# The Journal of Peasant Studies



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/fjps20

# Resilience and conflict: rethinking climate resilience through Indigenous territorial struggles

Noémi Gonda, Selmira Flores, Jennifer J. Casolo & Andrea J. Nightingale

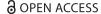
**To cite this article:** Noémi Gonda, Selmira Flores, Jennifer J. Casolo & Andrea J. Nightingale (2023) Resilience and conflict: rethinking climate resilience through Indigenous territorial struggles, The Journal of Peasant Studies, 50:6, 2312-2338, DOI: 10.1080/03066150.2022.2161372

To link to this article: <a href="https://doi.org/10.1080/03066150.2022.2161372">https://doi.org/10.1080/03066150.2022.2161372</a>

<u>a</u>	© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
	Published online: 07 Jan 2023.
	Submit your article to this journal $oldsymbol{\mathcal{C}}$
lılıl	Article views: 2440
Q <sup>L</sup>	View related articles ☑
CrossMark	View Crossmark data ☑
2	Citing articles: 2 View citing articles 🗗



### FORUM ON CLIMATE CHANGE AND CRITICAL **AGRARIAN STUDIES**





# Resilience and conflict: rethinking climate resilience through Indigenous territorial struggles

Noémi Gonda <sup>1</sup> a, Selmira Flores<sup>b</sup>, Jennifer J. Casolo<sup>b,c,d</sup> and Andrea J. Nightingale<sup>a,e</sup>

<sup>a</sup>Department of Urban and Rural Development, Swedish University of Agricultural Sciences, Uppsala, Sweden; <sup>b</sup>Research and Development Institute Nitlapan, Central American University, Managua, Nicaragua; <sup>c</sup>Institute of Development Policy, University of Antwerp, University of Antwerp, Antwerp, Belgium; <sup>d</sup>Institute of Ch'orti'- Maya Science and Technology Upejkna'r e Ja', Camotán, Guatemala; <sup>e</sup>Department of Sociology and Human Geography, University of Oslo, Oslo, Norway

#### **ABSTRACT**

Resilience to climate change demands a transformation in social and political relations, but the literature has largely neglected how these are embedded within legacies of conflict. We explore the roles socioenvironmental conflicts play in the scaling up of transformation amidst ongoing settler colonial projects in Indigenous territories in Nicaragua. Drawing on insights from resilience, climate change, and critical agrarian studies, this article reframes resilience as a process produced socioenvironmental conflicts, placing contestation and negotiation in the centre frame. By re-signifying the meanings and practices of resilience, Indigenous agrarian struggles contribute to 'eroding capitalism' and its entwinement with climate change.

#### **KEYWORDS**

resilience; climate change; conflict; Nicaragua; Indigenous struggles; biosphere reserve

#### 1. Introduction

The attacks have been escalating. (...) [A Mayangna Indigenous community in the heart of the biosphere reserve of BOSAWAS] was attacked by 80 heavily armed settlers with the result that 16 homes were burned, 10 people went missing, and four men from the Indigenous community were killed and two wounded, one of whom was left paraplegic as a result of the gunshot wounds he received during the attack. The settlers also slaughtered the Indigenous people's livestock. (100% Noticias 2020; IWGIA 2020)

Across the world, protecting valuable ecosystems and Indigenous land rights through biosphere reserves is taking on new significance as reserves become enrolled in efforts to promote resilience to climate change. Such efforts require clear resource tenure rights along with stable institutional arrangements, both of which are normally packaged under 'good governance' initiatives. Yet the target areas and purported beneficiaries of these projects are often embroiled in multiple socioecological conflicts, forged in the

CONTACT Noémi Gonda 🔯 noemi.gonda@slu.se, noemigonda@gmail.com 🗈 Department of Urban and Rural Development, Swedish University of Agricultural Sciences, Uppsala 750 07, Sweden

This article has been corrected with minor changes. These changes do not impact the academic content of the article.

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/ licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

crucible of multi-scaled dynamics of climate and agrarian change. The emphasis on property rights, stability and reducing conflict often sits in stark contrast with empirical realities wherein climate change initiatives have been shown to exacerbate land conflicts, struggles over authority, and perpetuate fraught relations embedded within colonial histories and capitalist expansionism (Nightingale 2017; Sultana 2022; Whyte 2017).

The BOSAWAS biosphere reserve in Nicaragua is no exception. The above violent attacks occurred eleven months before the Central American Bank for Economic Integration (CABEI) approved 84 million US dollars from the Green Climate Fund for Bio-CLIMA; a climate change mitigation project aimed at integrating climate action, reducing deforestation and strengthening resilience in Nicaraguan biosphere reserves, including BOSAWAS (Nicaraguan Ministry of Finance and Public Credit 2019). Since its creation in 1987, the BOSAWAS reserve has become a locus of land/forest use conflicts and struggles over whose vision of livelihood security will provide resilience for communities and ecosystems in the long term. The promise of abundant resources beyond the 'agrarian frontier' – an imagined frontier between agriculture and forested areas (Maldidier 2004) – spur migration by non-Indigenous populations to these Indigenous areas, felling the rainforest and deepening processes of conflict and primitive accumulation (Larson 2010; Nygren 2004).

In this article, we show that Indigenous resilience is not innate. Rather, resilience practices and processes emerge on the terrain of conflict and collaboration tied to territorialisation processes of settler colonialism, understood as 'the ongoing process which maintains European economic systems, political structures, social norms and occupation on Indigenous lands' (Thompson and Ban 2021, p.230), and associated capitalist political economies. By doing so, we challenge the notion that resilience in the face of climate change requires reducing conflict. Instead, we show how complex relations between the state, people and more-than-humans, characterised by both conflict and collusion, are instrumental in creating the openings wherein 'right' resilience can emerge. Rather than an outcome of climate change interventions or a form of essentialized flexibility, we theorise resilience to be a process produced within socioenvironmental conflicts. This process framing draws attention to the messy and often unruly practices, moments, and relations through which people seek livelihood security and assertion of their lifeways (Nightingale 2018). There is no blueprint or predictable outcome for resilience processes. Nevertheless, in a more normative vein, we follow feminist political ecologists to imagine 'right' resilience as a process of building commons, affective, democratic, equitable and just relations with humans and non-humans (Mehta and Harcourt 2021) for long-term livelihood security, while acknowledging that each of these processes is contested (Cote and Nightingale 2012) and based upon divergent definitions (Forsyth 2018). As it is used today, resilience signals an idealised response to the uncertainties and extreme events of climate change that can produce sustainability, itself another slippery boundary object. Indeed, it is precisely because resilience is a boundary object which is increasingly shaping the strategies of development agencies, state policies and even local communities, that inspires us to reclaim it and insist that its ontologically and politically contested nature is foregrounded.

Indigenous peoples, we argue, caught in the crosshairs of climate change /biodiversity conservation initiatives and 'agrarian and resource frontier' expansion, are engaging in class and more-than class politics in ways that do not neatly fit within Wright's (2019)

discussion of anticapitalist strategies<sup>1</sup> but nevertheless wear away at agrarian, extractivist and environmental attempts that threaten lands, lives, and livelihoods. In Nicaragua, as climate change policies and effects intensify settler colonialism<sup>2</sup> and associated political economic processes, Mayangna communities with recognised historic land rights (GoN 2003) manoeuvre to protect their territory in ways that both resemble and diverge from non-Indigenous struggles for agrarian justice and autonomy.

Rethinking resilience at the conjuncture of Indigenous territorial struggles, climate change migration, projects and policies, and the ongoing dynamics linked to agrarian dynamics of colonial-extractive capitalism<sup>3</sup> help us to make two crucial theory-practice leaps. First, that resilience processes arising out of socioenvironmental conflict can produce a plurality of strategies that can erode current racialised processes of agrarian and extractive capitalism from the inside-out. In particular, we show that ontological and spiritual dimensions of land and territory are not the 'flip side' of agrarian political economy understandings, rather they are reproduced, sustained and sometimes suspended in tension with them. As a result, challenges to the current political economy can occur within capitalist relations of production and exchange, not simply in resistance to them. Conflicts and dissent are the cement in this continuum underpinning the practices through which resilience emerges.

Second, the ways in which Indigenous peoples embrace or refuse capitalist and market relations, attempting to reconfigure them in their own terms, is a resilience strategy that is equally valid as efforts to gain autonomy from the market through (e.g.) agroecology or food security (Santiago Vera et al. 2022). The former strategy is often missed in agrarian studies that focus on class relations and land as a physical terrain to be claimed (Coulthard 2014; Koshy et al. 2022; Tzul Tzul 2018). In addition, understanding resilience through Indigenous territorial struggles, rather than through class, allows us to better draw attention to resilience processes' relationship with the non-human (Whyte 2018) and with efforts for autonomy and self-governance which lie at the heart of counter capitalist initiatives (Gahman 2020). By making these analytical moves, Indigenous territorial struggles at the conjuncture of a biosphere reserve re-purposed for climate change mitigation efforts, and 'agrarian frontier' expansion, help us envision how resilience processes can lead to transformative change. Moreover, how Indigenous peoples operate within and refuse colonial-capitalist ontologies and epistemologies helps make visible the colonial underpinnings and continuities of agrarian capitalism under climate change.

Drawing on insights from feminist political ecology, critical agrarian studies and Indigenous studies, this article thus reframes resilience, placing conflict, contestation, and negotiation in the centre frame. We build from recent work on power in resilience (Garcia et al. 2022) and theoretical insights on authority, knowledge and affect in

<sup>&</sup>lt;sup>1</sup>Wright's 'strategic logics' that historically animated anti-capitalist struggles are: 'smashing capitalism', 'dismantling capitalism', 'taming capitalism', 'resisting capitalism' and 'escaping capitalism'(2019).

<sup>&</sup>lt;sup>2</sup>Settler colonialism is based on Eurocentric ideas that see land 'as a physical terrain to be claimed; as the seat of political sovereignty; as the resource of capitalist development; and as the homeland of the settler'. It downplays the role of land in Indigenous rights struggles. It is grounded in physical, epistemological and ontological 'elimination' of Indigenous peoples (Taylor and Lublin 2021, 263).

<sup>&</sup>lt;sup>3</sup>Extractive capitalism is a form of capitalism that is based on the extraction of profit from humankind and nature often jeopardising agrarian and Indigenous populations' livelihoods and ways of living with non-human nature. It is 'a logic and practice of colonialist domination that involves the extraction of natural resource rents without restoration or care of the territories to which the resources belonged nor of the socio-natural relations that they previously sustained' (Fash 2022, 38). Extensive ranching is one form of contemporary extractivism.

climate change (Eriksen, Nightingale, and Eakin 2015; Nightingale, Gonda, and Eriksen 2022). This work shows how resilience occurs within the operation of power and political economies, rejecting earlier accounts which overly emphasised resilience as an adaptive capacity to biophysical change (Cote and Nightingale 2012; IPCC 2007). We thus reinforce recent calls, - in particular in the Forum on Climate Change and Agrarian Justice (Borras et al. 2021) - for seeing local negotiations, contestations struggles, and conflicts, as reworking, resisting and re-signifying resilience not just as material processes borne out of class struggle, but also as products of the agency and desires of different people (Camargo 2022), and as part of broader agrarian and Indigenous movements for recognition and autonomy (Mills-Novoa et al. 2022). Following Indigenous philosopher Kyle Whyte's (2017) critique of universalist framings of climate change as the singular threat of modernity, while casting Indigenous people as either victims or saviours of it, we argue that these conflicts are a vital part of on-going relations through which resilience emerges, rather than impediments to a normative end point. More pluralistic engagements with the complexities of these emplaced power asymmetries and relations (Nightingale 2018) open space for the co-production and co-existence of multiple climate realities to serve as leverage points for transformative change. Climate change is the most recent ruination (Stoler 2013) in a long history of environmental changes tied to the dynamics of creative-destructive capitalist-colonial dynamics. Understanding resilience through the lens of violent colonial continuities reveals pathways to building 'right' socioenvironmental resilient relations (Gram-Hanssen, Schafenacker, and Bentz 2022).

Empirically, we examine the relationships between socioenvironmental conflicts and resilience practices in Indigenous territories that overlap the BOSAWAS biosphere reserve. Colonial nation state imaginaries and projections of the 'agrarian frontier' have fuelled an intensification of land grabbing and illegal selling of Indigenous lands. The dynamics of capitalist accumulation in the biosphere reserve vary: from land poor climate migrants to cattle-ranchers and their hired hands, to timber barons, to largescale exploration and exploitation of the subsoils. Nevertheless, all take advantage of a repeated narrative of empty or unproductive spaces available for the taking, and all operate through intense pressures due to how climate change adaptation and mitigation schemes rework agrarian and extractive capitalist spatial relations. These processes of land and forest dispossession are also embedded within political splits between and within Indigenous communities that draw them into contradictory relations of production and exchange. Rather than mitigating conflict, climate change interventions fuel increasingly violent clashes between state forces, settlers, Indigenous communities and environmentalist organisations. For Indigenous populations, their need to reduce conflict subsumes their livelihood aspirations and socioenvironments to the priorities of an authoritarian state and a (largely) well-meaning international development community focused on carbon capture rather than on human well-being. It is within these messy dynamics that we find the trajectories of 'resilience' and how local people work within problematic relations to assert their lifeways.

In the next section, we theorise the nexus of resilience, critical agrarian studies and climate change in Indigenous territorial struggles by discussing how 'frontier' imaginaries, contested subjectivities, and visions of autonomy feed into the politics of resilience in Nicaragua. Section 3 presents the process of engaged research in the Mayangna territories through which this paper emerged, while section 4 describes the climate contours

and overlapping conflicts in the BOSAWAS reserve. Section 5 shows how Indigenous people maintain cooperation and conflict in continuous balance to survive, anchoring their lifeways in the past to anticipate future uncertainties, and how their climate resilience strategies are articulated in affective relations and emotional practices which also have the potential to erode capitalism. In Section 6 we conclude by elaborating how conflict and contestations productive of resilience require scrutiny of everyday practices, collusions, contestations and struggles; understanding of historical continuities and legacies of resilience practices; uncovering their complexity and uncertain character; and understanding how resilience actions support dissent and the building of affective relations.

# 2. Theorising the nexus of resilience, critical agrarian studies and climate change in indigenous territorial struggles

In this section, we first highlight the conceptual foci that emerge from our empirical research: namely 'frontier' imaginaries, contested subjectivities, and visions of autonomy. Second, we underline the main ideas from diverse trends of the resilience literature on which we build our analysis. Through bringing these two aspects together, we unpack the nexus of resilience, critical agrarian studies and climate change in Indigenous territorial struggles. Our analysis shows how complex relations of conflict and collusion between the state, capitalism, migration and settlement, people and more-than-humans are instrumental in creating the openings wherein 'right' resilience can emerge. More mainstream resilience literature suggests that conflicts represent a risk that needs to be reduced for building resilience (Sultana et al. 2019). Climate change mitigation programmes specifically list conflict as a risk (CABEI 2019). We theorise that rather than an outcome of climate change interventions or a form of essentialised flexibility, resilience is a process produced through socioenvironmental conflicts, themselves rooted in processes of extractivism, capitalist land use, and the politics of the so-called 'frontier'.

# 2.1. At the intersection of capitalism and anti-capitalism: 'frontier' imaginaries, contested subjectivities, and visions of autonomy

The tensions we observe in the rural world are underpinned by the contradiction between sanctioned policies and practices based on exploiting so-called 'agrarian and resource frontiers' (Kröger and Nygren 2020) and those to mitigate climate change and protect biodiversity through a different, yet overlapping space: biosphere reserves. 'Agrarian and resource frontiers' have long been political: from the 1950s onwards, peasant migration from the Eastern, non-Indigenous parts of Nicaragua towards the Western, Indigenous territories was encouraged by the Somoza dictatorship, aimed at avoiding political instability while supporting elites involved in export-oriented, large-scale agriculture. By keeping the best quality lands of the Pacific, Central and Northern regions of the country for ruling elites, and pushing smallholder producers towards the East, the colonisation of the 'agrarian frontier' contributed to capitalist expansion while avoiding social conflicts: Indigenous territories were the escape valve. For our discussion, it is immaterial whether the contemporary case is that of an 'agricultural frontier', or a so-called post-frontier where the only land 'free' to be appropriated through colonisation remains within the

protected conservation areas. What matters for us is that the lived environments of local forest-dwellers, – the Indigenous people – continue to be framed as unused lands (Kröger and Nygren 2020), rendering the people within them as non-existent.

Understanding the everyday processes of an imaginary, physical, epistemological and ontological erasure brings a new dimension to critical agrarian studies discussions of territory (Giraldo and Rosset 2018). It helps recognise the entanglements between subjectivities and land rights, suggesting common ground between Indigenous peoples and campesinos. 'Frontier' imaginaries work in relation to one another, hardening lines between peasant/small farmer subjects and Indigenous peoples through simplistic binaries: invaders vs. natives; destructive settlers vs. natural stewards (Devine 2018; Larson 2010: Nightingale 2018), conveniently erasing the colonial-capitalist continuities that produce the conditions for conflict. While this shift represents powerful possibilities for uniting struggles across the rural world, 4 it is crucial that what is distinct about Indigenous processes of resilience is visible in the quest to forge unity around anti-capitalist politics.

Indigenous studies and anti-colonial analyses highlight the centrality of land/nature and the historical global connections of capitalism in ways that bring into focus two logics of agrarian expansion and green grabbing (Coulthard 2014; Koshy et al. 2022; Ybarra 2018): (i) the plurality of uses and meanings of territory and; (ii) the elimination of Indigenous territories-bodies. We argue that overlooking the significance of Indigenous territorial struggles runs the risk of contributing to further de-politicising the resilience debate and reinforcing the colonial-capitalist status quo (Ojha et al. 2022). Further, such an omission can normalise violence as well as Human and land rights abuses.

Mayangnas in and around the BOSAWAS reserve, like many Indigenous peoples in the rural world, have protected rights to land and resources as well as to self-government under the International Labour Organisation's (ILO) 169 convention. But Indigenous 'autonomous territories' overlap with the biosphere reserve, which is governed by UNESCO linked institutions in collaboration with the central state. On the ground, attention to the everyday efforts of managing conflicts and re-negotiating power relations of Mayangnas living in the BOSAWAS communities suggests the centrality of autonomy as a normative goal for resilience. Autonomy resides in the collective ancestral practice through which Mayangnas experience, govern, care for, and reproduce their relationship to each other and to more-than-human nature, including their right to define how they engage with market/class relations. As we show below, Mayangna autonomy does not mean becoming autonomous from market relations through food sovereignty and agroforestry practices: rather, Mayangnas' social reproduction is interlinked with both capitalist accumulation and building alternative social relations to dependence, deprivation and marginalisation (Douwe van der Ploeg 2010).

In the subsequent discussion, we highlight seven main ideas from diverse trends of the resilience literature (socioenvironmental resilience, Indigenous studies and settler colonial critiques that expand critical agrarian engagements with resilience) that have inspired our thinking about the everyday politics of resilience.

<sup>&</sup>lt;sup>4</sup>The Vía Campesina social movement has been particularly influential in advancing a plurality of uses and meanings of territory to articulate struggles for access and control of land with struggles for the defence of territories and lives (Giraldo and Rosset 2018) as a way of embracing myriad uses and meanings at work in the rural world.

#### 2.2. Everyday resilience politics

A first aspect of our argument is that the historically produced knowledge, needs and values of marginalised groups cannot be subsumed to concerns over adaptive capacity and planning for the future. We build on ecological resilience research that makes clear that social, political and biophysical changes are deeply entangled, meaning that understanding one in isolation of the other is not only ontologically flawed but also leads to empirically problematic policy outcomes. Socioecological systems thus capture the dynamics of change (Folke et al. 2016; Haider et al. 2021), but too often end up reifying stability and resistance to change in livelihood systems (Carr 2019). Recent efforts at rethinking resilience from the socioecological perspective recommend shifts in practice: from capitals to capacities, from objects to relations, from outcomes to processes, from closed to open systems, from generic interventions to context sensitivity, and from linear to complex causality (Reyers et al. 2022). While we welcome these efforts, we believe that they still too often gloss over how intersectional subjects that are necessarily classed (racialised, gendered, abled, aged) can refuse, albeit in ambiguous ways, the dispossessing and dis/placing effects of climate change.

A second aspect of our argument is that efforts at building resilience may create an *undesirable* resilient system. Resilience in ecological science refers to the ability of a system to withstand shocks and disturbance without flipping into a different phase, such as a forest becoming a grassland from too much disturbance. In socio-ecological systems, this thinking has led to analyses concerned about humanity's 'operating space' in relation to environmental change (Rockström et al. 2009) and the institutional and political arrangements that promote adequate social and human capital to avoid the collapse of current societies and economies (Stone-Jovicich et al. 2018). Many scholars in this tradition are concerned about the unsustainability of today's industrial economy and thus promote shifting into a 'better phase' (Olsson, Folke, and Moore 2022), without also considering that such efforts may indeed create an *undesirable* resilient system.

Third, we want to bring the agrarian question back into the debate on Indigenous resilience but without subsuming the latter to the former. Resilience policies and practice linked to Indigenous territorial struggles in so-called 'agrarian and resource frontiers' speak directly to the still present agrarian question (Watts 2021) posed by Kautsky: 'whether and how capital is seizing hold of agriculture, revolutionizing it, making old forms of production and property untenable and creating the necessity for new ones' (1988 [1899], p.12). Both discussions on the recognition of Indigenous lands without full restitution of the accompanying rights, and resilience studies in the face of climate change, seek to show how individuals and communities navigate market forces or hegemonic state-society relations (Correia 2019; Sekine 2021). Further, resilience studies emerging from critical urban studies make visible the spatial relations of racial capitalism. Grove, Cox, and Barnett (2020, 1627) frame it as both 'a mechanism for securing ... racialized economic trajectories' and a 'medium' through which anti-racial capitalist practices can emerge and gain traction. Resilience, in this light, in spaces where agrarian capitalism, extractive capitalism and 'green grabbing' are all at work, can signal the possibilities and persistence of subjects that straddle class relations and non-class relations (Santiago Vera et al. 2022).

In Nicaragua, it draws attention to Indigenous peoples' resistance to the ways that existing forms of production perpetuate ecological destruction. Analytical attention needs to pivot upon what work resilience does, who takes it up and for what purposes. Development agencies and the state promote resilience as an idealised way to support communities and marginalised peoples in the face of uncertainty and disasters, yet critics show that subjects become incorporated into shifting capitalist relations in uneven ways (Gonda 2019). Projects that promote resilience to support communities and Indigenous peoples often demand that they further engage with the dynamics of capitalist colonialism. Yet, resilience also signals the ways that Indigenous communities navigate multiple and diverging pressures from settler migrants, public actors and international projects. In these ways, we unsettle the idea that Indigenous resilience automatically requires resistance to capitalism, and focus instead on the dynamics of conflict and collusion to both market dynamics and historical lifeways through which resilience is asserted.

A fourth aspect to our argument is that the ontologies behind materiality and meaning matter. As we show, Indigenous peoples reclaim capitalist processes by alternatively seeking redress and engage in land transactions to assure the land/forest continues to anchor their identity, history, and community. The insidious power of capitalist relations of exchange – resting upon historical regimes of accumulation – to define land, property, identity politics and conservation agendas is a core frame for understanding the dynamics of the biosphere reserves. However, it is not the only frame that shapes how processes of resilience unfold, nor is resistance to capitalism the only way through which local people push back against these pressures. Political ecology and critical agrarian studies literature have shown how struggles over the (micro) politics of contestation and reworkings of hegemonic rule/ governmentality vis à vis rural dispossession, reveal political fissures and openings (Devine 2018; Li 2014; Moore 2005; Peet and Watts 2004; Sawyer 2004; Wainwright and Bryan 2009; Watts 2003). Yet, this focus needs re-centering Indigenous epistemologies (in the fashion of Ybarra 2018).

Fifth, to accomplish such re-centering, we draw from work on how socioenvironmental change is embedded within the operation of power in relation to climate change adaptation (Eriksen, Nightingale, and Eakin 2015; Nightingale 2017). Precisely what this means varies from trying to better integrate political economy dynamics into socioecology systems thinking (Van Hecken et al. 2021), to showing how cross scalar dynamics and struggles over knowledge and subject-making shape resilience dynamics (Garcia et al. 2022). Garcia et al. (2022) highlight the inequitable legacies of colonialism that underpin modern exclusions, exploitation, identities and representations through which 'resilience' is negotiated. Their argument invokes earlier feminist and Indigenous attention to the everyday spaces, places and processes that are often ignored as sites of social change (Abu-Lughod 1990; Cumes 2012; Rivera Cusicanqui 2010). Highlighting these situated social and material practices that support life and livelihoods allows us to problematise when and how 'everyday acts of resilience, reworking and resistance' can remake social and material relations (Betteridge and Webber 2019, 944), including capitalism.

Sixth, we are inspired by recent critical literature that has begun to engage the role of resistance and everyday conflicts in building resilience. Here, resilience is shown as complex and uncertain process (Harris, Chu, and Ziervogel 2018), as opposed to some naturalised characteristic of a people (Kaika 2017), or desired outcome of an intervention

(Boyd et al. 2008). Our argument draws on a theorisation of power that captures its ambivalent and multidirectional nature (Butler 1997; Nightingale 2011, 2017; Tuana 2013), side stepping the debate about 'resistance' versus 'resilience' by showing how all acts of resistance include dimensions of collusion and cooperation. Indeed, practices of resilience are diverse, contested, and often contradictory – sometimes individual, collective, or redistributive, while at other times reinforcing existing inequalities (Betteridge and Webber 2019). In Nicaragua, this insight is vital to avoid essentialising how various members of Indigenous communities and settlers engage with fraught land exchange dynamics.

Finally, conflicts are not just about oppositional politics, violence or land use; they have the potential to create affective relations. Yet affective relations always carry with them uncertainty and unpredictability. As outcomes of relational encounters, they are not easy to direct or orchestrate, even if it is these affects that hold the most promise to bridge social and political divides and help generate transformative engagements with each other (González-Hidalgo and Zografos 2019). Efforts to link affect with resilience in the climate change debate are rare (Nightingale, Gonda, and Eriksen 2022, are one exception) but affective relations between humans and non-humans are central in Indigenous thinking and decolonial scholarship (e.g. Simpson 2007; Tuhiwai Smith 2013).

These constrained but not foreclosed possibilities and limits of socio environmental struggles in Indigenous territories/protected areas suggest the need to better understand entanglements between conflicts and resilience to highlight terrains of struggle that can contribute to unsettling capitalist and colonialist structures and relations. It is to these terrains in Nicaragua that we now turn.

#### 3. Engaged research in uncertain times

This paper brings new research (2018-present) in conversation with the insights drawn from long-term engagement (30 + years) with Nicaraguan mestizo peasants and agrarian processes, and deepening relations with Indigenous peoples and territories (10 + years). Fieldwork around conflict and climate change began in 2019-2020 with twenty-five open interviews with Indigenous, and mestizo professionals and activists involved in defending human, environmental and indigenous territorial rights. Those interviewed (12 women and 13 men), traced their experiences with struggles in and around biosphere reserves in Nicaragua. These interviews led to 6 workshops (2021) with two groups of Mayangna forest guardians and one group of Mayangna women. The security situation in Nicaragua made further community research impossible and posed dilemmas both in relation to what we could research and how we could write. Nevertheless, ongoing communication has continued as we try to deepen non-extractive research praxis and 'deep reciprocity' (Casolo et al. 2022; Simpson 2017) that honours Indigenous knowledges, struggles, and autonomy.

The convergence of three crises: political, public health and climate both reshaped and became part of the research process itself (Gonda et al. 2021, 2022). Together these crises highlighted for us the multiple scales of precarity that differently situated peoples navigate, and revealed the ways in which the politics of emotion penetrate struggles over lands, lives and livelihoods.



#### 4. Climate contours of territorial conflict in the BOSAWAS reserve

Some institutions and [even] some Mayangna say we, the Mayangna, live in a reserve ... [but] we live in a [territory] that is inherited from our ancestors, a place that we are owners, we do not live in a reserve of the State. (Interview 2/06/2020).

Making sense of Mayangna resilience strategies requires placing their efforts within the overall political economy of environmental governance in Nicaragua. Governance regimes in relation to the biosphere reserve often come into direct contradiction with Indigenous rights. For example, state institutions manipulate the 'free and informed consent' requirement of projects<sup>5</sup> - co-opting leaders, consulting few people, and exchanging bribes. Rather than safeguarding biodiversity and strengthening the 'resilience' of tropical forest ecosystems, the resulting 'overlapping systems of governance have encouraged rapid ecological destruction and social differentiation as well as corruption and violence' and violate Indigenous peoples' rights (Kaimowitz, Faune, and Mendoza 2003, 6). Between 2011 and 2016, for example, over half million hectares of forests in Nicaraguan biosphere reserves were destroyed by forest fires, hurricanes, and clearance for extraction and other activities (Campos Cubas 2018; Guevara Flores 2017, 22-23). State officials and political elites are complicit in giving mining concessions or rights for timber extraction and cattle ranching in direct violation of the reserve's requlations and the desires of many resident peoples. The police supposed to defend the territorial rights of local people, often are enrolled into such illegal land deals.

Who is living around the biosphere reserve and how they make claims to land is central to our story. 'Settlers' refers to people of usually mixed Spanish-Indigenous ancestry (called mestizo in Nicaragua) who obtained access to land on Indigenous territories through a variety of pathways including, buying land titles and resource concessions from Indigenous leaders and state officials who sell them illegally, from impoverished local people who are desperate for cash, and through land traffickers. Land traffickers offer cheap land, operating in pseudo-legality created through connections with local elites and Indigenous territorial leaders in collusion with municipal or regional authorities. Land traffickers, especially on land for artisanal mining and livestock, breed chains of settler families, as one settler family opens the door to their kin in a recurrent process. Once on the land, settlers often engage in aggressive deforestation to install pastures for cattle ranching and sometimes attack Indigenous residents in an attempt to stake claims in the rich forest lands (Figueroa Romero and Pérez 2021; Oakland Institute 2020).

Since the imposition in 1987 of a state vision over an area of 20,000 km<sup>2</sup> overlapping with Mayangna autonomous territories<sup>6</sup> (GoN 2001), areas of forest have been converted to pasture and Mayangna territories are increasingly inhabited by *mestizos*. For example, in the BOSAWAS territory, in 1990 there were only 15 non-Mayangna families, in 2007 there were 121 while in 2013 the number increased to 314. Although there is no recent data, according to Mayangnas this number has been increasing. The underlying problem with mestizo settlers is the actions they implement, in particular the

<sup>&</sup>lt;sup>5</sup>Reguired by the ILO's Convention 169, Nicaragua being one of its signatories since 2010.

<sup>&</sup>lt;sup>6</sup>In 1987, the then Sandinista government accorded autonomy to Nicaraguan Indigenous territories to lessen Indigenous support for the US funded counterrevolutionary forces. In parallel, the central state supported agrarian reform policies that were pushing non-Indigenous farmers in search of pastures towards the 'agrarian frontier' and these Indigenous territories.

deforestation of large areas of forests to introduce livestock that change land use and jeopardise Mayangnas' autonomy and lifeways as well as their aspirations and rights to govern the territory and preserve the forest. Gendered and racialised dualistic imaginaries reinforce the frontier ideal of a male cattle rancher with leather boots and cowboy hats, looking over his cattle from the back of his horse, as opposed to an Indigenous woman relying on the forest for food and medicine (Flores Cruz and Torres 2012; Gonda 2021).

Meanwhile, BOSAWAS continues to be conceived from the perspective of the central, colonial capitalist state. For example, the recently cemented roads that connect the capital city of Managua to Bonanza (the closest medium-sized city to BOSAWAS) have been built with the idea of extracting resources (mining, timber, cattle) for development, conceived as national economic growth through extraction. Human Rights defenders, environmentalists and social activists highlight that the progressive invasion into Indigenous territories has been encouraged by the state through licences and mining concessions for private and public-private interests (interview 1, 13 May 2020; interview 2, 21 May 2020; interview 3, 6 June 2020). Alternatives that support Indigenous territories' autonomy, for example possibilities to engage in agro-ecotourism, are not considered.

Mayangna communities most affected by conflicts, find themselves caught between two paths of action. The first: to obtain state protection from an increasingly undemocratic and corrupt political regime (Martí i Puig and Serra 2020), or second: to work in an uneven terrain of state neglect and ultimately accept co-existence with settlers. Environmental activists and some environmentalist organisations defend Indigenous people's rights to their ancestral lands, amplifying the important roles local people play in maintaining the forests. Yet, Matamoros-Chávez (2014, 83) highlights that

the evidence that the settlers remain untouchable in the Indigenous territories suggests that they have learned to navigate between a network of institutional and economic interests, which means that they can achieve their strategic objective of establishing roots in the Indigenous territory.

In this context, Indigenous Mayangna people have developed their own strategies for reducing conflict and navigating through complex relations of dispossession and exchange.

#### 5. Re-signifying resilience at the interstices of conflict and transformation

In this section, we illustrate how re-signifying resilience at the interstices of conflict and transformation can contribute to 'eroding capitalism'. Through the realities of environmental change and critical agrarian debates we see the ways in which Indigenous communities navigate climate change related conflicts and violence whilst holding onto their territory and lifeways. By doing so, they contribute to eroding capitalism from the insideout by redefining the terms of engagement in the biosphere reserve.

### 5.1. Balancing cooperation and conflict

Conflicts in the biosphere reserve reflect the ways in which the actors outlined above engage in conflict, cooperation or collusion to further their interests, and sustain their relationships in their territory. Those interviewed identified three actors: Indigenous territorial authorities, non-Indigenous state actors, and mestizo migrant occupiers of various stripes. Together they pointed to multiple threads: the significance of Indigenous ways of feeling and knowing (senti-pensar) the land/territory itself, awareness of the relationship between agrarian capitalist expansion and land speculation and deforestation (what they call 'invasion'), intensification of climate change, and extractivism. Despite recognising complexity of these dynamics, they focus on how Indigenous territorial authorities fail to uphold the interests of those they represent, while state actors are absent, or worse, actively participate in furthering the interests of settlers and those seeking mining concessions or access to forests for extraction or Bio-CLIMA perks. Indigenous territorial authorities admit that they find themselves caught between the conflicting demands of the Indigenous people they are supposed to represent; their duties to prosecute settlers; and the designs of the state to open the forest for economic growth and development (mining licenses, pine resin and timber extraction, cattle ranching). Yet, they omit their role in the crafting of the Bio-CLIMA project and its conflict minimisation logic.

A flash point for these conflicts is between territorial authorities attending to agrarian and environmental pressures, and forest guardian groups tasked with safeguarding Mayangna autonomous territory from settlers engaged in deforestation. Forest quardians constitute the first line of protection by routinely convening a group of men from different communities to monitor territorial boundaries, restore boundary markers – clearing paths, checking 'papers' (documents of settlers they hold to prove their 'rights' on the land), and apprehend and present for prosecution any would-be invaders. If caught within the territory, persons must show a deed or leasing agreement. Recently, however, collusion between settlers, Indigenous territorial authorities, the state, and agrarian and extractive capitalist processes linked climate/cattle/mineral dynamics have become more frequent, undermining the actions of the forest guardians who attempt to exercise Mayangna territorial rights.

While practices of coercion through corruption are widespread in relation to peasant and peasant-indigenous struggles (Nuijten 2004), when Indigenous territories are involved, more than life and livelihoods are at stake. The ability to autonomously protect the deep roots of lifeways bound together with more-than-human nature is under threat. Bribes and threats from extractive enterprises, cattle ranchers, loggers, and state officials, corrupt Indigenous territorial authorities, leading them to rent and sell land without consultation undermine ancestral values (interview 4, man, June 2, 2020). Community Indigenous leaders are targeted by politicians and government officials who invite them to travel to the regional or national capital to stay in hotels, offering 'free food', alcohol and even paying for prostitutes in return for signatures or support (Interview 1, 13 May 2020). According to community members and forest guardians, 'territorial authorities are more interested in augmenting their salaries than investing in or defending our territory' (Mayangna man, personal communication, 12 April 2021). Given this collusion with Indigenous territorial authorities, when certain forest guardians attempt to gather evidence (papers, pictures or even witnesses) to prove that territorial authorities are part of the problem, they enter into conflict with other Indigenous authorities: those recognised hierarchically by the colonial state due to their support for extractive businesses linked to national economic growth.

For example, in June 2021, forest quardians captured and evicted a group of 12 mestizo men from a given territory, who subsequently produced papers signed by the president of the Indigenous territorial government giving them permission to settle and use communal land. The forest quardians' protests that they had not given such permission to the territorial authorities were met with silence. They then sought state support, calling on local police to defend Indigenous territorial rights; but again the police who should protect them let the settlers go free. Ultimately, in the face of the betrayal of their own authorities, forest guardians had to coordinate with the mestiz, colonial state, with the territorial government, the local police, the Ecological Battalion of the Nicaraguan Army and the attorney general's office (personal communication, 6 June 2021) to evict the settlers. They sacrificed some autonomy in order to save more immediate practices.

Discussions with forest quardians and interviews with women have shown that opinions about these actions are divided on generational and political (level of authority) grounds, sowing discord in communities and families based on the intertwined values of Indigenous autonomy and a just relationship with nature. For example: 'young Mayangna men think maybe ... I must sell seven hectares out of necessity. Before they would sell community land that was not in use; now the situation is worse: they sell land already claimed by relatives or neighbours' (Mayangna woman, personal communication, 3 June 2021).

These fragmented and often contradictory ways that Mayangna forest quardians and community members experience struggles over land, nature and governance is the process through which resilience emerges. Forest guardians are beginning to position themselves and Mayangna territorial struggles in ways that shift the practice and scale of authority, and begin to reconfigure the exercise of autonomous rights to sustain human and more-than-human nature. Yet their conditions of possibility are linked to the ways they attend to everyday dynamics of dissent and disagreements, and the emotional and cultural toll of their overall suffering. In the next section, we show how they find anchorage in the past to anticipate future uncertainties.

# 5.2. Remembering and re-membering: anchors to the past as resilience for anticipating the future

The struggle for the defence of territory and the exercise of autonomy is kept alive by everyday dissent and disagreement among Indigenous community members regarding the meaning and material losses driven by the invasions. These conflicts create spaces to remember the past and strengthen affective relations through a shared sense of loss, and emphasis on recovering historical memory softens intergenerational conflicts.

Forest guardians from two different territorial districts proposed workshops in 2021 where they could share their memories and ways of understanding the losses and injustices they suffer from invasion, deforestation and other related socio environmental changes. Seven workshops took place in total, one with just women. Memories intertwined and refracted through one another as participants began to move from territorial survival in the crucible of conflict to the depth of their emotions. They expressed a deep sense of emotional attachment to the forest and articulated a sustainability sensibility that harkened back to the past.

These memories at first appeared to paralyse participants; 'If I go out, I see fences, I see that rivers are drying, it is not like before and that stresses me ... '. Some memories are wistful, recalling times when there were no settlers in the territory and no necessity to

defend it; when everyone could use the forests without restriction or fear: 'before the forest guardian job started there was peace' (Workshop with forest guardians, March, 2021), 'Today I went for a walk, and I came back sad, there is a lot of destruction in the hills, stripping of trees, drought' (Workshop with forest guardians, March, 2021) ... 'walking upstream my heart was filled with sadness, desolation knowing that people don't care and not knowing what to do to make a change' (Workshop with forest guardians, March, 2021). While these reflections seem to forget precolonial and colonial domination, they clearly re-member the past to keep alive Indigenous lifeways, pointing to where resilience processes begin.

The reflections among the Mayangna women were particularly insightful. Women discussed with us the suffering they experienced due to conflicts and how it had impacted their everyday lives. They lamented the drying up of the rivers, its contamination, and soil impoverishment due to the creation of pastures. While men and women both expressed that the river is a source of life for them, in practice, women's everyday activities are especially tied to the rivers, where they have bodily connections through washing clothes and dishes, bathing, fishing and canoeing. More importantly, they also function as a key site for social interaction with other women. While these reflections echo prior feminist political ecology claims about agrarian change, social reproduction and nature, we zoom in on what it means in a space/place where territorial rights have formally existed since 1987 and commitment to particular socionatural relations much longer. Maintaining non-capitalist means of production and the autonomy it entails, is not just about food sovereignty or accumulation by dispossession of women's knowledge or labour. When the forest is integral to social reproduction as it is for most Mayangna living in their autonomous territories, hunting, harvesting fruits and collecting medicinal plants and the reciprocal relations they entail is being (workshop with forest quardians, June 2021). The process of listening to each other and validating and disputing these sentiments is also integral to navigating the violences of Mayangna territorial conflicts. At the centre of both are maintaining or strengthening relations of co-responsibility between humans and non-humans that are eminently affective and emotional, not transactional (Tynan 2021), affects which from Western eyes appears as an ethics of care (Whyte et al. 2016).

Sometimes, listening and validating occur in private spaces, other times more publicly; but the process solidifies bonds in time and space. As one Mayangna Indigenous youth leader pointed out, re-membering in the sense of actively recovering, reassembling and employing historical memories can rework tensions and frictions between generations. Elders fear that the hard-won struggle for autonomous governance over lands and forests is slipping away. Working with elders, asking, reflecting, and recreating their own history of territorial conflicts, he emphasised, helps them to see themselves not as victims or marginalised; but as people with a long and creative history of preserving their language, cultural practices, cosmovision and territories, against all odds. '[M]y

<sup>&</sup>lt;sup>7</sup>Also referring to the landmark case of Awas Tingni. The Mayangna Indigenous community of Awas Tingni sued the Nicaraguan state in 1997 for granting a logging concession to private interests in Mayangna traditional territory. The case ended in a landmark Human Rights ruling by the Inter-American Court of Human Rights in 2001 that became a precedent for all Indigenous groups of the world (Gómez Isa 2017) as it established, for the first time in history, Indigenous communities' right to their collective land as a basic Human Right (Inter-American Court on Human Rights 2001).



desire' he said, 'is to bring the same process throughout the nine Mayangna territories' (Mayangna man, personal communication, 30 July 2021). This process of remembering and re-membering (Olsen 2003) suggests the relationship between historical refusals and the possibilities of eroding capitalism: 'the Mayangnas' struggles is not today, not of this decade nor of this millennium, it is a long history that involved our ancestors' (Interview 4, 2 June 2020).

## 5.3. Weaving new relations within and beyond capitalism

Affective relations between people and their land/territory form a foundation for understanding how conflicts reveal the contradictions of Mayangnas as 'agrarian' and 'Indigenous' subjects. Indigenous leaders colluding with agrarian capitalist land use similarly signals a paradoxical collaboration with state territorialisation<sup>8</sup> that ultimately helps retain Indigenous authority and control over land. Some Mayangna men and women have opened themselves to 'meeting *mestizos* halfway' in areas where land encroachment is accentuated and community-level fragmentation expanding, according to the forest guardians. By forging new bonds with settlers, they hope to foster a semblance of peaceful coexistence and lessen the likelihood of violent clashes, yet also maintaining a certain degree of autonomous control over their lifeways.

Settlers form unions with Mayangna women in some communities, purchase goods from community markets, or as is the case of settler youth, attend Mayangna baseball games. Other settlers and Mayangnas have developed trade relationships - such as bartering a mule for a plot of land. One Indigenous leader's conversation with a cattle rancher suggested that he was committed to building a good relationship: 'Look, Madame you are authorities, see we have money and we are cattle ranchers, we want to work and we do not want to be bad, we want to live that is what we want ... ' (Mayangna woman leader, personal communication, 2 June 2021). Some Mayangna women saw the creation of new - to some extent caring - relations as necessary, in part due to the fact that their families are now a minority in their own territory, and partially because they have no support from state authorities (Workshop with Mayangna women, 1 June 2021). Crucial to this is an understanding of how these actions are grounded both in economic need and in a deep desire to avoid more conflicts and greater suffering.

In territories that have been dealing with land invasions for a long time, managing conflict has signified accepting settler presence in the territory (due to dynamics of corruption, violence and state irresponsibility), while finding ways to protect territorial autonomy, recover biodiversity, avoid overt violence, and defuse internal dissent (between settlers and Indigenous peoples, and between Indigenous people themselves). The conversations, negotiations, and exchanges entailed, even when they are volatile or painful, reshape social relations and socio-ecological practices.

In one Mayangna territory men and women have agreed to self-regulate land use. Faced with mounting pressure from settlers and the continued lack of state protection on their behalf, they allocated 27% of their territory for lease to settlers but with differentiated rates for land use in order to reverse deforestation and greenhouse gas release,

<sup>&</sup>lt;sup>8</sup>State territorialisation i.e. the process through which conservation areas consolidate state sovereignty and power spatially through imposed tenure rights and control resource extraction (Sylvander 2021).

while encouraging a shift to agroecological production systems. Leasing for extensive cattle ranching would cost three times more than areas destined for more sustainable production. While regulating land titles (saneamiento) can equal state territorialisation (Sylvander 2021), the details about land use conditions and pricing are important in showing how through land markets, Indigenous people contribute to eroding capitalist forces within their territory, or at least reshape them for their own lifeway goals. However, whether or not this manoeuvring contributes to deeper transformation remains uncertain.

Indigenous responses to settler and extractivist practices are thus motivated by a great sense of responsibility between descendants and ancestors, and between the human and non-human worlds. They counter western imaginaries of 'progress' and hierarchies of personhood that drive colonialism and inform alternative ways forward (Thompson and Ban 2021; Whyte 2018). These relations and responsibilities are very different from those that derive from a capitalist logic as they cannot be monetised. They bridge ethnic and gender differences, taking Indigenous lifeways and knowledges seriously to help re-centre the forest within decisions over land exchanges.

### 5.4. Feeling-knowing-doing resilience

Emotional practices such as keeping silent, suffering and fear as well as solace, are resilience strategies as much as the most visible (legal, patrolling, confrontational) struggles. They do not exist without each other, and one does not prefigure the other; rather, they are the ways through which knowledge of resilience is co-created and contributes to transformation.

Within Indigenous communities themselves, women and men, elders and youth, wrestle with contradictory and ambiguous emotions. Historical suffering and practices that root people in their socionatures inform present-day distrust and dissent. Land invasions, forest destruction, and divergent positions regarding colonisation and extractive practices within and between families shape the silences and solace at the community level. Such collective emotions and relations are not usually perceived as part of resilience practices per se. Yet when examined through their interconnections, they tend to simultaneously move people nearer one another while also creating distance amongst themselves; the experience of being close yet apart (in positions and practice). In this sense, the possibilities within these processes are ambiguous. Here we look at how these play out in specific instances.

The tensions arising when Mayangna communitarians individually enter into agreements with settlers often provoke silence, rather than direct confrontation. When members of an extended family sell or lease community lands, family members often cover it up. If others in the community are aware, they do not challenge it. For them, it is better not to get involved; 'this is not discussed so as not to cause conflicts between families' (Mayangna man, personal communication, 2 June 2021). When asked why elders who have authority cannot stop a nephew, for example, from selling land, the answer is that it 'would deepen family problems'. Instead, the community enters into a pact of silence where tensions may brew or dissipate with time and distance. As another elder commented privately

when they sell, they do it quietly so that no one notices and when they know that someone finds out, they stay away from the community for seasons to avoid complaints, that is why it is difficult to resolve the situation at the moment. (Mayangna man, personal communication, June 2, 2021)

Collective suffering is expressed differently, but here also divisions within the community shape public responses. Indigenous women and men experience socioenvironmental conflict caused by land encroachment differently. Men can use their own bodies to protect their territory, for instance patrolling long-distances, or they handle violent clashes using rudimentary weapons (machetes, wood-stick, stones); women are considered too vulnerable to do so. Additionally, men are being assassinated while women's bodies can be used to cause triple damage by settlers: physical, psychological, and moral for instance, through sexual violation. In both the women's workshop and in individual interviews, fear of being raped by settlers was constant. Consequently, women (sometimes at the request of their spouse) have relinquished their freedom to walk alone to cultivation areas, rivers for fishing, the forest to collect firewood, seeds or plants used for medicinal purposes, or to bring food home. Many women have moved their cultivation areas into new places in the forest where they feel safer. They go to areas with permaculture crops like fruit trees less frequently, and always in groups of relatives, not alone. In other moments of high risk, women usually move to other communities to protect themselves. During more critical moments of conflict, they rely on their faith; gathering together to pray while the men confront the settlers.

While these stories of suffering are clearly disruptive and traumatising for the community, they also show how collective responses to conflict and violence help maintain community ties and livelihood activities within a context that is rapidly changing due to settlement.

## 5.5. Re-signifying uncertainty

As the stories of violence and conflict avoidance imply, resilience processes and transformation also unfold under conditions of uncertainty (Mehta, Adam, and Srivastava 2019). This is especially important in authoritarian contexts in which uncertainties are compounded: resilience is about trying to rework relations rather than reversing them (Ojha et al. 2022). The everyday entwinement of dissent and affective relations between Mayangna peoples and mestizo peasants illustrate how resilience processes emerge in and through socio-environmental conflict, despite lacking foreseeable outcomes.

For example, some forest guardians called into guestion the territorial authorities, and in doing so exposed themselves to critique (both from their communities and the authorities), further complicating their job. Some responded to their limited ability to defend their territories by recognising they needed to do something more organised. For them, this meant (i) documenting and publicly revealing to their communities and to regional and national civil society organisations the ways in which the Indigenous territorial authorities under state influence were allowing settler invasions; and (ii) strengthening their organisation. The fact that they gathered to speak outside of the community attracted distrust and criticism: 'they say that when we come to these workshops it is because we are selling land', 'others say that we are getting into politics ... but the Mayangnas should not interfere with the parties, we are not politicians' (Forest guardian, personal communication 15 May 2021).

Forest guardians, community members and activists uncover violence (internally and externally), and make connections between different types of invasions through these exposure tactics. Their strategy is simple - to ensure that they are not alone in their struggle; they are not denouncing territorial land grabs and settler colonialism outright,



yet neither are they objecting only to the violence. Rather they are attempting to repair the state's relationship with their territory;

If we denounce what is going on in our territory and what the GTI [Indigenous Territorial Government- Gobierno Territorial Indígena is doing, we can call attention to our situation and get solidarity from other groups to create pressure so that national authorities can take responsibility for this situation. (Forest guardian, personal communication, 23 April 2021)

This process is reshaping subjectivities and relationships of struggle even if the outcomes remain uncertain. First, sharing information with the communities after participation in workshops not only helps to defuse distrust, it also subtly communicates that forest quardians actively communicate about their work, in contrast to the secrecy of the territorial authorities. Moreover, it establishes that their work and actions are necessary for addressing the conflict. Second, they are increasingly responsive to the different needs of community members as opposed to feeling accountable to the territorial authorities. They have already committed to producing printed materials in their native language as well as Spanish. Whether or not these efforts to uncover violence will mobilise dissent against territorial authorities and shift support to the forest quardians most active in denouncing the territorial authorities remains to be seen.

Uncertainty also stems from the fact that collaboration born out of conflict on one level does not imply the absence of tension and internal struggle in other spaces. At the territorial level, the process of collaboration to protect the reserve and exercise autonomy can widen fissures and provoke new tensions. Collaboration practices in the face of conflict often open spaces for navigating other expressions of dissent and exclusion, with the possibility of strengthening resilience processes, questioning capitalist relations and even challenging authoritarian politics.

But how this happens and what it means is disputed. In this sense, while sharing the position to halt invasions, these forest quardians question extractive capitalism as a means of legitimising and reinforcing unequal power relations between community members. Collaborative processes take shape through knowledge disputes, agreements and governance practices over how to confront aggressive land use change or deal with other conflicts produced by invasions. Concurrently, as their position solidifies to oppose extractive capitalist invasions, other fissures of dissent appear and/or widen, especially internal dissent along gendered, racialised and generational lines. In this painful and uncertain process lies the seeds of transformation that can erode the entwinement between capitalism, colonialism and climate change.

# 6. Rethinking resilience: conclusions and beyond

Rethinking resilience through the lens of conflict shows the severe limitations of climate change policies intent on promoting stability and conflict resolution. We need to look outside of dominant visions of climate change in order to be able to put forward valid anti-capitalist approaches to climate change (Paprocki 2022). In Nicaragua, like in many parts of the world, current Indigenous territorial conflicts are rooted in histories of colonialism, relations with the state and capital, and practices with more-than-humans. These roots, however, are uneven across intersectional social relations (gender, age, ethnicity) and emerge in sometimes surprising and uncertain ways as Indigenous people seek to

protect their lifeways in the face of agrarian change, climate change interventions and biodiversity protection initiatives. In BOSAWAS, we show how resilience emerges out of the actions of Indigenous forest quardians who challenge not only agrarian and resource frontier settlers, but also Indigenous authorities and local people critical of their efforts to bring into public view violations of both biosphere reserve and local land use regulations. Yet these resistance efforts co-exist with other resilience strategies of silence and acceptance, as when hard pressed young men sell land in order to preserve livelihoods, or people accept mestizo neighbours as trading partners. In these practices, we find strategies to reduce violence and conflict and exert a level of control over a monetised land market largely dictated by outsiders, all of which are ultimately aimed at maintaining community cohesion and Indigenous lifeways. While in some sense these practices bring Indigenous people closer to the dynamics of agrarian change, a narrow class reading of them misses efforts at decolonising biosphere reserve governance regimes, intersectionality, and the affective relations with humans and more-than-humans through which such responses unfold.

When Indigenous authorities illegally sign land titles and concessions in collusion with powerful business and government elites, it shakes community foundations. And yet, resilience emerges from the internal struggles that result and commitments to maintaining the core values of the group. It is unlikely that Indigenous men would have gathered together to form a structured response to land encroachment as they have with the forest guardians if their own leaders had not been co-opted, or if violent clashes in the forest did not have embodied affects for women. Similarly, faced with declining control over land, some Indigenous communities have imposed their own conditions on land access, demanding that mestizo settlers engage in land use consistent with Indigenous sustainability practices and working at a social level to better integrate them into community social life. Each struggle foregrounds a particular focus such as: biodiversity protection, gender and youth justice, or territorial autonomy, but in practice they evidence intertwined concerns. These multiple interconnections, as well as Indigenous peoples' long history of navigating between isolation and deal-making (Casolo 2011) reflect the longue durée of practices of resilience.

Such tactics lay a foundation for 'doing capitalism' differently within Mayangna Indigenous territories. According to Wright (2019), dismantling, escaping, taming and resisting capitalism, when combined strategically can contribute to eroding capitalism from the inside-out. We do not dispute this claim in general, but we recognise that none of these logics sufficiently explain the plurality of ways that Mayangna Indigenous communities wrestle with the class and ethnicity differentiated settlers that lay claim to their territory, the disparate state responses or lack of response, including those labelled as biodiversity conservation or climate change mitigation initiatives, and growing divisions amongst themselves. These are not simple acts of resisting conservation, development, capital accumulation or dispossession. Rather, they are efforts by intersectional and uneven actors to take control and remake the terms under which territorial claims occur. They bring mestizo settlers into different socioenvironmental relations, ones that more closely mirror the historical ontologies and practices of Indigenous Mayangna. They help erode the hegemony of outsiders in (illegal) land sales and offer back a modicum of control to Indigenous peoples. These efforts at asserting territorial autonomy become the best way to challenge destructive designs on nature and local lives where

state sanctioned capital accumulation goes hand in hand with biodiversity conservation and climate change responses.

Our work shows that authoritarian governance challenges resilience not only in its efforts at top-down control, but also in the micropolitics of co-optation and corruption used as mechanisms of capital accumulation. Mayangna practices of re-membering help ensure these efforts at eroding capitalism are rooted in history and embodied experiences of the more-than-human, but also the transformations of current subjectivities and meanings within agrarian economies. Resilience entails not only identifying and strengthening one's own skills, but also analysing the strategies and endgames of the other. They stimulate processes in which capacity strengthening (learning from elders) and new actions (forest guardians working together) are key. The successes of current Mayangna resilience strategies thus lie not in the actions themselves, but rather in a willingness to understand the subjectivities and positionalities that are emerging, and in relation to what visions, frameworks, and dynamics (past and present). Even if decision-makers and practitioners are conceptually prepared to include complexity in social, cultural and political issues when intervening in development processes (Ensor, Forrester, and Matin 2018), how these issues are incorporated in practice is conditioned by the parameters of authoritarian rule, colonial legacies, and extractive capitalism as well as their reverberations in the territories of agrarian change.

The case here thus sheds light on how the dynamics of conflict and collusion shape abilities to respond to climate change throughout Nicaragua and the region more widely. Ultimately, we have shown how resilience and socioenvironmental conflicts work together dialectically and dialogically. Resilience actions support dissent and the building of affective relations. Conflicts innovate, deepen, reshape, revalue historical and situated resilience practices and/or give birth to new ones. For that reason, even when conflicts and resilience processes are not visible, the silences themselves can speak. Looking for resilience in this manner is not to discount how the dynamics of settlement in the biosphere reserve remain tied to processes of agrarian change, modernisation and the historical legacies of colonial practices. Rather, it is to read the everyday practices of contestation and struggle and the building of affective relations as moments wherein resilience can solidify, relations can be re-written, and community lifeways perpetuated. For us, this is what a process oriented conceptualisation of resilience to climate change means.

#### **Disclosure statement**

No potential conflict of interest was reported by the author(s).

# **Funding**

This work was supported by the Swedish Research Council Vetenskapsrådet [Grant Number 2018-05866] and the Swedish Research Council for Sustainable Development Formas [Grant Number 2018-00442]. JC also received support from a Junior Research Grant/The Research Foundation – Flanders (FWO) [Grant Number G0D8620N].

#### **Notes on contributors**

Noémi Gonda is a researcher at the Department of Urban and Rural Development at the Swedish University of Agricultural Sciences. She holds a PhD from Central European University, Budapest,

Hungary (now moved to Vienna, Austria). Her PhD research (2016) was a feminist ethnography focused on the politics of gender and climate change in Nicaragua. Between 2017 and 2020, she was a post-doctoral researcher on social and ecological justice at the Swedish University of Agricultural Sciences under the mentorship of Professor Andrea Nightingale. She is currently doing research on justice and conflict resolution in resource management as well as on the linkages between natural resources management and the development of authoritarian regimes. Her empirical research field sites are in Nicaragua and Hungary. Previously to becoming a researcher, she was a development worker mainly in Central America (Nicaragua, Honduras, and Guatemala) where she has been working between 2002 and 2010 with smallholder farmers, Indigenous groups and international organisations. Noémi is particularly interested in exploring how radical social and environmental transformations towards justice and equity can emerge, and the role of scholar-activists in supporting the emergence of such transformations.

Selmira Flores is researcher, currently the research director at the Research and Development Institute Nitlapan, Central American University Managua, Nicaragua. She has professional experience in NGOs working on credit, training and technical assistance to rural women in the North of Nicaragua. She has been working in development research since 2002 using participatory and qualitative methods to explore the challenges faced by smallholder producers to access agrarian markets, implement value chain analyses mainly in the livestock and dairy sectors, study Indigenous women's participation in forest governance, rural women and youth's land rights, as well as land and socioenvironmental conflicts in Indigenous territories. She has been a member of the Global Council of the International Land Coalition on behalf of the Central American region.

Jennifer J. Casolo (MA, PhD University of California at Berkeley), is an engaged geographer based in the Maya Ch'orti' territory (Guatemala-Honduran borderlands). Working in and/or on Central America since 1985, she is serving presently as interim President of the Ch'orti'- Maya Pluriversity, a post-doctoral researcher with the Institute of Development Policy, University of Antwerp, Belgium, an associate researcher with the Research and Development Institute Nitlapan, Central American University, Managua, Nicaragua. She has published on rural women's land rights, the praxis of Indigenous struggles, the feminization of racialized dispossession, and engaged praxis in resource geography. Her public scholarship has included facilitating anti-colonial gender strategies for the Ch'orti' Maya and strategic litigation briefs for Indigenous peoples in support of Indigenous environmental defenders and territorial claims, and the recovery of Ch'orti' ecological knowledge and climate change. Her research and service are in coordination with rural peasant and Indigenous peoples in Guatemala and Honduras regarding agrarian and Indigenous struggles, neo-extractivism and criminalization, the Right to Food, and the pluralization of ontologies and epistemologies in teaching, research and "development" praxis.

Andrea J. Nightingale is Professor of Human Geography, University of Oslo and Research Fellow, Swedish University of Agricultural Sciences. She has over 25 years of experience leading research projects on environmental governance in multiple parts of the world and doing consultancies in development contexts. Her current research seeks to account for power and politics within dynamic and unpredictable environmental change. She works with critical international development and political economy theories in relation to: climate change adaptation and transformation debates; collective action and state formation; the environment-society nexus; political violence in natural resource governance; and feminist work on emotion and subjectivity in relation to development, transformation, collective action and cooperation. Her research has developed methodologies that integrate different kinds of data across scales to gain a richer picture of socioenvironmental change (using biophysical, remote sensing, qualitative social-political and ethnographic methods). Her work in Nepal has traced the Local Adaptation Plans of Action (LAPA), beginning with global efforts to support National Adaptation Plans of Action (NAPAs), to the national dialogue in Nepal, to the District and grassroots level implementation. She has collaborated closely with development practitioners and colleagues in Nepal, India, Kenya, Nicaragua, Uganda, Scotland, and globally for over two decades. Her career has been research and teaching focused, while remaining deeply connected to the everyday challenges on the ground in low-income countries, including several consultancies with international projects. She has over 50 academic



journal articles, numerous popular science articles and her recent book is Environment and Sustainability in a Globalizing World, Routledge, 2019.

#### **ORCID**

*Noémi Gonda* http://orcid.org/0000-0002-1261-8380

#### References

- 100% Noticias. 2020. "Gobierno territorial Mayagna denuncia atroz asesinato de indígenas [Mayagna territorial government denounces atrocious murder of Indigenous people]. YouTube video." https://www.youtube.com/watch?v=HUIYI4elfBw&feature=share&fbclid=lwAR18VQocIhX 034GRNBKbCZwa\_rHYlmjXqznuYRtjuxjvDaZTQ7l5u-SiYZw.
- Abu-Lughod, Lila. 1990. "The Romance of Resistance: Tracing Transformations of Power Through Bedouin Women." American Ethnologist 17 (1): 41-55. doi:10.1525/ae.1990.17.1.02a00030
- Betteridge, Brittany, and Sophie Webber. 2019. "Everyday Resilience, Reworking, and Resistance in North Jakarta's Kampungs." Environment and Planning E: Nature and Space 2 (4): 944–966. doi:10. 1177/2514848619853985
- Borras, Saturnino M. Jr, Ian Scoones, Amita Baviskar, Marc Edelman, Nancy Lee Peluso, and Wendy Wolford. 2021. "Climate Change and Agrarian Struggles: An Invitation to Contribute to a JPS Forum." The Journal of Peasant Studies 49 (1): 1-28. doi:10.1080/03066150.2021.195647.
- Boyd, Emily, Henny Osbahr, Polly J. Ericksen, Emma L. Tompkins, Maria Carmen Lemos, and Fiona Miller. 2008. "Resilience and 'Climatizing' Development: Examples and Policy Implications." Development 51 (3): 390-396. doi:10.1057/dev.2008.32.
- Butler, Judith. 1997. The Psychic Life of Power: Theories in Subjection. Stanford, CA, USA: Stanford University Press.
- CABEI. 2019. "Bio-CLIMA Nicaragua: Integrated Climate Action for Reduced Deforestation and Strengthened Resilience in the BOSAWÁS and Rio San Juan Biosphere Reserves." Central American Bank for Economic Integration, (Green Climate Fund), March 18. https://www. greenclimate.fund/sites/default/files/document/21710-bio-clima-nicaragua.pdf.
- Camargo, Alejandro. 2022. "Imagined Transitions: Agrarian Capitalism and Climate Change Adaptation in Colombia." The Journal of Peasant Studies 49 (4): 713-733. doi:10.1080/ 03066150.2022.2059350.
- Campos Cubas, Victor M. 2018. "Cuántos años le quedan a la reserva Indio Maíz? El deterioro de la reserva entre incendios y deforestación." Confidencial, 2018. Accessed 30 May 2022. https://www. confidencial.com.ni/confidencialtv/cuantos-anos-le-quedan-a-indio-maiz-el-deterioro-de-lareserva-entre-incendios-y-deforestacion/.
- Carr, Edward R. 2019. "Properties and Projects: Reconciling Resilience and Transformation for Adaptation and Development." World Development 122: 70-84. doi:10.1016/j.worlddev.2019.05.
- Casolo, Jennifer J. 2011. "Unthinkable Rebellion and the Praxis of the Possible: Ch'orti'Campesin@ Struggles in Guatemala's Eastern Highlands." UC Berkeley.
- Casolo, Jennifer J., Selmira Flores Cruz, Noémi Gonda, and Andrea J. Nightingale. 2022. "Choosing to "Stay with the Trouble": A Gesture Towards Decolonial Research Praxis." Undisciplined Environments. 8 March 2022. https://undisciplinedenvironments.org/2022/03/08/choosing-tostay-with-the-trouble-a-gesture-towards-decolonial-research-praxis/.
- Correia, Joel E. 2019. "Unsettling Territory: Indigenous Mobilizations, the Territorial Turn, and the Limits of Land Rights in the Paraguay-Brazil Borderlands." Journal of Latin American Geography 18 (1): 11-37. doi:10.1353/lag.2019.0001
- Cote, Muriel, and Andrea J. Nightingale. 2012. "Resilience Thinking Meets Social Theory: Situating Social Change in Socio-Ecological Systems (SES) Research." Progress in Human Geography 36 (4): 475–489. doi:10.1177/0309132511425708



- Coulthard, Glen Sean. 2014. Red Skin, White Masks: Rejecting the Colonial Politics of Recognition. Minneapolis. Minnesota: University of Minnesota Press.
- Cumes, Aura Estela. 2012. "Mujeres indígenas patriarcado y colonialismo: un desafío a la segregación comprensiva de las formas de dominio." Anuario de Hojas de WARMI 17: 1-16.
- Devine, Jennifer A. 2018. "Community Forest Concessionaires: Resisting Green Grabs and Producing Political Subjects in Guatemala." The Journal of Peasant Studies 45 (3): 565-584. doi:10.1080/ 03066150.2016.1215305
- Douwe van der Ploeg, Jan. 2010. "The Peasantries of the Twenty-First Century: The Commoditisation Debate Revisited." The Journal of Peasant Studies 37 (1): 1-30. doi:10.1080/03066150903498721.
- Ensor, Jonathan, John Forrester, and Nilufar Matin. 2018. "Bringing Rights Into Resilience: Revealing Complexities of Climate Risks and Social Conflict." Disasters 42: S287–S305. https://onlinelibrary. wiley.com/doi/abs/10.1111disa.12304. doi:10.1111/disa.12304
- Eriksen, Siri H., Andrea J. Nightingale, and Hallie Eakin. 2015. "Reframing Adaptation: The Political Nature of Climate Change Adaptation." Global Environmental Change 35: 523-533. doi:10.1016/ j.gloenvcha.2015.09.014.
- Fash, Benjamin C. 2022. "Redefining Extractivism from Honduras." Geoforum; Journal of Physical, Human, and Regional Geosciences 135: 37–48. doi:10.1016/j.geoforum.2022.07.010.
- Figueroa Romero, Dolores, and Miguel González Pérez. 2021. "Violencia política en los márgenes del Estado: Autonomía comunitaria afro-indígena en la Costa Atlántica de Nicaragua." Canadian Journal of Latin American and Caribbean Studies/Revue Canadienne des études Latino-Américaines et Caraïbes 46 (3): 449-469. doi:10.1080/08263663.2021.1970410
- Flores, Selmira, and Sylvia Torres. 2012. "Ganaderas en la producción de leche: una realidad oculta por el imaginario social en dos zonas de Nicaragua." Encuentro: Revista Académica de la Universidad Centroamericana 44 (92): 7–28. doi:10.5377/encuentro.v0i92.790.
- Folke, Carl, Reinette Biggs, Albert V Norström, Belinda Reyers, and Johan Rockström. 2016. "Socialecological resilience and biosphere-based sustainability science." Ecology and Society 21: 3. doi:10.5751/ES-08748-210341.
- Forsyth, Tim. 2018. "Is Resilience to Climate Change Socially Inclusive? Investigating Theories of Change Processes in Myanmar." World Development 111: 13-26. doi:10.1016/j.worlddev.2018.06.023.
- Gahman, Levi. 2020. "Contra Plantation, Prison, and Capitalist Annihilation: Collective Struggle, Social Reproduction, and the co-Creation of Lifegiving Worlds." The Journal of Peasant Studies 47 (3): 503-524. doi:10.1080/03066150.2019.1572606.
- Garcia, Alicea, Noémi Gonda, Ed Atkins, Godden Naomi Joy, Paiva Henrique Karen, Meg Parsons, Petra Tschakert, and Gina Ziervogel. 2022. "Power in Resilience and Resilience's Power in Climate Change Scholarship." Wiley Interdisciplinary Reviews: Climate Change e762: 1–21. doi:10.1002/wcc.762.
- Giraldo, Omar Felipe, and Peter M Rosset. 2018. "Agroecology as a Territory in Dispute: Between Institutionality and Social Movements." The Journal of Peasant Studies 45 (3): 545-564. doi:10. 1080/03066150.2017.1353496
- Gómez Isa, Felipe. 2017. "The Decision by the Inter-American Court of Human Rights on the Awas Tingni vs. Nicaragua Case (2001): The Implementation Gap." The Age of Human Rights Journal 8: 67-91. doi:10.17561/tahrj.n8.4.
- GoN. 2001. Ley 407 que Declara y Define la Reserva de BOSAWAS, edited by Nicaraguan Government. Managua, Nicaragua: La Gaceta.
- GoN. 2003. Ley No. 445. Ley del Regimen de Propiedad Comunal de los Pueblos Indigenas y Comunidades Etnicas de las Regiones Autonomas de la Costa Atlantica de Nicaraqua y de los Rios Bocay, Coco, Indio y Maiz, edited by Nicaraguan Government. Managua, Nicaragua: Gaceta
- Gonda, Noémi. 2019. "Re-politicizing the Gender and Climate Change Debate: The Potential of Feminist Political Ecology to Engage with Power in Action in Adaptation Policies and Projects in Nicaragua." Geoforum 106: 87–96. doi:10.1016/j.geoforum.2019.07.020.
- Gonda, Noémi. 2021. "Re-Negotiating Rural Masculinities as Vulnerability: Cattle Ranchers in Climate Change Affected Rural Nicaragua." In Men, Masculinities, and Earth, edited by Paul Pulé, and Martin Hultman, 289-307. Cham: Palgrave Macmillan.



- Gonda, Noémi, Stephanie Leder, Marien González-Hidalgo, Linley Chiwona-Karltun, Arvid Stiernström, Flora Haidu, Ildikó Asztalos Morell, Klara Fischer, Alin Kadfak, and Anna Arvidsson. 2021. "Critical Reflexivity in Political Ecology Research: How Can the Coronavirus Pandemic Transform Us Into Better Researchers?" Frontiers in Human Dynamics 3: 41. doi:10.3389/fhumd. 2021.652968.
- Gonda, Noémi, José Pablo Prado Córdova, Frédéric Huybrechs, and Gert T. Van Hecken. 2022. "Exploring the Love Triangle of Authoritarianism, Populism, and COVID-19 Through Political Ecology: Time for a Break-Up?" Frontiers in Human Dynamics 4. doi:10.3389/fhumd.2022.653990.
- González-Hidalgo, Marien, and Christos Zografos. 2019. "Emotions, Power, and Environmental Conflict: Expanding the 'Emotional Turn' in Political Ecology." Progress in Human Geography 44 (2): 235-255. doi:10.1177/03091325188246...
- Gram-Hanssen, Irmelin, Nicole Schafenacker, and Julia Bentz. 2022. "Decolonizing Transformations through 'Right Relations'." Sustainability Science 17 (2): 673-685. doi:10.1007/s11625-021-00960-9.
- Grove, Kevin, Savannah Cox, and Allain Barnett. 2020. "Racializing Resilience: Assemblage, Critique, and Contested Futures in Greater Miami Resilience Planning." Annals of the American Association of Geographers 110 (5): 1613-1630. doi:10.1080/24694452.2020.1715778
- Guevara Flores, Ramón. 2017. "Estado de la deforestación y estadísticas socioeconómicas y ambientales recientes en las zonas ocupadas por colonos del el territorio indígena Mayangna Sauni As en BOSAWAS." Wani 72: 9-34. doi:10.5377/wani.v0i72.7436.
- Haider, L Jamila, Maja Schlüter, Carl Folke, and Belinda Reyers. 2021. "Rethinking Resilience and Development: A Coevolutionary Perspective." Ambio 50 (7): 1304-1312. doi:10.1007/s13280-020-01485-8
- Harris, Leila M., Eric K. Chu, and Gina Ziervogel. 2018. "Negotiated Resilience." Resilience 6 (3): 196-214. doi:10.1080/21693293.2017.1353196.
- Inter-American Court on Human Rights. 2001. Case of the Mayagna (Sumo) Awas tingni community vs. Nicaragua. Judgment of August 31, 2001, edited by Inter-American Court on Human Rights.
- IPCC. 2007. Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK; New York, USA: Cambridge University Press.
- IWGIA. 2020. Attack on Alal Goes Unpunished. Accessed 22 October 2022. https://iwgia.org/en/ nicaragua/4237-iw-2021-nicaragua.html#\_ftn26.
- Kaika, Maria. 2017. "'Don't Call me Resilient Again!': The New Urban Agenda as Immunology ... or ... What Happens When Communities Refuse to be Vaccinated with 'Smart Cities' and Indicators." Environment and Urbanization 29 (1): 89–102. doi:10.1177/0956247816684763
- Kaimowitz, David, Angelica Faune, and Rene Mendoza. 2003. "Your Biosphere is my Backyard: The Story of Bosawas in Nicaragua." Vol. 25: Center for International Forestry Research.
- Kautsky, Karl. 1988. The Agrarian Question. London: Zwan Publications.
- Koshy, Susan, Lisa Marie Cacho, Jodi A Byrd, and Brian Jordan Jefferson. 2022. Colonial Racial Capitalism. Durham: Duke University Press.
- Kröger, Markus, and Anja Nygren. 2020. "Shifting Frontier Dynamics in Latin America." Journal of Agrarian Change 20 (3): 364–386. doi:10.1111/joac.12354.
- Larson, Anne M. 2010. "The "Demonization" of Rainforest Migrants, or: What Conservation Means to Poor Colonist Farmers." In Beyond the Biophysical: Knowledge, Culture, and Politics in Agriculture and Natural Resource Management, edited by Laura A. German, Joshua J. Ramisch, and Ritu Verma, 49-71. Dordrecht: Springer Netherlands.
- Li, Tania Murray. 2014. Land's End. Durham: Duke University Press.
- Maldidier, Christophe. 2004. "Agricultural Pioneer Fronts, the Crest of a Far-reaching Wave. The Social and Spatial Dimension of Lowland Colonization in Nicaragua." In Beyond Tropical Deforestation. From Tropical Deforestation to Forest Cover Dynamics and Forest Development, edited by Didier Babin. Montpellier: Unesco-Cirad.
- Martí i Puig, Salvador, and Macià Serra. 2020. "Nicaragua: De-Democratization and Regime Crisis." Latin American Politics and Society 62 (2): 117-136. doi:10.1017/lap.2019.64
- Matamoros-Chávez, Edwin. 2014. "Micropolíticas de campesinos colonos en territorios indígenas de Nicaragua." PhD, Latin American Studies, The University of Texas at Austin. http://hdl.handle.net/ 2152/28420.



- Mehta, Lyla, Hans Nicolai Adam, and Shilpi Srivastava. 2019. "Unpacking Uncertainty and Climate Change from 'Above' and 'Below'." *Regional Environmental Change* 19 (6): 1529–1532. doi:10. 1007/s10113-019-01539-y.
- Mehta, Lyla, and Wendy Harcourt. 2021. "Beyond Limits and Scarcity: Feminist and Decolonial Contributions to Degrowth." *Political Geography* 89: 102411. doi:10.1016/j.polgeo.2021.102411.
- Mills-Novoa, Megan, Rutgerd Boelens, Jaime Hoogesteger, and Jeroen Vos. 2022. "Resisting, Rejecting, and Reworking Climate Change Adaptation Projects in Ecuador." *Journal of Peasant Studies* 1–29. doi:10.1080/03066150.2022.2144252.
- Moore, Donald S. 2005. Suffering for Territory. Durham: Duke University Press.
- Nicaraguan Ministry of Finance and Public Credit. 2019. "Bio-CLIMA Nicaragua: Integrated climate action for reduced deforestation and strengthened resilience in the BOSAWÁS and Rio San Juan Biosphere Reserves." (Managua, Nicaragua). https://www.greenclimate.fund/sites/default/files/document/21710-bio-clima-nicaragua.pdf.
- Nightingale, Andrea J. 2011. "Bounding Difference: Intersectionality and the Material Production of Gender, Caste, Class and Environment in Nepal." *Geoforum; Journal of Physical, Human, and Regional Geosciences* 42 (2): 153–162. doi:10.1016/j.geoforum.2010.03.004.
- Nightingale, Andrea J. 2017. "Power and Politics in Climate Change Adaptation Efforts: Struggles Over Authority and Recognition in the Context of Political Instability." *Geoforum; Journal of Physical, Human, and Regional Geosciences* 84: 11–20. doi:10.1016/j.geoforum.2017.05.011.
- Nightingale, Andrea J. 2018. "The Socioenvironmental State: Political Authority, Subjects, and Transformative Socionatural Change in an Uncertain World." *Environment and Planning E: Nature and Space* 1 (4): 688–711. doi:10.1177/2514848618816467.
- Nightingale, Andrea J., Noémi Gonda, and Siri H. Eriksen. 2022. "Affective Adaptation = Effective Transformation? Shifting the Politics of Climate Change Adaptation and Transformation from the Status quo." WIRES Climate Change 13 (1): e740. doi:10.1002/wcc.740.
- Nuijten, Monique. 2004. "Peasant 'Participation', Rural Property and the State in Western Mexico." The Journal of Peasant Studies 31 (2): 181–209. doi:10.1080/0306615042000224276.
- Nygren, Anja. 2004. "Contested Lands and Incompatible Images: The Political Ecology of Struggles Over Resources in Nicaragua's Indio-Maíz Reserve." Society and Natural Resources 17 (3): 189–205. doi:10.1080/08941920490270221
- Oakland Institute. 2020. "Nicaraguás Failed Revolution; The Indigenous Struggle for Saneamiento." Oakland, CA, USA: Oakland Institute. https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/nicaraguas-failed-revolution.pdf.
- Ojha, Hemant, Andrea J. Nightingale, Noémi Gonda, Benard Oula Muok, Siri Eriksen, Dil Khatri, and Dinesh Paudel. 2022. "Transforming Environmental Governance: Critical Action Intellectuals and Their Praxis in the Field." *Sustainability Science* 17: 621–635. doi:10.1007/s11625-022-01108-z.
- Olsen, BjØrnar. 2003. "Material Culture After Text: Re-Membering Things." *Norwegian Archaeological Review* 36 (2): 87–104. doi:10.1080/00293650310000650.
- Olsson, Per, Folke Carl, and Moore Michele-Lee. 2022. "Capacities for Navigating Large-Scale Sustainability Transformations: Exploring the Revolt and Remembrance Mechanisms for Shaping Collapse and Renewal in Social-Ecological Systems." In *Applied Panarchy: Applications and Diffusion Across Disciplines*, edited by Lance H. Gunderson, Craig R. Allen, and Ahjond Garmestani. Washington, DC: Island Press.
- Paprocki, Kasia. 2022. "Anticipatory Ruination." *The Journal of Peasant Studies* 49 (7): 1399–1408. doi:10.1080/03066150.2022.2113068.
- Peet, Richard, and Michael Watts. 2004. Liberation Ecologies: Environment, Development and Social Movements (2nd Edition). Edited by Richard Peet and Michael Watts. London and New York: Routledge.
- Reyers, Belinda, Michele-Lee Moore, L. Jamila Haider, and Maja Schlüter. 2022. "The Contributions of Resilience to Reshaping Sustainable Development." *Nature Sustainability* 5 (2022): 657–664. doi:10.1038/s41893-022-00889-6.
- Rivera Cusicanqui, Silvia. 2010. "Ch'ixinakax utxiwa. Una reflexión sobre prácticas y discursos descolonizadores." Tinta limon.
- Rockström, Johan, Will Steffen, Kevin Noone, Åsa Persson, F. Stuart Chapin, Eric F. Lambin, Timothy M. Lenton, et al. 2009. "A Safe Operating Space for Humanity." *Nature* 461 (7263): 472–475. doi:10. 1038/461472a.



- Santiago Vera, Teresita, Peter Michael Rosset, Antonio Saldívar Moreno, and Victor Ernesto Méndez. 2022. "Peasant Resilience: Decolonization and Re-Conceptualization." Environmental Justice 15 (3): 179-184. doi:10.1089/env.2020.0070
- Sawyer, Suzanna. 2004. Crude Chronicles: Indigenous Politics, Multinational Oil, and Neoliberalism in Ecuador. Durham, NC: Duke University Press.
- Sekine, Yukari. 2021. "Emerging 'Agrarian Climate Justice' Struggles in Myanmar." The Journal of Peasant Studies 48 (3): 517-540. doi:10.1080/03066150.2020.1839054.
- Simpson, Audra. 2007. "On Ethnographic Refusal: Indigeneity, Voice'and Colonial Citizenship." Junctures: The Journal for Thematic Dialogue, 9 December 2007. https://junctures.org/junctures/index.php/junctures/article/view/66/60.
- Simpson, Leanne Betasamosake. 2017. As We have always Done: Indiaenous Freedom through Radical Resistance. Minneapolis: University of Minnesota Press.
- Stoler, Ann Laura (ed.). 2013. Imperial Debris: On Ruins and Ruination. Durham: Duke University Press. Stone-Jovicich, Samantha, Bruce E. Goldstein, Katrina Brown, Ryan Plummer, and Per Olsson. 2018. "Expanding the Contribution of the Social Sciences to Social-Ecological Resilience Research." Ecology and Society 23: 1. doi:10.5751/ES-10008-230141.
- Sultana, Farhana. 2022. "The Unbearable Heaviness of Climate Coloniality." Political Geography 102638. doi:10.1016/i.polgeo.2022.102638.
- Sultana, Parvin, Paul Michael Thompson, Naya Sharma Paudel, Madan Pariyar, and Mujibur Rahman. 2019. "Transforming Local Natural Resource Conflicts to Cooperation in a Changing Climate: Bangladesh and Nepal Lessons." Climate Policy 19 (sup1): S94-S106. doi:10.1080/14693062. 2018.1527678
- Sylvander, Nora. 2021. "Territorial Cleansing'for Whom? Indigenous Rights, Conservation, and State Territorialization in the Bosawas Biosphere Reserve, Nicaragua." Geoforum; Journal of Physical, Human, and Regional Geosciences 121: 23–32. doi:10.1016/j.geoforum.2021.02.013
- Taylor, Lucy, and Geraldine Lublin. 2021. "Settler Colonial Studies and Latin America." Settler Colonial Studies 11 (3): 259-270. doi:10.1080/2201473X.2021.1999155.
- Thompson, Kim-Ly, and Natalie C. Ban. 2021. ""Turning to the Territory": A Gitga'at Nation Case Study of Indigenous Climate Imaginaries and Actions." Geoforum; Journal of Physical, Human, and Regional Geosciences 137: 230-236. https://doi.org/10.1016/j.geoforum.2021.11.006.
- Tuana, Nancy. 2013. "Gendering Climate Knowledge for Justice: Catalyzing a New Research Agenda." In Research, Action and Policy: Addressing the Gendered Impacts of Climate Change, edited by Margaret Alston, and Kerri Whittenbury, 17–31. Dordrecht: Springer Netherlands.
- Tuhiwai Smith, Linda. 2013. Decolonizing Methodologies: Research and Indigenous Peoples. London: Zed Books.
- Tynan, Lauren. 2021. "What is Relationality? Indigenous Knowledges, Practices and Responsibilities with kin." Cultural Geographies 28 (4): 597-610. doi:10.1177/14744740211029287.
- Tzul Tzul, Gladys. 2018. Gobierno comunal indígena y estado quatemalteco. Guatemala: Instituto Amag': edicionesbizarras.
- Van Hecken, Gert, Vijay Kolinjivadi, Frédéric Huybrechs, Johan Bastiaensen, and Pierre Merlet. 2021. "Playing Into the Hands of the Powerful: Extracting "Success" by Mining for Evidence in a Payments for Environmental Services Project in Matiguás-Río Blanco, Nicaragua." Tropical Conservation Science 14: 19400829211020191. doi:10.1177/19400829211020191.
- Wainwright, Joel, and Joe Bryan. 2009. "Cartography, Territory, Property: Postcolonial Reflections on Indigenous Counter-Mapping in Nicaragua and Belize." Cultural Geographies 16 (2): 153-178. doi:10.1177/1474474008101515
- Watts, Michael. 2003. "Development and Governmentality." Singapore Journal of Tropical Geography 24 (1): 6-34. doi:10.1111/1467-9493.00140
- Watts, Michael. 2021. "The Agrarian Question." In Handbook of Critical Agrarian Studies, edited by A. Haroon Akram-Lohdi, Kristina Dietz, Bettina Engels, and Ben M. McKay, 53-66. Cheltenham: Edward Elgar Publishing.
- Whyte, Kyle. 2017. "Indigenous Climate Change Studies: Indigenizing Futures, Decolonizing the Anthropocene." English Language Notes 55 (1): 153–162. doi:10.1215/00138282-55.1-2.153



Whyte, Kyle. 2018. "Settler Colonialism, Ecology, and Environmental Injustice." Environment and Society 9 (1): 125-144. doi:10.3167/ares.2018.090109

Whyte, Kyle, Chris J Cuomo, S. M. Gardiner, and A. Thompson. 2016. "Ethics of Caring in Environmental Ethics." In The Oxford Handbook of Environmental Ethics, edited by Stephen M Gardiner, and Allen Thompson, 234. Oxford: Oxford University Press.

Wright, Erik Olin. 2019. How to be an Anticapitalist in the Twenty-First Century. London: Verso Books. Ybarra, Megan. 2018. Green Wars: Conservation and Decolonization in the Maya Forest. Oakland: Univ of California Press.