

Lauer, M. (2023). *Sensing Disaster: Local Knowledge and Vulnerability in Oceania*. University of California Press, 292 pages, ISBN 9780520392052

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In an era marked by escalating environmental crises and growing recognition of the social dimensions of disaster vulnerability, Matthew Lauer's *Sensing disaster: Local knowledge and vulnerability in Oceania* offers a timely and thought-provoking contribution to disaster sociology and Indigenous environmental knowledge. Lauer draws on over a decade of ethnographic fieldwork in Simbo, a small island in the Western Solomon Islands, and explores how local communities interpret, respond to, and recover from disasters, particularly the 2007 tsunami, through culturally embedded practices and ecological sensibilities.

Rather than claiming to produce Indigenous Knowledge (IK) himself, Lauer foregrounds the importance of recognising and respecting Indigenous epistemologies. His approach is shaped by a commitment to collaborative and context-sensitive research, which stands in contrast to the historical legacy of extractive and exploitative engagements with Indigenous communities. As a non-Indigenous scholar, Lauer's positionality is marked by epistemic humility and reflexivity, acknowledging the limits of outsider perspectives and the value of 'productive misunderstanding' in cross-cultural research. *Sensing disaster* challenges dominant paradigms of disaster response that prioritise technocratic solutions and standardised protocols. Through rich narratives and critical reflections, Lauer demonstrates how Indigenous Ecological Knowledge (IEK), such as the Simboan concept of *Mulongo*, an intuitive sensing of environmental disturbance, offers alternative modes of understanding and responding to hazards. The book invites readers to rethink what counts as valid knowledge in disaster research and to embrace more inclusive, pluralistic approaches that centre local perspectives and lived experiences.

At the heart of *Sensing disaster* is a compelling argument for rethinking how disasters are sensed, understood, and responded to, particularly in Indigenous contexts. In Chapter 1, "The Rise of Indigenous Ecological Knowledge", Lauer contends that dominant Western paradigms of disaster response emphasise formal early warning systems, institutional protocols, and expert-led interventions. Such paradigms often fail to account for the nuanced, place-based knowledge systems that guide Indigenous communities in times of crisis. Through the concept of *Mulongo*, an intuitive sensing of environmental disturbance in the Simbo language, Lauer illustrates how IEK operates as a sensory and experiential mode of knowing. This knowledge is cultivated through lived relationships with the land, sea, and non-human entities, and is deeply embedded in cultural memory and everyday practice, which he discusses in Chapter 2, "Ocean Knowing". For example, during the 2007 tsunami, Simboan children fled to higher ground without instruction, guided by an embodied awareness of danger. Similarly, a fisher's simple statement, "something was not right", captures the essence of *Mulongo* as a form of environmental attunement that challenges the reliance on external alerts and scientific explanations. Lauer argues that such intuitive responses are not anomalies but reflections of a broader epistemological framework that privileges relationality, reciprocity, and ecological

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sensitivity. By foregrounding these Indigenous ways of knowing, *Sensing disaster* critiques the technocratic bias of mainstream disaster governance and calls for a more inclusive approach that values diverse knowledge systems. This argument is not only theoretical but grounded in ethnographic detail, making a strong case for the co-production of knowledge and the democratisation of disaster research.

Lauer's methodological approach is grounded in long-term ethnographic engagement, characterised by immersion, collaboration, and reflexivity. Over more than a decade of fieldwork in Simbo, he cultivated relationships with community members, participated in daily life, and documented local responses to environmental change. This sustained presence allowed him to move beyond surface-level observations and engage deeply with Simboan ways of knowing. Importantly, Lauer's ethnography is less extractive. He is acutely aware of anthropology's colonial legacy, where Indigenous communities were often treated as subjects of study rather than partners in knowledge production (Santos, 2016). In contrast, Lauer positions himself as a respectful collaborator, acknowledging the limitations of his outsider status and the importance of epistemic humility. He reflects on moments of 'productive misunderstanding', where his assumptions were challenged by local interpretations, particularly about *Mulongo* and other intuitive forms of sensing. Rather than imposing external frameworks, Lauer allows Indigenous perspectives to shape the direction and interpretation of his research. His methodology aligns with calls from scholars like Linda Tuhiwai Smith (2021) for decolonising research practices and honouring Indigenous epistemologies. By centring lived experience, relational knowledge, and community agency, Lauer's ethnographic approach becomes a vehicle for amplifying Indigenous voices and challenging dominant narratives in disaster research. *Sensing disaster* can be best understood through its interwoven themes that collectively challenge dominant disaster paradigms and foreground Indigenous ecological sensibilities. Lauer's ethnographic narratives reveal how Simboan life is shaped by a constellation of relationships between people, place, ancestors, non-human entities, and colonial histories that inform both vulnerability and resilience.

Central to the book is the concept of *Mulongo*, an intuitive sensing of environmental disturbance that guided Simboans during the 2007 tsunami. This form of knowledge is not taught through formal instruction but cultivated through embodied experience and relational attunement to the land and sea. Lauer extends this theme in his exploration of "Ocean Knowing", where children learn survival skills through play, and marine life is understood through reverence and observation. These insights challenge the Western reliance on scientific forecasting and underscore the legitimacy of IK through sensory experiences.

Lauer traces how colonial encounters, particularly land dispossession and economic exploitation, reshaped Simboan spatial and social relations. In Chapter 3 "Ancestors, Steel, and Inland Living", Lauer introduces the concept of "domination at a distance" to describe how colonial powers exerted influence without direct control, leaving enduring legacies of inequality. Importantly, he shows that tsunami risk was not part of Simboan ancestral knowledge, as inland living historically shaped their environmental awareness. This complicates assumptions about the continuity of IK and highlights the need for historically situated analysis.

In examining religious transformation and capitalist expansion, Lauer reveals how Simboans navigate external pressures through strategic adaptation. In Chapter 4, "New Villages, New God and New Vulnerabilities", he problematises the tension between ancestral beliefs and Christianity, and how the economic shifts brought by logging and copra production are met with subtle forms of resistance. This illustrates James Scott's concept of 'weapons of the weak' (cited in Vinthagen & Johansson, 2013, p. 1) as how Simboans preserve cultural identity and community cohesion while engaging with modernity on their own terms.

Lauer's analysis of post-tsunami reconstruction in Chapter 5 exposes the complexities of aid distribution, land politics, and competing interests. The relocation of communities, compensation disputes, and infrastructure projects reveal how disaster recovery is entangled with power and place, echoing similar critiques from other contexts, like post-earthquake Nepal (Karki et al., 2022). In Chapter 6, he critiques the

imposition of vulnerability narratives by external actors, showing how land (*gusu*) is not merely a resource, but a dynamic entity tied to ancestry and agency.

Throughout the book, Lauer advocates for the co-production of knowledge, where Indigenous epistemologies are engaged with on their own terms, not reduced to data points within Western frameworks. In Chapter 7, he cautions against validating IK through scientific paradigms and calls for a pluralistic approach that honours diverse ways of knowing. This resonates with emerging calls for decolonial methodology and plural approaches in knowledge production, and challenges researchers to rethink their role in shaping disaster discourse (Khan et al., 2021; Santos, 2016; Zulfadrim et al., 2019).

Sensing disaster makes a significant contribution to the evolving field of disaster sociology by challenging dominant paradigms and advocating for the recognition of Indigenous epistemologies. Lauer's work aligns with a growing body of scholarship that critiques the technocratic and often depoliticised nature of mainstream disaster governance, which tends to marginalise local knowledge systems in favour of standardised, expert-driven solutions. By foregrounding IEK and emphasising the sensory, relational, and place-based dimensions of disaster response, Lauer expands the conceptual boundaries of what constitutes valid knowledge in disaster research. His critique of vulnerability narratives imposed by external actors resonates with Oliver-Smith's (2022) argument that vulnerability is socially constructed through historical, political, and economic processes. Similarly, his call for knowledge co-production echoes Linda Tuhiwai Smith's (2021) decolonial framework, which urges researchers to engage with Indigenous communities on their own terms and to honour diverse ways of knowing.

Lauer's ethnographic approach also contributes to methodological debates in anthropology and sociology. By reflecting on his positionality and embracing productive misunderstanding, he models a form of research that is collaborative, reflexive, and ethically grounded. His work challenges the legacy of extractive approaches in research, or what Fricker (2007) terms epistemic injustice—the systemic undervaluing of marginalised knowing systems, and offers a pathway toward more equitable and inclusive scholarship. In the context of the Anthropocene where environmental uncertainty and disaster risk are intensifying, *Sensing disaster* offers a compelling vision for reimagining disaster research. It invites scholars and practitioners to move beyond tokenistic inclusion of IK and toward a genuinely pluralistic epistemological space, one where Indigenous cosmologies, ecological sensibilities, and community agency are central to understanding and responding to environmental change (Ahenakew, 2016).

Sensing disaster is a powerful and timely intervention in the field of disaster studies, offering a nuanced and ethically grounded account of how Indigenous communities sense, interpret, and respond to environmental hazards. Lauer's central message is clear: Indigenous wisdom is not a peripheral supplement to scientific knowledge but a foundational epistemology that must be engaged with on its own terms. His critique of hierarchical knowledge structures and externally imposed disaster frameworks challenges researchers and practitioners to rethink the very foundations of disaster management. By weaving together rich ethnographic narratives, historical analysis, and critical reflections, Lauer demonstrates that resilience is not merely a technical outcome, but a lived, relational process shaped by culture, history, and place. His emphasis on knowledge co-production, epistemic democracy, and the agency of non-human actors expands the scope of disaster research and invites a more inclusive, pluralistic approach to understanding vulnerability and resilience. In an increasingly uncertain world, *Sensing disaster* urges scholars, policymakers, and practitioners to move beyond technocratic models and embrace the complexity of local knowledge systems. It is a compelling call to honour Indigenous perspectives, challenge colonial legacies, and build disaster research that is not only scientifically robust but also culturally respectful and socially just.

As an Indigenous Wakhi researcher from the High Mountain Asia region, *Sensing disaster* resonates with my efforts to articulate a Wakhi worldview of disaster risk communication and resilience. Drawing from fieldwork in the Pamirian Knot, I propose the concept of *Khikvey Meros*—a Wakhi term meaning 'the heritage of Wakhis'—to describe the intergenerational transmission of environmental sensing, adaptive

practices, and spiritual ethics. This legacy includes migration to safer areas, earthquake-resilient architecture, mutual aid systems like *Keryar*, reverence for supernatural custodians such as *Mergichon*, and ecological stewardship rooted in agricultural calendars and medicinal plant use. Like Lauer's exploration of *Mulongo*, *Khikvey Meross* reflects a holistic, relational approach to living with risk, one that challenges technocratic models and affirms the depth of Indigenous knowledge systems.

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