Social Participation as an Autopoietic System?
Analysis of Participatory Instances in Brazil

Isabela Batista Pires
Doutoranda, USP, Brasil
isabelabatista@usp.br
ORCID iD https://orcid.org/0000-0001-6179-3065

Anja Pratschke
Professora Doutora, USP, Brasil
pratschke@sc.usp.br
ORCID iD https://orcid.org/0000-0002-7126-2871

Participação Social como Sistema Autopoiético?
Análise das Instâncias Participativas no Brasil

RESUMO

Objetivo - analisar criticamente o sistema participativo brasileiro à luz da Teoria da Autopoiese.

Metodologia - abordagem qualitativa de natureza teórico-analítica, com base em revisão bibliográfica e análise crítica das instâncias participativas brasileiras, articulando os aportes da Teoria da Autopoiese (Maturana e Varela, 2003; Luhmann, 1989) com autores que discutem a participação social qualificada (Oliveira e Ckagnazaroff, 2023; Lüchmann, 2020) e a resiliência (Heinimann e Hatfield, 2017).

Originalidade/relevância - o artigo propõe um olhar analítico autopoiético sobre a participação social, considerando o sistema participativo como um sistema autopoiético, capaz de reorganização interna, autoprodução e aprendizado.

Resultados – a análise do sistema participativo brasileiro a partir da autopoiese nos permite compreender a capacidade de cada instância participativa em produzir cognição distribuída de forma a fomentar a resiliência urbana.

Contribuições teóricas/metodológicas - proposta de análise baseada em cinco dimensões interdependentes para um sistema participativo autopoiético: diversidade comunicativa, memória social, plasticidade organizacional, acoplamento territorial e ressonância institucional.

Contribuições sociais e ambientais – compreender o sistema participativo como autopoiético oferece subsídios para buscarmos uma governança urbana resiliente com escuta institucional, valorização de saberes territoriais e promoção de cidadãos autônomos aptos a enfrentar os desafios sociais e ambientais contemporâneos.

PALAVRAS-CHAVE: Participação Social. Autopoiese. Resiliência Urbana.

Social Participation as an Autopoietic System?
Analysis of Participatory Instances in Brazil

ABSTRACT

Objective – This article aims to critically analyze the Brazilian participatory system considering Theory of Autopoiesis.

Methodology – Qualitative approach of a theoretical-analytical nature, based on a literature review and critical analysis of Brazilian participatory instances, articulating the contributions of the Theory of Autopoiesis (Maturana and Varela, 2003; Luhmann, 1989) with authors who discuss qualified social participation (Oliveira and Ckagnazaroff, 2023; Lüchmann, 2020) and resilience (Heinimann e Hatfield, 2017).

Originality/Relevance – This article proposes an autopoietic analytical perspective on social participation, considering the participatory system as an autopoietic system capable of internal reorganization, self-production, and learning.

Results – The analysis of the Brazilian participatory system through the lens of autopoiesis allows us to understand the capacity of each participatory instance to produce distributed cognition in a way that fosters urban resilience.

Theoretical/Methodological Contributions – Proposal of an analysis based on five interdependent dimensions for an autopoietic participatory system: communicative diversity, social memory, organizational plasticity, territorial coupling, and institutional resonance.

Social and Environmental Contributions – Understanding the participatory system as autopoietic provides insights for the development of resilient urban governance with institutional listening, valorization of territorial knowledge, and the promotion of autonomous citizens capable of facing contemporary social and environmental challenges.

KEYWORDS: Social Participation. Autopoiesis. Urban Resilience.

¿Participación Social como Sistema Autopoiético?
Análisis de las Instancias Participativas en Brasil

RESUMEN

Objetivo – Analizar críticamente el sistema participativo brasileño a la luz de la Teoría de la Autopoiesis.

Metodología – Enfoque cualitativo de naturaleza teórico-analítica, basado en revisión bibliográfica y análisis crítico de las instancias participativas brasileñas, articulando los aportes de la Teoría de la Autopoiesis (Maturana y Varela, 2003; Luhmann, 1989) con autores que discuten la participación social calificada (Oliveira y Ckagnazaroff, 2023; Lüchmann, 2020) y la resiliencia (Heinimann e Hatfield, 2017).

Originalidad/Relevancia – El artículo propone una mirada analítica autopoiética sobre la participación social, considerando el sistema participativo como un sistema autopoiético, capaz de reorganización interna, autoproducción y aprendizaje.

Resultados – El análisis del sistema participativo brasileño desde la perspectiva de la autopoiesis permite comprender la capacidad de cada instancia participativa para producir cognición distribuida, fomentando así la resiliencia urbana.

Contribuciones Teóricas/Metodológicas – Propuesta de análisis basada en cinco dimensiones interdependientes para un sistema participativo autopoiético: diversidad comunicativa, memoria social, plasticidad organizacional, acoplamiento territorial y resonancia institucional.

Contribuciones Sociales y Ambientales – Comprender el sistema participativo como autopoiético ofrece insumos para avanzar hacia una gobernanza urbana resiliente, con escucha institucional, valorización de saberes territoriales y promoción de ciudadanos autónomos capaces de enfrentar los desafíos sociales y ambientales contemporáneos.

PALABRAS CLAVE: Participación social. Autopoiesis. Resiliencia urbana.

GRAPHIC ABSTRACT
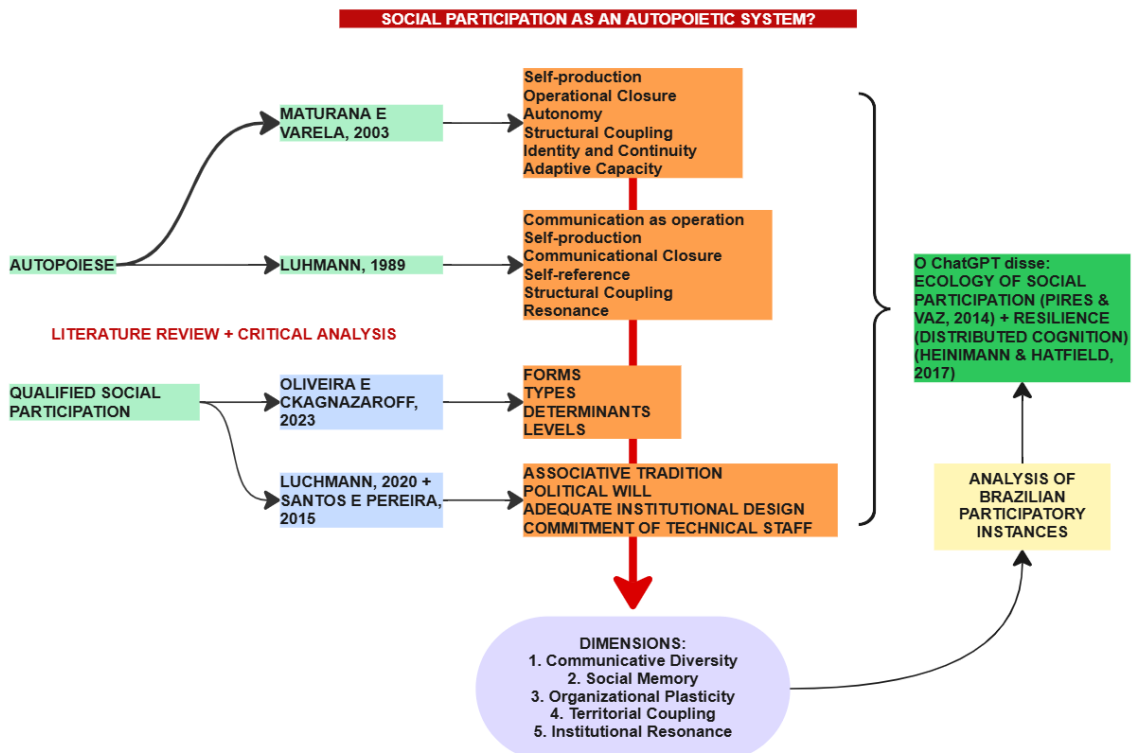
1 INTRODUCTION

In recent decades, Brazil has experienced a growing process of democratic weakening, marked by a crisis of representativeness, a widening gap between the state and civil society, and the capture of public institutions by private interests (Rolnik, 2004; Harvey, 2014). The contemporary context reflects the exhaustion of traditional mechanisms of representative democracy and highlights the need to consider institutional alternatives that strengthen popular sovereignty and the collective capacity for territorial self-determination (Löwy, 2015). Alongside the democratic crisis, we are simultaneously facing the intensification of socio-environmental crises, such as climate change, social inequality, and ecological collapse, which demand systemic, integrated, and profoundly transformative responses (Raworth, 2019). The Socioecological Transformation, as discussed by Löwy (2015)—who refers to it as ecosocial transition or ecosocialism—entails profound structural changes in the relationships between society, economy, and nature, breaking away from neoliberal paradigms that prioritize unlimited economic growth, the commodification of life, and centralized decision-making power. This transformation involves adapting to existing crises through the radical reorganization of social systems based on principles such as environmental and social justice, equity, regeneration, and collective autonomy. Social participation has a decisive role in Socioecological Transformation, as it enables the construction of alternative forms of governance capable of redistributing power and rearticulating local knowledge in the formulation of public policies. Placing the community as the center of decision-making—not merely as an occasional consultant—is essential to effectively decentralize power and ensure meaningful responses to the multiple ongoing crises.

Despite institutional advances in social participation in the country, the so-called Participatory Instances[1] (PIs) remain largely influenced by technocratic, consultative, and symbolic logics, and face a series of limitations: weak deliberative capacity, institutional discontinuity, low representativeness, and poor integration with local territories (Rolnik, 2004; Avritzer, 2002). In many cases, PIs function as mechanisms for legitimizing pre-defined public policies, rather than as genuine spaces for collective construction. At the same time, other forms of participation—such as community networks, digital platforms, territorial mobilizations, and social movements—persist as counterpoints, albeit often unrecognized or unofficially acknowledged by the state (Pires and Vaz, 2014). To address these challenges, this article proposes an alternative theoretical framework: to understand social participation as an autopoietic system, based on the Theory of Autopoiesis formulated by Maturana and Varela (2003) and expanded by Luhmann (1989). Through the autopoietic lens, social participation shifts from being a technical procedure or legal mechanism to being seen as a living, adaptive, and self-referential system, capable of reorganizing itself in response to social disturbances by producing distributed cognition among system agents. The theoretical framework employed

---

[1] Participatory Instances (PIs) refer to formal and informal mechanisms established to enable civil society's involvement in the formulation, implementation, monitoring, and evaluation of public policies. Their institutionalization in Brazil was solidified with the 1988 Federal Constitution, which enshrined popular sovereignty as a foundational principle of the democratic state, and was further expanded through sectoral legislation such as the City Statute (Law No. 10.257/2001). PIs operate at different levels of formalization, with varying degrees of decision-making power, and constitute what authors such as Pires and Vaz (2014) describe as an ecology of social participation.

connects the theory of autopoiesis with contemporary debates on infrastructure resilience (Heinimann and Hatfield, 2017), considering that the adaptive capacity of participatory systems is a key element in addressing urban and climate crises.

Thus, this article aims to critically analyze the Brazilian participatory system through the lens of the Theory of Autopoiesis, with a focus on participatory instances, understanding social participation as an autopoietic process. The methodology adopted is qualitative, with a theoretical-analytical approach based on bibliographic review and critical analysis of Brazilian PIs (Minayo, 2014; Gil, 2010). The investigation is structured around two central axes: on one hand, the debates on qualified social participation, based on authors such as Oliveira and Ckagnazaroff (2023), Lüchmann (2020), Santos and Pereira (2015); on the other hand, the conceptual framework of Autopoiesis in dialogue with contemporary studies on resilience (Heinimann and Hatfield, 2017). This article constitutes a theoretical excerpt from the ongoing doctoral research of architect and urbanist Isabela Batista Pires, supervised by Prof. Dr. Anja Pratschke (IAU-USP). The present reflection focuses on the conceptual foundation and the development of an analytical typology aimed at understanding participatory instances from a systemic-autopoietic perspective, whose empirical application will be further explored in the subsequent stages of the thesis research.

2 SOCIAL PARTICIPATION IN BRAZIL

Social participation in Brazilian urban management has undergone, particularly over the past three decades, in a progressive process of institutionalization aiming to democratize and expand access to decision-making spaces for historically marginalized populations. However, while this institutionalization represents an important achievement, it has also created a place for capture of the participatory process, as participation becomes integrated into the state apparatus without necessarily altering its underlying logic (Santos and Pereira, 2015). For example, public councils and hearings often function as formal validation mechanisms for public policies than as spaces for genuine deliberation. As analyzed by Brazilian architect and urbanist Raquel Rolnik (2004), what emerges is a regime of disciplined listening, where the plurality of voices is mediated by technobureaucratic devices that filter and neutralize the political power of popular discourse.

Moreover, Brazil's current reality of social participation must be understood within the framework of neoliberal logic, which has shaped urbanism in recent decades. As British geographer David Harvey (2011) argues, the city has become a platform for capital accumulation, and participatory processes have been instrumentalized to legitimize market-driven policies, masking unpopular decisions under the guise of consultative democracy. The rise of technocratic and managerial models of governance reduces the city to issues of efficiency and control, marginalizing the insurgent and transformative dimensions of participation. What should be a collective deliberation process is instead turned into a mechanism for suppressing dissent, obscuring conflict under the rhetoric of rational governance (Avritzer, 2002).

This argument is illustrated by the case of the municipality of Lima Duarte (MG), studied by Muchinelli and Barbosa (2015), Where despite the adoption of participatory methodologies in the formulation of the Master Plan, administrative and cultural barriers

restricted social participation to a consultative and fragmented role. Vieira, Reis, and Tostes (2015) analyze a similar scenario in the municipality of Laranjal do Jari (AP), where the implementation of a Participatory Master Plan exposed contradictions between institutional discourse and actual practices. Despite local mobilization and the use of consultation mechanisms, the lack of autonomous organizational feedback channels resulted in a process marked by formality and minimal transformative impact. Both studies underscore the need to understand participation not as a technical-legal appendix to legitimize public policies, but as an organizing function of the urban system.

To this end, cities play a central role both in reproducing inequalities and in offering the potential for their overcoming, as they concentrate major social conflicts, environmental impacts, and exclusionary dynamics (Lefebvre, 1996; Harvey, 2011). Urban planning is the arena in which ways of life are structured and visions of the city materialized, and thus it is where power is contested: decisions about land use, public investment, development priorities, and territorial rights are made here. Therefore, social participation in Brazilian urban planning is an essential tool for promoting formal inclusion, redistributing power, and recognizing local knowledge (Santos and Pereira, 2015; Rolnik, 2004). The way we plan and consequently produce urban spaces reflects the political, economic, social, and cultural structures we uphold. Strengthening social participation in urban planning is thus a strategic move for confronting both democratic and climate crises (Acselrad, 2010).

2.1 Participatory Instances

Emerging from popular struggles for redemocratization and social justice during the 1970s and 1980s, social participation gained formal support with Brazil's 1988 Federal Constitution, which enshrined, in various articles, the principle of popular sovereignty in public administration, policymaking, and citizen oversight of the state (Brasil, 1988). Since then, a broad repertoire of Participatory Instances has become part of Brazil's political system, including policy management councils, thematic conferences, public hearings, popular consultations, plebiscites, referendo, popular legislative initiatives, participatory budgeting (PB) processes, and urban planning tools such as Master Plans and the regulatory mechanisms established by the City Statute (Brasil, 2001). Although there is no overarching legal framework integrating these tools into a single formal structure, it is possible to identify an articulated set of practices that comprise what specialized literature refers to as a national system of social participation (Pires and Vaz, 2014).

Among the institutionalized mechanisms within Brazil's legal framework, key participatory tools include public policy councils, national and local conferences, public hearings, popular consultations, and public ombudsman offices. Widely provided for in the 1988 Constitution and further regulated by sectoral and sub-legal norms, these mechanisms operate with varying degrees of formalization and decision-making power. Public policy councils—such as those focused on health, education, social assistance, and housing—were designed as parity-based arenas of deliberation between the state and civil society, responsible for overseeing the formulation, implementation, and monitoring of public policies. In practice, however, many of these councils face structural challenges such as bureaucratization, weak social representation,

and limited deliberative capacity, which compromise their influence on governmental decisions (Pires and Vaz, 2014).

Conferences, on the other hand, are conceived as periodic spaces for broad social mobilization to discuss public policy guidelines at local, state, and national levels. While important as democratic rituals that amplify social demands, many conferences lack mechanisms to link their resolutions with actual policy decisions, making them resemble non-binding consultative models (Avritzer, 2002). Public hearings that are mandatory at various stages of legislative processes and in urban, environmental, and budgetary policies often have low effectiveness. They frequently become formal, procedural spaces for consultation, without feedback to the population and with little capacity to influence urban policy (Peixoto, 2018). Public consultations, while legally grounded, aim to expand public access to policymaking and regulation. However, when disconnected from broader deliberative processes, they often function as technocratic tools of validation. Lastly, public ombudsman offices, linked to government agencies and supported by specific legislation, have an important mediating role between citizens and the public administration by receiving complaints, suggestions, and reports. Nevertheless, they depend on institutional autonomy, procedural transparency, and the state's responsiveness to be effective (Pires and Vaz, 2014).

Beyond these deliberative and consultative forums within public policy, the Constitution also established mechanisms of direct democracy such as the plebiscite, *referendo*, and popular legislative initiative (Brasil, 1988). The plebiscite enables the electorate to express prior opinion on significant legislative or constitutional proposals, while the *referendo* allows the population to approve or reject laws already passed by Congress. However, both are rarely used, as they are often blocked by parliamentary elites reluctant to relinquish control over political decision-making (Avritzer, 2002; Peixoto, 2018). Popular legislative initiatives allow civil society to propose legislation directly to the legislature, but are subject to strict technical and bureaucratic requirements, such as obtaining signatures from at least 1% of the national electorate across five or more states, greatly limiting their practical viability (Mendes da Silva, 2015).

In the field of urban planning, the City Statute (Law No. 10.257/2001) expanded participatory tools by establishing democratic city governance as a foundational principle for urban development (Brasil, 2001). These tools include Participatory Master Plans (PMPs), which require public hearings and consultations in their development and revision; Neighborhood Impact Assessment; Special Zones of Social Interest; the Right of First Refusal; the Onerous Grant of Building Rights; and Urban Consortium Operations. All these instruments require some form of public participation in their formulation, application, or revision, granting the population the right to influence urban planning decisions that directly affect their lives. However, implementation varies widely across municipalities and often lacks effectiveness due to a lack of political will, weak local participatory structures, or the capture of processes by corporate or technocratic interests (Peixoto, 2018; European Union Brazil, 2023).

In addition to formalized instances, Brazil's participatory system includes a range of non-institutionalized or loosely regulated mechanisms mediating between civil society and the state. These include Working Groups (WGs), meetings with interest groups, public ombudsman services, public policy observatories, social movement networks, and more recently, interactive

digital platforms. Working Groups are temporary and flexible structures typically composed of civil society representatives, technical experts, and specialists, mobilized to address specific public agenda topics. While important, many operate without clear criteria for representation or transparency mechanisms. Meetings with interest groups—such as civil associations, urban collectives, unions, and community organizations—are common at municipal and state levels and serve to negotiate urgent issues. However, the absence of standardized rules, public records, and structured methodologies may foster fragmentation and enable instrumental use of these encounters by public authorities (European Union Brazil, 2023).

Digital participation platforms have increasingly been adopted as tools of democratic innovation, with potential to broaden territorial reach and improve communication between government and citizens. Though, studies show that these tools often operate disconnected from real deliberative processes, acting more as channels for opinion collection than genuine participatory spaces. Moreover, unequal access to the internet and digital technologies creates representation gaps, further marginalizing peripheral and rural populations (Lüchmann, 2020). Finally, public policy observatories, often affiliated with universities or NGOs, and the growing role of Civil Society Organizations complete Brazil's system of social participation. Especially after the enactment of the Legal Framework for Civil Society Organizations, Law No. 13.019/2014, Civil Society Organizations have played an active role in the formulation, implementation, and oversight of public policies, including through mechanisms like the Social Interest Expression Procedure (PMIS) (Pires & Vaz, 2014; European Union Brazil, 2023). All the participatory instances discussed here contribute to enhancing public debate and provide technical, legal, and political counterweights to the decision-making process.

8

Next, Table 1 presents a summary of the PIs and their interaction formats:

Table 1 – Forms of Interaction in Different Participatory Instances

Type	Forms of interactions
Council	Program (or its subcomponents) submitted for discussion in a national council
Conference	Program (or its subcomponents) submitted for discussion in a national conference
Public Consultation	Program (or its subcomponents) involving some public consultation process regarding its operation, regulation, etc.
Public Hearing	Program (or its subcomponents) involving a public hearing process concerning its actions, interventions, initiatives, , among others
Ombudsman	Ombudsman activity, linked to a government body (whether in the same sector or not), addressing the program—channeling complaints, reports, criticisms, suggestions, etc.
Meeting with Interest Groups	Meetings between civil, business, union, or social movement associations and government bodies or representatives; minimally institutionalized interactions that influence aspects of program management (content, goals, implementation methods, evaluation, among others)
Working Groups	Temporary structures formed to discuss and propose solutions for specific topics, potentially including experts, public managers, and civil society representatives
Participatory Budgeting	Deliberative process in which the population directly decides on the allocation of part of the municipal public budget, promoting co-management in the definition of budgetary priorities
Participatory Master Plans	Mandatory urban planning instruments for cities with more than 20,000 inhabitants, whose development must include broad social participation, including public hearings and popular consultations
Direct Democracy Mechanisms	Plebiscite, Referendum, and Popular Initiative, allowing civil society to directly influence political and legislative decisions
Participatory Urban Planning Instruments	Include Neighborhood Impact Assessment, Special Zones of Social Interest, the Onerous Grant of Building Rights, and the Right of First Refusal, all requiring public consultation
Digital Participation Platforms	Tools like Decidim, Colab, and online consultation platforms, expanding participation reach but facing challenges in effectiveness and representativeness
Government Digital Interfaces	Institutional channels used by governments to communicate with society, often reduced to tools for political marketing or service delivery, lacking deliberative guarantees
Social Networks and Movements	Actions by collectives, grassroots organizations, and activists through social mobilization, urban occupations, protests, and other forms of direct political action
Public Policy Observatories	Independent organizations, often linked to universities or NGOs, that monitor, analyze, and evaluate public policies, contributing to government transparency and accountability

Source: Pires and Vaz (2014), expanded by the Authors.

Pires and Vaz (2014) divide participatory instances into two major groups, based on their level of formalization and institutionalization. The first group includes councils, conferences, ombudsman offices, public hearings, and public consultations, which are supported by legal frameworks and specific regulations that establish clear rules regarding their existence, operation, composition, and decision-making processes. These mechanisms possess a certain degree of institutional stability and predictability in terms of social participation. The second group comprises meetings with interest groups, digital participation platforms, and telephone service channels, which are characterized by lower levels of formalization and institutionalization. Interfaces in this second group generally lack solid legal backing and operate under greater discretion of the public administration, with their continuity and effectiveness depending on governmental will and prevailing political conditions.

Within the heterogeneous landscape of social participation in Brazil, the concept of a social participation ecology aims to help make sense of the participatory system's complexity. It recognizes participation as an ecosystem of practices that interact, conflict, and feed back into one another, encompassing both legally established mechanisms and insurgent, informal, and territorial forms of political action, as discussed by Pires and Vaz (2014). In this ecology, participatory instances vary in terms of institutionalization, legitimacy, accessibility, and

decision-making power, operating across different scales and timeframes. Beyond understanding their characteristics and functions, grasping the complexity of the ecology of social participation also requires analyzing what constitutes a high-quality participatory system, which will be explored in the next section.

2.2 The Quality of Social Participation

To enhance the debate, Oliveira and Ckagnazaroff (2023) propose an analysis of the quality of social participation based on four dimensions: forms, types, determinants, and levels of participation. The forms refer to how citizens engage: spontaneous, voluntary, induced, provoked, imposed, or granted. The types classify the processes as direct or indirect, active or passive, symbolic or real, complete or partial. The determinants are structural factors such as access to information, representativeness, and influence capacity, while the levels of participation are discussed based on the scales proposed by Arnstein (1969), Wilcox (1994), IAP2 (2021), and the OECD (2001). The forms of participation show that spontaneous participation occurs when citizens mobilize independently, such as in protests and social movements. Voluntary participation takes place through neighborhood associations, unions, or cooperatives. Induced participation results from external encouragement, such as conferences or working groups. Provoked participation is driven by external agents with interests differing from those of the mobilized group. Imposed participation, while not formally present in Brazil, refers to contexts of compulsory participation. Granted participation, as in the case of participatory budgeting or popular initiatives, depends on the political openness of public managers. Regarding the types of participation, direct participation involves face-to-face citizen engagement or participation in decision-making bodies, such as deliberative councils. Indirect participation occurs through representation or channels with limited power. Active participation involves engagement with actual influence, while passive participation is merely reactive. Symbolic participation happens when citizens engage without their input being truly considered, and real participation allows actual influence on decisions. Finally, complete participation involves engagement in all stages of public policy, while partial participation is limited to specific phases (Oliveira & Ckagnazaroff, 2023).

The determinants of participation are nine factors: information, representativeness, capacity, independence, frequency, engagement, continuity, influence, and context. Oliveira and Ckagnazaroff (2023) clarify: information refers to access to public data; representativeness to the presence of diverse groups in participatory spaces; capacity relates to knowledge necessary for intervention; independence refers to autonomy from the state; and frequency and engagement concern the regularity and depth of participation. Continuity refers to the ongoing presence of social actors; influence to the ability to affect decisions; and context to the external conditions that shape participation's effectiveness. As for participation scales, Arnstein (1969) proposed a ladder with eight rungs, ranging from manipulation to advanced forms of citizen control, while Wilcox (1994) outlined five levels, from information to support for independent initiatives. IAP2 (2021) proposed five stages: inform, consult, involve, collaborate, and empower, and the OECD (2001) introduced a simplified model with three levels: information, consultation, and active participation. Each scale emphasizes different aspects of the state-society

relationship, but all converge on the idea that citizen participation must move beyond symbolism toward more effective forms of co-management and deliberation.

Having presented the criteria proposed by Oliveira and Ckagnazaroff (2023), we broaden the discussion of qualified social participation by considering the elements proposed by Lüchmann (2020): associative tradition, political will, and appropriate institutional design, which form the foundation upon which the previous criteria can thrive. Associative tradition refers to the existing culture of social participation within a community, which strengthens the potential for greater popular organization and engagement. Political will denotes the commitment of public managers to citizen deliberation, which enhances the effectiveness of participatory processes. Appropriate institutional design establishes the rules, formats, and inclusion guarantees necessary for quality participation. Santos and Pereira (2015) add a fourth factor: the commitment of technical staff to participatory principles. Resistance among urban planners to popular participation is a recurring barrier; overcoming it requires integrating technical and local knowledge, encouraging professionals to act as facilitators rather than as knowledge-holders or gatekeepers. Among the four elements, institutional design stands out as foundational, since it serves as the structure through which the others are articulated. A proper institutional arrangement must be inclusive, flexible, and sensitive to territorial context, so that participatory spaces can be consolidated as effective instances of co-management.

In conclusion, for social participation to be of quality, it must be real—with actual capacity to influence public decisions; active—with meaningful citizen engagement; complete—encompassing all stages of the public policy cycle; and, whenever possible, direct. Additionally, it must ensure that information is both accessible and understood by participants, allowing for shared meaning-making and more informed decision-making. Representativeness must be diverse, including historically marginalized groups, and there must be knowledge-sharing and capacity-building to ensure citizens have the technical and political means to intervene. Independence from the state is equally essential to uphold the autonomy of participatory spaces. Frequency should be consistent and engagement continuous, to guarantee the sustained presence of social actors throughout the process.

However, while the debate around the quality of social participation helps identify the factors that shape its effectiveness—from institutional design to the variety of forms and levels of engagement, it also points to the need for a deeper understanding of the operational foundations of participation, with a view toward its implementation and rootedness in the daily lives of communities. It is in this context that we now propose to analyze social participation as an autopoietic system.

3 SOCIAL PARTICIPATION AS AN AUTOPOIETIC SYSTEM

Understand social participation as an autopoietic system requires an ontological shift in how democratic processes are conceived. It moves away from an instrumental view of participation as a tool of public management and adopts a relational perspective, in which subjects, practices, and territories organize themselves into communicative networks capable of generating, sustaining, and transforming their own modes of existence. This approach is grounded in Second-Order Cybernetics (Heylighen and Joslyn, 2001), which holds that systems

do not react to their environment but construct it through reflexive cycles of feedback and self-organization. Autopoietic social participation is also understood as distributed cognition, in which communication generates shared meanings that sustain citizen autonomy (Heinimann and Hatfield, 2017). This conception aligns with the idea of implicit order (Bohm and Peat, 2000), in which creativity and organization emerge from local interactions rather than external commands.

The Theory of Autopoiesis, developed by Maturana and Varela (2003), defines living systems as units capable of self-production through interactions among their components. These systems are not directly shaped by their environment but establish structural coupling with it: they respond to perturbations according to their own internal logic, maintaining identity and adaptability. This self-reference dynamic, known as operational closure, guarantees autonomy and the capacity for reorganization. Luhmann (1989) reinterprets autopoiesis in the context of social systems, replacing the concept of "life" with "communication." For the sociologist, systems such as the legal or participatory are composed of communicational flows that self-produce and delineate the system's boundaries, remaining autopoietic if they sustain their communicational network through their own codes. External communication has an effect only if there is internal resonance—that is, if it can be translated into the terms of the system—a kind of selective openness to external influence.

Despite its analytical power in describing the complexity of social communication, Systems Theory encounters important epistemological limitations when applied to the urban field. Mathur (2005) highlights that the approach privileges functionality and tends to suppress insurgent forms of expression by prioritizing communication over people. Baltazar (2010) also questions the application of autopoiesis to the urban context, arguing that cities are open systems, marked by conflict, histories, and disputes. For the author, the city is not a closed unit but an ecology of relationships in constant reinvention. As authors such as Jessop (1997) and Latour (2005) emphasize, the focus on operational closure and self-reference tends to obscure the conflicts, disputes, and power asymmetries that structure contemporary urban space. By privileging systemic stability and internal adaptation, the systemic paradigm risks naturalizing exclusionary institutional structures, sidelining insurgent practices, dissent, and rupture. Latour (2005) proposes abandoning the separation between systems and environment, suggesting a "symmetric coupling" between humans and non-humans in sociotechnical networks.

Consequently, we observe that adopting autopoiesis as an analytical lens requires engaging it with agonistic and hybrid approaches that account for the porosity, historical entanglements, and transformative potential of urban social practices. Inspired by Maturana and Varela (2003) and Luhmann (1989), and based on the critiques mentioned, this article proposes a conceptual transposition of the notion of autopoiesis to understand social participation as a cognitive autopoietic system. This refers to a communicative system that learns, reorganizes, and produces meaning in response to social perturbations, shifting the focus from normativity to relation, and from functionalism to an ecology of knowledge. From Maturana and Varela (2003), we draw the idea of adaptive reorganization with the maintenance of identity. From Luhmann (1989), we adopt the understanding of social systems as self-referential communicative networks. Based on this articulation, we propose that participatory instances function as communicative cognitive systems, sensitive to social practices and collective expressions.

Participation thus becomes a process of distributed cognition, based on collective memory, the listening of diverse voices, and continuous adaptation.

Propose participation as an autopoietic system is, therefore, advocate for an ecology of social participation (Pires and Vaz, 2014), where multiple communications intersect and influence decisions. This perspective also connects to the concept of urban resilience (Heinimann and Hatfield, 2017), understood as the capacity for reorganization in the face of disturbances. As in Maturana and Varela's (2003) living systems, resilience here is relational. Instead of evaluating instances solely by their formal structure, we seek to understand their capacity to listen, incorporate knowledge, and reconfigure institutions. The effectiveness of an autopoietic participatory system is not measured by technical efficiency, but by its ability to generate meaning, learn from difference, and reorganize. As Meadows (2008) emphasizes, self-organization is one of the most important and least controllable aspects of systems. Participatory spaces are thus feedback points in urban organization. From this perspective, we identify five defining dimensions of autopoietic participatory systems: communicative diversity, social memory, organizational plasticity, territorial coupling, and institutional resonance.

Communicative diversity implies recognizing multiple forms of expression as legitimate. *Social memory* refers to the ability to retain experiences and reorganize based on them. Halbwachs (2006) and Heinimann and Hatfield (2017) highlight the role of memory in sustaining resilient systems, as it requires continuity, the ongoing presence of social actors, and methodologies that value local knowledge. *Organizational plasticity* is the ability to adapt institutionally. According to Maturana and Varela (2003), autopoietic systems maintain their organization through internal reorganization. Pires and Vaz (2014) show that institutional rigidity is an obstacle to participatory effectiveness, also, plasticity requires autonomy from both the state and the market. *Territorial coupling* indicates the rooting of the participatory system in the local context. Escobar (2018) argues that sociopolitical systems should emerge from territorial ways of life. And finally, *institutional resonance* refers to the system's ability to respond to social demands by producing effects in public policy. Luhmann (1989) states that there is no resonance without internal translation, and that irrelevant communications are dismissed as noise[2].

To evaluate these dimensions, a set of qualitative criteria is proposed. Communicative diversity can be observed through the existence of diverse and accessible active listening channels. Social memory is expressed in records, ongoing agendas, and continuity of actors. Organizational plasticity is evidenced by the adaptability of participatory formats and openness to innovation. Territorial coupling manifests through links to concrete territories and networking with local collectives. Institutional resonance can be verified through the existence of mechanisms that respond to participatory deliberations. These criteria offer a path to make a typology applicable across different contexts, expanding its analytical and political utility.

3.1 Analysis of the Participatory System as Autopoietic

[2] In Luhmann's Social Systems Theory, noise refers to communications originating from the environment that are not understood or processed by the system. This occurs because social systems operate with operational closure and only recognize as information that which can be encoded according to their own communicative schemes. What does not resonate internally—that is, what cannot be translated into the system's own terms—is discarded as irrelevant or unintelligible and thus considered noise. Therefore, noise is not the absence of communication in the environment, but rather the system's inability to recognize it as valid or meaningful (Luhmann, 1989).

Understanding Brazilian PIs through the lens of autopoiesis allows a shift in perspective: rather than evaluating their formal presence, the focus turns to understanding each instance's capacity to operate as an autopoietic system. Based on the five analytical dimensions previously proposed, we aim to critically analyze the set of PIs presented in Table 1. Thus, the discussion begins with the most consolidated and normatively regulated participatory instances—such as public policy councils, thematic conferences, public hearings, and public consultations—which have served as pillars of Brazil's participatory system since 1988. These structures often demonstrate low communicative diversity due to their reliance on technical language and formal procedures, which limit the expression of marginalized groups. The predominance of rigid formats and normative protocols also undermines organizational plasticity, reducing the ability of participatory instances to reorganize in response to external disturbances, such as social mobilizations or urban crises.

In terms of social memory, these instances show fragility, as decisions are rarely systematized or revisited in future cycles, hindering institutional learning. Despite some territorial presence, the disconnection between debates and local realities compromises territorial coupling. Furthermore, institutional resonance is often low, as these spaces of listening rarely allow for translation between popular voices and actual decision-making. While these structures form a core part of the institutional participatory system, they often reproduce logic that limits the community's capacity to operate as an autopoietic system.

Public ombudsman offices, meetings with interest groups, and Working Groups occupy a hybrid position in the participatory system: they combine institutional elements with more flexible, context-sensitive practices. These PIs offer greater potential for communicative diversity, particularly in informal meetings and WGs, where there is room for horizontal exchanges, accessible language, and direct listening to social demands. Even though ombudsman offices follow formal structures, their receptive function allows for different narratives to be heard—though often these are translated into technical or bureaucratic categories. The presence of social memory in these instances depends on the maintenance of records and the reactivation of learning. However, organizational plasticity is considerably greater than in the previous instances, as WGs and interest group meetings are adaptable to emerging themes and can be reformulated with relative agility. Regarding territorial coupling, these hybrid mechanisms are more rooted, as they emerge from local demands, mobilize directly affected actors, and enable contextualized negotiation. Institutional resonance is variable, depending on the political will of public managers to translate discussions and demands into actual public policies. Although subject to co-optation or discontinuity, these instances represent relational reorganization spaces that approach autopoietic functioning.

Participatory Budgeting and Participatory Master Plans demonstrate strong communicative diversity, engaging in plural languages including oral, emotional, and territorial forms of political expression—that foster participation from diverse groups and the construction of shared meaning. In the case of PMPs, when well-conducted, they aim to translate technical knowledge into accessible formats, enhancing information understanding. Regarding social memory, both mechanisms show significant variation: while some PB programs maintain historical records and ongoing learning processes, others are discontinued with each change in

administration, limiting experiential consolidation. A similar pattern is observed with PMPs, which are treated in some municipalities as living documents, while in others as static tools. In terms of organizational plasticity, these mechanisms stand out positively due to their normative and methodological flexibility, enabling reconfiguration according to context and emerging demands—provided there is political will and institutional commitment.

Regarding territorial coupling, both PB and PMPs show high potential, as they are directly linked to local dynamics and needs, especially when processes are decentralized and grounded in territorial realities. Finally, institutional resonance depends on the state's willingness to treat the deliberations from these mechanisms as binding to government decisions. In contexts where there is effective feedback to society and integration between listening and action, these instruments approach autopoietic functioning. Where this is not the case, they become symbolic tools with low transformative impact.

Direct democracy mechanisms—plebiscite, referendum, and popular initiative—and participatory urban planning instruments—such as Neighborhood Impact Assessment, Special Zones of Social Interest, Onerous Grant of Building Rights, and the Right of First Refusal—are legally established forms of citizen participation that present ambivalences. Although they offer institutional reorganization potential by enabling civil society to directly influence significant decisions, they face challenges related to communicative diversity, constrained by legal and technocratic language that is inaccessible to less educated or socially marginalized populations. In terms of social memory, both types of mechanisms function in isolated, discontinuous ways without systematic accumulation of learning. Their organizational plasticity is also low, as they are grounded in fixed legal devices that are often unresponsive to shifting social dynamics. Territorial coupling is limited as well, as, despite directly affecting urban space, these tools are rarely formulated or implemented through processes that are sensitive to local contexts. Often, they are conducted by technical teams or driven by corporate interests. Institutional resonance is likewise compromised: despite being formally provided for, these mechanisms are underutilized, frequently blocked by political elites (in the case of direct democracy), or reduced to rituals that validate pre-decided actions (in the case of urban planning instruments). Thus, while important, these mechanisms tend to deviate from autopoietic principles, functioning more as bureaucratic machinery than as tools for fostering autonomous citizenship.

Less formalized instances, such as digital participation platforms, demonstrate greater communicative diversity due to their potential for participatory reorganization and innovation, although they face challenges related to continuity, institutional recognition, and decision-making power. Regarding organizational plasticity, these platforms stand out positively for their fluid structure, which allows for agile reconfiguration in response to new demands, encouraging experimentation and the emergence of deliberative formats tailored to specific contexts. However, they also exhibit ambivalences concerning territorial coupling and institutional resonance, as—despite operating with high communicative diversity—they are often disconnected from actual decision-making processes and have limited capacity to produce binding effects and foster social memory, especially due to a lack of structured feedback and digital exclusion affecting marginalized groups.

We continue the analysis with social movements and networks and public policy observatories, which represent PIs that often operate on the margins of formal structures but

15

play a central role in critiquing, challenging, and reshaping institutional systems. They stand out for their ability to generate communication outside normative codes, disrupting technocratic and institutionalized logics of public management. From the perspective of communicative diversity, they are privileged spaces of insurgent expression. Social memory is also central, as movements accumulate histories of struggle, resistance, and grassroots mobilization, sustaining issue continuity and reactivating collective meanings of social and environmental justice. Observatories, in turn, document and systematize information often silenced by official channels and, because of their critical and autonomous stance, show high organizational plasticity, continuously reinventing strategies and formats in response to political scenarios and territorial challenges. As for territorial coupling, it is deep, given their grounding in specific territories, mobilization of local knowledge, articulation of community networks, and direct action on the material conditions of urban life. Their direct engagement in territorial conflicts enables them to function with sensitivity to environmental disruptions, acting as systems of anticipation and response to socio-environmental injustices. However, institutional resonance remains low, as formal systems often resist incorporating disruptive discourses.

Analyzing PIs through autopoiesis reveals a hybrid and complex landscape in which institutionalized and insurgent forms of participation coexist, contend, and at times complement one another. The autopoietic perspective shifts the focus from the formal fulfillment of institutional rules to the observation of communicative dynamics that sustain or weaken participatory systems. Instances such as councils, conferences, hearings, and public consultations prove rigid, reproducing patterns of low communicative diversity, weak social memory, and limited organizational plasticity. Although normatively legitimate, these formats often lack listening and transformative capacity, undermining institutional resonance and territorial coupling. On the other hand, more flexible mechanisms such as WGs and meetings with interest groups demonstrate greater autopoietic potential by fostering active listening, collective learning, and internal reorganization—especially when rooted in specific territorial realities. Insurgent participatory instances such as networks and social movements, critical digital platforms, and observatories emerge as poles of creative disruption, feeding the system with new codes, narratives, and practices that challenge the status quo. Although they still lack strong institutional resonance, they are essential to the vitality of the autopoietic participatory system, which is sustained by its ability to reorganize through listening to society and fostering resonant communication among its components.

4 CONCLUSIONS

This article aimed to critically analyze the Brazilian participatory system through the lens of autopoiesis theory, drawing on the concepts developed by Maturana and Varela (2003) and Luhmann (1989), with the objective of understanding not just the existence of formal institutional arrangements but also focusing on the communicative, relational, and adaptive processes that sustain—or limit—the effectiveness of social participation. To this end, we adopted a theoretical-analytical approach that articulated the concept of quality social participation through five proposed dimensions of an autopoietic participatory system: communicative diversity, social memory, organizational plasticity, territorial coupling, and

institutional resonance. The methodology employed was qualitative in nature, consisting of a bibliographic review and critical analysis of Brazilian Participatory Instances (PIs), based mainly on the works of Pires and Vaz (2014) and Oliveira and Ckagnazaroff (2023). In this way, we observed that the Brazilian participatory system presents notable contradictions. On one hand, it represents a significant milestone in the democratization of the state in the post-1988 Constitution period, generating important instruments for deliberation, social oversight, and the co-creation of public policies. On the other hand, it reveals a process of symbolic and functional hollowing out of many instances, which often operate at low or medium levels of participation, with limited listening capacity, minimal influence on decision-making, and weak connections to territories and social actors.

Many of the mechanisms analyzed reproduce technocratic logics, with exclusionary language, rigid formats, and detachment from civil society dynamics. Though originally created to foster participatory and deliberative democracy, many have become, in practice, formalized bureaucratic apparatuses more concerned with legitimizing pre-formulated public policies than with redistributing power. In this context, the concept of autopoiesis enabled us to view participation as a living system, capable of reorganizing itself in response to disturbances emerging from its environment—recognizing the diversity of knowledge, languages, temporalities, and territorialities that make up urban life. By emphasizing dimensions such as organizational plasticity and institutional resonance, we propose a new evaluative criterion for participatory instances, focused on their ability to learn, listen, respond to, and transform in the face of demands and voices from society. The contribution of this article lies in offering an expanded analytical framework that enriches the discussion on the crisis of social participation in Brazil, providing a foundation for researchers, public managers, and activists who seek to rethink participation beyond its institutional form.

Understanding participatory systems as autopoietic means recognizing them as essential components of urban resilience, capable of learning from disruptions and reorganizing in the face of uncertainty. In contexts marked by climate disasters, social inequality, and environmental degradation, the ability to transform through social participation becomes a strategic condition for formulating effective public policies that are sensitive to local realities and promote autonomous citizenship. Resilient cities are not built solely through adaptive infrastructure, but through politically engaged communities that actively participate in the co-production of solutions. Thus, strengthening the autopoietic dimension of participatory instances means enhancing the ability to respond to the challenges of the climate crisis, to translate territorial knowledge into collective action, and to articulate networks of care, solidarity, and sociopolitical innovation. The city must be capable of learning from its inhabitants—and of offering the conditions for its inhabitants to learn from one another—so that together, they can collectively shape the paths of their own survival.

Acknowledgments

5 REFERENCES

ACSELRAD, Henri. **A ambientalização das lutas sociais**: a justiça ambiental no Brasil. Estudos Avançados, São Paulo, v. 24, n. 68, p. 103-120, 2010.

ARNSTEIN, S. A Ladder of Citizen Participation. *Journal of the American Institute of Planners,* 35 (4): 216–224, 1969. https://doi.org/10.1080/01944366908977225.

AVRITZER, Leonardo. 2002. **Democracia e Esfera Pública**: participação e deliberação política no Brasil contemporâneo. Rio de Janeiro: EdUERJ.

BALTAZAR, A. P. Sobre a resiliência dos sistemas urbanos: devem eles ser resilientes e são eles realmente sistemas? *V!RUS*, no. 3, 2010. Disponível em: http://www.nomads.usp.br/virus/virus03/invited/layout.php?item=1&lang=pt. Acesso em: mar. 2023.

BOHM, David; PEAT, David. **Science, Order, and Creativity**. London: Routledge, 2000.

BRASIL. 1988. **Constituição da República Federativa do Brasil de 1988**. Brasília: Senado Federal.

BRASIL. 2001. **Estatuto da Cidade**: Lei nº 10.257. Brasília: Senado Federal.

ESCOBAR, Arturo. **Designs for the pluriverse**: Radical interdependence, autonomy, and the making of worlds. Duke University Press, 2018.

GIL, Antônio Carlos. **Como elaborar projetos de pesquisa**. 5. ed. São Paulo: Atlas, 2010.

HALBWACHS, Maurice. **A memória coletiva**. São Paulo: Vértice, 2006.

HARVEY, David. **O enigma do capital e as crises do capitalismo**. São Paulo: Boitempo, 2011.

HARVEY, David. **Cidades rebeldes**: do direito à cidade à revolução urbana. São Paulo: Martins Fontes, 2014.

HEINIMANN, Hans R.; HATFIELD, Kirk. Resilience: theory and application to infrastructure. Cambridge: University of Florida Press, 2017. In LINKOV, Igor; PALMA-OLIVEIRA, José Manuel (eds.). **Resilience and Risk**: Methods and Application in Environment, Cyber and Social Domains. Dordrecht: Springer, 2017.

HEYLYGHEN, Francis; JOSLYN, Cliff. Cybernetics and second-order cybernetics. In: MEYERS, Robert A. (ed.). Encyclopedia of Physical Science & Technology. 3. ed. New York: Academic Press, 2001. v. 4, p. 155–170.

IAP2. **Spectrum of Public Participation**. 2021.

JESSOP, Bob. The Governance of Complexity and the Complexity of Governance: Preliminary Remarks on Some Problems and Limits of Economic Guidance. In: AMIN, Ash; HAUSNER, Jerzy (Orgs.). **Beyond Market and Hierarchy**: Interactive Governance and Social Complexity. Cheltenham: Edward Elgar, 1997. p. 95–128.

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

LEFEBVRE, Henri. **The Right to the City**. In: Kofman, Eleonore; Lebas, Elizabeth (eds.). *Writings on Cities*. Oxford: Blackwell, 1996.

LÖWY, Michael. **Ecosocialism**: A Radical Alternative to Capitalist Catastrophe. Chicago: Haymarket Books, 2015.

LÜCHMANN, L. H. H. Interfaces das interfaces socioestatais: ouvidorias, conselhos gestores e Facebooks governamentais. *Revista de Sociologia e Política*, v. 28, n. 74, p. 1-22, 2020.

LUHMANN, Niklas. **Ecological Communication**. Chicago: University of Chicago Press, 1989.

MATHUR, P. Neither Cited Nor Foundational: Niklas Luhmann's Ecological Communication; A Critical Exegesis and Some Theoretical Suggestions for the Future of a Field. *The Communication Review*, 8: 329–362, 2005.

MATURANA, Humberto; VARELA, Francisco. **De Máquinas y Seres Vivos**: Autopoiesis, La Organización de lo Vivo. Buenos Aires: Lumen, 2003.

MEADOWS, Donella H. **Thinking in Systems**: A Primer. Chelsea Green Publishing, 2008.

MENDES DA SILVA, F. Vontade política e condições institucionais: o papel do Estado no planejamento urbano participativo. In **A Alegoria da Participação**: Planos Diretores Participativos Pós-Estatuto da Cidade, organizado por E.M. Pereira, 51–72. Florianópolis: Insular, 2015.

MINAYO, Maria Cecília de Souza. **O desafio do conhecimento**: pesquisa qualitativa em saúde. 5. ed. São Paulo: Hucitec, 2014.

MUCHINELLI, L. R. A.; BARBOSA, B. L. EXPERIÊNCIAS DE PARTICIPAÇÃO SOCIAL NA ELABORAÇÃO DO PLANO DIRETOR DE DESENVOLVIMENTO URBANO DE LIMA DUARTE. *Revista Nacional de Gerenciamento de Cidades*, *[S. l.]*, v. 3, n. 14, 2015. DOI: 10.17271/231884723142015937. Disponível em: https://publicacoes.amigosdanatureza.org.br/index.php/gerenciamento_de_cidades/article/view/937. Acesso em: 17 jun. 2025.

OCDE. **Citizens as partners**: information, consultation and public participation in policymaking. Paris: OECD, 2001.

OLIVEIRA, R. de; CKAGNAZAROFF, I. A Participação Cidadã como um dos Princípios de Governo Aberto. *Cadernos Gestão Pública e Cidadania* 28, 2023. Disponível em: https://doi.org/10.12660/cgpc.v28nEspecial.2023.88085. Acesso em jan. 2025.

PARRIQUE, Timothée. **Decoupling debunked**: evidence and arguments against green growth as a sole strategy for sustainability. Bruxelas: European Environmental Bureau, 2019.

PEIXOTO, L. S. Audiências públicas parlamentares e concretização democrática. In: Dias Junior, J. A. P.; Silva, A. C. Q. da; Leite, D. de M. (Org.). **Participação política e cidadania**: Amicus Curiae, audiências públicas parlamentares e orçamento participativo. Curitiba: Appris, 2018.

PIRES, R. R. C.; VAZ, J. L. R. Ecologias Institucionais da Participação Social. *Revista de Sociologia e Política*, 22 (50): 79–95, 2014.

RAWORTH, Kate. **Doughnut economics**: seven ways to think like a 21st-century economist. London: Penguin Random House, 2019.

ROLNIK, Raquel. **O que é cidade**. São Paulo: Brasiliense, 2004.

SANTOS, Marcelo Lopes de Souza; PEREIRA, Marcos Aurélio. A participação social no planejamento urbano: desafios e possibilidades. *Cadernos Metrópole*, v. 17, n. 33, p. 11–28, 2015.

UNIÃO EUROPEIA BRASIL. **Relatório Participação Social na Administração Pública Federal**: Desafios e Perspectivas Para a criação de uma Política Nacional de Participação. Projeto apoio aos diálogos setoriais União Europeia – Brasil, Delegação da União Europeia no Brasil. Brasília: 2023.

VIEIRA, L.; REIS, V.; TOSTES, J. A. A EXPERIÊNCIA PARTICIPATIVA NO AMAPÁ: ANÁLISE DO PLANO DIRETOR DE LARANJAL DO JARI. *Revista Nacional de Gerenciamento de Cidades*, *[S. l.]*, v. 3, n. 22, 2015. DOI: 10.17271/2318847232220151160. Disponível em: https://publicacoes.amigosdanatureza.org.br/index.php/gerenciamento_de_cidades/article/view/1160. Acesso em: 17 jun. 2025.

WILCOX, David. **The guide to effective participation**. Brighton: Partnership Books, 1994.

DECLARAÇÕES

CONTRIBUIÇÃO DE CADA AUTOR

Ao descrever a participação de cada autor no manuscrito, utilize os seguintes critérios:

- **Concepção e Design do Estudo**: Isabela Batista Pires.
- **Curadoria de Dados**: Isabela Batista Pires
- **Análise Formal**: Isabela Batista Pires.
- **Aquisição de Financiamento**: Isabela Batista Pires.
- **Investigação**: Isabela Batista Pires.
- **Metodologia**: Isabela Batista Pires.
- **Redação - Rascunho Inicial**: Isabela Batista Pires.
- **Redação - Revisão Crítica**: Isabela Batista Pires e Anja Pratschke.
- **Revisão e Edição Final**: Isabela Batista Pires e Anja Pratschke.
- **Supervisão**: Anja Pratschke.

DECLARAÇÃO DE CONFLITOS DE INTERESSE

Nós, **Isabela Batista Pires e Anja Pratschke**, declaramos que o manuscrito intitulado **Participação Social como Sistema Autopoiético? Análise das Instâncias Participativas no Brasil**":

1. **Vínculos Financeiros**: Foi realizado com apoio da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Código de Financiamento 001.
2. **Relações Profissionais**: Nós mantemos vínculo empregatício com Universidade de São Paulo (USP), no Instituto de Arquitetura e Urbanismo (IAU). Anja Pratschke como Professora Doutora Associada e Isabela Batista Pires como Doutoranda Bolsista.
3. **Conflitos Pessoais**: Nenhum conflito pessoal relacionado ao conteúdo foi identificado.