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EPISTEMOLOGIAS DA FLORESTA: PROTAGONISMO FEMININO E A DESCOLONIZAÇÃO DA CIÊNCIA NA AMAZÔNIA

Rossicléa Ferreira do Nascimento[1] | Josué de Lima Carvalho[2]
Vanusa do Carmo Souza de Freitas[3] | Ana Margarida Santiago[4]
Ynis Cristine de Santana Martins Lino Ferreira[5]

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[1] PhD candidate in Administration (UNAMA).
Belém, PA, Brazil.
Email: rossinascimento@gmail.com

[2] PhD candidate (UNAMA).
Professor at the Federal Rural University of the Amazon.
Paragominas, PA, Brazil.
Email: josue.carvalho@ufra.edu.br

[3] PhD candidate in Administration (UNAMA).
Ministry of Defense – Brazilian Air Force.
Belém, PA, Brazil.
Email: vanusasouza²@hotmail.com

[4] PhD in Administration (UNAMA).
Professor at the Federal Rural University of the Amazon.
Paragominas, PA, Brazil.
Email: anamargos@yahoo.com.br

[5] PhD in Administration (UNAMA).
Professor at the Federal Rural University of the Amazon.
Belém, PA, Brazil.
Email: ynis.cristine@ufra.edu

ABSTRACT

This article comparatively analyzed the mechanisms shaping visibility, leadership, circulation, and recognition in the established scientific careers of women working in the Amazon. It argued that scientific production in the region is territorially grounded and shaped by material and symbolic asymmetries, within which validation and assessment regimes operate as infrastructures of recognition. The theoretical framework integrated territory and regional development, decolonial critique, Epistemologies of the South, decolonial feminism, and microinstitutional barriers associated with the glass ceiling. Methodologically, the research adopted a comparative multiple-case design structured as a 2 × 2 matrix, using purposive sampling and an analytical replication logic. Public data from the Lattes CV Platform and a curated corpus of publications were examined through documentary career analysis, descriptive bibliometrics, and text mining using word clouds, TF-IDF, principal component analysis, and exploratory clustering. Composite indicators of territorialization, internationalization, and leadership were also examined through descriptive statistics. The results revealed a shared Amazon-oriented thematic core alongside distinct lexical signatures, indicating that women's scientific agency in the region is organized as a constellation of research agendas related to education and language, governance and institutional design, and productive systems and sustainability. The indicators revealed distinct configurations of territorialization, internationalization, and leadership, showing that, across the cases examined, territorially grounded agendas coexisted in heterogeneous ways with broader scientific circulation and institutional centrality. The study concluded that forest epistemologies refer not only to Amazon-related research topics but also to the conditions, power relations, and disputes through which knowledge is produced, legitimized, and recognized in a peripheral territory of the Global South.

Keywords: Amazon; epistemic coloniality; women's scientific agency.

RESUMO

O artigo analisou, em perspectiva comparativa, os mecanismos que estruturam a visibilidade, a liderança, a circulação e o reconhecimento em trajetórias científicas femininas consolidadas na Amazônia. Sustentou-se que a produção científica regional é territorializada e atravessada por assimetrias materiais e simbólicas, nas quais regimes de validação e avaliação operam como infraestruturas de reconhecimento. O referencial articulou território e desenvolvimento regional, crítica decolonial, Epistemologias do Sul, feminismo decolonial e barreiras microinstitucionais associadas ao teto de vidro. Metodologicamente, realizou-se um estudo de caso múltiplo comparativo, estruturado em uma matriz 2 × 2, com amostragem intencional e lógica de replicação analítica. Foram utilizados dados públicos do Currículo Lattes e um corpus de publicações submetido a procedimentos de curadoria, análise documental das trajetórias, bibliometria descritiva e mineração de texto, mediante nuvens de palavras, TF-IDF, análise de componentes principais e clusterização exploratória. Também foram empregados indicadores sintéticos de territorialização, internacionalização e liderança, analisados por meio de estatísticas descritivas. Os resultados evidenciaram um núcleo temático amazônico compartilhado e assinaturas lexicais diferenciadas, indicando que o protagonismo científico feminino na região se organiza como uma constelação de agendas relacionadas à educação e à linguagem, à governança e ao desenho institucional, bem como aos sistemas produtivos e à sustentabilidade. Os indicadores revelaram configurações distintas entre territorialização, internacionalização e liderança, mostrando que, nos casos analisados, agendas territorializadas coexistiram de maneira heterogênea com a circulação científica ampliada e a centralidade institucional. Concluiu-se que as epistemologias da floresta não designam apenas temas relacionados à Amazônia, mas também as condições, relações de poder e disputas por meio das quais o conhecimento é produzido, legitimado e reconhecido em um território periférico do Sul Global.

Palavras-chave: Amazônia; colonialidade epistêmica; protagonismo feminino.

INTRODUCTION

Scientific production in the Amazon is structured by asymmetries of infrastructure, funding, connectivity, and visibility regimes that condition research agendas, partnerships, and the circulation of knowledge. From this perspective, the region was treated as “used space”, that is, as the historical outcome of the articulation between technique, time, and social organization, allowing science to be understood as a material and symbolic dimension of the production of space (Santos, 1996). By shifting the Amazon from the status of “frontier” to that of a strategic territory in dispute, geopolitical readings have emphasized that universities, networks, and academic trajectories are part of a field of forces that shapes regional futures and patterns of knowledge validation (Becker, 2005).

This framing required a notion of regional development capable of integrating sustainability, inclusion, and institutional capacities. Multidimensional approaches have linked development to social, environmental, and institutional dimensions, while the capabilities perspective has made it possible to understand “social impact” beyond productivist metrics. Within this framework, gender, education, and public communication become central dimensions, as they reorient collective expectations, expand scientific culture, and influence the circulation of academic work in peripheral ecosystems.

Decolonial critique and the Epistemologies of the South have provided a vocabulary for understanding Amazonian science as situated production that disputes pertinence, authorship, and enunciation (Quijano, 2000; Santos, 2014). Recent evidence has also indicated that regimes of scientific evaluation and circulation may reinforce linguistic and editorial hierarchies, amplifying the centrality of English-language journals and pressuring Global South researchers to cross editorial borders. Thus, inequalities cannot be explained by individual attributes alone; it becomes necessary to identify mechanisms that articulate epistemic coloniality and validation regimes, microinstitutional barriers, and concrete patterns of trajectory, networks, and academic circulation.

In view of this problem, the objective of this article was to analyze, in a comparative perspective, the mechanisms that structure visibility, leadership, circulation, and recognition in consolidated women's scientific trajectories in the Amazon, articulating macrostructural conditions (the geopolitics of knowledge and evaluation regimes) and microinstitutional conditions (organizational barriers and academic routines).

It was on this point that the article concentrated: in examining women's scientific agency in the Amazon, the focus fell less on "presence" and more on the mechanisms that organize visibility, leadership, circulation, and recognition in a peripheral territory of the Global South. Accordingly, the following question was formulated: how, and through which mechanisms, do consolidated women's scientific trajectories in the Amazon combine the territorialization of knowledge, academic leadership, and expanded circulation under simultaneously macrostructural and microinstitutional conditions?

To answer this question, a comparative multiple-case study was carried out, with purposive sampling based on theoretical relevance and analytical replication, seeking recurrences and variations of mechanisms across cases. Four researchers with consolidated careers in the Amazon were selected and organized in a 2 × 2 design structured along two axes: trajectory of academic formation and territorial insertion, distinguishing Amazonian-formed researchers from researchers whose professional insertion in the region occurred at a later stage of their careers, and disciplinary positioning, differentiating Administration from interdisciplinarity with an emphasis on Education and Language studies.

The article offered three contributions. The first was theoretical, integrating territory and regional development with an epistemic critique that highlights validation and circulation regimes as symbolic infrastructures of recognition. The second was methodological, combining a multiple-case study with data curation and lexical and bibliometric analysis, ensuring auditability and comparability. The third was empirical, describing distinct arrangements of territorialization, leadership, and circulation in Amazonian women's trajectories, contributing to debates on scientific evaluation, equity, and territorial development. In what follows, the article presents the methodology, the comparative results, and the discussion of the findings in light of the adopted framework.

THE AMAZON AS A TERRITORY OF SCIENTIFIC PRODUCTION AND REGIONAL DEVELOPMENT

The Amazon, as a territory of scientific production, constitutes the very condition of research activity. Infrastructures, networks, and visibility regimes are asymmetrically distributed across space, modulating agendas and the circulation of knowledge. From this standpoint, regional development is treated as a socio-institutional process aimed at building local capacities and confronting territorialized inequalities. Grounding this perspective, Santos (1996) defines territory as "used space", the outcome of the articulation between technique, time, and social organization. The concept of the technical-scientific-informational milieu thus makes it possible to situate science as a material and symbolic dimension of the production of space, in which institutional density and connectivity directly affect funding and academic recognition.

This approach turns "place" into a central analytical variable (Santos, 1996), a thesis reinforced by Becker (2005) in interpreting the Amazon as a geopolitical territory in dispute. By shifting the region from the status of "frontier" to that of strategic space, the author makes it possible to understand universities and academic trajectories as components of a field of forces that defines regional futures. Hence, scientific activity in the region transcends individual itineraries, becoming embedded in arrangements that condition patterns of cooperation and knowledge validation (Becker, 2004; Oliveira et al., 2023).

Interpreting regional development therefore demands a framework capable of integrating sustainability and inclusion. While Sachs (2000) criticizes economistic reductionisms in favor of a strategy that integrates the social, environmental, and institutional dimensions, Sen (1999) defines development as the expansion of human freedoms and capabilities. Coupling Sachs (2000) and Sen (1999) makes it possible to operationalize "social impact" as a traceable category in trajectory indicators, such as supervisions and partnerships, assessing scientific contribution beyond productivist metrics.

Contemporary evidence corroborates the centrality of gender, education, and public communication as pillars of this territorial development. In the Amazonian school context, Sousa (2024) points out that valuing women's trajectories is essential to expanding scientific culture and citizenship, converging with Sen's (1999) expansion of capabilities. In parallel, Costa, Barbosa and Lima (2024) demonstrate that science communication through digital media strengthens the regional innovation ecosystem, while Lima (2025) shows that educational interventions against women's invisibility reorganize local expectations of the future.

At the community level, women's agency and resistance indicate that development is crossed by relations of power and identity, linking research to concrete territorial demands (Rolim; Silva; Brito, 2025). Finally, Carvalho et al. (2025) emphasize that the visibility of women's work is mediated by oscillating institutional framings. This framework articulates the production of space (Santos, 1996; Becker, 2004) with multidimensional development (Sachs, 2000; Sen, 1999), sustaining that gender, education, and communication operate as constitutive and observable dimensions of regional development.

EPISTEMIC COLONIALITY AND THE GLASS CEILING IN SCIENCE

Decolonial critique understands the coloniality of power as a historical matrix that articulates social classification, political economy, and knowledge production, sustaining a geopolitics of knowledge in which Eurocentric rationality universalizes itself and subalternizes situated knowledges (Quijano, 2000). Within this framework, "modernity" and "coloniality" are mutually constitutive, and epistemic disobedience implies reorienting criteria of pertinence, authorship, and enunciation, repositioning who may theorize and on what terms (Mignolo, 2009; 2011). The Epistemologies of the South deepen this key by arguing that social injustice and cognitive injustice are inseparable: ecologies of knowledges and intercultural translation render visible disputes over epistemic recognition that run through academic production and public interfaces (extension, networks, training) (Santos; Meneses, 2009; Santos, 2014). Taken together, this body of work makes it possible to read Amazonian science not as a local variation of external agendas but as situated production that disputes regimes of validation, circulation, and impact (Quijano, 2000; Mignolo, 2009; 2011; Santos; Meneses, 2009; Santos, 2014).

Recent evidence indicates that such disputes are reinforced by contemporary regimes of scientific evaluation and circulation, often dependent on platforms, rankings, and linguistic norms, which amplify the centrality of English-language journals and put pressure on non-hegemonic publishing ecosystems (Snijder; Kingsley, 2024). At the editorial level, hierarchy does not operate only "outside" the text: it is internalized in expectations of framing, writing style, and the negotiation of epistemic legitimacies when Global South researchers publish in Global North journals (Naidu et al., 2024). Moreover, the concentration of decision-making power in editorial boards from high-income countries indicates that what counts as a relevant problem and a "publishable" contribution remains unequally distributed (Manan et al., 2023).

Decolonial feminism displaces this critique to show that the legitimacy of knowledge is also gendered and racialized: the coloniality of gender reorganizes labor, sexuality, and humanity, producing hierarchies over who may speak, research, and be recognized as an epistemic subject (Lugones, 2007). At the same time, the critique of the homogeneous category "Third World women" warns against universalisms that erase class, race, and territory (Mohanty, 1988). In the Brazilian case, studies on CNPq research productivity (PQ) grants have identified persistent asymmetries of prestige and recognition, with women's underrepresentation in the upper strata and intersections with racial inequalities, reinforcing the

institutional reproduction of these hierarchies (Cunha; Dimenstein; Dantas, 2021; Oliveira et al., 2021). Accordingly, "trajectory" can be treated less as an individual sequence and more as the unequal conversion of production into academic capital, mediated by gender, race, and territory (Cunha; Dimenstein; Dantas, 2021; Oliveira et al., 2021).

The glass ceiling literature describes how formal rules of merit coexist with informal barriers that intensify in the upper strata: tokenism and numerical minority dynamics (Kanter, 1977), gendered organizations and "neutral" criteria of competence and availability built on masculine assumptions (Acker, 1990), growing barriers at the top of the hierarchy (Cotter et al., 2001), biases against female leadership stemming from role incongruity (Eagly; Karau, 2002), and the unequal attribution of scientific credit (the Matilda effect) (Rossiter, 1993). Empirical evidence shows that inequality is not limited to access: it includes losses of visibility, authorship, and conditions of production; during the pandemic, for example, a relative decline was recorded in women's participation as authors in fast-circulation channels, suggesting that institutional shocks amplify asymmetries through care burdens and reconfigurations of academic time (Muric; Lerman; Ferrara, 2021). In the field of science communication, asymmetries of credit and visibility have also been analyzed by explicitly mobilizing the Matilda effect (Song et al., 2024). These mechanisms are further connected to biases within evaluation circuits themselves: experimental evidence indicates that author gender affects perceptions of scientific quality and interest in collaboration (Knobloch-Westerwick; Glynn; Huge, 2013), while differences in self-promotion and reputation affect recognition and impact, reinforcing that visibility does not follow automatically from production (Peng et al., 2025).

In this context, "dystopia" was mobilized as a critical analytical device, not as ornament: by exacerbating and making explicit the logics of domination, it makes it possible to identify what, in institutional everyday life, is naturalized as technical, neutral, or inevitable. Thus, the articulation between epistemic coloniality, decolonial feminism, and the glass ceiling renders visible the mediations through which validation regimes, organizational routines, and metrics convert (or block) production into recognition (Acker, 1990; Cotter et al., 2001; Eagly; Karau, 2002; Rossiter, 1993).

METHODOLOGY

The study was conducted as a comparative multiple-case study, with purposive sampling based on theoretical relevance and a logic of analytical replication, aiming to identify recurrences and variations of explanatory mechanisms across cases (Yin, 2018; Eisenhardt, 1989). This strategy was suitable for understanding women's scientific trajectories as a simultaneously macrostructural and microinstitutional phenomenon, privileging explanatory consistency among evidence, categories, and inferences, without any claim to statistical generalization.

Case selection followed criteria of informational density and pertinence to the problem, in line with purposive sampling (Patton, 2015). Four researchers with consolidated careers in the Amazon were included, organized in a comparative 2 × 2 design. The first axis corresponded to the trajectory of academic formation and territorial insertion, distinguishing Amazonian-formed researchers, whose educational and academic socialization took place in the region, from researchers who entered the Amazon professionally at a later stage of their careers, already as faculty members. The second axis corresponded to disciplinary positioning, differentiating Administration from interdisciplinarity with an emphasis on Education and Language studies. For classification purposes, territorial origin considered not only place of birth but also territorial socialization and the formative path developed in the Amazon.

The evidence derived from public documentary sources, with triangulation of data and methods. The Lattes CV was treated as the structuring document for reconstructing academic and institutional trajectories (bibliographic production, supervisions, projects, affiliations, and participations), while, in parallel, a corpus of publications (titles, abstracts, and keywords, when available) was assembled for bibliometric and lexical analyses.

Corpus construction proceeded through stages of curation and standardization: consolidation into a single database, author disambiguation, institutional normalization, and treatment of duplicates (by DOI when available and, alternatively, by title/year combination). The textual material was normalized (orthographic standardization, removal of noise and stopwords, harmonization of equivalent terms), keeping "original" and "clean" versions for audit purposes. An auxiliary vocabulary of territorial terms and Amazonian markers was also developed to operationalize measures of

territorialization, together with explicit rules to distinguish “the Amazon as a central object” from “the Amazon as an illustrative setting”, with a record of analytical decisions.

The composite indicators of territorialization, internationalization, and leadership were constructed through the attribution of interpretive scores, on a continuous scale from 0 to 1, grounded in the full reading of the four Lattes CVs and of the corpus of publications. The attribution did not follow an algorithmic formula but rather the researcher’s grounded expert judgment, a procedure consistent with the interpretive nature of the multiple-case study and with the logic of analytical generalization adopted (Yin, 2018; Patton, 2015). To discipline this judgment and ensure auditability, each dimension was anchored in observable descriptors previously defined in an analytical rubric: territorialization, gauged by the presence of the Amazon as a central object of production, the recurrence of territorial markers, and the linkage of projects and supervisions to regional demands; internationalization, gauged by training and research stays abroad, international co-authorships and networks, and publications in foreign venues and other languages; and leadership, gauged by the exercise of academic management positions, coordination of programs and projects, leadership of research groups, and research productivity grants. Scores were attributed after successive readings of the CVs, with a record of the evidence supporting each value, and were subsequently triangulated with the lexical and bibliometric results, verifying the convergence between interpretive judgment and the patterns observed in the corpus.

The analyses were organized into two integrated layers. The first, bibliometric and descriptive, examined the volume and temporal distribution of production, document types, publication channels, and the evolution of trajectories, in line with established practices of bibliometrics and science mapping (Zupic; Čater, 2015; Donthu et al., 2021). The second employed text mining, through lexical frequencies, word clouds, distinctive terms by TF-IDF, principal component analysis, and exploratory clustering, in order to identify thematic convergences and differentiations across cases. Quantitative results were interpreted in articulation with the documentary information on the trajectories and with the categories of the theoretical framework, following the logic of analytical generalization, without population-level extrapolation.

The qualitative stage consisted of a documentary analysis of the trajectories, guided by categories derived from the theoretical framework — epistemic coloniality and regimes of validation and visibility, as well as microinstitutional barriers associated with the glass ceiling and gendered organizations — while recording territorial specificities that emerged from the reading of the CVs, in line with principles of content analysis (Bardin, 2016; Krippendorff, 2018; Neuendorf, 2017). The analysis was carried out by a single researcher, with systematic recording of analytical decisions and successive re-readings for consistency control.

To reduce selection bias and ensure traceability, a systematic record of inclusion, exclusion, and curation decisions was adopted, with dates, sources, and justifications, available for audit. The integration of results was conducted through interpretive triangulation between the quantitative evidence (bibliometrics, text mining, and indices) and the documentary evidence on the trajectories, seeking convergences, complementarities, and interpretive tensions (Creswell; Plano Clark, 2018). Interpretation followed the logic of analytical generalization, supporting propositions about the mechanisms that structure women's scientific trajectories in peripheral territories of the Global South, without population-level extrapolation.

As for rigor, the study relied on triangulation of sources and methods and on auditability procedures (records of analytical decisions, corpus versions, dictionaries, and coding rules), in dialogue with classic parameters of credibility, confirmability, and dependability. On the ethical plane, the study was limited to publicly available data, adopting responsible description, avoiding unsupported personal inferences, and acknowledging limitations associated with the incompleteness of the Lattes Platform, the heterogeneity of metadata, and asymmetries of public visibility across institutions and regions. The nominal identification of the researchers follows from the very nature of the design, which analyzes consolidated public trajectories whose recognition constitutes the object of the study; anonymization would make independent verification of the documentary evidence unfeasible.

RESULTS

LEADERSHIP TRAILS AND THE TERRITORIALIZATION OF KNOWLEDGE IN THE AMAZON

The study adopted purposive sampling based on theoretical relevance to examine how different trajectories of academic formation and territorial insertion, and distinct disciplinary positionings, were associated with the observed patterns of knowledge production about the Amazon, as shown in Chart 1.

Chart 1 | Researchers investigated.

Group	Administration (Management focus)	Interdisciplinary / Education / Language and Literature
Amazonian	Profa. Dra. Ana Maria de Albuquerque Vasconcellos (UNAMA)	Profa. Dra. Nilsa Brito Ribeiro (Unifesspa)
Migrant	Profa. Dra. Mariluce Paes de Souza (UNIR)	Profa. Dra. Tânia Suely Azevedo Brasileiro (UFOPA)

Source: prepared by the authors based on research data (2026).

Note: the classification “Amazonian” was not defined exclusively by place of birth, but by territorial socialization and by the formative path developed in the Amazon. Nilsa Brito Ribeiro, although born in Bahia, completed her academic formation in the state of Pará, for which reason she was classified, like Ana Maria de Albuquerque Vasconcellos, as Amazonian-formed. Mariluce Paes de Souza and Tânia Suely Azevedo Brasileiro were placed in the migrant group because they entered the region professionally at a later stage of their trajectories, already as faculty members.

Prior to the bibliometric and lexical analyses, the results relied on a trajectory cartography aimed at describing the positioning of the professors within the organization of Amazonian scientific life. The comparative reading of the CVs revealed a structuring pattern: institutional continuity combined with strategic mobility. Tânia Brasileiro’s trajectory shows consolidation at UNIR and, after her transfer in 2012, leadership in territorial expansion at UFOPA, as full professor and articulator of graduate networks. In parallel, Ana Maria Vasconcellos displays strong anchorage at UNAMA,

with decisive insertion in academic management (Office of the Dean of Graduate Studies since 2014) and in the consolidation of the PPAD. Nilsa Brito Ribeiro exemplifies scientific interiorization: her management experience at the Marabá campus (UFPA) in the 1990s and her subsequent consolidation at UNIFESSPA evince the interdependence between academic careers and regional territorial dynamics. Mariluce Paes de Souza (UNIR), in turn, combines high seniority, recognized by a CNPq research productivity grant, with a continuous presence in coordination and institutional articulation roles.

These paths reveal multiscalar circulation circuits that connect Amazonian institutions to external centers without dissolving the regional centrality of their work. This appears, for example, in Mariluce Paes de Souza's collaborations with the University of Michigan and USP, as well as in Ana Maria Vasconcellos's international doctoral training (University of Wales Swansea), whose revalidation at NAEA/UFPA expresses the logic of "external training with Amazonian anchorage". The direct intersection between these networks, exemplified by Mariluce Paes de Souza's participation in projects led by Ana Maria Vasconcellos, indicates that the connection between the cases (UNAMA–UNIR) is not limited to similarity of profile but constitutes effective collaboration.

From a theoretical standpoint, these trajectories converge toward positions that the literature on gender and science recognizes as nodes of visibility and legitimation (graduate program coordinations, dean's offices, and research group leaderships), operating as instances of mediation of recognition and symbolic regulation of merit. At the same time, the heterogeneity of institutional ecologies, spanning federal-public and private-metropolitan arrangements, offers an analytical contrast for testing whether mechanisms of epistemic coloniality and microinstitutional barriers associated with the "glass ceiling" emerge recurrently or vary according to disciplinary field and hierarchical position (Quijano, 2000; Santos, 2014; Cotter et al., 2001).

Qualified circulation combined with institutional anchorage suggests a situated science and a practiced interdisciplinarity, whose infrastructures of production remain intrinsically tied to the territory (Santos, 1996; Becker, 2004). The following section presents the results of the bibliometric assessment, relating production to indicators of territorialization, internationalization, and leadership.

TERRITORIALIZATION, CIRCULATION, AND LEADERSHIP IN AMAZONIAN SCIENTIFIC TRAJECTORIES

The word clouds presented in Figure 1 do not prove causality, nor do they replace a qualitative reading of the texts; rather, they function as an exploratory tracking of agendas, making it possible to identify the recurrence of themes, objects, and territorial markers in each trajectory. The lexical patterns were subsequently interpreted in articulation with the bibliometric, institutional, and career evidence. This use is consistent with the proposal of treating CVs and their textual traces as evidence of validation and circulation regimes, which can be read in light of epistemic coloniality, decolonial feminism, and microinstitutional barriers.

Figure 1 | Word clouds of the publications of the four researchers.



Source: prepared by the authors based on research data (2026).

For Tânia Suely Azevedo Brasileiro, the predominant terms are directly associated with the Amazon and with situated production (“amazonia”, “educacao”, “ensino”, “professores”, “escolar”), along with territorial and institutional markers (“paraense”, “Santarém”, “ufopa”) and connections with health and culture. This pattern is compatible with a reading of regional development as a social and institutional process, in which science is linked to local capacities, training, and networks, and not only to economic outcomes (Sachs, 2000; Sen, 1999). The set suggests an agenda that combines territory, education, and institutional practices, converging with the idea that “place” structures research opportunities and priorities and conditions networks and circulation (Santos, 1996).

For Ana Maria de Albuquerque Vasconcellos, the cloud is dominated by terms linked to administration and public policy (“administracao”, “social”, “desenvolvimento”, “local”, “trabalho”, “programa”, “parceria”, “política”, “governanca”), with the marker “belem”. The presence of English terms such as “development”, “policy”, and “state” indicates the incorporation of an internationalized vocabulary into the corpus. In isolation, however, this lexical result does not warrant inferring greater international circulation and must be interpreted together with the indicators of language, publication channels, and institutional cooperation. The centrality of “local” and “desenvolvimento” preserves adherence to the Amazonian axis, but with an emphasis on governance, collective action, and institutional design, consistent with metropolitan academic-institutional ecologies and networks of greater centrality.

In the case of Nilsa Brito Ribeiro, the cloud emphasizes “discurso”, “comunicacao”, “sentidos”, “producao”, “formacao”, “práticas”, and “leitura”, with the presence of “maraba” and “amazonia”. Here, territorialization shifts from the economic axis to language and symbolic mediation, which is particularly relevant to the decolonial argument: coloniality also operates through regimes of signification that legitimize some narratives and silence others, including in the internal Amazonian periphery (Quijano, 2000; Santos, 2014). Thus, an agenda centered on discourse and communication constitutes privileged evidence for observing how knowledge is produced, translated, and validated.

As for Mariluce Paes de Souza, the salient terms are “amazonia”, “rondonia”, “desenvolvimento”, “sustentavel”, “governanca”, “cadeia”, “produtivo”, “municipio”, “agricultura”, “agronegocio”, “recursos”, “cooperativa”, and “sistemas”. This is a territorialized agenda oriented toward regional political economy, productive systems, and sustainability, converging with the notion of multidimensional development and with the reading of the Amazon as a territory of disputes and regional projects (Sachs, 2000; Santos, 1996).

Here, the territory appears as object and problem, not merely as backdrop.

Taken together, the clouds indicate that the Amazon constitutes a recurrent axis of the production analyzed, articulated with distinct disciplinary specializations and different ways of addressing dimensions of regional development. Tânia and Nilsa show a higher recurrence of terms related to education, training, and symbolic mediations; Ana Maria concentrates vocabulary associated with governance, management, and institutional design; and Mariluce shows a greater presence of terms linked to productive systems, regional chains, and sustainability. The results reinforce the understanding of regional development as a multidimensional phenomenon, although they do not allow measuring, in isolation, the social impact produced by these agendas (Sachs, 2000; Sen, 1999).

A relevant interpretive point is that terms explicitly associated with gender and feminism did not occupy a central position in the clouds. This result does not warrant concluding that the gender dimension is absent from the trajectories or agendas analyzed; it indicates only that such markers were not lexically dominant in the corpus. In light of decolonial feminism, the finding opens an interpretive hypothesis about how scientific agendas are organized by disciplinary languages and academic validation regimes, a hypothesis that was not directly tested by the lexical procedures employed (Lugones, 2007; Mohanty, 1988; Santos, 2014). This reading aligns with the coloniality of gender, insofar as the modern/colonial system defines not only who counts as an epistemic subject but also which problems are recognized as "science" and which tend to be downgraded to "activism" or "secondary topic" (Lugones, 2007).

At the same time, decolonial feminism warns against reading territorialization as neutrality: terms such as "Amazônia", "município", "comunidade", "trabalho", and "educação" carry disputes over power and enunciation. If the risk, in Mohanty (1988), is to homogenize subalternized subjects, the clouds here suggest a plurality of entry points and disciplinary grammars, reinforcing the need to treat production and trajectory as a situated locus, without reducing the Amazonian female experience to a single category (Mohanty, 1988).

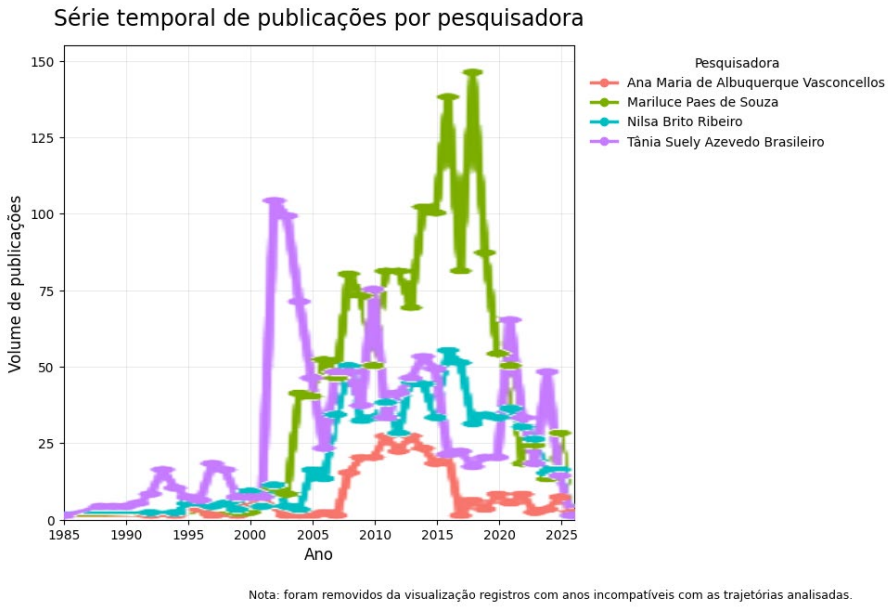
The literature on the glass ceiling and gendered organizations reinforces that careers do not advance through productivity alone, but through access to networks, positions, and credentialing circuits that operate as invisible filters (Acker, 1990; Cotter et al., 2001). In this sense, terms such as "programa", "parceria", "governanca", "seminario", "campus", and institutional markers are not mere context: they

signal career ecologies in which visibility is produced and disputed.

The contrast between clouds and framework sustains, in a preliminary way, a convergence: the agendas are territorialized, but their circulation and legitimation depend on institutional infrastructures and networks that may reproduce gender and center–periphery asymmetries. Decolonial critique makes it possible to problematize the global hierarchies that differentiate centers authorized to theorize from peripheries frequently treated as suppliers of cases. The glass ceiling literature offers a lens for interpreting possible internal barriers produced under apparently neutral rules, while decolonial feminism shows that recognition regimes can be gendered, racialized, and territorialized (Quijano, 2000; Santos, 2014; Lugones, 2007; Acker, 1990; Cotter et al., 2001).

The time series of publications, presented in Figure 2, made it possible to identify periods of growth, stability, and oscillation in the production of the four researchers. The association of these periods with the stages of entry, consolidation, and leadership was carried out through triangulation with the professional milestones recorded in the CVs, and not solely on the basis of annual publication volume. For methodological transparency, records located in years incompatible with the trajectories were treated as extraction noise and excluded from the analysis.

Figure 2 | Temporal distribution of the publications of the four researchers.

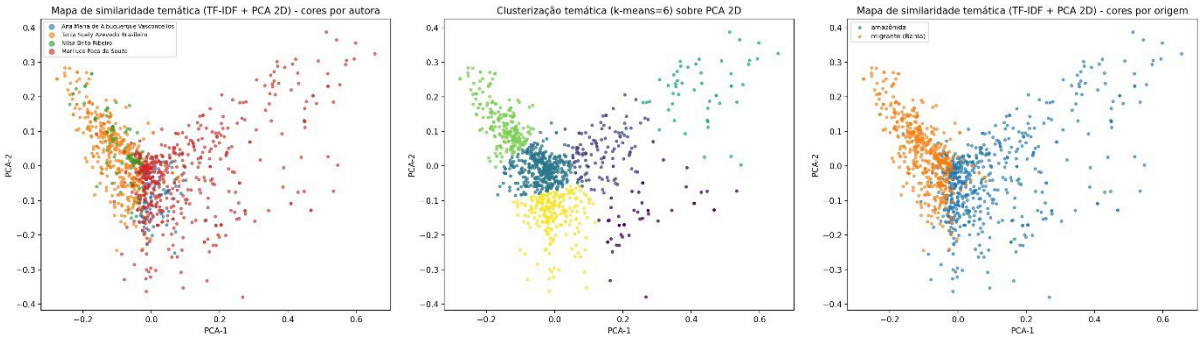


Source: prepared by the authors based on research data (2026).

The series showed that production was not distributed linearly over time, presenting periods of growth, stability, and oscillation. These movements were interpreted in articulation with the professional milestones recorded in the CVs and with the literature on scientific evaluation and circulation. The figure, on its own, did not allow identifying gender barriers or establishing causal relations between production volume, leadership, and microinstitutional mechanisms.

The thematic similarity analysis, operationalized through TF-IDF vectorization of the textual corpus and dimensionality reduction via PCA into two principal components, made it possible to observe the relational structure of the thematic space of the publications and, above all, to test whether the differentiation between trajectories appears as a recurrent pattern within the study's comparative design. In Figure 3, each point represents a record of the analyzed corpus, projected onto a plane in which distances indicate greater or lesser lexical proximity, without attributing direct substantive meaning to the PCA 1 and PCA 2 axes.

Figure 3 | Projection of the corpus records onto two principal components (PCA), by author and by k-means grouping.



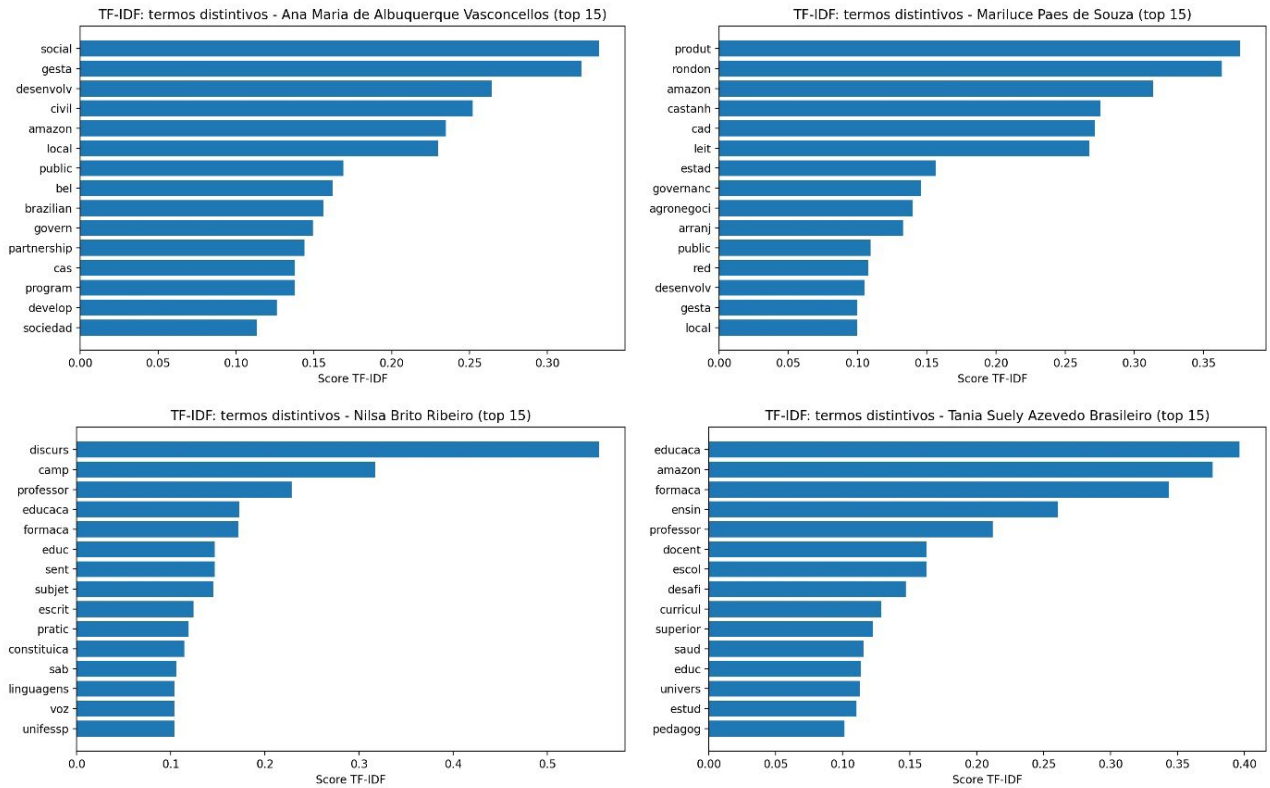
Source: prepared by the authors based on research data (2026).

The map by author revealed a core of overlap close to the origin, indicating a partially shared vocabulary base among the four researchers. At the same time, dispersion was not homogeneous. The records of Mariluce Paes de Souza showed greater dispersion in the plane formed by the two components, indicating greater lexical heterogeneity in the represented two-dimensional space. Tânia Suely Azevedo Brasileiro and Nilsa Brito Ribeiro showed greater concentration in a region to the left of the plane and considerable overlap, indicating the recurrence of shared vocabulary in part

of their publications. The records of Ana Maria de Albuquerque Vasconcellos were more markedly concentrated in the region of intersection between the different documentary sets.

The exploratory clustering solution presented in the central panel of Figure 3, with k-means set to 6, defined on an exploratory basis, identified six groupings of lexical proximity. These groupings were not interpreted as closed substantive themes, but as exploratory partitions of the vocabulary space. Shared groupings were observed alongside others with a greater concentration of records associated with particular trajectories. The result proved compatible with the logic of analytical replication, by simultaneously revealing convergences and differentiations across cases, without reducing the phenomenon to a biographical portrait. Figure 4 presents the results of the TF-IDF analysis.

Figure 4 | Distinctive terms by author according to the TF-IDF analysis.



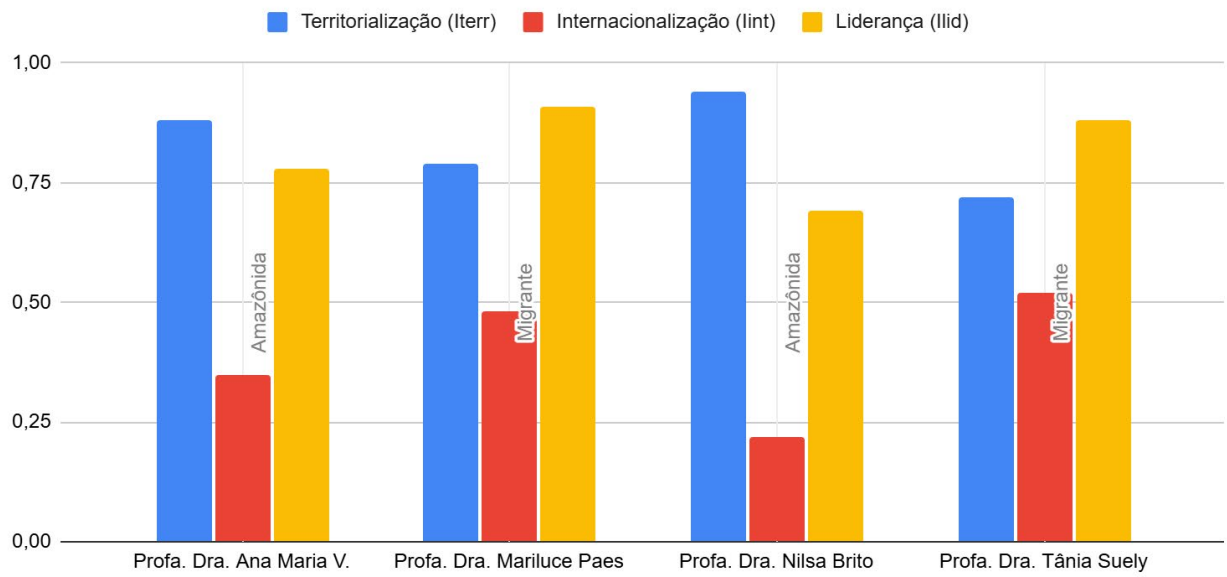
Source: prepared by the authors based on research data (2026).

Taken together, Figures 3 and 4 produce an integrative finding: there is a shared thematic core that sustains comparability across cases, but there are lexical signatures distinct enough to indicate that women's scientific agency in the Amazon is not expressed through a single thematic profile.

It is organized as a plural set of agendas ranging across governance and public management, productive chains and networks, and education, language, and training, maintaining, with varying intensity, Amazonian territoriality as a substantive reference. This pattern is theoretically congruent with the articulation proposed in the article: epistemic coloniality acts as a matrix of validation and hierarchization of knowledge produced in the periphery (Quijano, 2000; Mignolo, 2011; Santos, 2014); decolonial feminism makes it possible to read these agendas as situated and gendered science, crossed by disputes over enunciation and recognition (Lugones, 2007; Mohanty, 1988); and the glass ceiling literature offers a lens for problematizing how visibility and evaluation regimes may operate in institutional everyday life, modulating authorship, leadership, and credentialing (Acker, 1990; Cotter et al., 2001).

The indicator panel (Figure 5) consolidates, along three dimensions, patterns that had already been suggested by the word clouds and by the preliminary career reading. In empirical terms, the figure shows a clear asymmetry between (i) territorialization, understood as the explicit marking of the Amazon and of Amazonian objects in the production, (ii) internationalization, treated here as external circulation and not as a "seal of quality", and (iii) leadership, as a proxy for centrality and the capacity to conduct agendas, networks, and institutional positions.

Figure 5 | Composite indicators of territorialization, internationalization, and leadership by researcher.



Source: prepared by the authors based on research data (2026).

The descriptive statistics of the indicators are presented in Table 1, subdivided into panels A and B.

Table 1 | Descriptive statistics of the indicators

Panel A – Overall statistics for the four cases

Indicator	N	Mean	Median	Standard deviation	Minimum	Maximum	Range
Territorialization	4	0.833	0.835	0.097	0.720	0.940	0.220
Internationalization	4	0.393	0.415	0.136	0.220	0.520	0.300
Leadership	4	0.815	0.830	0.100	0.690	0.910	0.220

Panel B – Means by origin and disciplinary field

Comparative dimension	Group	N	Territorialization	Internationalization	Leadership
Origin	Amazonian	2	0.910	0.285	0.735
Origin	Migrant	2	0.755	0.500	0.895
Field	Administration	2	0.835	0.415	0.845
Field	Interdisciplinary	2	0.830	0.370	0.785

Source: prepared by the authors based on research data (2026).

Note: the standard deviation presented in Panel A was calculated using the sample formula. The subgroup results are exclusively descriptive, considering two cases in each category.

Table 1 presents the descriptive statistics of the composite indicators used to compare the four scientific trajectories. Territorialization reached the highest mean of the set, at 0.833, followed by leadership, at 0.815, while internationalization showed a considerably lower mean of 0.393. Medians close to the means in the territorialization and leadership indicators pointed to the relative stability of these attributes across cases, although distinct individual configurations were observed. Internationalization showed the largest standard deviation, of 0.136, and the widest range, of 0.300, proving to be the most heterogeneous dimension among the researchers. This result reinforced that territorial insertion was more consistently present across the set of trajectories, while expanded circulation occurred through more differentiated paths.

The comparison by origin showed that the researchers classified as Amazonian presented a higher mean territorialization, of 0.910, in contrast with 0.755 among the migrants. The direction of the result was reversed for the other indicators, since the migrant group achieved higher means for internationalization, 0.500, and leadership, 0.895, against 0.285 and 0.735, respectively, in the Amazonian group. Although the small number of cases does not allow statistical inferences or population-level generalizations, the results show that, in the set analyzed, greater territorialization

was not necessarily accompanied by greater internationalization or leadership. The contrast is exclusively descriptive and indicates distinct configurations across the three dimensions, without allowing causal relations to be established between territorial trajectory, external circulation, and institutional centrality.

Differences by disciplinary field were less pronounced. Administration and interdisciplinarity showed practically equivalent territorialization means, of 0.835 and 0.830, respectively. The field of Administration recorded moderately higher values for internationalization, 0.415, and leadership, 0.845, when compared with the interdisciplinary field, at 0.370 and 0.785. In the set analyzed, the numerical contrasts between the categories of territorial trajectory were more pronounced than those observed between disciplinary fields. Considering that each group comprised only two cases, the result does not allow attributing independent explanatory capacity to territorial trajectory or disciplinary field. The comparison was descriptive in character and was used to identify recurrences and variations across theoretically selected cases. This reading converges with the methodological option for analytical replication, which considers the interaction between trajectory, territory, field, and institutional position, rather than attributing the results to a single explanatory variable.

Nilsa Brito Ribeiro presented the highest territorialization index of the set, at 0.94, and the lowest internationalization and leadership indices, at 0.22 and 0.69, respectively. In the set analyzed, this profile indicates a strong presence of territorial markers combined with lower international circulation and relative leadership. In light of the adopted framework, the case makes it possible to discuss tensions between territorialization and expanded validation regimes, without the indicators allowing direct measurement of epistemic frictions or local social relevance (Quijano, 2000; Santos, 2014; Lugones, 2007).

Ana Maria de Albuquerque Vasconcellos presented a territorialization index of 0.88, internationalization of 0.35, and leadership of 0.78. Comparatively, her trajectory combined a strong presence of Amazonian markers with less elevated values of international circulation and leadership relative to the highest indices observed in the set. This configuration makes it possible to discuss how a territorial agenda can remain substantive even when production moves through expanded arenas of evaluation and circulation.

Mariluce Paes de Souza presented a territorialization index of 0.79, internationalization of 0.48, and the highest leadership index of the set, at 0.91. This configuration combined an expressive presence of territorial markers, relatively high international circulation, and the greatest comparative leadership among the four cases. The arrangement is analytically relevant because it brings together, in a single case, territorial density and a high capacity for leadership and circulation. Within the article's framework, this helps explore how, in this case, a territorial agenda coexisted with institutional centrality and expanded networks, without necessarily abandoning the territory as an object. It is also a point of support for discussing how leadership may require intensive navigation through organizational structures that are not neutral, even when the final outcome suggests success (Acker, 1990; Cotter et al., 2001).

Tânia Suely Azevedo Brasileiro presented the lowest territorialization index of the set, at 0.72, the highest internationalization index, at 0.52, and a leadership index of 0.88. This configuration indicates that, in the case analyzed, greater international circulation coexisted with a lower explicit presence of territorial markers in the corpus. The result makes it possible to formulate, as an interpretive hypothesis, that agendas of expanded circulation may display less lexical explicitness of the territory. The documentary data, however, do not allow determining whether this pattern stemmed from editorial requirements, thematic choices, characteristics of the publication venues, or other institutional factors.

This pattern is compatible, as an initial theoretical reading, with the idea that trajectories may differentiate themselves by how they access validation circuits and circulation networks, without this implying intrinsic academic superiority. In the decolonial vocabulary, the point is to observe how epistemic authority is distributed and converted into recognition, and how the territory may be kept at the center of the problem or translated to fit dominant evaluation regimes (Quijano, 2000; Mignolo, 2011; Santos, 2014).

In the organizational vocabulary, the point is to remember that leadership and centrality are outcomes crossed by institutional filters, and not mere effects of merit, especially in gendered evaluation systems.

FINAL CONSIDERATIONS

This article analyzed, in a comparative perspective, mechanisms of visibility, leadership, circulation, and recognition in consolidated women's scientific trajectories in the Amazon, articulating macrostructural conditions (the geopolitics of knowledge and evaluation regimes) and microinstitutional conditions (organizational barriers and academic routines).

The 2 × 2 design and the logic of analytical replication made it possible to treat the trajectories as evidence of a situated science, without reducing the phenomenon to biographical portraits, and with attention to variations across institutional ecologies and disciplinary positionings.

The results supported three integrative findings. First, the scientific production analyzed remained strongly anchored in the Amazon, albeit through distinct disciplinary grammars, suggesting that the territorialization of knowledge can be expressed as (i) education/training and symbolic mediations, (ii) governance and institutional design, or (iii) regional political economy, productive chains, and sustainability. Second, the lexical and relational analyses indicated a shared thematic core combined with differentiated thematic signatures, which reinforced comparability across cases but also showed that Amazonian women's scientific agency is not monolithic: it is organized as a constellation of agendas that converge on the territory yet diverge in their forms of circulation and credentialing. Third, the indicator panel pointed to distinct configurations of territorialization, internationalization, and leadership, showing that the presence of territorialized agendas coexisted heterogeneously with expanded circulation and institutional centrality across the four cases analyzed.

A relevant result was the low centrality of explicit gender markers in the lexical signatures. This finding does not imply the absence of the gender dimension, nor does it demonstrate that validation regimes have directly disciplined the agendas analyzed. It does, however, open an interpretive hypothesis about how themes and objects are presented through disciplinary and institutionally recognized languages. Investigating this hypothesis would require additional evidence, such as interviews, editorial reviews, or observation of institutional routines.

From a theoretical standpoint, the articulation between epistemic coloniality, decolonial feminism, and the glass ceiling was reinforced by the proposal of reading "dystopia" as a critical device: not as a rhetorical flourish, but as a strategy for making explicit logics that, in everyday university life, appear as technical, inevitable, or "meritocratic". In this key, the article contributed by showing that visibility and

recognition do not follow automatically from production, but from symbolic and institutional infrastructures that regulate circulation, credentialing, centrality in networks, and access to leadership positions.

It should be stressed that the documentary design did not allow directly identifying experiences of discrimination, nor establishing a causal relation between gender and professional progression. The glass ceiling was mobilized as a theoretical lens for interpreting possible organizational barriers and asymmetries, and not as an outcome directly measured in the four trajectories.

The practical implications are direct for science policy and university management in the region: improving evaluation criteria to recognize territorial impact and the public interfaces of science; reducing linguistic and editorial asymmetries through multilingual circulation strategies and the strengthening of non-hegemonic publishing ecosystems; expanding transparency and equity in the distribution of duties, opportunities, and decision-making positions; and sustaining institutional recognition policies that explicitly consider how gender, territory, and metric regimes interact in the construction of trajectories.

As limitations, the study relied on public documentary data, subject to incompleteness and heterogeneous record-keeping; it used text mining procedures and composite indicators that depend on curation choices and analytical rules; and it worked with a small number of cases, suitable for analytical generalization but insufficient for population-level extrapolations. These restrictions do not invalidate the findings; on the contrary, they delimit the interpretive scope and reinforce the need for inferential caution. Moreover, the composite indicators express the interpretive judgment of a single researcher: although anchored in observable descriptors and triangulated with the lexical and bibliometric evidence, they were not submitted to validation by multiple raters, which recommends caution in the comparative reading of the scores.

Future research may: (i) expand the sample and replicate the comparative design in other Amazonian subregions; (ii) incorporate interviews and institutional observation to capture micro-organizational mechanisms that do not appear in documentary records; (iii) deepen the intersectional dimension (race, class, interiorization) to qualify the analysis of the coloniality of gender; and (iv) test the robustness of the indicators with different dictionaries, weights, and normalization criteria. In sum, the article indicated that "forest epistemologies" designate not only Amazonian themes but, above all, the conditions, disputes, and mediations through which knowledge is produced, legitimized, and recognized in a peripheral territory of the Global South.

REFERENCES

ACKER, Joan. Hierarchies, jobs, bodies: A theory of gendered organizations. **Gender & society**, v. 4, n. 2, p. 139-158, 1990. Disponível em: https://journals.sagepub.com/doi/abs/10.1177/089124390004002002. Acesso em: 14 fev. 2026.

BARDIN, Laurence. **Análise de conteúdo**. São Paulo: Edições 70, 2016.

BECKER, Bertha K. **Amazônia: geopolítica na virada do III milênio**. Rio de Janeiro: Garamond, 2004.

BECKER, Bertha K. Geopolítica da Amazônia. **Estudos Avançados**, v. 19, n. 53, p. 71-86, 2005.

CARVALHO, Josué de Lima; NASCIMENTO, Rossiclea Ferreira do; BARROS, Jones Nogueira; VASCONCELLOS SOBRINHO, Mário; ALBUQUERQUE VASCONCELLOS, Ana Maria de. Nem toda sustentabilidade é verde: representações do trabalho feminino na Amazônia pré-COP30. **Oikos: Família e Sociedade em Debate**, *[S. l.]*, v. 36, n. 3, 2025. DOI: 10.31423/oikos.v36i3.22284. Disponível em: https://periodicos.ufv.br/oikos/article/view/22284. Acesso em: 15 fev. 2026.

COSTA, Inara Regina Batista da; BARBOSA, Cristiane de Lima; LIMA, Manuella Dantas Corrêa. Pesquisadoras e empreendedoras conectadas pela ciência e tecnologia na Amazônia. **Cuadernos de Educación y Desarrollo-QUALIS A4**, v. 16, n. 11, p. e6599-e6599, 2024.

COTTER, David A. et al. The glass ceiling effect. **Social forces**, v. 80, n. 2, p. 655-681, 2001. Disponível em: https://www.researchgate.net/publication/236778636_The_Glass_Ceiling_Effect. Acesso em: 15 fev. 2026.

CRESWELL, John W.; PLANO CLARK, Vicki L. **Designing and Conducting Mixed Methods Research**. 3. ed. Thousand Oaks, CA: SAGE Publications, 2018.

CUNHA, Rocelly; DIMENSTEIN, Magda; DANTAS, Candida. Desigualdades de gênero por área de conhecimento na ciência brasileira: panorama das bolsistas PQ/CNPq. **Saúde em Debate**, v. 45, p. 83-97, 2021. Disponível em: https://www.scielosp.org/article/sdeb/2021.v45nspe1/83-97/pt/. Acesso em: 14 fev. 2026.

DONTHU, Naveen et al. How to conduct a bibliometric analysis: An overview and guidelines. **Journal of business research**, v. 133, p. 285-296, 2021. Disponível em: https://doi.org/10.1016/j.jbusres.2021.04.070. Acesso em: 10 fev. 2026.

EAGLY, Alice H.; KARAU, Steven J. Role congruity theory of prejudice toward female leaders. **Psychological review**, v. 109, n. 3, p. 573-598, 2002. Disponível em: https://www.women-unlimited.com/wp-content/uploads/prejudice_against_women.pdf. Acesso em: 15 fev. 2026.

EISENHARDT, Kathleen M. Building theories from case study research. **Academy of management review**, v. 14, n. 4, p. 532-550, 1989. Disponível em: https://journals.aom.org/doi/abs/10.5465/AMR.1989.4308385. Acesso em: 12 fev. 2026.

KANTER, Rosabeth Moss. **Men and women of the corporation**. New York: Basic Books, 1977.

KNOBLOCH-WESTERWICK, Silvia; GLYNN, Carroll J.; HUGE, Michael. The Matilda effect in science communication: an experiment on gender bias in publication quality perceptions and collaboration interest. **Science communication**, v. 35, n. 5, p. 603-625, 2013. Disponível em: https://journals.sagepub.com/doi/full/10.1177/1075547012472684?casa_token=Bruku-_nMiIAAAAA%3AgLjwDqNE67Uom5E5lE5-VtTQZK5GJGG1Huz4Zbii2DabFVnjEls2zhZjBpQ4DTikVRHarlHfNqd3_kk. Acesso em: 12 fev. 2026.

KRIPPENDORFF, Klaus. **Content analysis: an introduction to its methodology**. 4. ed. Thousand Oaks: SAGE Publications, 2018.

LIMA, Ana. Mulheres que inspiram: descobrindo a invisibilidade feminina na ciência por meio do protagonismo estudantil. **Revista Ceará Científico**, v. 4, n. 6, p. 98-108, 2025. Disponível em: https://periodicos.seduc.ce.gov.br/cearacientifico/article/view/1554. Acesso em: 12 jan. 2026.

LUGONES, Maria. Heterosexualism and the colonial/modern gender system. **Hypatia**, v. 22, n. 1, p. 186-209, 2007.

Disponível em: https://docs.enriquedussel.com/txt/Textos_200_Obras/Filosofos_latinos_EU/Heterosexualism-Maria_Lugones.pdf. Acesso em: 18 jan. 2026.

MANAN, Muhammad Romail et al. Diversity, equity, and inclusion on editorial boards of global health journals. **Asian Bioethics Review**, v. 15, n. 3, p. 209-239, 2023. Disponível em: https://link.springer.com/article/10.1007/s41649-023-00243-8. Acesso em: 15 fev. 2026.

MIGNOLO, Walter D. Epistemic disobedience, independent thought and decolonial freedom. **Theory, Culture & Society**, v. 26, n. 7-8, p. 159-181, 2009. Disponível em: https://doi.org/10.1177/0263276409349275. Acesso em: 02 fev. 2026.

MIGNOLO, Walter D. **The darker side of western modernity: Global futures, decolonial options**. Durham: Duke University Press, 2011.

MOHANTY, Chandra. Under Western eyes: Feminist scholarship and colonial discourses. **Feminist review**, v. 30, n. 1, p. 61-88, 1988.

MURIC, Goran; LERMAN, Kristina; FERRARA, Emilio. Gender disparity in the authorship of biomedical research publications during the COVID-19 pandemic: retrospective observational study. **Journal of Medical Internet Research**, v. 23, n. 4, e25379, 2021. Disponível em: https://doi.org/10.2196/25379. Acesso em: 10 jul. 2026.

NAIDU, Thirusha et al. Shapeshifters: Global South scholars and their tensions in border-crossing to Global North journals. **BMJ Global Health**, v. 9, n. 4, 2024. Disponível em: https://gh.bmj.com/content/9/4/e014420. Acesso em: 14 fev. 2026.

NEUENDORF, Kimberly A. **The content analysis guidebook**. Thousand Oaks: SAGE Publications, 2017.

OLIVEIRA, Amurabi et al. Gênero e desigualdade na academia brasileira: uma análise a partir dos bolsistas de produtividade em pesquisa do CNPq. **Configurações. Revista Ciências Sociais**, n. 27, p. 75-93, 2021. Disponível em: https://journals.openedition.org/configuracoes/11979. Acesso em: 15 fev. 2026.

OLIVEIRA, Ana Maria Libório et al. Uma nova percepeção [sic] geopolítica para Amazonia no século XXI. **Revista Geopolítica Transfronteiriça**, v. 7, n. 1, p. 38-64, 2023. Disponível em: https://periodicos.uea.edu.br/index.php/revistageotransfronteirica/article/view/2810. Acesso em: 12 jan. 2026.

PATTON, Michael Quinn. **Qualitative research & evaluation methods: integrating theory and practice**. 4. ed. Thousand Oaks: SAGE Publications, 2015.

PENG, Hao et al. The gender gap in scholarly self-promotion on social media. **Nature Communications**, v. 16, n. 1, p. 5552, 2025. Disponível em: https://www.nature.com/articles/s41467-025-60590-y. Acesso em: 12 fev. 2026.

QUIJANO, Aníbal. Coloniality of power, Eurocentrism, and Latin America. **Nepantla: Views from South**, v. 1, n. 3, p. 533-580, 2000.

ROLIM, Dalvina Teixeira; SILVA, Iolete Ribeiro da; BRITO, Orleans dos Santos. Mulheres, protagonismo, lutas e resistências no cenário brasileiro: perspectivas sobre a Amazônia. **Revista Brasileira de Educação do Campo**, *[S. l.]*, v. 10, p. e19766, 2025. DOI: 10.70860/ufnt.rbec.e19766. Disponível em: https://periodicos.ufnt.edu.br/index.php/campo/article/view/19766. Acesso em: 15 jan. 2026.

ROSSITER, Margaret W. The Matthew Matilda effect in science. **Social studies of science**, v. 23, n. 2, p. 325-341, 1993. Disponível em: https://journals.sagepub.com/doi/abs/10.1177/030631293023002004. Acesso em: 12 fev. 2026.

SACHS, Ignacy. **Caminhos para o desenvolvimento sustentável**. Editora Garamond, 2000.

SANTOS, Boaventura de Sousa; MENESES, Maria Paula (org.). **Epistemologias do Sul**. Coimbra: Almedina, 2009.

SANTOS, Boaventura de Sousa. **Epistemologies of the South**: Justice Against Epistemicide. Boulder: Paradigm Publishers, 2014.

SANTOS, Milton. **A natureza do espaço**: técnica e tempo, razão e emoção. São Paulo: Hucitec, 1996.

SEN, Amartya. **Development as Freedom**. New York: Alfred A. Knopf, 1999.

SNIJDER, Ronald; KINGSLEY, Danny. Research assessment systems and the effects of publication language: manifestations in the Directory of Open Access Books. **The Journal of Electronic Publishing**, v. 27, n. 1, 2024. Disponível em: https://doi.org/10.3998/jep.4847. Acesso em: 15 fev. 2026.

SONG, Yunya; WANG, Xiaohui; LI, Guanrong. Can social media combat gender inequalities in academia? Measuring the prevalence of the Matilda effect in communication. **Journal of computer-mediated Communication**, v. 29, n. 1, p. zmad050, 2024. Disponível em: https://academic.oup.com/jcmc/article/29/1/zmad050/7596748. Acesso em: 16 fev. 2026.

SOUSA, Hillana Vinhales. **Feminismo e ciências: a importância das mulheres nas ciências por um olhar de professores (as) que atuam em escolas públicas em contexto amazônico**. 2024. Trabalho de Conclusão de Curso (Graduação em Ciências: Biologia e Química – Licenciatura) – Instituto de Natureza e Cultura, Universidade Federal do Amazonas, Benjamin Constant, 2024. Disponível em: http://riu.ufam.edu.br/handle/prefix/9102. Acesso em: 15 jan. 2026.

YIN, Robert K. **Estudo de caso: planejamento e métodos**. 6. ed. Porto Alegre: Bookman, 2018.

ZUPIC, Ivan; ČATER, Tomaž. Bibliometric methods in management and organization. **Organizational research methods**, v. 18, n. 3, p. 429-472, 2015. Disponível em: https://journals.sagepub.com/doi/full/10.1177/1094428114562629?casa_token=w59XFLuEEaoAAAAA%3A2qu7yESU1fnGbBbaQfedFA_UTLAZyB2xmNLB6Kr598NL9uN7Om4znIcmFqsQTqnzBMfB5jsHx0bOpgk. Acesso em: 10 fev. 2026.

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