1. Political ecology: handbook topics and themes

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5 thus explore selected themes, people and institutional dynamics across Anglo-American, Latin American and French contributions to political ecology. In Chapter 3, Simon Batterbury provides an international survey of political ecology, with special attention to the Anglo-American contribution, in relation to scholarship, teaching and wider engagement. He explores how a radical and critical field such as political ecology continues to thrive despite the deepening neoliberal context in which it operates – a process that occurs because of student demand for a bracing critique of the social and ecological status quo, as well as scholarly engagement with assorted state and non-state actors beyond academia. In contrast, Enrique Leff argues in Chapter 4 that Latin American writing has played a particularly central role in the international formulation of political ecology, singling out the region’s contributions regarding epistemology and emancipation. This pivotal role encompasses everything from dependency theory to decolonial and environmental rationality writing, and from ontology of diversity through the politics of difference to culturally and territorially based resistance. Denis Gautier and Baptiste Hautdidier in Chapter 5 then examine the French contribution to political ecology, suggesting that French geography in particular has produced internationally significant, if often overlooked, scholarship. Traced back to the early twentieth century, that scholarship is fragmented and even contradictory but contains a wealth of insight about tropicality, fieldwork and radical politics that has affinities with some work in Anglo-American political ecology. While covering different academic cultures, these three chapters simultaneously point to the accelerating integration of research concerns and interests, as often hitherto disparate agendas become more connected today.

In Chapter 6, Dianne Rocheleau focuses precisely on such integration when she explores the transnational and transcultural school of thought that frames political ecology in terms of the analysis of roots, rhizomes, networks and territories, notably with regard to social movements and allied actors fighting for social and ecological justice. Drawing on extensive fieldwork experience in the Dominican Republic, Kenya and Mexico, she demonstrates how such thinking informs understanding of place-based struggles generating new ways of seeing and being.

Chapters 7 to 10 thereafter shift attention to specific issues that unite and divide political ecologists, and that, in their own ways, also frame how scholars approach the research endeavour. Alex Loftus in Chapter 7 thus calls for a return to class analysis, albeit one framed within a philosophy of praxis based on the work of Italian theorist Antonio Gramsci. This Gramscian approach is gaining favour in political ecology, he argues, precisely because it grounds the study of politicized environments to a non-reductionist historical materialism that is keenly needed at the current juncture. In contrast, Tim Forsyth argues in Chapter 8 that political ecology needs to understand how politics and ecological science co-evolve, thereby invoking a longstanding debate in the field. The point is not to deny either the explanatory power of science or the urgent need for political action, but rather to show how environmental policy is more effective when connections between science and politics are acknowledged. For Shangrila Joshi in Chapter 9, what is at stake is the promotion of more complex post-colonial understandings of North–South difference, including how actors in the South may use to their own advantage Northern essentialism about the South. Examining India’s participation in global climate negotiations, she argues that political
ecology must accommodate an appreciation of such participation, even as Northern political ecologists need to reflect on their own positionality and power in rejecting binary thinking. Rounding out Part II, Erik Swyngedouw in Chapter 10 asserts that greater attention is needed to what constitutes the ‘political’ in political ecology today. This call reflects both widespread depoliticization of environmental matters and deeper understanding of the co-shaping of socio-political and ecological-geological processes, and requires serious engagement by political ecologists with new theoretical tools and philosophical debates to aid in grasping these epoch-making changes in the Anthropocene.

Part III focuses on how governance and power inform political ecology dynamics. That focus has been a key thematic referent over the years as different generations of scholars, hailing from different disciplines and often academic cultures, with different geographical and topical foci, as well as different theoretical influences and concerns, have nonetheless shared an abiding interest in how human–environmental relations are governed and how often quite unequal power relations affect those relations. The present section of the handbook amply demonstrates this situation, as an array of ‘traditional’ and new topics is informed by that interest.

Chapters 11 to 14 examine a more traditional set of natural-resource-related concerns that have long been a central preoccupation for many political ecologists. Here, governance and power are bound up in the ‘discovery’, appropriation and movement of commercially prized matter – a centuries-long dynamic that prompted a radically new politics (colonialism, and then neo-colonialism under a globally elaborated nation-state system centred on the functionally defined state) as well as enabling a radically new economics (from mercantilism to a worldwide elaboration of industrial capitalist relations). In Chapter 11, Héctor Alimonda argues that we need to understand this vast transformation as a project of coloniality, that is, a complex set of deeply historical processes encompassing politics, economics, culture and ecology that profoundly shaped both the colonized and colonizer’s worlds. The focus is on Latin America, where he argues that the activity of mining is at the heart of that region’s coloniality, and hence key to appreciating shifts in how society and nature are governed there (even as it helped to define processes of ‘modernity’ around the world). Peter Vandergeest and Nancy Lee Peluso turn their gaze in Chapter 12 to the practice of forestry, exploring how the quest for prized timber in Southeast Asia led to the articulation of a modern and ‘scientific’ forestry that found territorial expression in what they call ‘political forests’. Their chapter examines how the creation of such forests as a governance vehicle spans colonial and post-colonial times while encompassing a widening array of local and non-local actors, as well as cementing highly unequal power relations, evinced notably by diverse forms of coercion and violence. Philippe Le Billon in Chapter 13 complements these region-specific analyses with a wide-ranging critical reflection on how ‘resource wars’ have been understood in relation to centuries of human–environmental interaction, finding modern expression in ‘securitization’ debates, even as such understanding must be rejected in favour of the kinds of site-specific, historically contingent and culturally nuanced accounts of power relations and struggle that are standard in political ecology. He argues that the latter affords more reflexive and holistic perspectives that not only deepen our appreciation of the many forms of violence occurring in relation to resources, but also opens the way for new
understandings, ontologies and solidarities to come to the fore through ‘worldization’. For Seungho Lee, writing in Chapter 14, the harnessing of natural resources to development is not necessarily all bad inasmuch as benefits may circulate more widely than some political ecologists believe, even as this distribution process is mediated by unequal power relations. Deploying a benefit-sharing analytical framework, he offers us a regional political ecology study focused on inter-state relations over hydropower development in the Mekong River Basin, and suggests that, however unequally, some benefits accrue to all riparian states as well as to their populations.

As these chapters also demonstrate, exploiting natural resources is inevitably a matter of governing people as well as the ‘right disposition’ of prized biophysical matter. These can be quite violent environments, yet, as political ecologists also highlight, much effort is devoted by state and non-state elites to promoting the ‘peaceful’ regulation of human behaviour in natural-resource-rich areas. This process of disciplining in turn must grapple with wider power dynamics and governance issues shaping life in local ‘communities’. In Chapter 15, Bina Agarwal explores some of these complexities by considering how unequal gendered relations inform group behaviour and community forestry in South Asia. She explores how such relations serve to restrict women’s effective participation in these schemes, with what implications in terms of equity of outcomes and institutional efficiency, as well as how such constraints might be overcome and outcomes improved.

Beyond the question of natural resources, political ecologists probe more generally how governance and power relate to the movement of people, to their presence or absence, and with what political, economic, cultural and ecological effects. In quite different ways, Chapters 16 to 18 illuminate some of the complex dynamics at stake here. Shanti Nair in Chapter 16 explores political ecologies of religious pilgrimage, gauging how the temporary migration of people reflects, reinforces and sometimes challenges unequal power relations. While political ecologists write about indigenous peoples’ ‘cosmovisions’, they scarcely address the role and impact of world religions, but the latter are significant as a case study of the hajj (performed by millions of Muslims annually and notably centred on Saudi Arabia) demonstrates with politically charged and ecologically resonant governance embracing colonial and post-colonial state action, wealth and consumption-linked practices, health concerns and the rise of civil society activism. In Chapter 17, Raymond L. Bryant, Ángel Paniagua and Thanasis Kizos focus instead on out-migration as attention shifts to relatively depopulated areas with reference to southern Europe. Perhaps because political ecology in Anglo-America developed partly as a critique of neo-Malthusian thinking, scholars have not addressed human population dynamics sufficiently, yet exploration of how ‘shadow landscapes’ in such areas are governed underlines how power relations are reflected too in situations marked by the relative absence of population. In contrast, Lei Xie explores in Chapter 18 some of the political ecological implications of one of the most densely populated places on the planet, and one deeply marked by the largest mass movement of people in human history: China. Her main concern is to assess how intensifying environmental degradation, carefully regulated political participation and the spread of environmental movements in civil society complicate contemporary
environmental governance in China, finding that multiple scenarios of political participation point to greater behavioural complexity than is often credited in Western accounts.

The final two chapters in Part III assess how far environmental governance and power relations are transformed by new dynamics in global development. Aya H. Kimura examines civil nuclear power in Chapter 19, utilizing a feminist political ecology perspective to explore the ways in which nuclear impacts, risk perceptions and organic farming combined in the context of Japan’s Fukushima disaster. She finds that governance reflected complicated gender dynamics, with a hegemonic masculinity reflected nationally in a downplaying of food safety risks (with fears dismissed as ‘irrational’ and ‘feminine’), whereas organic farmers’ responses often reflected gender-based intra-family tensions as to whether to stay or leave the farms. In Chapter 20, Adeniyi Asiyani explores the marketization of green initiatives to promote environmental governance in globally significant conservation areas through a study of a Nigerian carbon scheme. Infusing the terrain of political ecology with insights from policy implementation studies, he finds messy local realities as multi-actor governance as well as unequal power relations between and among state and non-state actors divert and subvert globally articulated projects.

Part IV examines the role of knowledge and discourse in the articulation of political ecology relations. Often associated with the post-structural turn in the research field, notably since the 1990s, attention to the world of ideas, narratives, stories and discourses opened up a new thematic array of topics, attracting in turn a fresh wave of adherents. Theoretically linked insights followed as scholars found new ways in which to critically understand trends and battles in environment and development around the world.

Chapters 21 to 23 engage with core concerns in political ecology, shedding new light on them by framing them through specific knowledge claims and discourses. Thus C. Anne Claus, Sarah Osterhoudt, Lauren Baker, Luisa Cortesi, Chris Hebdon, Amy Zhang and Michael R. Dove consider in Chapter 21 the issue of disasters using ethnographic examples (drawn from India, Peru, Japan and China) to situate epistemologies of disasters within broader analyses that notably encompass social and political constructions of nature–culture, disaster classification, social identity formation and constructions of the self. At the interface of political ecology and disaster studies, these authors argue for culturally based and nuanced appreciations of disaster that reject simplistic ‘objective’ analyses of a complex phenomenon. In Chapter 22, Lucy Jarosz explores the hunger discourses that circulate in national and international policy circles, showing how the research field critiques them. This occurs through a challenge to mainstream knowledge claims about ‘world hunger’, a profile of how global food systems increase poverty and degradation, an assessment of social inequality and racism in urban food dynamics, and the discursive interrelationship of food, hunger, consumption and embodiment, even as political ecology simultaneously promotes counter-narratives of food sovereignty and justice. Meanwhile, in Chapter 23 Ting-jieh Wang discusses the contribution of French theorist Michel Foucault to critical work on the construction of knowledge and practice surrounding environment and development, especially his notion of governmentality. That contribution is then related to the question of indigeneity in nature conservation (a recurrent empirical focus in the
field) via a Taiwanese case study in order to demonstrate the utility of and need for
closer engagement between political ecology and Foucauldian studies, while shedding
new light on a relatively less studied East Asian context.

By paying close attention to elite knowledge claims and discourses, political
ecologists have armed themselves with a powerful new ‘hatchet’ (as Paul Robbins
would put it) to attack the arguments and promoters of social and ecological injustice.
A notable target is the discourses and associated practices of the ‘green’ state much
debated in the literature. Chapters 24 and 25 provide complementary critical analyses
in this regard. Elizabeth Bravo and Melissa Moreano in Chapter 24 challenge the
widespread view of Ecuador as being run by a green state supportive of alternative
development. Instead, they draw on examples of state practice relating to protected
areas and forest management to show how a green international image goes hand-in-
hand with expanded natural resource extraction conducted in cahoots with transnational
capital. In contrast, Sanghun Lee examines the ‘Green Growth Strategy’ of the South
Korean state in Chapter 25 – a country of rapidly growing international importance that
has formally embraced ecological modernization thinking yet which is rarely consid-
ered in English-language political ecology. Drawing theoretical insight from work on
environmental fixes, decoupling growth and neo-developmentalism, he argues that the
South Korean strategy reflects at best very shallow greening and at worst business-as-
usual in a construction-oriented state. While both of these chapters make for gloomy
reading, they nonetheless serve an important function in political ecology in that they
resist official efforts by both developing and developed states to discursively colonize
and thereby subvert the terrain of green thought.

Chapters 26 to 29 meanwhile explore other areas in which knowledge claims and
discourse articulation are seen to profoundly shape how elemental aspects of human–
environment interaction are understood, including water, labour, the city and ‘nature’.
In Chapter 26, Robert Fletcher, Wolfram Dressler and Bram Büscher examine how
environmental conservation has become increasingly conjoined with capitalism through
a powerful neoliberal imaginary that they label ‘Nature™ Inc.’. Drawing on an
expanding political ecology literature, they argue that this dynamic prompts the need to
develop critical analyses on the articulation of neoliberal principles with pre-existing
conservation strategies, the abstraction and circulation of ‘natural capital’ in the global
economy, and the effects of these trends on social perceptions and representations of
human–nonhuman relations, while promoting new thinking and practice centred on
post-capitalist alternatives. The question of the cultural politics of ‘waterscapes’ is then
considered in Chapter 27 by Amitangshu Acharya, who uses Indian examples to extend
and deepen our understanding of the political ecology of water. He asserts that attention
to such culturally based and mediated factors as symbolism, consumption, belonging
and landscape helps to clarify how water and its use are framed as an issue, and with
what effects. In Chapter 28, Stefania Barca turns attention to current discussions of the
green economy, focusing on the little-studied role of organized labour therein.
Referring to internationally circulating discourses on ‘climate jobs’ and ‘just transition’
with reference to UK and South African campaigns, she critically assesses these
mainstream views and argues that there is notably need for greater input from an
eco/feminist economics perspective to ensure a more socially and ecologically just
approach. The final chapter of Part IV is by Harvey Neo and C.P. Pow, who address the
discursive and material struggles over the emergent urban form of the ‘eco-city’ (Chapter 29). Noting the radical Berkeley roots of the eco-city idea, they consider how this promising notion has been co-opted by international capital with examples from rapidly urbanizing China involving a ‘green’ Singaporean state–business alliance that in turn raises important questions for urban political ecologists keen to promote socio-environmental justice in the city.

Part V helps us to understand political ecology from a different angle in that it explores how issues of method and scale inform praxis in the research field. In general, the elaboration of political ecology as an interdisciplinary and international enterprise has meant that the flexibility encountered in the articulation of research approaches, themes and topics discussed above is mirrored in the array of understandings and uses made of both method and scale in the pursuit of specific research projects. True, there are certain tendencies that can be identified in how scholars approach method and scale – a greater emphasis given to qualitative methods on the one hand, and a growing stress on the social construction of scale on the other. Both trends form part of a larger dynamic centred on the shift by many political ecologists from structural to post-structural thinking even as room is made for new materialist approaches that explore human–nonhuman dynamics. But trends here must not be exaggerated inasmuch as political ecologists criss-cross methodological and scalar boundaries while reflecting different understandings of both.

In Chapter 30, Piers Blaikie and Joshua Muldavin pinpoint a key debate in political ecology: how far scholarship is and ought to be about policy advice and input. Their view is that political ecologists can be ‘useful outsiders’, making important contributions to environmental policy-making in a development context, and they elaborate a method based on what they call the ‘policy reform dossier’ to do precisely that, in which multi-scale partnerships are central. There is explicit political purpose here too, insofar as the aim is to promote positive change in keeping with social and environmental justice. There are serious challenges to this sort of policy engagement, as the authors are well aware. The extent of those challenges is suggested in Chapters 31 and 32, where neoliberal and ecological modernization thinking is seen to inform the articulation of multi-scale dynamics that promote unjust outcomes. Ariel Salleh in Chapter 31 critically analyses Earth System Governance, a neoliberal policy based on a new multi-scalar architecture and ideology of scientism that responds to global socio-ecological crises by perversely accelerating human dissociation from essential life-worlds. By translating thermodynamic flows into disentangled ad hoc stochastic units, she argues that methodological forcing occurs that is at odds with the sensuous material ecologies they purport to manage. In Chapter 32, Andréa Zhouri confronts the ecological modernization thinking at the heart of environmental conflict resolution policies in Brazil, charting how abstract global ideas about ‘participation’ and ‘negotiation’ are deployed to help construct local-scale politics in which dissent and alterity are sidelined and environmental inequalities are perpetuated.

Unlike the statistically linked generalizations, systems thinking and quantitative methods beloved by the sorts of national and international environmental policy-makers discussed in these two chapters, most political ecologists are instead usually keen to develop detailed site-specific understandings of the socio-natural relations they study. Such ‘rich thick description’ is especially felt to be necessary when scholars work with
disadvantaged groups, as is often the case. Guillermina Gina Núñez explores this terrain in Chapter 33 where she examines selected issues in the conduct of ethnographic fieldwork in hidden and hard-to-reach communities. She uses a case study of colonias – informal rural settlements populated by poor migrants along the US–Mexico border – to explore the challenges and opportunities surrounding such matters as specifying the research site, building trust with vulnerable residents, understanding the multi-scale causal forces shaping local political ecologies, and appreciating how residents construct self and community identities.

Chapters 34 to 36 provide in-depth assessments of how scale can be deployed to sharpen our appreciation of political ecological dynamics. In Chapter 34, Roderick P. Neumann reviews the voluminous literature in human geography on scale, highlighting how political ecologists have deployed the concept in the past as well as how recent theorizations promote a more rigorous understanding of it. Insights from the ‘politics of scale’ debate are integrated with political ecology’s longstanding interest in multi-scalar spatio-temporal methodology to produce a political ecology of scale approach that combines ideas on the social construction of scale with an appreciation of nature–society relations mediated by power relations. Christian A. Kull and Haripriya Rangan elaborate on some of this thinking in Chapter 35, where they conceptualize three scalar moments, which they label operational, observational and interpretative scale, based on a Lefebvrian understanding of the production of space. They then use this conceptualization to explore the political ecology of landscape transformation, specifically focusing on how and where certain plants become ‘weeds’, and with what implications for both humans and weeds. In Chapter 36, Maano Ramutsindela and Christine Noe connect the scale literature with conceptualizing about bordering processes to better appreciate how the latter inform conservation spaces and the production of scale. Indeed, through attention to notions of scalar thickening and ecological scaling, they show how scalar and border narratives combine to promote powerful conservation logics in wildlife management and trans-frontier conservation areas in southern Africa.

Chapters 37 and 38 complete Part V by providing contrasting accounts of the role of methodological pluralism in political ecology. For Amity Doolittle in Chapter 37, such pluralism is integral to what political ecology is all about, enabling scholars not only to match methods to the nature of their research questions, but also allowing them to embrace complexity and uncertainty in their analyses. The value of methodological pluralism is demonstrated through a case study of environmental history and contemporary environmental conflict in the city of New Haven in the US northeast in which she interweaves data derived from census assessment, observation, newspaper analysis, semi-structured interviews and archival research to thereby promote rich place-based understanding. If Doolittle is preoccupied with harnessing methodological pluralism to promote critical insights for political ecology analysis based mainly in the social sciences and humanities, Matthew D. Turner explores in Chapter 38 how the choice of a mixed methods approach might aid in the integration of politics and ecology. Drawing on examples from sub-Saharan Africa, he examines the promise and pitfalls of incorporating biophysical measurement from the geospatial and environmental sciences into standard social scientific methodological packages that political ecologists habitually use, and argues that such integration works best if such measurement is done in a deliberate, targeted and piecemeal manner to answer key questions.
Part VI lastly considers some of the connections and transformations that are shaping or are likely to shape how political ecology develops in the years ahead. Standing back from the proliferation of specific topics that seem set to colonize just about every element of the human–environment relationship imaginable, what are some of the broader areas for growth as well as issues to be confronted in terms of a political ecology understood both as an international community of scholars and as a set of flexibly linked research agendas?

One issue to confront is the question of community politics in political ecology and the positioning of scholars within it. If, as Chapter 2 suggests, the field is becoming more integrated, and hence more of a community, then the matter of how to ensure that all members of the community are heard becomes more complex and pressing. Political ecology is influenced by hierarchical pressures, like many other scholarly communities – universities are in the business, after all, of differentiating and ranking individuals. With international integration has come another pressure, though – proficiency in English increasingly used as the international language. Yet political ecology likes to see itself as a radical enterprise in which equality is a common refrain. How this deep-seated ethos is squared with what appear to be proliferating inequalities within the community remains to be seen. In Chapter 39, Denis Chartier and Estienne Rodary critically engage with this issue from the vantage-point of French écologie politique, in many ways a kindred field to political ecology, but one increasingly under pressure as an Anglo-American style ‘political ecology’ expands in France (see Gautier and Hautdidier, ch. 5 this volume). They argue that écologie politique itself needs to go global if it is to survive, but that both it and political ecology need to be more reflexive politically about themselves as practising communities, a process that encompasses greater personal research situatedness as well as sensitivity about language. Beth Rose Middleton then takes this sort of analysis to the next level in Chapter 40, where she argues for a radical overhaul of the field through elaboration of an indigenous political ecology. Drawing mainly on US-based examples, this new approach foregrounds indigenous epistemologies while asserting decolonial frameworks rooted in indigenous experiences, even as it thereby decentres ‘conventional’ political ecology based on Marxist or post-structural thinking.

At the same time, as Chapters 41 and 42 demonstrate, the research field is constantly being shaped in other ways by connections made to cognate fields, as new ideas, concepts, theories and approaches circulate through the porous borders that flexibly frame political ecology. Such an intellectual nutrient flow has always been important (even as it is a two-way process insofar as political ecology influences other research fields). As Hali Healy, Joan Martinez-Alier and Giorgos Kallis argue in Chapter 41, one crucial connection relates political ecology to ecological economics and through it to the global environmental justice and de-growth movements. They examine some of the more ‘political’ work in ecological economics that addresses intra- and inter-generational distribution, conflicting languages of valuation, and the eco-egalitarian imaginary of ‘de-growth’ by way of illustrating how political ecology, with its abiding concern to promote a more equitable and sustainable future, might benefit from cross-fertilization. In contrast, Anna Zimmer is concerned with urban political ecology in Chapter 42 where she asserts that it has paid not nearly enough attention to non-Western cities, where, after all, most of the world’s urban population now lives.
Here, political ecology needs to go ‘beyond the West’, a process that is demonstrated with regard to the possible insights to be learned from South Asian urban scholarship about such things as the ‘everyday’ state and the heterogeneity of urban society.

These sorts of connections help to transform political ecology, as does the geographical extension of the field itself, into new areas both in terms of geographically linked research topics and membership in the community of scholars. Chapters 43 and 44 examine two contrasting experiences here. In Chapter 43, Tiago Ávila Martins Freitas and Augusto Cesar Sálimão Mozine explore the less studied case of Lusophone political ecology, that is, work broadly conducted in the research field drawn from a disparate set of countries united by the (colonial) Portuguese language. Drawing on scholarship written in and about countries such as Guinea-Bissau, Mozambique, Portugal and Brazil, they identify an internationally distinctive way in which to conceive environment–society relations crystallized in the phrase ‘para inglês ver’ [literally ‘for the Englishman to see’] that gains analytical purchase as a metaphor of external influences as well as a sense of action undertaken ‘merely for show’. Emily T. Yeh provides a detailed analysis of the case of China in Chapter 44, where she argues that the expansion of political ecology is more about outsiders offering a powerful alternative framework to understandings of human–environment relations than it is a matter of assimilating an already vibrant critical in situ scholarship (as in the Lusophone world). Her detailed review of the political ecology literature pinpoints an array of novel topics linked to processes such as mass decollectivization and market reform, even as it underscores possible constraints on the expansion of the international political ecology community as state-led repression limits the critical possibilities of Chinese language scholarship in the country. These two chapters thus raise the issue of disconnect between the reach of political ecology as an international research endeavour and its reach as an internationally representative research community. While political ecology today is moving on from the days when most researchers addressing political ecologies of the South hailed from Europe or North America, this current disconnect speaks to continuing tensions in the mapping of political ecology as praxis on to the world.

Perhaps less divisive is the ongoing transformation of political ecology in terms of its subject-matter. While some topics will prove more enduring than others, changes in the object of the research gaze bespeak an intellectual curiosity and vibrancy that is appealing: everything is up for analysis! Complementing many other chapters in this book, the final three chapters of Part VI address topics set to further shake up the research field. In Chapter 45, Farhana Sultana firmly pushes political ecology into the realm of emotions, as the intersection of feminist political ecology, resources management and emotional geographies is explored. Through a case study of water crises in Bangladesh, she demonstrates that emotions matter deeply in resource struggles, even as she emphatically rejects the idea that ‘real’ scholarship is only about ‘rational’ social interactions over resources. Gustav Cederlöf focuses our attention in Chapter 46 on the surprisingly still under-researched area of the political ecology of energy systems, noting that while important work has been published in recent years by the likes of Gavin Bridge and Jane Bennett, much more needs to be done to appreciate how a focus on energy involves new ways of seeing political ecology. Through a comparative historical analysis of electrification in the USA, the Soviet Union and the former Third
World, he argues that such systems are fundamentally historical products based on extant political and economic rationales such that current proposals to shift to a low-carbon future must above all confront the interests embodied in these proposed systems, let alone any other energy system. Finally, Chapter 47 finds Allison and Jessica Hayes-Conroy inviting us to embrace a political ecology of the human body itself as a visceral approach blending the material and discursive domains is outlined, notably with reference to examples drawn from US, Japanese and Colombian fieldwork. Here, the upsurge of interest of late in material issues and dynamics finds expression in bodily materiality, as old and new concerns in political ecology about structural inequity, social and environmental discourses, health, as well as relational thinking are brought together to understand how we are transformed both inside and out. In this way, and perhaps fittingly, the history of political ecology becomes embodied in understanding the very frame of our existence.

This overview of the ideas, topics, debates, themes and approaches covered in the chapters of this *International Handbook* is inevitably selective (as is the list of personnel that could have been invited to join in this project) but underscores one central point that, I think, we can all agree on: political ecology is an intellectually exciting and vibrant field to be in. The next chapter builds on this discussion by offering some brief reflections on the changing nature of the political ecology community as well as the research done by that community.

**NOTE**

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