the new public management, 'good governance,' socio-cybernetic systems, and self-organizing networks." (p. 652).

As there is no room here for an extended theoretical discussion on the various uses of the concept within the scope of scientific production, we will briefly highlight the approaches of public governance and environmental governance due to the correlation between both.

Ansell and Torfing (2016) define public governance as "Interactive processes through which society, the economy, and the environment are steered towards collectively negotiated objectives. The crucial insight is that no single actor has the knowledge, resources, and capacities to govern alone in our complex and fragmented societies." (p. 4). Rigaud (2012), in the *Dictionnaire encyclopédique de l'administration publique*, offers the following definition:

Interdisciplinary field of study that focuses on power relations between government authorities, civil society, and the market, in a context of transformations in the capacity of political communities to govern themselves legitimately and act effectively (p. 1).

In the current century, with the worsening of the ecological crisis, environmental governance has gained increasing importance in the debate on public action. In conceptual terms, the studies present a similar variety of approaches to addressing governance as a whole; they are produced from different perspectives. Thus, it is possible to find in this variety the formalism of the proposals of international organizations, in addition to the scientific production of researchers with numerous perspectives. Due to the size limitations governing scientific articles, here we prioritize the concepts developed by some authors that we consider to be more enlightening.

According to [Cavalcanti \(2004\)](#), environmental governance is the “institutional framework of rules, institutions, processes, and behaviors that affect how powers are exercised in the sphere of policies or actions linked to society’s relations with the ecological system.” In the work ‘Environmental governance in Brazil’, [Moura \(2016\)](#) offers us a broad view:

With regard to environmental issues, in particular, there are specific challenges to be faced in the field that has been called ‘environmental governance,’ which concerns the processes and institutions through which societies organize themselves and make decisions that affect the environment (p. 9).

[Graham et al. \(2003\)](#) define environmental governance as “interactions among structures, processes, and traditions that determine how power and responsibilities are exercised, decisions are taken, and citizens or other stakeholders have their say.” (p. 1). [Jacobi and Sinisgalli \(2012\)](#) state that “environmental governance involves everyone in decisions about the environment, through civil and governmental organizations, to obtain broad and unrestricted adherence to the project of maintaining the integrity of the planet.” (p. 1471).

We highlight some concepts demonstrating the conflicts inherent in environmental governance processes, a perspective we also adopted in this study. [Jacobi and Sinisgalli \(2012\)](#) argue that environmental governance should encompass the participation of ‘multi-actors,’ the decentralization of power to local government, and mechanisms for conflict resolution. [Evans and Thomas \(2024\)](#), in their book *Environmental governance (2024)*, state that this work “places governance within its wider political context to explore how the environment is controlled, manipulated, regulated, and contested by a range

of actors and institutions” (p. 5). Besides clearly addressing manipulation and contestation, the authors advocate that:

Rather than presenting environmental problems as an external threat, communities and the public have the right to create the kinds of places and societies they want to live in. Community engagement and public participation reduce conflict between different interests around contentious issues ([Evans & Thomas, 2024](#), p. 246).

Pragmatist-inspired sociologies

In addition to environmental governance approaches, this research is based on studies called ‘pragmatist-inspired sociologies.’ This name refers to studies based on philosophical pragmatism created in the USA at the end of the 19th century. The beginning of pragmatism is attributed to a group of philosophers that emerged in 1870 in Cambridge. The group met frequently to discuss philosophy and called themselves the ‘Metaphysical Club’. Two basic characteristics marked the origin of this philosophical current: the break with a priori concepts, prioritizing human experience, action, and experimentation in the construction of knowledge, and the valorization of the effects of actions as valid references for the meaning of our ideas. Thus, a realistic ontology is established at its foundations. Charles Peirce, considered the founder of this group, and William James, a full professor at Harvard and the greatest promoter of this approach at that time, stood out.

In the first decades of the 20th century, pragmatism expanded as one of the main philosophical trends in the USA, notably with the contributions of John Dewey and George Mead, both professors at the University of Chicago. Their works allowed the extension of pragmatism to sociology, both because its content is situated on the threshold between these areas and because of its use as an epistemological basis for symbolic interactionism. After the deaths of Dewey and Mead, pragmatism suffered a period of stagnation, being intensively revived in the second half of the century by philosophers such as Richard Rorty, Hilary Putnam, Axel Honneth, Hans Joas, and Richard Bernstein.

From 1980 onward, a movement initiated in critical sociology established new connections between philosophical pragmatism and the social sciences. The movement does not present a model, unity, or strict procedures, with thematic and methodological plurality being some of its characteristics. However, sharing the basic precepts of pragmatist ontology and epistemology allows them to be identified together. In this study, we draw on some approaches from ‘pragmatist-inspired sociologies,’ whose general lines are identified by [Chateauraynaud \(2022\)](#), [Serva \(2023\)](#) and [Ogien \(2015\)](#): (a) preference given to situations, actions, and their effects

in the analysis of social phenomena; (b) priority given to the experience of all actors involved in the research; (c) objects and other non-humans considered in the analysis of situations; (e) research as experimentation; (f) continuity of the critical perspective in the social sciences.

Therefore, the design of this research, data collection, and analytical process were based primarily on the following approaches: pragmatist analysis of governance (Ansell, 2016); analysis of situated action (Quéré, 1997, 2009); public problems and pragmatist research ethnography (Cefai, 2010, 2011, 2013, 2017); procedural approach to 'dispositifs' (Dodier & Barbot, 2017); critical analysis of socio-environmental issues (Chateauraynaud, 2016, 2017, 2022); and pragmatist analysis of organizations (Serva, 2023). Specifically, we adopted from these approaches their general lines and some concepts that we will summarize below; we chose not to undertake long theoretical discussions about these aspects but rather to summarize our main contributions. This option allows us to invest more in action analysis, corroborating the pragmatist perspective of the priority of analyzing the situations of the phenomenon under study.

Ansell (2016) argues that a pragmatist lens leads us to three fundamental questions about governance: What is problematic? What values are at stake? And what is possible? In examining such questions, this lens focuses empirically on problem-solving, deliberation, and experimentation. The author argues that this positioning is equivalent to the guidance toward the concrete situations in which governance issues arise: "in terms of governance, the focus on the concrete situation guides us toward the insertion of individuals and groups in historically specific webs of activity and focuses on the problems that arise in the course of this activity" (Ansell, 2016, p. 394). As for the deliberation, Ansell (2016) states that it "is anything but a frictionless form of 'information processing' or simple 'exchange of reasons' ... Like problem solving, deliberation is problematic" (p. 395).

The analysis of concrete situations is in line with the contribution of pragmatism to the sociology of action. In this study, we adopted the approach proposed by Quéré regarding the analysis of situated action:

A sociology of action worthy of the name must start from the phenomenon of acting in a situation, which is a procedural and serial phenomenon, and implies a dimension of concrete intervention on a state of affairs to transform it. It must be attentive to the agencies that mediate the practical activity, the forms of exploration, and reflection that it puts into practice, the structure of situations and the ways of coordinating with others and with things (Quéré, 2009, p. 309).

The author's considerations concerning the aspects that lend complexity to the analysis of action, with emphasis on the interpretation of the 'agency' of objects and artifacts, the reestablishment of the temporal structure of the situation, and the distinction for analytical purposes between environment, context, and situation (Quéré, 1997), proved to be appropriate for examining the situations experienced in our field research.

Deepening the pragmatist theoretical support for examining the problematic situations inherent to the governance of protected areas, we followed the general outline of the approach to arenas and public problems proposed by Cefai (2017). It allowed us to establish connections between the everyday issues protected area managers face and the political, economic, and environmental macro-challenges. By retracing the development of Dewey's political philosophy through the Chicago School to current studies, the author demonstrates how the legacy of these theoretical sources helps us follow the dynamics of the origin of the problematic situation up to the political process:

Faced with a problematic situation whose consequences are perceived and assessed by a group of people as harmful to human beings and the goods to which they are linked, but also to living beings or the Earth, these people become restless, question themselves, investigate, experiment, discuss... they imagine scripts, design alternatives, try to discover how to regulate or suppress what they have defined as a problematic situation. This collective dynamic brings about the emergence of both a problem and its audience (Cefai, 2017, p. 188).

Investigating collective action through pragmatist ethnography, Cefai (2017) proposes carefully observing the political process throughout inquiry, problematization, and publicization, frequently affected by tests of argumentative validity, conflicts of interest, and controversies. For mapping collective action in favor of governance undertaken by protected area managers and the various audiences affected by protected areas and their 'dispositifs', the author's recommendations were of great importance in interpreting the data collected.

The concept of 'dispositif', in accordance with the 'procedural approach to dispositifs' developed by Dodier and Barbot (2017), was used by us to understand the meanings of actions and the dynamics of actors' movements throughout the phenomenon investigated. We start from the expectations of the actors generated by the 'dispositifs' in the face of their interests and rights, aiming to understand the generation of actions, mobilizations, alliances, and political conflicts. The authors recognize Foucault's original conception but advance the sociology of action,

proposing new perspectives for the concept: “a ‘dispositif’ can be conceived as a prepared concatenation of sequences, intended to qualify or transform a state of affairs through the medium of an assemblage of material or language elements” (Dodier & Barbot, 2017, p. 496). It is a broad conception, allowing for the consideration of different types of non-human elements present in situations and which interfere in various ways in the action. Dodier and Barbot (2017) recommend the procedural approach to ‘dispositifs’ as a method of analysis that seeks to reveal the normative supports on which individuals rely to undertake mediations and to act in complex situations. With the support of this approach, we could reflect on the relationship between the relevant ‘dispositif’ (the SNUC², public hearings, management plans, various materials used to support actions, among others) with the actions of managers and other actors participating in governance.

Complementing the overall research design, we adopted the main lines of the pragmatist analysis of organizations (Serva, 2023), particularly using the resource called ‘action analytical operators.’ Given that the adoption of pragmatism does not involve a priori theoretical elements imposed on experience and action, nor the use of models before data collection and examination, the analytical process can become a complex issue for the researcher, especially in administration, where using models is widespread. One of the possible ways to address this issue is to use action analytical operators:

These are solutions that the pragmatist researcher can employ to interpret and discuss the organizational phenomena that interest them. Capturing what emerges from the action implies identifying and dealing with the most relevant aspects of the agency of actions and their effects. It is primarily essential to analyze what actors actually do, how they act, the effects generated, and the recursion of these effects into new actions (Serva, 2023, p. 14-15).

In our study, four operators emerged exclusively from ethnographic research: (a) creation of governance and shared management ‘dispositifs’; (b) establishment of institutional arrangements and partnerships; (c) construction of territorial assets; (d) inspection actions. Each operator brings together the issues and situations that most mobilize managers to act, spending more time and energy on arrangements in governance processes and that generate the most forceful effects in these processes. According to Serva (2023), “in addition to helping the comparison with theory, analytical operators refer to the narrative construction, leading to the text as a material product of the analytical enterprise.” (p. 15). Proceeding in this way, we elaborated the narrative corresponding to the analytical operators, which will be presented later.

METHODOLOGY

Initially, we will present the two protected areas analyzed in this study.

The PNSJ is a federal park located on the eastern edge of the Serra Geral (SC), with escarpments varying between 1,500 and 1,822 meters in altitude. Created in 1961, its main objective is to protect the remaining araucaria forests within its 49,672 hectares. This area covers the municipalities of Urubici, Bom Jardim da Serra, Orleans, Grão-Pará, and Lauro Muller. Despite being created in 1961, its land regularization only began in 2006. However, approximately 50% of the area is still occupied by private properties, constituting one factor that generates conflicts of interest in the territory. The PNSJ is vital due to its water potential, as it hosts the sources of the state’s main rivers (Pelotas, Canoas, and Tubarão). Its geological formation, composed of volcanic rocks and sandstone generated over 133 million years, provides the recharge and discharge of the important Guarani Aquifer. The park is a tourist attraction in Serra Catarinense: in 2022, it received 110 thousand visitors (<https://www.icmbio.gov.br/parnasaojoaquim>). Its management team is made up of just three environmental analysts, 10 security guards, two administrative staff, and six firefighters (temporarily hired), a structure far below what is necessary, considering the almost 50 thousand hectares of area.

MONA was created in 1981 as a municipal park, and its category was changed to a protected area of the Natural Monument type in 2019, according to Law 10,530 (Lei 10.530). It was designed to protect its water source and natural heritage. Nowadays, it is recognized as a model of leisure infrastructure and environmental education combined with environmental preservation. With an area of 4,274 hectares, it is located south of Florianópolis. It is part of one of the last remaining areas of the Atlantic Forest, home to the largest freshwater lagoon on the Santa Catarina coast, Lagoa do Peri, with 5 km² of water surface. The lagoon is the largest source of drinking water on the island; its treatment plant supplies water to around 100 thousand inhabitants, in addition to forming an essential ecosystem for preserving biodiversity given the variety of species of fauna and flora. MONA is legally composed of three areas: one intended for integral preservation, the second for scientific purposes, and the third where the settlements of the Azoreans and their descendants are located. As in the PNSJ, there are residents in the MONA area. Furthermore, as it is located in a capital city, conflicts of interest are frequent and directly affect its governance. During our research, we found that MONA did not have an exclusive management structure. At its headquarters, a small team was responsible for managing all nine municipal parks in Florianópolis, which occupy 18.7%

of the municipality's territory. The team consisted of one manager, three technicians, three employees provided by the City Hall, five general service assistants, and two interns, an insufficient structure, considering the vast area of the municipality occupied by parks.

The research strategy employed in these protected areas adopted the general premises of ethnography in organizational studies (Andion & Serva, 2006) and the guidelines expressed by Cefaï in the sense of adhering to the "emergence of an ethnography conceived as a 'science in action,' attentive to its relationship with the public, resuming historical dynamics and open to political challenges" (Cefaï, 2010, p. 449). This strategy involves daily, *in situ* monitoring of situations experienced by organizational actors and their interactions with other actors in their environment. Thus, we favored the perspective of an 'ethnographic engagement' (Cefaï, 2010, 2013), through which the researcher must necessarily direct their attention to local activities and their social, spatial, and temporal implications in the context of the situations experienced.

Within the scope of the ethnography undertaken, direct observation and in-depth interviews were the specific techniques most used for data collection. According to Angrosino and Pérez (2000), observation is the basic technique for the ethnographic process. Still, it is also fundamental to all research methods in the social and behavioral sciences. For these authors, social scientists are observers of human activities and the physical spatial configurations where such activities occur. For Peretz (2004), "observation consists of being present and immersed in a social situation to record and interpret it, trying not to modify it. It takes form in events composed of successive sequences with a beginning and an end." (p. 5).

The field research was undertaken from February 2018 to January 2020, with 227 hours at PNSJ and 196 hours at MONA, totaling 396 hours in person in the protected areas. We participated in internal meetings with stakeholders outside the protected areas, inspection rounds in the park areas, and technical maintenance circuits in these areas. Our field proposal was to follow the actions of managers and pay attention to how issues, environments, situations, and interactions are addressed between all the actors involved.

During the research period, we were present at all important meetings for the governance process, in which we observed the logic of actions, technical and political impositions, interests at stake, ways of exercising power, and deliberative processes. Below, we will report formal meetings with external actors to the most important protected areas for governance analysis. At MONA: meeting with employees of the City Hall of Biguaçu — a municipality in Greater Florianópolis — who were seeking assistance in organizing

the first protected area in that municipality; public hearings on the legal recategorization of MONA; meetings of the MONA Advisory Council; meetings between members of the MONA Advisory Council and other councils of protected areas in Florianópolis to establish joint action strategies. At the PNSJ: public debate in Urubici on the installation of public-private partnerships at the PNSJ; Advisory Council meetings, some of which were held in several municipalities that make up the protected area, with the participation of political representatives and residents. Internal meetings were held routinely in both protected areas. At MONA, these meetings were always weekly. Participation provided us with insights for management analysis, particularly of the decisions, actions, and effects. The unstructured interviews with protected area members helped gain insight into the course of action in each legal process, as well as the issues and challenges that protected areas face in establishing governance

We used ethnographic procedures to record the experiences in our field notebook during direct observation. We noted the speeches, the details, the situations of conflict and controversy, the games of interests and disputes, and the justifications for positions, trying to highlight the most incisive issues

According to Becker (1993):

The observer is not limited to observation alone. He may also interview group members, either individually or in groups. ... The observer will also find it useful to collect documents and statistics (meeting minutes, annual reports, newspaper clippings) generated by the community or organization. They can provide a useful history, necessary documentation of the conditions of action for a group (such as a set of codified rules), or a convenient record of events and analyses (Becker, 1993, p. 122).

Following Becker's (1993), guidelines, we complemented data collection with in-depth interviews with members of protected areas and technical procedures for bibliographic research and document analysis. Thus, we examined the process of producing the environmental regulatory framework, the constitution of the main institutions focused on this area, and the history of the environmental movement through secondary data through extensive bibliographic research that included actions and acts of governments between 1930 and 2018. From this perspective, we analyzed documents, laws, standards, minutes, and regulations that provide formal support for governance.

The reflections generated by the ethnography completed and the theoretical framework employed produced the analysis we will discuss in the next section.

GOVERNANCE THAT EMERGES FROM ACTION

The data analysis presentation will follow the sequence of the action analytical operators, as informed above. Because the ethnography completed was long-term, we participated in and analyzed numerous situations. However, as it is impossible to report them in full here, we decided to present at least one situation from each protected area when approaching analytical operators. We then selected the situations that we considered most elucidative of the actions developed in the governance processes.

Creation of shared governance and management 'dispositifs'

At the PNSJ, the lack of a management plan (MP) and other 'dispositifs' and the lack of classification under SNUC caused management problems. Consequently, the management made the decision to prioritize the establishment of regulatory 'dispositifs' aimed at improving the governance of the protected area. Thus, preparing the management plan (MP), the public use plan, referrals for public-private partnerships, meetings of the Advisory Council, and negotiations with park guides made up a considerable part of the management team's actions during our research. Upon the approval of the MP, managers now have an effective governance 'dispositifs', with their guidelines being the main reference for decisions on several important issues. Therefore, the MP is used based on its normative bases and serves as a 'dispositifs' for mediating and adjusting the expectations of actors (Dodier & Barbot, 2017). We understand that the MP contributed to adjusting local needs to legal prerogatives, reducing the discretionary power of managers but providing opportunities for shared management proposals. In the research, we followed several situations that highlighted the shared management proposal. As exemplary situations, we cite the treatment of the Advisory Council and the activities of the Public Use Technical Chamber.

The Advisory Council constitutes a 'dispositifs' that carries the premises of coexistence in society, as well as the issues that the interests of citizens contribute to governance. The Council provides a space for participation by non-compensated owners, guides, entrepreneurs, representatives of City Councils, and other organizations in the region. Generally, these participants defend their interests, and directing disputes for the good of the protected area constitutes a complex task for its managers. Conflicts and controversies emerge more strongly when discussing territorial demarcation and compensation. These conflicts arise mainly from the land issue, considering that almost

50% of its area has not yet been subject to compensation to the owners. However, when scheduling the meetings, the managers decided to include the most controversial topics to legitimize the park and share responsibilities. According to a team member: "despite its advisory nature, the Council can be active and participatory, play a greater role than that provided for by the SNUC and contribute to alleviating pressure on management."

Shared management in the construction of governance was also exercised when preparing the first specific plan to be added to the MP: the public use plan. This plan sought to identify the potential for public use in the protected area and define which attractions and activities would be prioritized. The Council organized the work, with the formation of the Public Use Technical Chamber. In its operation, conflicts of interest occurred similarly to those of the Council. The topic of natural attractions is sensitive to many participants, as some activities and businesses depend on this arrangement. At the Chamber meetings, there were asides in defense of legislation on first aid, safety on trails, general legislation on tourist guides, organization of documents, licenses, and terms of responsibility. As an illustration, we report on the debates about safety with releasing the Rio do Bispo trails, which requires care with falls, currents, and water volume. The head of the protected area proposed sharing responsibility with the guides: "a trail generates management responsibilities and to open it for visitors we need it to be in good condition and signposted. We need some guides, with their experience, to take on this work so we can open more trails." The proposal generated debates among the guides. However, it was subsequently accepted, and work leaders were chosen for each type of attraction. Shared management can catalyze diverse interests in work groups, and this combination of forces can benefit management.

If at PNSJ, the development of the MP was the main contribution to governance, at MONA, the outstanding highlight was the contribution to preparing the municipal law that classified it as a Natural Monument under SNUC. The difficulty reconciling legislation with the interests of groups in the territory led managers to establish a solid partnership with the Advisory Council, which was fundamental for approving the law that changed the protected area category.

This change affected the surrounding community, especially property owners in the area. The issue of land use was a long-standing public problem (Cefai, 2017) as residents had been living with it since 1981. Still, the possibility of solving this situation caused concern and involvement of actors in the search for solutions. The situation implied that new rules were being analyzed and old justifications were suspended, opening up new possibilities for negotiations and deliberations. Involvement in the construction of regulatory 'dispositifs' was one of the main activities of managers,

mainly in organizing meetings, negotiations, meetings with the community, and public hearings to recategorize the protected area and draft the internal regulations of the Advisory Council.

Before recategorization, MONA did not fall within the SNUC parameters; therefore, it did not have an MP. Upon approval of the recategorization law, the preparation of the MP became a priority for managers. The Council then invited an ICMBio specialist to present the methodology used by the organization; after this event, a working group was created to move the process forward. The MP model adopted by ICMBio prioritizes the participation of local communities in developing a synthetic document. At the meeting to present this methodology, positions were divided between the possibilities of participatory construction or hiring a consultancy service. The topic generated debates and controversies. While managers pointed out the lack of structure to coordinate a project of such magnitude, some councilors understood that the Council could contribute a lot to the process. A representative of the residents spoke out against the outsourcing of the process, stating that “there has already been discussion in the community, and they want to participate in the development of the MP; it is important to do it at home, listening to the community itself, which knows and understands our needs.” Community leaders wanted to actively participate in the development of the MP, as this would mean collaborating in the ‘development’ of their territory.

The Council, with the participation of representatives of property owners from each region, organized debates and public hearings and mobilized politicians with local ties and other interested parties in the issue. Thus, the Council became a political ‘dispositif’ for the governance of the protected area, interacting with the park’s surroundings and its representatives in the City Council. For [Bursztyn and Bursztyn \(2013\)](#), these are aspects of environmental governance that involve “a complex game of pressures and representations, where governments are (or should be) an active part, but other forces express themselves, such as social movements, organized lobbies, economic sectors, public opinion, etc.” Throughout these debates, we observed that the recategorization process adopted the option that community leaders defended: maintaining the protected area as a Fully Protected Area. The fight to change the category created a sense of belonging among the most engaged actors, especially the Council members. This collective construction gave rise to a public arena for the circulation and exchange of arguments:

The public arena is co-produced as a forum for discussions: the fact that points of conflict have to be defended and justified and that opposing positions have to be criticized and invalidated implies

operations of evaluation, deliberation, and judgment ([Cefai, 2017](#), p. 204).

The effective participation of local populations in the management process of protected areas, in addition to being one of the premises of environmental governance, is one of the guidelines of the SNUC. In addition to the partnership between the protected area managers and the Council, a favorable environment was created for the shared construction of solutions to an existing public problem. Management practices, exchange, and participation processes constituted a public arena, where the mediations of a field of collective experience also produced conflicts and controversies. Therefore, even with the coordination work, the recategorization did not happen without conflicts, as the change in the category of the protected area could benefit economic interests linked to real estate speculation, which are politically very strong in the municipality. The decision to maintain the area as a Fully Protected Area was approved by the Council and the public hearings mobilized many actors. Some were interested in the possibilities of economic exploitation that other categories of protected areas, such as an APA, would bring to the region. These positions became conflicts and power struggles that emerged in the City Council’s public hearings and continued in Advisory Council meetings.

According to the representative of one of the universities participating in the Council, “participatory practices bring controversies between actors into the processes.” Another advisor highlighted that “the form and conduct of the recategorization process in Lagoa do Peri will serve as a reference for other processes.” The MONA manager considered that “this process sealed a pact of trust between the protected area and the community.” The community’s engagement with the protected area cause and how the process was conducted gave legitimacy to the governance option adopted.

In addition to the recategorization process, the Advisory Council has assisted the management of MONA. In our field research, we identified interventions by counselors in meetings that demonstrated engagement in solving the protected area’s day-to-day problems. The practices are diverse, from everyday issues such as organizing the protected area for the summer season and trail signage to broader issues such as debates on the management plan and managing water resources in Lagoa do Peri. In this aspect, and considering the experience as an interactive exchange ([Cefai, 2017](#)), the interaction processes between protected area managers and Council members point to cooperation practices with links and anchoring around spatially situated problems.

Establishment of institutional arrangements and partnerships

Among the main guidelines of the SNUC is the effective participation of society, local populations, traditional populations, NGOs, private organizations, and public authorities. To meet this guideline, the management of protected areas has among its priorities the construction of institutional arrangements and partnerships. Besides the normative prescription, these arrangements are determined by practical need, as protected areas are not spaces isolated from society; several other actors, human and non-human beings, integrate their territories. Therefore, establishing institutional arrangements and partnerships is a crucial part of the daily lives of its managers.

In the case of the PNSJ, which covers five municipalities, managers need to engage in dialogue with actors from all these territories: mayors, councilors, government organizations, trade associations, NGOs, companies, and resident.

As it is not possible to analyze all the situations raised in the research here, we first selected the one that concerns the most complex institutional arrangement for management: the relationship with the Air Force, in particular, the management of the area where a CINDACTA II radar is located — a system responsible for controlling the airspace of Southern Brazil. In this area, there is an Air Force unit that has legal power over its space; also, in the area, there is the *Morro da Igreja* road, an important tourist attraction identified in the MP as a Conflicting Use Zone. Within the limits of the Air Force unit, decision-making is assigned to its commander, and it is even possible to block access to the road if this authority deems it necessary due to an incident. There is an official document from the Air Force delegating the road administration to the PNSJ. Still, it is considered precarious by the protected area as it could be changed unilaterally. The PNSJ managers aim for a more solid institutional agreement, established at an interministerial level, as they understand it would be a more consistent regulatory dispositif. On the other hand, the establishment of a new dispositif would probably give rise to a period of uncertainty and negotiations; furthermore, the PNSJ management considered the history of the relationship between the parties as positive; consequently, the option was to be careful to maintain the stability of the relationship. And while there is still no solid dispositif in place, management has to deal with the dynamics of current situations, in which institutional arrangements shaped by practical necessity prevail.

An illustrative example of this practical need was a meeting to discuss the *Morro da Igreja* road renovation. In addition to the PNSJ managers and Air Force officers,

the mayor, and councilors of Urubici, representatives of the residents' association, and owners of guesthouses and properties in the region also participated. The management of the meeting and the communication of the measures to be adopted during the work were left entirely to the Air Force officials; the park managers did not express any questions, although they had the delegation of the road administration as provided for in the current agreement.

Another vital partnership concerns fighting fires. One of the most serious environmental problems today is fire. In the surroundings of the PNSJ, most fires are caused by pasture burning to regrow vegetation — a traditional activity in the region. When not properly managed, fire can spread and invade protected areas. The managers developed a program with the residents of the buffer zones, who began to communicate the dates planned for burnings. During these periods, the PNSJ sends its firefighters to monitor the process. This partnership has significantly reduced the number of fires in its territory to approximately 50 thousand hectares.

The PNSJ has partnerships with Universidade Federal de Santa Catarina, Universidade do Estado de Santa Catarina, and Universidade Federal do Rio Grande do Sul, which aim to support scientific research in the protected area. To this end, the park maintains accommodation for researchers. There is also the establishment of partnerships with actors representing the different segments of practitioners of sports, trails, and tourism in natural environments. These segments contribute to governance, participating in developing dispositifs, recognizing attractions, and organizing public spaces intended for visitation.

In the case of MONA, because the protected area is in a capital with great tourist attractions and strong real estate speculation, territorial management is more complex. The number and diversity of actors, institutions, and interests involved require managers to have the energy and skills to establish arrangements and partnerships with positive effects. Although the range of arrangements and partnerships extends to different types of actors (universities, entrepreneurs, NGOs, associations, public bodies, etc.), we found that the most challenging institutional arrangements are within the state sphere.

Among the various problematic situations raised, we will address the arrangement with the Santa Catarina Water and Sanitation Company (CASAN). The partnership between the two public bodies has precedents, as CASAN takes water from Lagoa do Peri to supply part of Florianópolis. By being classified under SNUC, the issue to be discussed in the partnership is compliance with the National Water Resources Plan regarding payment by the concessionaire for withdrawing water from the lagoon. The concessionaire avoided the debate for years, claiming that MONA did not

fit into SNUC. Although the classification had already been completed, during our study, the remuneration had not yet been made official, nor had its amounts been established, even though it was provided for in the legislation. A new institutional arrangement needs to be established, and its implementation requires agencies from managers and the Advisory Council in the arena of political articulations at the state and municipal levels.

Additionally, regarding remuneration, another issue to be discussed in the institutional arrangement concerns the volume of water taken from the source and its availability in the general network. Residents in the surrounding area expressed feelings of ownership and preservation of the lagoon, publicly expressing their fear of damage to the water source due to the alleged excess volume removed. At a public hearing held in 2019, a community leader expressed the community's fear: "they are going to destroy our lagoon." There is, then, an impact on public opinion, revealing that the issues to be addressed in the new arrangement generate greater complexity than an economic agreement.

Construction of territorial assets

The two protected areas have high tourist potential. The PNSJ receives more than 100 thousand visitors annually; MONA is an area embedded in one of the most visited capitals in Brazil. They offer wide possibilities for public use, allowing them to take advantage of their resources sustainably and boost the economy in the surrounding area. For Pecqueur (2006), 'resources' are territorial reserves and become 'assets' when they become a product valued by the market.

Changing the MONA category can transform the lives of residents and those living in buffer zones. In the previous category, the rules created many conflicts between residents who wanted to dispose of their properties and managers who felt pressured to manage an area that did not comply with current legislation. Popular participation in the process legitimized the community's traditional practices. It opened up possibilities for other low-impact practices in the area, indicating the creation of new 'assets' for the territory. To discuss these possibilities, a meeting was held in 2019 in the most traditional community in the park area and its surroundings; on the agenda was creating a brand for the territory, the signage of trails, waterfalls, and other attractions. The brand would promote the development of small businesses such as stills, mills, crafts, and short-term home rentals. This arrangement would be the first step in strengthening territorial identity, enabling sustainable economic practices, and reorganizing governance, considering the new category of protected area. However, the proposal generated debate and distrust, as residents still seemed uncertain about the new rules that

would guide MONA's relationship with the community. The memory of past conflicts with the park became evident, causing fear of linking their properties and businesses to MONA.

Here, we understand that it is enlightening to return to Cefai's reflections on the constitution of a public arena as a space constituted by a "tangle of theatrical 'dispositifs'" that unfold around situations of test and are expressed in public scenes: a "public arena develops by gaining support and building bridges between the different public scenes" (Cefai, 2011, p. 21). Analyzing public scenes as 'dispositifs' of social construction, we point to the recategorization of the protected area (Council meetings, public hearings, negotiations) as a first set of scenes, where the purpose was to defend repositionings of the territory in the face of change. Once the process of the officialization of the Fully Protected Area is completed, there is a new context, and new scenes unfold in the collective action to define an identity for the new territory and, above all, the relationships between the actors, configuring a new public problem. There are no simple paths or always harmonious interactions for the construction and development of governance. Indeed, the actors will once again experience mobilization, problematization, argumentation, and experimentation processes.

An asset-building process also took place at PNSJ, and work was completed by the Public Use Technical Chamber. The 'rediscovery' of new trails, waterfalls, climbing spots, and even the songs of rare birds can become new territorial assets, boosting the economy of neighboring communities. The members of the Chamber brought to the debate the experiences and knowledge of their experienced world that had been dear to them for years but had not yet been economically used by the community. The number of visitors to the park is expected to increase considerably, and with the guidance of the PNSJ team, the chances of preserving ecosystems will probably increase.

We found that creating governance 'dispositifs' generated important territorial coordination actions for the future of these protected areas and their surroundings. In this context, one of the main guidelines is the environmental preservation of ecosystems in the territory, and for this purpose, inspection actions are crucial.

Inspection actions

We understand that within the scope of a protected area, an effective analysis of environmental governance cannot ignore the importance and effects of inspection activities on interactions with the various actors in its surroundings. Here, we will focus on the effects of this activity on the judgments about protected area agents

made by certain social groups that are targets of inspection. These judgments exert a reasonable weight on the public image of the protected area and significantly interfere with governance processes. Based on legislation, environmental agencies can interfere in the social relations of the territory, imposing obstacles or needs for restoration and adjustments in human activities.

In federally protected areas such as the PNSJ, by law, employees are responsible for environmental control, inspection, licensing, and auditing. In Florianópolis, municipal law established the position of environmental inspector; employees from another City Hall area perform inspection events at MONA. In both protected areas, agents have the prerogative of police powers, including carrying weapons when completing inspection activities.

Coercion generally provokes reactions and opposition from those who are the target of penalties such as legal proceedings, bans, fines, and seizure of materials. The heterogeneity of nearby residents and actors with economic interests in the territories, combined with the fact that the PNSJ covers a large area and that MONA is located in a capital where real estate speculation is high, generates numerous conflicts and controversies given the diversity of interests at stake. Coercive power in these contexts corresponds to the intensification of opposing reactions from certain social groups. Combined with coercion, we can see the complex land situations of these UCs — they were created years ago. Still, many expropriations have not yet been completed, and the respective owners have not been compensated and continue to live in these areas. They face serious limitations on their freedom; for example, they cannot build or even renovate their properties without authorization from the protected area. Protected area officials have legal authority over land use. Still, families and communities live there — heirs of their ancestors — who have never had their situation regularized due to the state's inaction. This is the biggest contradiction we found within the protected areas researched. In this condition, uncertainty predominates intensely, generating animosity, tension, and distrust in the relationship between the protected area and certain inhabitants of these areas.

This contradiction directly affects the work of protected area managers. There is no way to ignore that attempts to establish fruitful environmental governance through shared territory management must address serious historical conflicts that continue into the present. Our analytical lens is pragmatist; therefore, it does not cover up conflicts and contradictions, quite the opposite, it makes them explicit to broaden the understanding of actions in the phenomena studied.

The issue of carrying weapons in inspection activities is of significant importance for this analytical operator as

it allows us to better understand the actions, the place of non-humans in this phenomenon, and the effects of social representations within the scope of environmental governance examined here. For [Matarazzo \(2017\)](#), “the use of weapons is a choice of the subjects, that is, becoming a monitoring agent is part of a personal objective of these subjects.” When monitoring inspection activities, we found that PNSJ employees decided not to display equipment that reinforces the police posture, they use power ‘dispositifs’ in accordance with their legal references, preferring a more discreet way of constituting this materiality. According to an environmental analyst at PNSJ, the decision not to use bulletproof vests and weapons is to avoid damaging the team’s public image. We, therefore, understand that this decision aims to promote certain effects in the process of governance and shared management in contexts marked by conflicts and controversies, which highlights how non-humans — in this case, weapons — become practical operators in relations with human beings ([Houdart & Thiery, 2011](#)).

Transversal dimension to governance processes

During the field research, we encountered many situations in which protected area managers were frequently involved in conflicts and controversies. Such characteristics emerged clearly in all the analytical operators discussed above. We can, therefore, state that conflicts and controversies are crucial elements that make up a transversal dimension of actions in governance processes. Consequently, we hope this transversality has become clear to readers in the narratives of the situations analyzed above. Due to this expectation, we decided not to comment long about this dimension, just to highlight some complementary aspects.

Initially, we highlight that traditional governance theories that normatively focus on the convergence of actions do not promote deep reflection on the issues of conflicts, controversies, and contradictions. According to [Marinho \(2013\)](#), “this position does not explicitly address the contradictions and the intensification of conflicts as a possibility or even a tendency resulting from the interest management process.” As we stated above, our pragmatist lens focuses on and analyzes these issues to expand the understanding of governance actions. Hence, we corroborate [Ansell \(2016\)](#), as we were able to attest to the permanent confrontation of perverse problems — conflicts and controversies — by protected area managers:

The recent shift in focus from formal institutions of government to more informal and interactive government processes accentuates the relevance

of pragmatism to governance theory because this orienting logic is extremely useful for addressing the wicked and unruly problems that lie at the heart of many governance processes (p. 394).

By prioritizing the situations experienced by the actors and, by extension, their actions from an analytical perspective, we follow critical sociological pragmatism, not limiting to 'discourse analysis,' that is, going beyond the linguistic forms and expressions used by the actors in the debates we witnessed. We attempt to deepen the understanding of the complexity of relationships between individuals and groups affected by conflicts, according to [Forester \(2012\)](#):

Critical pragmatism can teach us about process design and, not least, about the danger of reducing "conflicts" to "debates," assuming that conflicts are 'arguments' about (only) what the parties "say" what the issue is, rather than engaging with the complex and multiple relationships always in flux between the parties (p. 6).

Emerging with strong intensity from field research, the transversality of conflict confrontation led us to deepen the relationships between actors and, consequently, to consider the asymmetries of power between the parties involved in governance processes. Our reflection on power adopts the pragmatist option in the approach to the critical analysis of socio-environmental issues proposed by Chateauraynaud. This approach differs from the 'classical' options of critical sociology in several aspects, including: (a) "avoiding understanding domination as the simple expression of a difference in social status or a hierarchical relationship that transcends exchanges between people or groups" ([Chateauraynaud, 2017](#), p. 2); (b) considering the effective dynamics resulting from "asymmetries between actors and, above all, from continuous work to create or entertain them, mask or denounce them, inscribe them in status and instruments, or, on the contrary, to reverse or relativize them" (p. 5). Thus, when we reflect on the actions of the actors in the various conflicts we witnessed, we consider the dynamics of these processes without predicating interpretations centered on the predominance of hierarchical positions of certain actors. We observed that in some conflicts, civil society actors, such as residents close to protected areas, could have their claims approved in clashes against other actors with strong economic power. According to [Chateauraynaud \(2016\)](#), the reversibility of power "imposes a profound articulation between the pragmatics of the public and a sociology of conflict. The reversibility of powers, their inversion, or their continuous renewal is a major dimension of pragmatism." (p. 378). We affirm that the ethnography developed allowed us to attest to some situations of

reversibility, in which the asymmetries of power did not transcend "exchanges between people or groups" in real situations, mainly concerning the concrete effects of the actions undertaken

CONCLUSION

Due to the growing severity of environmental issues on a global scale and, consequently, the recognized importance of protected areas in addressing this issue, combined with the fact that there are few studies in the area of administration in Brazil on the management of protected areas, we attempt to contribute to broadening the understanding of how the phenomenon of environmental governance in the management of protected areas is performed in practical terms, within the scope of the actions of their managers in interactions developed with other actors in this phenomenon. To this end, we undertook ethnographies in two protected areas in Santa Catarina, one occupying a vast area in the interior of the state and the other located in Florianópolis.

The ethnographical data, focusing on situated action, were analyzed based on approaches to environmental governance characterized by conflicts, controversies, and contradictions, approaches from pragmatist-inspired sociology and the pragmatist analysis of organizations.

The analysis concluded that the governance that emerged from the action in the two protected areas studied could be characterized as 'creating governance and shared management 'dispositifs', establishing institutional arrangements and partnerships, building territorial assets, and completing inspection actions'. In all these processes, it was evident that 'the actions aimed at managing conflicts, controversies, and confronting contradictions are transversal', requiring intense behavioral, political, and technical efforts from management teams.

The evidence related to conflicts identified in this research fully supports the studies that formed the theoretical basis, especially the governance approaches that focus on the conflictual dimension, notably in the case of protected areas, such as the studies by [Cozzolino \(2014\)](#); [Marinho \(2013\)](#): "When we analyze the conflicts involving populations affected by protected areas in Brazil, we find that conflicts are more important than cooperation," (p. 49); and [Jeronymo et al. \(2021\)](#): "Brazil has been experiencing conflicts and uncertainties regarding environmental public policies, especially with regard to protected areas, due to the advancement of certain private interests over the community and environmental assets, which has called into question Brazil's historic achievements." (p. 128). This perspective of the theoretical basis is complemented by the pragmatist analysis of organizations that considers

management as situated actions composed of social practices of provisional regulation and stabilization (Serva, 2023), precisely because of the conflicts and contradictions inherent to the dynamics of organizations.

We hope that our study will help reduce the gap in the administration area in understanding environmental governance and the management of protected areas in our country.

REFERENCES

- Andion, C., & Serva, M. (2006). A etnografia e os estudos organizacionais. In A. Silva, A., C. Godoi, & R. Bandeira-de-Mello. Pesquisa qualitativa em estudos organizacionais: paradigmas, estratégias e métodos (pp. 147-179). Saraiva.
- Angrosino, M., & Pérez, K. (2000). Rethinking observation from method to context. In N. Denzin & Y. Lincoln, (Eds.). Handbook of qualitative research. (pp. 673-702). Sage.
- Ansell, C. (2016). Pragmatism. In C. Ansell & J. Torfing, (Eds.), Handbook on theories of governance (pp. 392-400). Edward Elgar.
- Ansell, C., & Torfing, J. (2016). Introduction. In C. Ansell & J. Torfing, (Eds.), Handbook on theories of governance (pp. 1-17). Edward Elgar.
- Barreto, H. (2014). Gestão ambiental e territorial: Um panorama dos espaços territoriais especialmente protegidos no Brasil. In P. Little (Ed.), Os novos desafios da política ambiental brasileira (pp. 274-302). IEB.
- Beck, U. (2010). Sociedade de risco. Resumo de uma outra modernidade. Ed. 34.
- Becker, H. (1993). Metodologia de pesquisa em ciências sociais. Hucitec.
- Bernard, E., Penna, L., & Araújo, E. (2014). Downgrading, downsizing, degazettement, and reclassification of protected areas in Brazil. *Conservation Biology*, 28(4), 939-950. <https://doi.org/10.1111/cobi.12298>
- Bevir, M. (2011). Governança democrática: uma genealogia. *Revista de Sociologia e Política*, 19(39), 103-114. <https://doi.org/10.1590/S0104-44782011000200008>
- Bursztyjn, M., & Bursztyjn, M. A. (2013). Fundamentos de política e gestão ambiental: Os caminhos do desenvolvimento sustentável. Garamond.
- Câmara, J. (2013). Governança Ambiental no Brasil: Ecos do passado. *Revista de Sociologia e Política*, 21(46), 125-146. <https://doi.org/10.1590/S0104-44782013000200008>
- Cavalcanti, C. (2004). Economia e Ecologia: Problemas da Governança Ambiental no Brasil. *Revista Iberoamericana de Economía Ecológica*, 1, 1-10.

NOTE

1. See information from the Ministry of the Environment: https://antigo.mma.gov.br/images/arquivo/80229/CNUC_FEV20%20-%20B_Cat.pdf
2. National System of Nature Conservation Units, established by Law 9,985/2000 (Lei 9.985/2000).

- Cefaï, D. (2010). Un pragmatisme ethnographique. In D. Cefaï (Ed.), L'engagement ethnographique (p. 447-492). EHESS.
- Cefaï, D. (2011). Como uma associação nasce para o público: Vínculos locais e arenas públicas em torno da associação La Bellevilleuse, em Paris. In D. Cefaï, M. Mello, F. Mota, & F. Veiga (Eds.). *Arenas públicas: Por uma etnografia da vida associativa*. Ed. UFF.
- Cefaï, D. (2013). ¿Qué es la etnografía? Inscriptones, extensiones y recepciones del trabajo de campo. *Persona y Sociedad*, 27(3), 11-32. <https://doi.org/10.53689/pys.v27i3.47>
- Cefaï, D. (2017). Públicos, problemas públicos, arenas públicas. *Novos Estudos*, 36(1), 187-213. <https://doi.org/10.25091/S0101-3300201700010009>
- Chateauraynaud, F. (2016). Pragmatique des transformations et sociologie des controverses. In *Histoires pragmatiques* (pp. 349-385). EHESS.
- Chateauraynaud, F. (2017). A captura como experiência, investigações pragmáticas e teorias do poder. *Revista Brasileira de Ciências Sociais*, 32(97). <https://doi.org/10.17666/329504/2017>
- Chateauraynaud, F. (2022). Des expériences ordinaires aux processus critiques non-linéaires. *Pragmata*, (5), 20-94.
- Cook, N., Valkan, S., Mascia, M., & McGeoch, M. (2017). Quantifying the extent of protected area downgrading, downsizing and degazettement in Australia. *Conservation Biology*, 31(5), 1039-1052. <https://doi.org/10.1111/cobi.12904>
- Cozzolino, L. (2014). Governança na gestão de Unidades de Conservação: Democratização na esfera pública ou legitimação de poder? [tese de doutorado]. Universidade Federal do Rio de Janeiro.
- Dodier, N., & Barbot, J. (2017). A força dos dispositivos. *Revista Sociedade e Estado*, 32(2), 487-518. <https://periodicos.unb.br/index.php/sociedade/article/view/6290>
- Evans, J., & Thomas, C. (2024). *Environmental governance*. Routledge.
- Forester, J. (2012). On the theory and practice of critical pragmatism: Deliberative practice and creative negotiations. *Planning Theory*, 12(1) 5-22. <https://doi.org/10.1177/1473095212448750>

- Forrest, J., Mascia, M., Pailler, S., Abidin, S., Araujo, M., Krithivasan, R., Riveros, J. (2015). Tropical deforestation and carbon emissions from protected area downgrading, downsizing, and degazettement (PADDD). *Conservation Letters*, 8(3), 153–161. <https://doi.org/10.1111/conl.12144>
- Graham, J., Amos, B., & Plupmtre, T. (2003). *Governance principles for protected areas in the 21st century*. IUCN.
- Houdart, S., & Thiery, O. (2011). *Humains, non-humains. Comment repeupler les sciences sociales*. La Découverte.
- Jacobi, P., & Sinisgalli, P. (2012). Governança ambiental e economia verde. *Ciência e Saúde Coletiva*, 17(6), 1469-1478. <https://doi.org/10.1590/S1413-81232012000600011>
- Jeronymo, C., Silva, E., Tanizaki-Fonseca, K. (2021). Boa governança e participação social: Uma leitura crítica das políticas públicas de Unidades de Conservação da Natureza do Brasil. *RAEGA - O Espaço Geográfico em Análise*, 50, 107 – 135.
- Jessop, B. (1998). *The rise of governance and the risks of failure: The case of economic development*. Blackwell.
- Kroner, R., Qin, S., Cook, C., Krithivasan, R., Pack, S., Bonilla, O., Cort-Kansinally, K., Coutinho, B., Feng, M., Garcia, M., He, Y., Kennedy, C., Lebreton, C., Ledezma, J., Lovejoy, T., Luther, D., Parmanand, Y., Ruíz-Agudelo, C., Yerena, E., ... Mascia, M. (2019). The uncertain future of protected lands and waters. *Science*, 364(6443), 881-886. <https://doi.org/10.1126/science.aau5525>
- Leff, H. (2006). *Racionalidade Ambiental, a reapropriação social da natureza*. Civilização Brasileira.
- Lei nº 10.530, de 02 de maio de 2019. (2019). Dispõe sobre a criação da unidade de conservação monumento natural municipal da lagoa do Peri (Mona da Lagoa do Peri) <https://leismunicipais.com.br/a/sc/f/florianopolis/lei-ordinaria/2019/1053/10530/lei-ordinaria-n-10530-2019-dispoe-sobre-a-criacao-da-unidade-de-conservacao-monumento-natural-municipal-da-lagoa-do-peri-mona-da-lagoa-do-peri>
- Marinho, M. (2013). Territorialidade e governança em áreas protegidas: O caso da comunidade do Marujá, no Parque Estadual da Ilha do Cardoso (Cananeia, SP) [tese de doutorado]. Universidade de São Paulo.
- Mascia, M., & Pailler, S. (2011). Protected area downgrading, downsizing, and degazettement (PADDD) and its conservation implications. *Conservation Letters*, 4, 9–20. <https://doi.org/10.1111/j.1755-263X.2010.00147.x>
- Mascia, M., Pailler, S., Krithivasan, R., Roshchanka, V., Burns, D., Mlotha, Murray, D., Peng, N. (2014). Protected area downgrading, downsizing, and degazettement (PADDD) in Africa, Asia, and Latin America and the Caribbean, 1900–2010PAD. *Biological Conservation*, 169, 355–361. <http://doi.org/10.1016/j.biocon.2013.11.021>
- Maserumule, M. (2011). Good governance in the new partnership for Africa's development (NEPAD): A public administration perspective. [tese de doutorado]. University of South Africa.
- Matarazzo, G. (2017). Gestão de unidades de conservação ambiental: Perspectivas pragmáticas e organizacionais. [tese de doutorado]. Universidade Federal de Santa Catarina.
- Matarazzo, G., & Serva, M. (2019). Ação pública ambiental: uma investigação etnográfica pragmatista dos dispositivos de uma Unidade de Conservação (UC) federal em um território. In R. Cantu, S. Leal, D. Corrêa, & L. Chartain, (Eds.), *Sociologia, crítica e pragmatismo: diálogos entre França e Brasil* (pp. 475-488). Pontes.
- Moura, A. (2016) Aplicação dos instrumentos de Política Ambiental no Brasil: avanços e desafios. In A. Moura (Ed.), *Governança ambiental no Brasil: instituições, atores e políticas públicas* (pp. 111-147). IPEA.
- Nuttall, M., Olsson, E., Washington, H., Ung, V., Bunnefeld, N., Merriman, J., Griffin, O., Hobson, K., Diment, A., & Kroner, R. G. (2023). Protected area downgrading, downsizing, and degazettement in Cambodia: Enabling conditions and opportunities for intervention. *Conservation Science and Practice*, 5(4), e12912. <https://doi.org/10.1111/csp2.12912>
- Ogien, A. (2015). Pragmatism's legacy to sociology respecified. *European Journal of Pragmatism and American Philosophy*, 7(1), 77-97. <https://doi.org/10.4000/ejapap.371>
- Pecqueur, B. (2006). A guinada territorial da economia global. *Eisforia*, 4, 81-103.
- Peretz, H. (2004). Les méthodes en sociologie, l'observation. La Découverte.
- Projeto de Lei, nº 208 (2018). Projeto de Lei do Senado nº 208, de 2018. <https://www25.senado.leg.br/web/atividade/materias/-/materia/133065>
- Qin, S., Kroner, R., Cook, C., Tesfaw, A., Braybrook, A., Rodriguez, C., Poelking, & C., Mascia, M. (2019). Protected area downgrading, downsizing, and degazettement as a threat to iconic protected areas. *Conservation Biology*, 33(6). <https://doi.org/10.1111/cobi.13365>
- Quééré, L. (2009). Intérêts et limites de la théorie des régimes pragmatiques pour la sociologie de l'action. In M. Brevigliere, C. Lafaye, D. Trom (Eds.), *Compétences critiques et sens de la justice* (pp. 309-332). Economica.
- Quééré, L. (1997). La situation toujours négligée? *Réseaux*, 15(85), 163-192. <https://doi.org/10.3406/reso.1997.3139>
- Rhodes, R. (1996). The New Governance: Governing without Government. *Political Studies*, 44(4), 652-667.
- Rigaud, B. (2012). Public governance, in L. Côté and J.-F. Savard (Eds.), *Dictionnaire encyclopédique de l'administration publique*. ENAP-CA. www.dictionnaire.enap.ca
- Serva, M. (2023). Análise pragmatista de organizações. *Revista de Administração de Empresas*, 63(1), 1-22. <http://doi.org/10.1590/S0034-759020230101>
- World Bank. (1992). *Governance and development*. World Bank.
- World Wildlife Fund. (2019). *PADDD trends in Brazilian Amazon protected areas - mapping the risk of protected area downgrade, downsize and degazettement in the biome*. https://wwfbrnew.awsassets.panda.org/downloads/wwf_br_padd_amazontrends_summary.pdf


Authorship

Jorge Stürmer

Universidade Federal de Santa Catarina

R. Eng. Agrônomo Andrei Cristian Ferreira, s/n, Trindade, CEP 88040-900, Florianópolis, SC, Brazil

E-mail: jorgesturmer@hotmail.com


 <https://orcid.org/0000-0002-8969-5237>

Maurício Serva*

Universidade Federal de Santa Catarina

R. Eng. Agrônomo Andrei Cristian Ferreira, s/n, Trindade, CEP 88040-900, Florianópolis, SC, Brazil

E-mail: mauserva@gmail.com

 <https://orcid.org/0000-0003-2416-3405>

* Corresponding Author

Copyrights

The authors retain the copyright relating to their article and grant the journal RAC, from ANPAD, the right of first publication, with the work simultaneously licensed under the Creative Commons Attribution 4.0 International license (CC BY 4.0).

Conflict of Interests

The authors informed that there is no conflict of interests.

Funding

The authors reported that there was no funding for the research in this article.

Plagiarism Check

RAC maintains the practice of submitting all documents approved for publication to the plagiarism check, using specific tools, e.g.: iThenticate

Authors' Contributions

1st author: project administration (equal), formal analysis (equal), conceptualization (equal), data curation (equal), investigation (equal), methodology (equal), writing - original draft (equal), writing - review and editing (equal), supervision (equal), validation (equal).

2nd author: project administration (equal), formal analysis (equal), conceptualization (equal), data curation (equal), investigation (equal), methodology (equal), writing - original draft (equal), writing - review and editing (equal), supervision (equal), validation (equal).

Peer Review Method

This content was evaluated using the double-blind peer review process. The disclosure of the reviewers' information on the first page, as well as the Peer Review Report, is made only after concluding the evaluation process, and with the voluntary consent of the respective reviewers and authors.

Data Availability

RAC encourages data sharing but, in compliance with ethical principles, it does not demand the disclosure of any means of identifying research subjects, preserving the privacy of research subjects. The practice of open data is to enable the reproducibility of results, and to ensure the unrestricted transparency of the results of the published research, without requiring the identity of research subjects.
