



Climate Change and Epistemic Injustices

Knowledge Transmission and Global South Legitimacy within Higher Education

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Abstract

This article examines how knowledge transmission within academic systems is shaped by epistemic injustices that affect the legitimacy of Global South scholarship, such as the marginalization of Global South knowledge, linguistic barriers, and unequal recognition within academic publishing. In a global context marked by growing social and political tensions and accelerating climate change, academic institutions are increasingly called upon to respond to complex societal challenges. However, the production and circulation of knowledge remain structured by asymmetrical North–South relations that influence whose knowledge is recognized, valued, and transmitted. These dynamics are particularly visible in fields related to environmental issues, where Global South scholars are embedded in cycles of reproduced inequalities that also shape the solutions proposed to these challenges. We first outline how epistemic inequalities structure global academic hierarchies and environmental knowledge production. Finally, we propose a theoretical framework to examine how epistemic injustices shape knowledge transmission and the legitimacy of Global South scholarship within educational systems. This theoretical framework is grounded in theories of epistemic injustice (as illustrated throughout the text), postcolonial studies and social justice. This article aims to make these mechanisms visible and to provide a tool for assessing educational systems from a postcolonial perspective.

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1. Introduction

While the scientific community has established the consequences of human activities, appropriate responses to the environmental crisis remain at the center of extensive debate. Within universities, the issue of climate change is crucial: it is a challenge at the intersection of these institutions' various missions, as it raises questions about scientific research, the transmission of knowledge, and the education of tomorrow's citizens. In this article, we examine the role of knowledge and the inequalities that permeate it within higher education institutions, through the lens of postcolonial studies. Indeed, this field allows us to observe epistemic injustices that result in the marginalization of voices from the Global South within the academic sphere. Our contribution is organized into three main sections: (1) a presentation of the context in which our work is grounded, structured around two key themes: the internationalization of universities and the climate emergency; (2) an analysis of epistemic injustices in academia from a global perspective, followed by a focus on environmental sciences; (3) the presentation of a theoretical framework enabling a critical analysis of the knowledge circulating in academic spaces. This article concludes with a discussion of this new framework in light of the concepts of social and epistemic justice.

In this article, epistemic injustice is examined specifically within the context of higher education, with particular attention to the production, legitimation, and transmission of knowledge within academic systems. With this in mind, the objective of our contribution is to offer a critical perspective on the relationship to knowledge higher education institutions, from a North/South perspective. By "critical perspective," we refer to an approach that considers relationships to knowledge as socially situated (Charlot 2017) and examines how educational institutions may value particular ways of relating to knowledge, potentially contributing to inequalities (Maulini 2009). From a North/South perspective, this involves examining which forms of knowledge are recognized and legitimized within academic spaces, and which are marginalized. In this article, equality is understood through Fraser's (2004) social justice framework, which emphasizes the conditions necessary for equal participation through three interrelated dimensions: recognition,

redistribution, and representation. From this perspective, equality within academia does not imply the absence of differences, but rather the conditions under which scholars and knowledge can participate in academic spaces without being structurally disadvantaged in terms of recognition, resources, or representation. Finally, we consider epistemic justice as a way to broaden the possibilities to address global challenges. Indeed, multiplying the perspectives (in our case, through an equal participation of all academic actors) allows for their complex understanding (Morin 2005¹).

2. Context

For several years now, globalization has shaped our social interactions, economic systems, and our relationship to information and knowledge, among other domains. While it is a positive force in that it accelerates access to knowledge, increases opportunities for collaboration, and promotes intercultural exchange, it is also a source of significant inequalities and standardization (Humes 2008). In this context, education systems face a multitude of demands, notably that of preparing youths to respond to and address global challenges (UNESCO 2020). Consequently, education has become a response to various social issues (Favre 2016). In this regard, it is tasked, for example, with generating solutions to the consequences of climate change (Maleval 2025).

Higher education is, of course, included in this discussion and its role must be framed around the internationalization process that has characterized the past forty years within these institutions (Buckner 2018). Indeed, this process of *“integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education”* (Knight, 2008, cited in de Wit & Deca, 2020, p.5) has changed the mission of higher education toward students and society (Buckner 2018; Zapp and Lerch 2020;

¹ We refer here to the «paradigm of complexity» as defined by Morin (2005). Complexity, for the author, depicts the way various elements interact within a phenomenon; this paradigm allows to make sense of these interactions, “rétroactions”, between elements that may appear very different.

Hammond and Keating 2017). This shift is embedded in a diversity of paradigms, ranging from more neo-liberal to humanistic and critical approaches (Stein, 2015, cited in Buckner et al. 2020). Many projects emerged from the internationalization process, such as international exchanges and global curriculum development (Mittelmeier et al. 2020). While this process has contributed to the opening of higher education institutions, which were initially conceived as local actors (see Bosio and de Wit 2024), it has also generated a wide range of tensions, including those between collaboration and competition, as illustrated by international rankings (Marginson and van der Wende 2007) and the race to publish. Internationalization may have fostered international dialogue while also contributing to the marginalization of certain voices (Clifford and Montgomery 2017) and the increase of global inequalities (Bosio and de Wit 2024).

These inequalities have particularly significant repercussions, especially with regard to the global challenge of climate change. Indeed, we have entered the Anthropocene epoch (Steffen et al. 2018), characterized by the significant impact of human activities on the planet. Since the Great Acceleration period (Steffen et al. 2018), scientists observed a chain reaction of consequences that has an important impact on our living conditions (Steffen et al. 2018). While scientists have identified nine planetary boundaries that define our “safe operating space” (Rockström et al. 2009), solutions to address climate change and remain within these boundaries are still needed. Moreover, sustainability issues are not only a matter of environmental preservation but also of social justice (Raworth 2018).

Education is often considered one of the main responses to climate change (Kang 2019; Donkor et al. 2019; Legagneux et al. 2018). However, it can be mobilized in various ways, ranging from emancipatory approaches to those embedded in a “reproduction” paradigm (Barthes 2023). In the same vein, knowledge production is also marked by various orientations and inequalities (Seats 2022; Hall and Tandon 2017; Carvalho and Flórez-Flórez 2014; Elamé 2022). If we want to make education—and higher education in particular—a space that addresses sustainability issues from a strong and inclusive

perspective, it is essential to include all voices and all resources, even the most marginalized ones.

Our reflection is therefore anchored in a context at the intersection of epistemic and climate injustices, where the Global South remains marginalized. While there is a growing trend to include and value its contributions within educational frameworks (Radhouane and Akkari 2021), inequalities within global academia persist. These are explored in the following section.

3. Global South Scholars and Epistemic Injustices

This section aims to analyze the forms of epistemic injustice affecting researchers from emerging countries, by highlighting the mechanisms that marginalize their knowledge and limit their recognition in academia and, more specifically, within the environmental sciences. Indeed, contrary to widespread belief, the current academic paradigm is not exempt from inequalities (Lander 2000), which also remain significant in the field of environmental sciences (Tengö et al. 2014).

The development of this section relies on the concept of cognitive justice, which

“ refers to an epistemological, ethical, and political ideal aimed at fostering the emergence and free circulation of socially relevant knowledge across the globe, and not just in the countries of the North (which have the resources to develop science and heritage policies that suit them), within a science that practices an inclusive universalism, open to all forms of knowledge and all epistemologies, rather than an abstract universalism based on Western—more specifically, U.S.-centered—standards that exclude anything that differs from them (Piron 2018: 275).

Piron (2018) states that cognitive justice stands in opposition to cognitive (or epistemic) injustices that involve the destruction of knowledge (Sousa

Santos, 2016, 2017). She also identifies material injustices, such as unequal access to information or resources required for conducting research.

Historically, the Global North has established itself as a dominant center in the production and validation of knowledge perceived as scientific (Hall & Tandon 2017). Research produced within this context benefits from implicit recognition, grounded in its alignment with norms defined by former colonial powers (Nandy 2011). Countries of the Global South carry specific forms of knowledge and practices (Fall and Gouin-Bonenfant 2023). However, theoretical and empirical contributions originating from these contexts remain largely marginalized (Hall & Tandon 2017) and devalued (Sultana 2022; Sultana 2024) within dominant academic spaces. By establishing Western norms as universal references, scientific institutions tend to render other worldviews invisible (Elamé 2022; Seats 2022), thereby limiting the diversity of approaches and perspectives in the production of knowledge (Nandy 2011).

Indeed, knowledge produced in the Global North is systematically considered “superior” and more legitimate (de Carvalho & Flórez-Flórez 2014). This recognition largely relies on its conformity with methodological standards of research (de Carvalho & Flórez-Flórez 2014; Nieuwenhuys 2013) and on the fact that it is grounded in Western theoretical frameworks (de Carvalho & Flórez-Flórez 2014; Seats 2022). De Sousa Santos (2007) refers to “epistemicide” as the systematic destruction of non-Western knowledge by coloniality, relegating it to the bottom of the epistemic hierarchy. In other words, research that is not produced in the West is frequently ignored or perceived as less relevant (de Sousa Santos 2011; Lander 2000). This epistemic imbalance sustains a power dynamic that continues to structure the academic world today (Hall & Tandon 2017) and influences its evolution (Abdi 2015; Bosio and Waghid 2025, 2023). The reproduction of a hierarchy of knowledge affects not only universities in the Global North (de Carvalho & Flórez-Flórez 2014), but also those in the Global South (Lebakeng and Dalindjebo 2006), which in turn perpetuate these inequalities.

However, contemporary epistemic power relations cannot be fully understood through a strictly binary opposition between the Global North and Global South. The geography of global science is increasingly multipolar, with the emergence of new scientific actors and centres of knowledge production (Selenica 2025). Nevertheless, this multipolarity does not imply the disappearance of historical North/South asymmetries, which continue to shape the production, circulation, and legitimation of knowledge (Oliveira et al. 2025). The North/South perspective adopted in this article should therefore be understood as an analytical lens for examining historically constituted epistemic inequalities, rather than as a representation of two homogeneous and strictly opposed geopolitical blocs.

To delve into this specific issue, we rely on two complementary sub-sections: the first aims to explicate how inequalities manifest within the academic world more generally, while the second focuses on the dynamics characteristic of environmental sciences, which contribute to the reproduction and reinforcement of these inequalities in the form of a self-reinforcing cycle.

Power Dynamics in the Academic Fields

This subsection examines the mechanisms through which academic spaces reproduce inequalities that affect researchers from the Global South. We identify five main categories: (1) the invisibilization of knowledge from the Global South; (2) knowledge extraction; (3) limited access to dominant journals; (4) linguistic barriers; and (5) North–South hierarchies in research collaborations.

The invisibilization of knowledge from the Global South

The international academic space includes a significantly smaller proportion of professors and researchers from the Global South (Carvalho and Flórez-Flórez 2014). Indeed, a substantial proportion of research focusing on Global South contexts is conducted by scholars affiliated with Western institutions, which may produce representations that do not fully reflect local experiences and knowledge systems (Agarwal and Narain 2012). As some authors highlight (Aitken, Ragnhild, and and Trine Kjørholt 2007), this dynamic tends to relegate local voices to a secondary role, filtered through external

interpretative frameworks. (Ansell 2017) observes that researchers from the Global North rarely engage with locally produced literature and frequently overlook the work of Indigenous scholars, even when conducting research within these same contexts.

Moreover, when such work does not align with dominant theoretical paradigms, particularly those rooted in Western traditions, its legitimacy is often called into question (Ansell 2017). The internationalization and standardization of knowledge tend to privilege theoretical frameworks from the Global North (Fragouli 2020), relegating other perspectives to the margins (Horáková and Werkman 2016).

Knowledge extraction

Another identified trend is that of “knowledge extraction,” that is, knowledge originating from distinct sources but leading to similar conclusions. In this context, some Western researchers may contribute to dynamics of dispossession by appropriating local knowledge. Although these do not fundamentally differ from those produced in Western contexts, they are nonetheless reclassified and legitimized as new forms of knowledge once integrated into Northern academic frameworks (Fall and Gouin-Bonenfant 2023; Janicot and Reinert 2015).

Limited access to dominant journals

Researchers and institutions in the Global South often have more limited financial resources to access subscription-based databases and journals, which can restrict access to scientific knowledge and hinder its local circulation and use (Amutuhair 2022; Beiter 2023; Faulkner and Nyamutata 2020; Haelewaters et al. 2021). While the substantial expansion of Open Access over the past decade has contributed to reducing some of these barriers, it has not eliminated inequalities in academic publishing. Rather, some of these inequalities have shifted from access to participation and visibility. In particular, *gold open access* models may transfer publication costs from readers to authors through Article Processing Charges (APCs), which can remain unaffordable for researchers and institutions with limited financial resources (Beiter 2023). Moreover, publication in internationally

prestigious journals does not necessarily ensure that research is accessible to or has an impact on the local communities concerned, particularly when findings remain behind paywalls, are published exclusively in English, or circulate primarily through international academic channels (Amutuhaire 2022; Haelewaters et al. 2021). Access should therefore be considered alongside researchers’ opportunities to publish, disseminate, and gain visibility for their work within the international academic system.

Linguistic barriers

The language of publication constitutes a central issue: English, the dominant language of international research, represents both a symbolic and practical barrier (Adami 2018; Fray and Lebaron 2022; Marginson and van der Wende 2007; Suzina 2021). At the same time, its role as a *lingua franca* facilitates communication across linguistic boundaries and the international circulation of knowledge (Melitz 2018; Estera et al. 2026). However, the use of a common language is not neutral and may simultaneously reproduce linguistic inequalities and power asymmetries, particularly for non-native English speakers (Estera et al. 2026). Moreover, translation, when it is undertaken, does not always allow for the precise rendering of nuances between English and the local language, which may lead to the loss or alteration of certain concepts (Maldonado et al. 2015). According to Dasgupta & Pieterse (2009), this situation reflects a form of cultural hegemony that compels researchers from the Global South to adapt their writing, vocabulary, and references to the epistemic norms of the Global North in order to gain academic recognition (Dasgupta and Pieterse 2009).

North–South hierarchies in research collaborations

Scientific outputs from the Global South are also confronted with significant constraints in terms of dissemination. They are often less widely read, rarely translated, and thus remain confined to their original contexts (Ansell 2017). Faced with these constraints, many researchers from the Global South adopt a strategy of extraversion (Belli 2024; Connell 2013; Hountondji 1997), which consists of affiliating with institutions or publishing in prestigious journals located in the Global North. While this approach enables greater visibility and may contribute to strengthening the representation of plural

realities (Bronen and Cochran 2021), it also reflects a form of structural dependency, whereby scientific legitimacy becomes dependent on external validation.

In the field of environmental sciences, these dynamics persist and become increasingly complex, given the nature of the phenomenon and the urgent need to develop effective responses (Wagner and Zeckhauser 2012).

A Cycle of Inequality Reproduction in Environmental Sciences

As climate change impacts higher education by challenging knowledge production and transmission, this section delves into the inequalities that characterize the field of environmental sciences. The following figure proposes a systemic reading of the inequalities that traverse environmental sciences, representing them in the form of a cycle of interdependent dynamics. It highlights the ways in which a discipline historically structured by Global North perspectives produces, maintains, and reinforces imbalances in the production of knowledge, the representation of actors, and the understanding of environmental realities. Far from being linear, these mechanisms mutually reinforce one another and contribute to the continuous reproduction of an unequal epistemic order, thereby limiting the capacity of environmental sciences to respond in a just and appropriate manner to contemporary challenges.

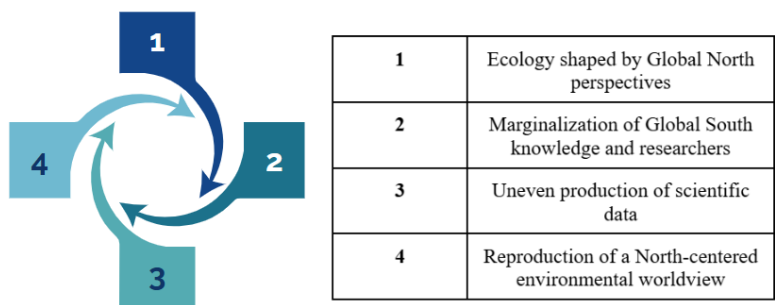


Figure 1. Cycle of epistemic inequalities in environmental sciences, structured by Global North perspectives.

The following section outlines more precisely how this process unfolds.

An Environmental Science Structured by Global North Perspectives

Environmental sciences have developed within a framework historically rooted in Western approaches, often exclusionary in nature, that have both shaped and constrained the evolution of the field (Tengö et al. 2014; Trisos, Auerbach, and Katti 2021). This predominance contributes to the homogenization of worldviews and modes of knowledge production, to the detriment of the diversity of knowledge and experiences, particularly those originating from local and Indigenous contexts (Nahuelhual et al. 2018). This centrality of Global North perspectives restricts the capacity of the discipline to respond to environmental crises by overlooking the diversity of actors, knowledge systems, and possible solutions (Trisos, Auerbach, and Katti 2021), and limiting opportunities for innovation (Turnhout et al. 2012). Moreover, dominant approaches are not necessarily suited to all local contexts, particularly when they fail to account for historical inequalities and the socio-economic conditions that shape relationships between societies and environments (Nahuelhual et al. 2018). Conversely, a more equitable production of knowledge, grounded in the integration of diverse perspectives and in co-production processes, would strengthen both the relevance and the legitimacy of this field (Blicharska et al. 2017; Tengö et al. 2014), notably by anchoring it more firmly in the realities and needs of the populations concerned (Baker, Eichhorn, and Griffiths 2019). However, as long as these perspectives remain dominant, they continue to marginalize other actors and forms of knowledge, thereby paving the way for the second dynamic of this cycle.

Marginalization of Researchers and Knowledges from the Global South

An approach largely grounded in Western scientific criteria hinders research development and limits the capacity of environmental sciences to respond to environmental crises by excluding certain perspectives (Trisos, Auerbach, and Katti 2021). This is reflected, in particular, in the marginalization of non-Western authors in academic production (Pinton 2014), as they do not conform either to dominant norms defining the figure of the researcher or to widely established reproduced ideological frameworks (Trisos, Auerbach, and Katti 2021). It is also common for researchers from the Global North to

appropriate knowledge originating from communities or scholars in the Global South by presenting it as new discoveries (Trisos, Auerbach, and Katti 2021), or to fail to acknowledge the contributions of local actors in research processes (Baker, Eichhorn, and Griffiths 2019), while the latter are often required to adapt to Western academic standards (Tengö et al. 2014). Yet, the inclusion of researchers and knowledge rooted in diverse realities makes it possible to enrich knowledge production (Cash et al. 2003), to better account for local contexts and needs (Baker, Eichhorn, and Griffiths 2019), and to open up research to new approaches (Turnhout et al. 2012). Conversely, an approach centered on Western perspectives restricts the range of possible solutions and renders potentially crucial alternatives invisible (Tengö et al. 2014; Trisos, Auerbach, and Katti 2021). This marginalization thus results in an unequal production of knowledge, directly contributing to a lack of data on the realities of the Global South.

A Data Deficit on the Realities of the Global South

The limited number of researchers from the Global South, as well as the constraints they face—particularly in terms of scientific validation, contribute to a deficit in the production of knowledge grounded in Global South contexts. The application of validation criteria derived from Western sciences can indeed lead to the exclusion or devaluation of other knowledge systems, thereby compromising their recognition and integration into scientific and policy processes (Tengö et al. 2014). This dynamic contributes to a lack of data, particularly in regions of the Global South, where climate data records remain limited or underdeveloped, thereby increasing uncertainties regarding the regional impacts of climate change (Sen Roy 2018). More broadly, the dominance of the Global North in scientific research, as well as in defining research agendas and climate policies, constrains the development of research conducted in and for Global South contexts, despite their heightened vulnerability (Blicharska et al. 2017). Furthermore, research priorities are not always aligned with the needs of the countries concerned, as field dynamics may reproduce unequal power relations, akin to contemporary forms of scientific coloniality (Baker, Eichhorn, and Griffiths 2019). As a result, the absence or marginalization of Global South perspectives contributes to maintaining imbalances in knowledge production, thereby limiting the social

relevance and overall scope of environmental sciences (Ramirez et al. 2017). This data deficit, in turn, fosters a partial understanding of environmental dynamics, contributing to the reproduction of a North-centered vision of the environment.

The Reproduction of a North-Centered Vision of the Environment

At the global level, there are multiple conceptions of the environment (Diaz et al. 2018; Ramirez et al. 2017), that shape both environmental sciences and climate change mitigation policies (Mace 2014). However, only the Western conception of nature tends to be privileged (Baker, Eichhorn, and Griffiths 2019), thereby reinforcing the divide between environmental sciences and the social sciences (Pinton 2014). In a world characterized by the complexity of socio-ecological interactions, it nevertheless appears essential to mobilize diverse sources of knowledge. Indeed, the development of the field requires taking into account the full range of available intellectual contributions (Breslow et al. 2016; Diaz et al. 2018), particularly those emerging from perspectives that are closely connected to natural environments (Tengö et al. 2014). Without this, environmental sciences remain centered on a Western perspective, thereby contributing to the ongoing perpetuation of a field structured by Global North perspectives and sustaining the cycle of inequalities.

We can therefore observe a clear tendency toward the reproduction of inequalities within environmental sciences. To address these inequalities, we propose a specific theoretical framework.

4. A New Theoretical Framework to Analyze Epistemic Injustices and Global South Legitimacy within Educational Systems

In the previous section, we showed that documented inequalities persist within academia, particularly in ways that systematically disadvantage the Global South, leading to a cycle of inequalities that also affects the field of environmental sciences. To tackle this issue, we propose an analytical tool

grounded in a postcolonial perspective that aims to examine the power dynamics at work in the production and transmission of knowledge. This framework has three theoretical bases: (1) postcolonial studies; (2) social justice and (3) epistemic injustices. While the latter has been defined earlier to frame our analysis of inequalities within academia, the other two are discussed here.

Postcolonial studies

This school of thought highlights that, despite the significant reduction of formally colonized territories (Blanc 2021), certain dynamics of oppression exercised by Western countries toward countries of the Global South persist (Saïd 2004; Spivak 2023). The central methodology of this approach relies on the analysis of colonial discourses in order to examine the effects of Western domination (Saïd 1978). It involves studying how word choices, narratives, and representations contribute to legitimizing domination over communities in the Global South. This approach seeks to restore a place for historically marginalized populations (Sibeud 2004) and to challenge Eurocentrism (Boidin 2009). It is notably based on the analysis of written sources, particularly literature (Hirt and Desbiens 2020), through a close reading of texts that makes it possible to identify the ideas and representations underlying colonial discourses and to highlight the biases that structure them. It is on this principle that we built the theoretical framework to analyze epistemic injustices, knowledge transmission, and Global South legitimacy within educational systems, which we present in the next chapter.

Social justice

Fraser's definition of social justice relies on a three-part framework: (1) recognition, (2) redistribution, and (3) representation (Fraser 2004; Fraser and Halpern 2013; Lapointe 2020). When combined, these three dimensions of social justice enable equal participation within society (Fraser and Halpern 2013). Recognition reflects a cultural dimension (Fraser and Halpern 2013). In academia, this involves acknowledging the diversity of epistemological traditions and the culturally situated nature of relationships

with knowledge, thereby recognizing a range of worldviews that can contribute to knowledge construction. Redistribution reflects an economic dimension that implies a fair distribution of resources (Fraser and Halpbern 2013). In academia, this would mean a genuine commitment to supporting the participation of researchers from socio-economically disadvantaged countries (e.g., reduced conference participation fees and commitments to open-access publishing). Finally, representation relates to a political dimension aimed at ensuring the presence of all groups in decision-making bodies (Fraser and Halpbern 2013), therefore enabling debate grounded in the coexistence of diverse ideas. Representation within academia allows for fair and less ethnocentric cognitive conflict (Maulini 2019) and contributes to a genuine ethic of discussion (Habermas 1999).

These concepts shed light on the need to deeply analyze representation, recognition and redistribution opportunities to avoid the domination and marginalization of minoritized voices.

In this regard, the following framework (Table 1) enables the analysis of written sources, particularly scientific literature, to identify the extent to which they contribute to the reproduction of epistemic injustice. It thus makes it possible to analyze simultaneously who produces knowledge, how this knowledge is produced, and what type of knowledge is valorized, in order to identify potential forms of invisibilization, knowledge extraction, epistemic hierarchization, and the marginalization of knowledge from the Global South. This analytical framework builds on the theoretical elements presented in the previous sections, which highlight the structural inequalities characterizing the international academic space.

Table 1. Analytical framework for examining epistemic injustice and Global South knowledge legitimacy in written educational sources

Dimension 1 — Who produces knowledge?	Observed elements include: • Authors’ geographical origins and/or nationality (when available) • Institutional affiliations (Global North vs Global South)
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This dimension examines the distribution of epistemic authority in knowledge production.	• Authorship patterns (Single vs collaborative) • North–South collaborations and authorship hierarchy • Position of Global South scholars (First author, co-author, etc.) • Whether Global South scholars are positioned as knowledge producers or as objects of study • Location of journals or publishing institutions (Global North vs Global South) • Citation patterns and dominant theoretical references
Dimension 2 - How is knowledge produced? This dimension analyzes the epistemic conditions shaping knowledge production.	Observed elements include: • Language of publication • Type of journal or publication venue • Open access vs paywalled access • Special issues vs regular publications • Knowledge creation vs knowledge extraction • Methodologies presented as rigorous or legitimate • Epistemic hierarchies between methodological approaches • Whether Global South contexts are used as sites of data extraction • Who defines research questions and theoretical frameworks
Dimension 3 - What type of knowledge is produced?	Observed elements include: • Geographical focus of knowledge (Global North vs Global South) • Presentation of knowledge as universal, neutral, or objective

This dimension examines the epistemic status and positioning of knowledge.	• Distinction between “core knowledge” and “alternative perspectives” • Integration vs marginalization of Global South knowledge • Folklorization or contextualization of Global South perspectives • Inclusion as moral supplement vs epistemic contribution • Translation of Global South knowledge into external conceptual categories • Absence of certain experiences due to lack of interpretive frameworks • Epistemic silences and omissions
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Source: Belli, 2026

5. Discussion

Climate change constitutes a more pressing issue than ever, affecting populations at the global level (Kamal Uddin 2017; Prentice et al. 2024). However, its impacts are not distributed equitably: populations in the Global South experience the most severe consequences, even though they have historically contributed the least to emissions (Bronen and Cochran 2021; Dang and Gilabert 2024; Ferdinand 2024). Despite this heightened exposure, the scientific literature on climate change remains marked by a lack of data concerning emerging countries (Sen Roy 2018), which aligns with the observations presented in this article.

Several studies indeed highlight that the territories most affected often correspond to formerly colonized countries, and that environmental sciences may also carry values inherited from colonial contexts (Trisos, Auerbach, and Katti 2021). From this perspective, our analytical framework is intended as a first step. It aims neither to judge Western institutions (Morin 2011), nor to resolve these issues on its own, but rather to propose a tool for identifying potential dynamics of exclusion and perspective of inclusion. In doing so, it opens pathways toward the development of a “symbiotic path”, as

conceptualized by Morin (2016), bringing together diverse epistemological and cultural backgrounds.

This model offers a way to foster a socially just academia. In this sense, the framework is designed as a tool to promote epistemic (or cognitive) justice (Piron 2018). It encourages a paradigm shift in which institutions, faculty, and researchers are called upon to examine their relationship with knowledge (Charlot 2017) in order to identify and analyze epistemic biases that become embedded in their theoretical or pedagogical reflections. The framework can also be interpreted as a tool for reflecting on social justice (Fraser 2004; Fraser and Halpbern 2013) from a North-South perspective. More specifically, its three dimensions allow us to examine the recognition of knowledge produced by Global South scholars (e.g., folklorization, contextualization, silences, omissions), the representation of these scholars and their contributions (marginalization, classification as “alternatives”, authorship, institutional affiliations), and the redistribution of resources related to knowledge production and access.

We must also acknowledge the limits of an approach based exclusively on the analysis of written sources, as this methodology is embedded in largely Western academic traditions and relies on documents produced in contexts marked by unequal access to voice and representation (Sibeud 2004). Nonetheless, this model represents a call to broaden our perspective on academic production and to identify epistemic injustices in our work. Fostering cognitive justice and the inclusion of a wide range of perspectives would support embracing complexity (Morin 2005) when analyzing global challenges, such as climate change.

6. Conclusion

This article proposed an analytical framework for examining epistemic injustice, knowledge transmission, and the legitimacy of Global South knowledge within written academic sources. By structuring the analysis around who produces knowledge, how knowledge is produced, and what type

of knowledge is produced, the framework offers a systematic approach to identifying power dynamics in academia.

This approach makes it possible to examine processes such as the invisibilization of Global South knowledge, knowledge extraction, linguistic barriers, limited access to dominant journals, and North–South hierarchies in research collaborations. In doing so, the framework contributes to operationalizing postcolonial, epistemic and social justice perspectives within the analysis of academic literature.

Future research may apply this framework to empirical corpora in order to examine how these dynamics unfold across disciplines, educational contexts, and publication spaces. Such applications may further contribute to understanding how epistemic legitimacy is constructed and contested within global knowledge production.

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