

Part II: Knowledge under Pressure: Crisis, Complexity, and Collapse

Chapter 2

ECOLOGIES OF IGNORANCE: CLIMATE CHANGE AND THE POLITICS OF NOT-KNOWING

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INTRODUCTION

In recent decades, climate change has emerged not only as a scientific and environmental issue, but also as a deeply political and epistemological issue ([Piechota et al., 2005](#)). While overwhelming scientific consensus confirms the reality and urgency of anthropogenic climate change, the persistence of denial, delay, and inaction points to a troubling paradox: ignorance in the face of knowledge. This paradox is not merely the result of a knowledge deficit, but is increasingly being understood as the product of systemic, organized, and politically motivated ignorance - what scholars term "agnotology," the study of culturally induced ignorance. The strategic production of doubt, misinformation campaigns by fossil fuel lobbies, and state-led obfuscation contribute to a complex ecology of ignorance that shapes public perception and policy outcomes.

Moreover, the asymmetrical effects of climate change across the Global North and South are mirrored by asymmetries in whose knowledge counts and voices are marginalized ([Nulman, 2021](#)). Indigenous ecological wisdom, local environmental knowledge, and lived experiences are frequently excluded from the mainstream climate discourse, contributing to epistemic injustices. The politics of not knowing, therefore, cannot be separated from broader questions of power, authority, and legitimacy in the production and circulation of knowledge. As climate crises deepen, understanding these dynamics becomes crucial for imagining more just and inclusive responses. This chapter situates climate change within the broader framework of knowledge politics, highlighting how ignorance is not simply a passive absence, but an active force with ecological, epistemic, and political consequences ([Pongiglione & Martini, 2022](#)).

This chapter aims to critically examine how ignorance - far from mere lack of information - operates as a political and epistemic force in the context of climate change. It interrogates the intentional and structural mechanisms through which not knowing is cultivated, maintained, and weaponised in environmental governance. By exploring the concept of "ecologies of ignorance," this chapter sheds light on how uncertainty, denial, and selective knowledge production serve specific interests, often reinforcing the existing hierarchies of power and marginalization. The chapter also seeks to expand the analytical lens by incorporating insights from environmental

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studies, political science, and epistemology, thereby bridging disciplinary boundaries ([Krishna Pasupuleti, 2024](#)). It emphasizes the need to recognize and legitimize diverse ways of knowing, including indigenous, local, and experiential knowledge, which have long been sidelined in dominant environmental narratives. Ultimately, the purpose of this chapter is to argue that any meaningful engagement with the climate crisis requires not only technological and policy solutions, but also a critical rethinking of how knowledge is produced, withheld, and contested ([Sormunen, 2023](#)). By exposing the politics of ignorance, this chapter aims to open space for more inclusive and reflexive approaches to climate action and environmental justice.

CONCEPTUAL CLARIFICATION

The term “*ecologies of ignorance*” refers to the structured, systemic, and often strategic production, distribution, and maintenance of ignorance within environmental contexts, especially surrounding climate change ([Pongiglione & Martini, 2022](#)). Rather than seeing ignorance as a mere absence of knowledge, this concept reframes ignorance as an active social and political condition - something that is produced, sustained, and weaponised. It engages with the insight that not knowing is often not accidental or innocent, but can be cultivated through institutional mechanisms, ideological interests, and power relations.

The intellectual origin of this idea can be traced to *agnotology*, a term coined by the historian of science, Robert N. Proctor to study culturally induced ignorance, particularly as it pertains to scientific controversies ([Launer, 2020](#)). The tobacco industry's efforts to obscure the links between smoking and cancer exemplify how ignorance can be manufactured. This notion was later expanded into environmental studies, especially with the rise of climate change denialism and obfuscation of ecological data. “Ecologies” in this context does not refer only to natural ecosystems but also to epistemic environments - the social and institutional spaces in which knowledge (or the lack thereof) circulates ([Sturman & Quénol, 2023](#)). This framing allows us to understand ignorance as being embedded in and shaped by networks of power, politics, media, and science. In doing so, it foregrounds the idea that ignorance is not a void but a terrain that is complex, contingent, and contested.

Moreover, by using pluralecologies, the concept acknowledges the multiplicity of forms ignorance can take, from deliberate denial to willful blindness ([Gilchrist, 2020](#)), and from systemic omission to strategic deferral. This pluralistic framing allows for an analysis that is sensitive to the many layers and scales at which ignorance operates in the climate discourse, from local communities to international policy arenas. The idea of “ecologies of ignorance” has evolved through interdisciplinary engagement across history, sociology of knowledge, political science, and environmental studies ([Ford, 2025](#)). Initially emerging from agnotology and science and technology studies (STS), it has expanded in scope and complexity to capture the multifaceted nature of knowledge suppression in environmental politics.

In the 1990s and the early 2000s, a growing body of research began to examine how corporate interests, such as fossil fuel industries, manipulated scientific uncertainty to delay climate change ([Cherkashyna, 2023](#)). The Intergovernmental Panel on Climate Change (IPCC) was often challenged by counter-narratives funded by think tanks and lobbying groups, showing that ignorance could be orchestrated and institutionalized. Here, ignorance functioned as a political resource, a way to stall regulation, maintain profits, and shape public discourse. Gradually, this

understanding has moved beyond the dichotomy between knowledge and ignorance. Scholars began to explore the co-production of knowledge and ignorance - how institutions selectively fund research, how methodologies constrain visibility, and how cultural narratives shape what counts as evidence ([Dasgupta et al., 2024](#)). This shift was crucial for environmental studies, as it revealed that what remains unknown about ecosystems, species, and climate futures is not always due to a lack of scientific effort, but often due to political, economic, or ideological filtering.

Political ecologists and environmental justice scholars have further expanded the concept by highlighting how marginalized communities are disproportionately affected by environmental ignorance ([Lustiyati et al., 2023](#)). For example, the underreporting of toxic exposure in low-income areas or the lack of climate data for indigenous territories illustrates how ignorance can reproduce social inequalities. This lens exposes not only who knows and who does not, but also who defines legitimate knowledge and who is excluded from epistemic authority.

Today, “ecologies of ignorance” serve as a powerful heuristic to critique how uncertainty is politicized in the age of climate crisis ([Haider & Rödl, 2023](#)). It underscores how ignorance is not a passive backdrop to climate change, but an active, dynamic field shaped by contestations over truth, accountability, and future-making. The concept continues to evolve through intersectional approaches that consider race, class, gender, and geography integral to how ignorance is structured and contested in climate politics. “Ecologies of ignorance” is conceptually linked to several related frameworks, including *agnotology*, *epistemic injustice*, *strategic denial*, and *post-truth politics*. While these concepts overlap, they emphasize different aspects of how ignorance is constructed and maintained ([Bain, 2022](#)).

Agnotology focuses on the deliberate production of ignorance, especially through media, corporate strategies, and institutional manipulation ([Dasgupta et al., 2024](#)). While ecologies of ignorance build upon this, they extend the idea by examining the broader systems - cultural, political, and epistemic - within which ignorance circulates and becomes sustainable. Epistemic injustice, a term popularized by Miranda Fricker, refers to the harm done to individuals as knowers in their capacity ([Graham et al., 2022](#)). This concept is particularly relevant in environmental contexts where indigenous or local knowledge is systematically devalued or ignored. Ecologies of ignorance integrate this by analyzing how knowledge hierarchies contribute to environmental mismanagement or neglect. Strategic denial involves conscious rejection or suppression of available evidence, often for political or economic gain ([James, 2017](#)). While denial is a component of ignorance ecologies, the latter also includes more subtle forms, such as institutional silence, bureaucratic inertia, and cultural taboos - modes of ignorance that do not always stem from denial but nonetheless sustain not knowing.

Post-truth politics, characterized by the decline of factual consensus and the rise of emotionally charged narratives, provides a broader socio-political context in which ecologies of ignorance thrive ([Pusterla, 2024](#)). In the climate realm, this manifests as disinformation campaigns, false equivalences in the media, and the erosion of scientific authority. In distinguishing these concepts, *ecologies of ignorance* function as a meta-framework, attending not only to instances of ignorance, but also to their interrelations, circulations, and embeddedness in power structures. It encourages scholars to think beyond binaries of knowledge and ignorance, asking instead, What kinds of ignorance are at play? Who benefits from them? What are the material consequences?

THEORETICAL FOUNDATIONS

The notion of “ecologies of ignorance” draws on several intersecting theoretical traditions to explore how knowledge is obscured, withheld, or strategically ignored in relation to climate change ([Pongiglione & Martini, 2022](#)). At its core, the concept engages with agnotology, political ecology, and poststructuralist epistemology, each of which offers distinct insights into how ignorance is produced and sustained. Agnotology, a term coined by Robert Proctor and Londa Schiebinger, refers to the cultural production of ignorance, particularly through deliberate practices ([Kourany, 2020](#)). It foregrounds ignorance not merely as a lack of knowledge but as something actively constructed through misinformation, strategic silences, and institutional inertia. In the context of climate change, agnotology helps explain how fossil fuel lobbies, state actors, and certain media institutions contribute to climate denial and delay. The focus shifts from asking “what is unknown?” to “why is it unknown, and who benefits from this unknowing?”

Political ecology offers another foundational perspective, highlighting the power relations that shape environmental discourse and practices. Political ecology emphasizes that environmental issues are never purely technical; they are always mediated by social, economic, and political forces ([Karlsson, 2018](#)). In terms of ignorance, this perspective reveals how certain knowledge (e.g., indigenous ecological practices or community-based adaptation strategies) are rendered invisible or marginal, while technocratic, market-friendly narratives dominate climate policy. This field interrogates how environmental governance often privileges certain stakeholders, while excluding others, thus constituting a form of epistemic injustice.

Poststructuralist theories of knowledge, particularly those influenced by Michel Foucault and Donna Haraway, also inform this framework ([Deane, 2022](#)). Foucault’s work on power/knowledge underscores how knowledge systems are embedded in power regimes that determine what can be known and said. Haraway’s concept of “unk-situated knowledge” challenges the presumed objectivity of dominant scientific narratives and calls for an awareness of partial perspectives and epistemic plurality. These ideas underpin the critique of climate science as an authoritative discourse that marginalizes lived experiences and alternative ways of knowing.

Taken together, these theoretical traditions underscore that ignorance is not an accidental or apolitical condition ([Peels, 2023](#)). Instead, they emerge from specific configurations of power, authority, and exclusion. By conceptualizing ignorance ecologically, that is, as embedded in interdependent networks of institutions, discourses, and practices, this framework enables a critical analysis of the structural and epistemic forces that prevent meaningful climate action. While agnotology, political ecology, and poststructuralism form the backbone of the “ecologies of ignorance” framework, other theoretical approaches either challenge or enrich this perspective. These include risk society theory, post-normal science, and technology studies (STS) ([Dey, 2022](#)).

Beck’s theory of risk society posits that late modern societies are characterized by a shift from the distribution of wealth to the distribution of risk ([Alaszewski, 2023](#)). In this model, management of climate-related risks is a central concern. While Beck acknowledges the production of ignorance, especially through institutional denial and risk displacement, he remains optimistic about reflexive modernization, that societies can become more self-aware and rational in handling risk. Critics

argue that Beck underestimates the depth of the political and economic interests that sustain ignorance.

Post-normal science, developed by Silvio Funtowicz and Jerome Ravetz, complements the above framework by emphasizing that in cases where “facts are uncertain, values in dispute, stakes high and decisions urgent,” traditional scientific methods are insufficient ([Céspedes et al., 2024](#)). This perspective calls for the inclusion of extended peer communities such as laypeople, indigenous groups, and activists in climate debates. Postnormal science supports the argument that epistemic plurality is necessary, but it differs from agnotology by focusing less on the strategic production of ignorance and more on the conditions of uncertainty. Science and Technology Studies (STS) provides critical insights. Latour, Jasanoff, and others have shown how scientific facts are co-produced with social, political, and cultural contexts ([Chang et al., 2021](#)). STS shares with agnotology the focus on the social construction of knowledge, but emphasizes the entanglement of knowledge and ignorance in technoscientific processes. Jasanoff’s concept of “civic epistemology” is particularly relevant, showing how different societies legitimize knowledge differently in public decision-making. These ideas complicate the simplistic binaries of knowing/unknowing by highlighting hybrid and contested forms of knowledge.

While these perspectives may diverge in emphasis - some focus on reflexivity and others on structural power - they collectively reinforce the need to rethink epistemology in a climate context ([Mickel, 2015](#)). The “ecologies of ignorance” framework benefits from this plurality by integrating diverse critiques of how knowledge is produced, marginalized, or rendered ineffective. The choice of foreground agnotology, political ecology, and poststructuralist epistemologies in analyzing climate change and ignorance is deliberate ([Dasgupta et al., 2024](#)). These frameworks best capture the politics of not knowing - the strategic, structural, and systemic forces that shape ignorance as a condition of climate governance. Although risk theory and STS offer useful extensions, they often lack the critical edge needed to unpack how power and inequality determine the ecology of knowledge itself.

Agnotology, in particular, centers on the political economy of ignorance - asking who produces ignorance, for what ends, and at whose expense ([Dasgupta et al., 2024](#)). This avoids the trap of treating ignorance as a gap to be filled by more education or better science. Instead, it demands a politicized account of epistemic omission and delay. Political ecology brings the global climate crisis down to its situated, localized effects, revealing how environmental degradation is intimately tied to the histories of colonialism, dispossession, and capital accumulation. Poststructuralist thought adds a meta-theoretical lens, allowing for a critique of epistemic hierarchies that determine what counts as valid knowledge. This triadic lens is especially potent when examining climate change not simply as a material crisis but as an epistemic one - a crisis of knowing, communicating, and acting upon knowledge ([Večkalov et al., 2023](#)). This helps illuminate why, despite overwhelming scientific consensus, climate action has remained fragmented and delayed. It exposes how ignorance is not just residual, but functional, serving interests that benefit from the status quo.

In choosing this composite lens, this chapter aims to go beyond the analytics of uncertainty to map the architectures of ignorance. It contends that any effort to rethink knowledge in the age of uncertainty must engage seriously in the intentional and structural production of not knowing in climate politics.

DEBATES, GAPS, AND THEORETICAL CHALLENGES

One of the central controversies in discussions on climate change and epistemic uncertainty revolves around the *production and manipulation of ignorance* ([Pongiglione & Martini, 2022](#)). While traditional models assume ignorance to be an absence of knowledge, emerging scholarship emphasizes *strategic ignorance* - deliberately cultivated unknowing by powerful actors to preserve economic and political interests. The fossil fuel industry's suppression of climate science, particularly the role of corporate actors such as ExxonMobil in obfuscating climate risks, exemplifies the tension between scientific knowledge production and its intentional distortion or dismissal for profit and power.

Another major tension exists between *scientific consensus and political action* ([Kobayashi, 2021](#)). Despite robust scientific evidence and intergovernmental consensus on anthropogenic climate change, policymaking remains often stagnant or regressive. This disconnect points to what some theorists call an “epistemic-political disjuncture; even when knowledge is available, institutions fail to act on it due to ideological inertia, lobbying pressures, or nationalist populism. This raises fundamental questions about the role of knowledge in a world in which facts are increasingly contested or rendered irrelevant in political discourse.

There is also a growing debate about the *epistemological dominance of Western scientific frameworks* in climate discourse ([Hanson, 2023](#)). While climate science is often perceived as objective and universal, it is embedded in technocratic rationalities that marginalize indigenous, local, or alternative ecological knowledge. These knowledge systems often offer a more holistic, relational understanding of environmental change but are sidelined in global governance structures. This leads to an epistemic hierarchy where “scientific” ways of knowing are privileged over experiential or traditional forms, exacerbating both ecological degradation and knowledge injustice.

Finally, tensions also arise around the *temporal and spatial scales* of climate ignorance. Decisions in the Global North often obscure the disproportionate vulnerability of the Global South to climate disasters ([Nenmini Dileep, 2022](#)). As a result, temporal urgency is displaced by political temporization, and spatial inequalities are masked by discourses of global responsibility that ignore historical emissions and colonial legacies. These debates reveal the complexity of unknowing - not merely a failure to know, but a willful refusal to engage with inconvenient truths.

A growing body of critical scholarship has responded to these tensions through the conceptual lens of *agnotology*, the study of culturally induced ignorance ([Dasgupta et al., 2024](#)). Agnotologists argue that ignorance is not merely a passive void but is actively produced, sustained, and mobilized. This perspective shifts attention from knowledge production to ignorance production, implicating state and corporate actors in practices that delay climate change. For instance, Naomi Oreskes and Erik Conway's work on the “Merchants of Doubt” highlights how scientific uncertainty has been weaponized to maintain fossil fuel hegemony.

From a *postcolonial standpoint*, scholars critique how dominant climate discourses continue to replicate colonial logic ([Handy, 2024](#)). Chakrabarty, for instance, highlights the tension between the planetary and the postcolonial, suggesting that climate change requires a rethinking of politics beyond nation-states, but also warns against the erasure of historical responsibility and local

struggles. Indigenous scholars such as Kyle Powys Whyte argue that climate change is not a “new” crisis for many Indigenous communities, but a continuation of colonial disruption - thus reorienting the temporality of climate narratives and emphasizing continuity rather than rupture.

Feminist epistemologies also offer critical tools to investigate how knowledge is constructed and whose ignorance matters ([Vendramin, 2020](#)). Scholars such as the Lorraine Code and Vandana Shiva challenge the masculinist, technocratic paradigms that dominate environmental governance. Feminist political ecology emphasizes the lived experience of ecological degradation and foregrounds care, relationality, and situated knowledge as crucial for rethinking climate governance. These critiques align with the idea of *epistemic justice*, which demands the recognition of diverse knowers and knowledge systems when confronting ecological crises.

Environmental humanities and speculative theory further contribute to this critique by exposing the limits of enlightenment rationality in dealing with ecological collapse ([Crowley, 2023](#)). Scholars such as Bruno Latour and Timothy Morton argue that climate change is a “hyperobject” that overwhelms traditional categories of understanding. This insight problematizes the epistemological foundations of modernity, calling for rethinking ontological categories such as nature, humanity, and agency.

A shared concern emerges across these critical perspectives: the need to deconstruct hegemonic knowledge systems that obscure, deny, or silence multiple truths of climate vulnerability ([Tsopmo et al., 2022](#)). These critiques do not reject science, but demand a pluralization of knowledge and a reconfiguration of epistemic authority in the age of ecological uncertainty. Despite the rich and growing field of climate epistemology and ignorance, several gaps remain ([Ahmed et al., 2022](#)). First, much of the literature focuses on either macro-level institutional ignorance (e.g., state denialism and corporate misinformation) or micro-level cognitive biases (e.g., individual denial and psychological distance). There is a need for *meso-level analysis*, that is, studies that examine how ignorance circulates through intermediary spaces such as NGOs, media ecologies, educational institutions, and digital platforms, where knowledge is translated, reframed, or lost.

Second, while agnotology has successfully mapped the production of ignorance in industrialized contexts, *less work has been done on ignorance in postcolonial or indigenous settings* ([Dasgupta et al., 2024](#)). How do subaltern communities navigate, contest, or produce their own forms of strategic ignorance in the face of environmental governance or extractive capitalism? This question opens up possibilities for decolonizing agnotology by incorporating subaltern epistemologies and politics of refusal.

Third, this study assumes a binary relationship between knowledge and ignorance ([Le Morvan, 2021](#)). However, recent anthropological and Science and Technology Studies (STS) suggest the need to *complicate this binary*, recognizing ignorance not only as an epistemic absence but also as an affective, embodied, and performative practice. For example, communities may engage in practices of ‘not knowing’ to resist surveillance, protect sacred ecological knowledge, or navigate ambiguous futures. This calls for greater attention to the *ambivalence of ignorance* as both a tool of oppression and a possible space of resistance.

Finally, while much emphasis has been placed on climate denial and delay in the Global North, less scholarly attention has been paid to the *vernacular idioms of uncertainty* in the Global South - how local cultures articulate, cope with, and theorize uncertainty without access to formal scientific discourses ([Beiter, 2023](#)). Understanding these idioms is crucial not only for knowledge pluralization but also for designing more inclusive, context-sensitive climate policies.

APPLICATION OR ILLUSTRATION

Sundarbans, a vast coastal region spanning India and Bangladesh, represent a crucial ecological frontier that is also a political and epistemic battleground ([Das, 2022](#)). Comprising the world's largest mangrove forest and a critical buffer zone against cyclonic storms, this region is emblematic of climate-induced vulnerability. Sea-level rise, saline water intrusion, and increasingly frequent cyclones have led to loss of habitable land, agricultural degradation, and large-scale displacement. Yet, despite its high visibility in climate science, the unfolding crisis in the Sundarbans is also marked by profound “ecologies of ignorance.”

The politics of not knowing in the Sundarbans manifests in several ways. First, official records often underreport or inconsistently track climate-related displacements ([Haque et al., 2020](#)). This bureaucratic invisibility renders displaced communities ineligible for state-sponsored rehabilitation or climate-adaptation schemes. As a result, a large number of climate migrants are absorbed into urban informal sectors, where their status remains precarious and undocumented. Knowledge gaps here are not simply epistemological absences; they are structured silences that align with political and economic priorities.

Second, scientific models and climate forecasts often abstract human experience with environmental changes ([Zhang et al., 2023](#)). Risk maps and sea-level projections rarely capture the cultural, gendered, and caste-based vulnerabilities that condition people's abilities to adapt. For instance, women in Sundarbans face heightened risks of trafficking and exploitation during migration, a fact often omitted from mainstream adaptation discourse. Here, the production of ignorance is entangled with gender and social hierarchies, selectively excluding experiential knowledge from institutional actions.

Third, state- and donor-funded climate interventions, such as embankment construction, mangrove afforestation, and resettlement schemes, often proceed without adequate consultation with local communities ([Ito, 2017](#)). Local resistance to such projects is frequently portrayed as irrational or uninformed, revealing an asymmetry in what counts as “reliable knowledge.” In this context, ‘not knowing’ is actively sustained by governance regimes that prioritize technocratic solutions over participatory engagement. The state's ignorance of local ecological practices, land use history, and customary rights often undermines long-term sustainability.

In addition, geopolitical dynamics influence climate vulnerabilities that gain international visibility ([Loiko, 2022](#)). The transboundary nature of Sundarbans complicates the coordinated response, as India and Bangladesh have different strategies and narratives around adaptation and sovereignty. Climate-related ignorance here is geopolitical - certain risks are acknowledged or downplayed, depending on diplomatic and economic interests. For example, the displacement of religious minorities or indigenous groups has received far less attention than infrastructure-focused projects that align with national growth agenda.

The Sundarbans thus illuminate how the politics of not knowing operate at multiple levels: state, scientific, local, and global ([Hossain et al., 2024](#)). Climate ignorance is not merely the absence of data but an active process of denial, delay, and strategic silence. It reflects which knowledge matters, whose lives are countable, and which futures are made visible or left in the dark. As climate change intensifies, these ecologies of ignorance become more consequential in shaping environmental justice contours.

This case study reveals the limitations of traditional epistemologies that assume ignorance is simply a void filled by scientific knowledge ([Peels, 2023](#)). Drawing on feminist epistemology, postcolonial theory, and political ecology, we can reconceptualize ignorance as a *productive* and *politically situated* force. Following Nancy Tuana’s framework of “epistemologies of ignorance,” Sundarbans illustrate how ignorance is socially constructed and strategically maintained to serve power.

From a postcolonial perspective, the neglect of subaltern knowledge systems in climate governance underscores the epistemic violence embedded in the global environmental discourse ([Oberthür et al., 2021](#)). The preference for technocratic solutions over indigenous and local knowledge reinforces a hierarchy that privileges Northern expertise and marginalizes the Southern lived experience. This asymmetry is not accidental; it reflects colonial continuities in how environmental knowledge is authorized and mobilized.

Moreover, political ecology helps us understand how environmental ignorance is embedded in the material relations of power, resource distribution, and socio-natural inequalities ([Rudow, 2020](#)). The politics of not-knowing in Sundarbans is not a failure of science per se, but a reflection of broader structural dynamics - of development priorities, bureaucratic rationality, and institutional inertia. Ignorance is not just a passive but an active mode of governance.

Finally, the concept of “climate justice” has gained sharper contours when viewed through the lens of epistemic injustice. The silencing of local voices, marginalization of gendered experiences, and denial of lived realities all point to the need for a more pluralistic and reflexive approach to environmental knowledge. Recognizing ignorance as a relational and situated condition opens up space for counterknowledge, solidarity, and alternative futures.

CONTRIBUTION AND INNOVATION

This chapter introduces the concept of *ecologies of ignorance* as a distinct analytical lens for understanding the multiple, layered, and often intentional forms of not knowing that shape climate change discourse and governance ([Ford, 2025](#)). Whereas traditional environmental and political analyses focus on gaps in knowledge or scientific uncertainty as obstacles to effective climate action, this chapter reorients the debate by foregrounding ignorance as a *structural and political condition*, rather than a mere epistemic deficit. Drawing from critical ignorance studies, postcolonial theory, and political ecology, this chapter contends that ignorance is not simply the absence of knowledge, but is actively produced, managed, and weaponized in the service of specific interests, especially those of states, corporations, and global governance institutions.

This approach moves beyond critiques of misinformation or denialism, and instead interrogates the *politics of unknown* institutional silences, suppressed knowledge, and epistemic exclusions that allow climate injustice to persist ([Parr, 2021](#)). It sheds light on how dominant regimes of knowledge marginalize alternative epistemologies, especially those rooted in indigenous, local, or subaltern worldviews, by labeling them as unscientific or irrelevant. The chapter also emphasizes how these ecologies of ignorance are *spatially and socially uneven*, disproportionately affecting the most vulnerable communities while obscuring the real causes and consequences of environmental degradation.

Furthermore, by placing ignorance at the center of the analysis, this chapter challenges the technocratic assumption that more data or better science alone can solve the climate crisis ([Haider & Rödl, 2023](#)). Instead, it argues for a broader epistemological shift: one that critically examines who gets to know, what counts as knowledge, and how systems of power configure both knowledge and ignorance. This reframing offers a vital corrective to the prevailing narratives of environmental governance and opens up new pathways for more just, pluralistic, and accountable climate politics.

The central proposition of this chapter is that addressing the climate crisis requires not only confronting the ecological and economic dimensions of the problem, but also the *epistemic regimes that sustain and normalize ignorance* ([Haider & Rödl, 2023](#)). It synthesizes insights from environmental studies, political science, and epistemology to argue that ignorance should be treated as a constitutive feature of climate governance, rather than as an anomaly to be corrected. The concept of *ecologies of ignorance* encapsulates the interconnections between political interests, institutional practices, and epistemic exclusions, which actively shape what is visible, knowable, or actionable in climate discourse.

This chapter proposes a multi-pronged approach to undoing the ecologies of ignorance ([Peels, 2023](#)). First, it calls for *epistemic pluralism* - recognizing and valuing diverse forms of environmental knowledge, including indigenous cosmologies, experiential insights, and feminist critiques of objectivity. Second, it advocates for *politics of transparency and accountability*, where institutions must confront not only what they know and do not know, but also how and why certain forms of ignorance are sustained. Third, it urges the development of *methodologies for listening and refusal*, where marginalized communities are not merely consulted but empowered to challenge the framing and priorities of dominant environmental policies.

By integrating these perspectives, this chapter offers a fresh framework for rethinking climate politics in an age of uncertainty ([O'Brien & Milkoreit, 2022](#)). It highlights how epistemic justice is inseparable from environmental justice and how confronting ignorance is not a distraction from climate action, but a precondition for its legitimacy and effectiveness. In doing so, it contributes to a growing body of interdisciplinary scholarship committed to transforming not only what we know about the world but also how we come to know it.

IMPLICATIONS AND FUTURE DIRECTIONS

The notion of “ecologies of ignorance” invites a reconfiguration of how political theory, environmental studies, and epistemology address the intersection of knowledge and climate crises ([Pusceddu, 2021](#)). This chapter argues that ignorance is not simply a lack of knowledge but a

constitutive element of power relations and institutional design. The theoretical implications are significant: First, they challenge the epistemological assumption that more data and better information necessarily translate into better action. Instead, we must interrogate the political production of ignorance - *agnotology* - as central to environmental governance and delays.

Second, this reframing opens up space for analyzing ignorance as *active* and *strategic*, rather than passive ([Peels, 2023](#)). The strategic deployment of not-knowing - through denialism, bureaucratic ambiguity, and technocratic deferment - has become a tool for managing dissent, sustaining extractive systems, and postponing accountability. In this way, the politics of climate change is less about addressing scientific uncertainty and more about managing political certainties of risk, inequality, and historical responsibility.

Third, the concept of ecologies of ignorance encourages the decentering of dominant epistemologies in favor of more plural and relational modes of knowing ([Meissner & Huebner, 2022](#)). This includes indigenous cosmologies, feminist epistemologies, and postcolonial critiques that foreground the embedded, place-based, and historical understandings of the environment. Such a shift reframes the climate crisis not as a technical problem of emission reduction, but as an epistemic crisis rooted in silencing, erasure, and structural disavowal. In sum, by theorizing ignorance as a constitutive and political category, we gain a sharper analytical lens to study climate change not only as an environmental phenomenon, but also as a contested terrain of knowledge, authority, and power.

The framework of “ecologies of ignorance” opens up several promising directions for interdisciplinary research ([Ford, 2025](#)). First, empirical studies can map how ignorance is produced and maintained in different climate governance regimesthrough legislative inaction, corporate lobbying, or international climate negotiations. Comparative studies across the Global North and South can illuminate how different social, economic, and historical contexts shape what is rendered knowable or unknowable.

Second, there is scope for investigating the affective and cultural dimensions of climate ignorance: how fear, apathy, and denial are circulated through media, education, and popular discourse. How do societies normalize not knowing in the face of an impending catastrophe? Third, future research could explore counter-epistemologies - ways in which marginalized communities resist, reframe, or repurpose-dominant knowledge systems. This may include ethnographic studies of grassroots climate movements, indigenous climate knowledge systems, and local forms of environmental monitoring.

Finally, methodological innovation is required to study ignorance. Traditional research designs often privilege what is known; new approaches must account for what is hidden, silenced, or forgotten, drawing on archival gaps, discourse analysis, and critical cartographies.

Recognizing ecologies of ignorance has direct implications for policy, education, and activism ([Samson, 2020](#)). Climate policy must go beyond transparency and data sharing to critically address the structures that perpetuate selective ignorance, such as vested interests, institutional inertia, and techno-scientific elitism. Policy interventions should include mechanisms to identify and redress knowledge exclusion, particularly those affecting vulnerable and indigenous communities.

In environmental education, curricula should incorporate critical pedagogy that teaches students not only what is known about climate change but also what is systematically ignored or denied, and why. This empowers future generations to become active epistemic agents rather than just informed citizens. For climate activism, the politics of not knowing can be a rallying point: making visible the hidden forces that stall action, demand accountability for ignorance production, and promote epistemic justice as central to climate justice.

CONCLUSION

This chapter has explored the complex interplay between ignorance and knowledge in the context of climate change, revealing how “not-knowing” is not simply a lack of information but a politically and socially constructed condition that shapes ecological futures ([G, 2024](#)). By unpacking the concept of the antecedents of ignorance,” this chapter highlights how uncertainty, denial, and strategic silence function as mechanisms that maintain power structures, obscure responsibility, and delay meaningful climate action.

Central to the argument is the recognition that ignorance is embedded within environmental governance and political discourse, not merely as a passive deficit, but as an active, performative process ([Zimmerman, 2022](#)). This politics of not-knowing manifests through selective attention, the dismissal of scientific consensus, and the production of doubt - practices that are often deployed by vested interests to sustain economic growth paradigms and geopolitical priorities at the expense of environmental justice. In this way, ignorance serves as a shield that protects dominant ideologies and institutional inertia, complicating straightforward narratives of progress and knowledge accumulation.

This chapter contributes to environmental studies and political science by advancing the critical understanding of knowledge production as inherently situated, partial, and contested ([Moustafa, 2022](#)). It challenges dominant epistemologies that privilege certain forms of scientific expertise while marginalizing indigenous knowledge systems, local experiences, and the affective understanding of ecological change. This pluralistic approach underlines the necessity of rethinking what counts as valid knowledge in a fractured world, increasingly marked by ecological precarity and epistemic uncertainty.

Furthermore, the chapter situates ignorance within broader socio-political and economic contexts, emphasizing that tackling climate change requires more than technical solutions or enhanced data collection ([Tshikororo et al., 2021](#)). It demands addressing the underlying political economies and power relations that sustain ignorance and cultivating forms of democratic accountability and inclusive knowledge-making that embrace complexity and ambiguity. This entails fostering epistemic humility, reflexivity, and openness to multiple ways of knowing that can disrupt hegemonic narratives and support just and resilient environmental futures.

REFERENCES

Ahmed, R., Kabeel, A. A., & Mohammed, M. A. (2022). Characterization of tunable Ultra-Wideband Square Microstrip antenna with several gaps. 1–6. <https://doi.org/10.1109/itc-egypt55520.2022.9855686>

- Alaszewski, A. (2023). Introduction: risk as a key feature of late modern societies (pp. 1–8). *policy*. <https://doi.org/10.1332/policypress/9781447365242.003.0001>
- Bain, Z. (2022). On the Relation Between Ignorance and Epistemic Injustice (pp. 47–60). *routledge*. <https://doi.org/10.4324/9781003100607-7>
- Beiter, K. D. (2023). Access to scholarly publications in the global North and the global South-Copyright and the need for a paradigm shift under the right to science. *Frontiers in Sociology*, 8. <https://doi.org/10.3389/fsoc.2023.1277292>
- Céspedes, L., Fleerackers, A., & Maggio, L. A. (2024). “Giving them the best information I could with whatever I had at hand”. Physicians’ online health communication practices in a post-normal science context. *Journal of Science Communication*, 23(06). <https://doi.org/10.22323/2.23060204>
- Chang, J., Seetharam, K., & Sharma, M. (2021). An interview with Professor Sheila Jasanoff: On lessons from science, technology, and society. *MIT Science Policy Review*, 2. <https://doi.org/10.38105/spr.n9a0lhvw2b>
- Cherkashyna, T. (2023). UKRAINIAN AUTOFICTIONAL NOVEL OF THE 1990S AND EARLY 2000S. *Humanities Science Current Issues*, 3(65), 193–198. <https://doi.org/10.24919/2308-4863/65-3-30>
- Crowley, J. (2023). *Environmental Humanities* (pp. 43–65). *cambridge university*. <https://doi.org/10.1017/9781108769327.004>
- Das, S. C. (2022). The Sundarbans: Sustainable tourism, livelihoods and economies involving Bangladesh and India. *International Journal of Business & Economic Development*, 10(01). <https://doi.org/10.24052/ijbed/v010n01/art-03>
- Dasgupta, K., Panofsky, A., & Iturriaga, N. (2024). Racist Agnotology: How Myth-Making about Institutions and Knowledge Production Contributes to Racialized Ignorance. *Sociology of Race and Ethnicity*, 11(2), 191–206. <https://doi.org/10.1177/23326492241259403>
- Deane, S. (2022). Rethinking Agency: Addressing the Complexity of Gun Violence and Education. *Educational Theory*, 72(1), 47–64. <https://doi.org/10.1111/edth.12512>
- Dey, S. (2022). *Political Ecology and Science and Technology Studies* (pp. 91–100). *routledge india*. <https://doi.org/10.4324/9781003301950-4>
- Dong, Y.-W. (2023). Aquaculture Mapping in the Context of Climate Change (pp. 473–490). *springer nature singapore*. https://doi.org/10.1007/978-981-19-5486-3_14
- Ford, A. (2025). Slippery Knowledge: Ignorance, Ecologies, and Environment in Endometriosis Framing. *Medical Anthropology Quarterly*. <https://doi.org/10.1111/maq.70002>
- G, D. D. (2024). Converging Storms: Exploring The Complex Interplay Between Climate Change and Public Health (pp. 109–122). *iterative selfpage developers pvt*. <https://doi.org/10.58532/v3bfms9p1ch14>

Gilchrist, G. M. (2020). Willful Blindness as Mere Evidence. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3690351>

Graham, K. M., Griswold, A., Frazer, H., Arthur, A., Nagahawatte, J., Kitteringham, E., & Klade, Q. (2022). Slave Narratives and Epistemic Injustice. *Social Philosophy Today*, 38, 83–97. <https://doi.org/10.5840/socphiltoday202292297>

Haider, J., & Rödl, M. (2023). Google Search and the creation of ignorance: The case of the climate crisis. *Big Data & Society*, 10(1), 2053951723115899. <https://doi.org/10.1177/20539517231158997>

Handy, T. (2024). Disrupting Durabilities of Colonial Logics in the Field of Special Education: Toward Abolitionist Futures. *Teachers College Record: The Voice of Scholarship in Education*, 126(8), 63–95. <https://doi.org/10.1177/01614681241276949>

Hanson, J. (2023). Looking beyond climate contrarianism: nationalism and the reterritorialization of climate discourse in Spain's Vox party. Nordia Geographical Publications. <https://doi.org/10.30671/nordia.121511>

Haque, R., Parr, N., & Muhidin, S. (2020). Climate-related displacement, impoverishment and healthcare accessibility in mainland Bangladesh. *Asian Population Studies*, 16(2), 220–239. <https://doi.org/10.1080/17441730.2020.1764187>

Hossain, M., Saha, S., Saha, C., Ahmed, M., Ahmed, T., Sikder, A. H. F., Islam, H. M. N., & Billah, M. M. (2024). Is the Sundarbans of Bangladesh in a State of Pollution? *Open Journal of Forestry*, 14(01), 19–41. <https://doi.org/10.4236/ojf.2024.141002>

Ito, H. (2017). COMPARATIVE ANALYSIS OF NEW GEOMATERIALS AND EMBANKMENT CONSTRUCTION METHODS CONSIDERING RECYCLING. *International Journal of GEOMATE*, 13(35). <https://doi.org/10.21660/2017.35.6650>

James, J. W. (2017). Strategic Denial and Deception. routledge. <https://doi.org/10.4324/9781315130316>

Karlsson, B. G. (2018). AFTER POLITICAL ECOLOGY. *Anthropology Today*, 34(2), 22–24. <https://doi.org/10.1111/1467-8322.12422>

Kobayashi, K. (2021). Heuristic and systematic processing differentially influence the effects of scientific consensus messaging on perceived scientific consensus. *Current Psychology*, 41(11), 7742–7750. <https://doi.org/10.1007/s12144-020-01275-1>

Kourany, J. A. (2020). Science and the Production of Ignorance. massachusetts institute of technology. <https://doi.org/10.7551/mitpress/12146.001.0001>

Krishna Pasupuleti, M. (2024). Public Policy Implementation: Insights from Political Science and Public Administration (pp. 87–94). National Education Services. <https://doi.org/10.62311/nesx/22607>

- Launer, J. (2020). The production of ignorance. *Postgraduate Medical Journal*, 96(1133), 179–180. <https://doi.org/10.1136/postgradmedj-2020-137494>
- Le Morvan, P. (2021). Ignorance, Knowledge, and Two Epistemic Intuitions. *Philosophia*, 49(5), 2123–2132. <https://doi.org/10.1007/s11406-021-00342-6>
- Loiko, A. I. (2022). Geopolitical Dynamics of Greater Eurasia. *Вестник Удмуртского Университета. Социология. Политология. Международные Отношения*, 6(3), 353–358. <https://doi.org/10.35634/2587-9030-2022-6-3-353-358>
- Lustiyati, E. D., Rusyani, Y. Y., Untari, J., & Pasca Wati, N. A. (2023). Environmental ignorance behaviour index (EIBI) of the student organization member at Universitas Respati Yogyakarta. *MEDIA ILMU KESEHATAN*, 12(1), 12–20. <https://doi.org/10.30989/mik.v12i1.830>
- Meissner, S. N., & Huebner, B. (2022). Outlaw epistemologies: Resisting the viciousness of country music's settler ignorance. *Philosophical Issues*, 32(1), 214–232. <https://doi.org/10.1111/phis.12229>
- Mickel, A. (2015). Reasons for Redundancy in Reflexivity: The Role of Diaries in Archaeological Epistemology. *Journal of Field Archaeology*, 40(3), 300–309. <https://doi.org/10.1179/2042458214y.0000000002>
- Moustafa, T. (2022). Political Science at the NSF: The Politics of Knowledge Production. *PS: Political Science & Politics*, 55(2), 335–340. <https://doi.org/10.1017/s1049096521001487>
- Nenmini Dileep, V. (2022). Climate Change and Global Health Governance in Relation to the Global South and the Global North. *Nuovi Autoritarismi e Democrazie: Diritto, Istituzioni, Società (NAD-DIS)*, 4(2). <https://doi.org/10.54103/2612-6672/19467>
- Nulman, E. (2021). Climate change movements in the Global North (pp. 185–198). routledge. <https://doi.org/10.4324/9780367855680-15>
- O'Brien, K., & Milkoreit, M. (2022). Climate Politics and Social Change (pp. 127–152). oxford university. <https://doi.org/10.1093/oso/9780197568200.003.0007>
- Oberthür, S., Hermwille, L., & Rayner, T. (2021). A sectoral perspective on global climate governance: Analytical foundation. *Earth System Governance*, 8, 100104. <https://doi.org/10.1016/j.esg.2021.100104>
- Parr, A. (2021). The Gender-Climate-Injustice Nexus (pp. 474–483). oxford university. <https://doi.org/10.1093/oxfordhb/9780190628925.013.39>
- Peels, R. (2023). Asserting Ignorance (pp. 265–288). oxford university pressnew york. <https://doi.org/10.1093/oso/9780197654514.003.0012>
- Piechota, T. C., Schneider, J. M., & Garbrecht, J. D. (2005). Climate Variability and Climate Change (pp. 1–18). american society of civil engineers. <https://doi.org/10.1061/9780784408247.ch01>

- Pongiglione, F., & Martini, C. (2022). Climate Change and Culpable Ignorance: The Case of Pseudoscience. *Social Epistemology*, 36(4), 425–435. <https://doi.org/10.1080/02691728.2022.2052994>
- Pusceddu, A. M. (2021). Political ecologies of value (pp. 156–174). routledge. <https://doi.org/10.4324/9781003036265-12>
- Pusterla, E. R. G. (2024). Deconstruction at the Time of Post-Truth Politics. *Subjectivity*, 31(4), 366–385. <https://doi.org/10.1057/s41286-024-00204-y>
- Rudow, L. B. (2020). Environmental Ignorance. *Radical Philosophy Review*, 23(2), 299–329. <https://doi.org/10.5840/radphilrev2020721113>
- Samson, K. (2020). Events and Ecologies of Design and Urban Activism (pp. 202–216). routledge. <https://doi.org/10.4324/9781351187992-15>
- Sormunen, M. (2023). Rethinking Effective Remedies to the Climate Crisis: a Vulnerability Theory Approach. *Human Rights Review*, 24(2), 171–192. <https://doi.org/10.1007/s12142-023-00686-4>
- Sturman, A., & Quénot, H. (2023). Natural Ecosystems. oxford university. <https://doi.org/10.1093/hesc/9780198807506.003.0006>
- Tshikororo, M., Thaba, K., Nefale, T. A., & Tshikororo, M. (2021). Perception Driven From Farmers' Socio-economic Characteristics Towards Tackling Climate Change. *Journal of Agricultural Science*, 13(6), 41. <https://doi.org/10.5539/jas.v13n6p41>
- Tsopmo, P. C., Ekila Elanga, M. J., & Foudjo, S. I. (2022). Climate vulnerability and government resource mobilization in developing countries. united nations university world institute for development economic research. <https://doi.org/10.35188/unu-wider/2022/286-7>
- Večkalov, B., Nardin, V., Löloff, J., Bat, B., Roh, A., Broyles, M., White, M., Farahat, E., Akin, B., Shavgulidze, M., Schmidt, J., Rutjens, B. T., Pohl, F., Linden, S. V. D., Natarajan, D., Newman-Oktan, S., Bartoš, F., Joustra, S., Ruggeri, K., ... Jordan, G. (2023). A 27-country test of communicating the scientific consensus on climate change. center for open science. <https://doi.org/10.31219/osf.io/bctm3>
- Vendramin, V. (2020). The Grammar of Knowledge: A Look at Feminism and Feminist Epistemologies. *Šolsko Polje*, 31(5–6), 139–146. [https://doi.org/10.32320/1581-6044.31\(5-6\)139-146](https://doi.org/10.32320/1581-6044.31(5-6)139-146)
- Zhang, J., Zhao, S., Guan, K., Fu, R., Peng, B., & Zhuang, Y. (2023). Evaluating Seasonal Climate Forecasts from Dynamical Models over South America. *Journal of Hydrometeorology*, 24(4), 801–814. <https://doi.org/10.1175/jhm-d-22-0156.1>
- Zimmerman, M. J. (2022). The Argument from Ignorance (pp. 3–C1.F2). oxford university pressoxford. <https://doi.org/10.1093/oso/9780192859570.003.0001>