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# BIOTROPICA

THE JOURNAL OF THE ASSOCIATION FOR TROPICAL BIOLOGY AND CONSERVATION

2     **A. TITLE PAGE**

3

4     **Title: Decolonizing Field Ecology**

5

6

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24        **B. ABSTRACT PAGE**

25        There is no abstract for Commentary papers.

26

27        **C. KEY WORDS**

28        Fieldwork; Postcolonialism; Collaboration; Engaged Research; Community; Ethics; Objectivity;  
29        Positionality

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47        **D. TEXT**

48        WHAT RELATIONSHIPS DO VISITING FIELD RESEARCHERS HAVE WITH THEIR TROPICAL HOST COUNTRIES?

49        Ecologists from the Global North often justify their research agendas by reference to dominant paradigms,  
50        with their work adding to the understanding of tropical systems globally. But often research priorities are  
51        not aligned with the interests of the host countries, either in terms of the focus or the roles played by  
52        participants. In this sense field research can be a colonial exercise, in which an incoming set of established  
53        researchers impose an agenda and set of practices that reflect uneven power dynamics. Ecologists from  
54        the Global North must critically examine the ways in which they conduct fieldwork and how they relate  
55        to and reinforce existing inequalities.

56

57        Within the humanities and social sciences, a growing recognition of this issue has led to calls to  
58        decolonize overseas research. While this process of collective reflection has altered the way in which  
59        research is planned, conducted and presented in these fields, the discussion has yet to percolate through  
60        the ecological sciences. Periodic attempts have been made to prompt this reflection within the field in the  
61        past (e.g. Raby, 2017; Toomey, 2016), although with limited reach and impact to date. The objective of  
62        this commentary is therefore to bring current debates on decolonizing research practice into contact with  
63        field ecology.

64

65        Postcolonialism, the body of cultural and literary critique that interrogates the pervasive legacies  
66        of colonialism, has been a staple perspective in a variety of disciplines including history (Grove, 1996;  
67        Raby, 2017), political ecology (Biersack, 2006), and human geography (Robinson, 2003) since the early  
68        1990s. More recently, focus has sharpened from postcolonial critique to decolonizing the practices of  
69        knowledge production (e.g. Noxolo, 2017; Radcliffe, 2017). These debates, however, remain relatively  
70        bounded to human geography and cognate disciplines (such as anthropology) and there remains little  
71        engagement from those working on the natural or physical environment.

72

73           Some may seek to excuse the relative absence of ecologists from post- and de-colonial discussion  
74 on the basis that ecological systems are conceived as part of the physical world, and therefore distinct from  
75 the human histories of European and US imperialism. However, colonialism was (and remains) a project  
76 of domination over physical space, a mastery in which Victorian-era geographers and later ecologists played  
77 a significant role (Driver, 2001). Ecologists from Europe undoubtedly benefited from the access to land  
78 afforded by colonialism in the establishing of permanent study stations for long-term field research (Raby,  
79 2017). The present-day geographic distribution of tropical ecological research reflects this, with a greater  
80 number of North American ecologists working in central and south America and Europeans predominantly  
81 working in Asia and Africa (Raby, 2017). In these regions and their study stations, key theories and values  
82 have developed, forming the foundation of ecology and related disciplines (Grove, 1996).

83           Acknowledging a colonial legacy to research in the tropics, with the aim of bringing current debates  
84 on decolonizing research practice into contact with field ecology, we offer three areas of focus to stimulate  
85 thought on decolonizing field ecology: i) scientific objectivity; ii) local knowledge and collaboration; and  
86 iii) researcher positionality.

87

## 88 **OBJECTIVITY**

89           A central concern of postcolonial writing is the way in which a perceived ‘neutral’ authorial voice  
90 from the Global North analyses and ‘objectively’ represents the people and places of formerly colonized  
91 areas of the world. The Indian scholar and theorist Gayatri Spivak questioned the role of a ‘First World  
92 analyst’ who ‘masquerad[es] as the absent non-representor’ (1988, 292), arguing that claims to ‘objectivity’  
93 ignore the historical effects that influence (scientific) authority and that the subsequent claims to knowledge  
94 – from the “First World” - returns the postcolonial South to a ‘resource’ for exploitation (1999, 388). Spivak  
95 thus draws connections between the colonial practices of extraction – of land (raw materials) and people  
96 (labour and slavery) – and contemporary modes of knowledge extraction where our knowledge of a diverse  
97 world remains entrenched in narrow post-Enlightenment frames of scientific “objectivity”.

98           For a “First World” ecologist this presents a challenge to current research practice. Being objective  
99 is central to notions of “good science”, and the extraction of resources (ecological data) from the  
100 postcolonial South is most often followed by supposedly objective intellectual labor from our offices in the  
101 Global North. Accordingly, we must consider how our data – most of it quantitative – carries a trace of our  
102 interpretive frames (see Scott 1999). Werner Heisenberg asserted that ‘what we observe is not nature itself,  
103 but nature exposed to our method of questioning’ (1955). Infusing such a philosophy of science with  
104 decolonial critique means careful consideration of how nature is constructed through the choice of  
105 measurements taken and, consequently, those which are not, and what the predominance of one body of  
106 collected data means for the myriad of others that are left behind – numbers are never innocent (see Sayer  
107 1984). However, even if a diverse dataset is amassed, we might then ask, so what? This is not to advocate  
108 for an anthropocentric form of ecological science, but to raise questions about the ethics of studying  
109 ecological patterns without dealing with the realities of those – often poor, often marginalized –  
110 communities that are always the most vulnerable to ecological threat. Ecologists should therefore  
111 commence study by consulting participants on how outcomes can be aligned to local concerns, and build  
112 these in from the outset. We can thereby ensure that our promises in impact statements are rooted in local  
113 needs and can be used to effect meaningful actions on the ground.

114

#### 115 **LOCAL KNOWLEDGE AND COLLABORATION**

116           Ecologists from the Global North often describe distant field sites as “remote”. They are not: they  
117 are only “distant” and “remote” from a Eurocentric or North American perspective. In fact, in the majority  
118 of such field sites the presence of people tells us that remoteness is actually “home” and our research rests  
119 on exchange and collaboration. Turning attention to local knowledge requires us to consider in full the  
120 meaning of ecological field sites and relations to space and place. Links between western science and local  
121 communities have focused on science dissemination or local people taking on roles such as fieldworkers  
122 (Toomey, 2006; Malhado, 2011). Recent years have brought calls for a greater focus on co-creation and  
123 collaborative research in the tropics (Stocks et al., 2008; Toomey, 2006) but while some successful

124 participatory models have been documented, they remain on the margins of established methodologies. A  
125 more decolonized approach would imply a research culture in which local scientists take the lead in  
126 designing and implementing studies, and in which outsiders from the Global North act as supporting  
127 collaborators.

128         In the consideration of measurements and methods, our scientific instruments ‘do more than simply  
129 record the presence of land as a resource: they are integral to assembling it as a resource for different actors’  
130 (Li, 2014, 589). As we take field measurements, we render locations legible to the discourses of science –  
131 extracting information about the Latin names of species and their relative abundances – but at the same  
132 time we obfuscate other ways of interpreting and using the land, and how it constitutes place for (especially)  
133 local people. This is not to suggest that ecologists should forego research to understand and conserve species  
134 and habitats, instead it is to recognize that the natural environment does not exist in a vacuum. Ecologists  
135 routinely “write out” local people and communities, which may be considered unethical on two counts.  
136 Firstly, science tells only a partial story that disregards – and therefore silences – local and indigenous  
137 knowledges. Secondly, the writing out of communities in research outputs and teaching neglects to recall  
138 that the research would not be possible without the logistical help, hospitality and geographical knowledge  
139 of local people. This was the case, for instance, in the research of one of the authors (K.B.) whose  
140 collaboration and reliance on local field assistants was not given enough prominence (Baker et al., 2016,  
141 2017).

142         In this way, many disciplinary norms are complicit in the reproduction of colonial-era relations.  
143 There are some moves by ecologists to acknowledge such complicity: The Intergovernmental Science-  
144 Policy Platform on Biodiversity and Ecosystem Services (IPBES) has now included indigenous and local  
145 knowledges in their assessments of the state of ecosystems and services, and a recent panel discussion at  
146 the 2018 conference of the Association for Tropical Biology and Conservation highlighted that scientists  
147 from outside arrive in poorer parts of the world with preconceived conservation values that demean local  
148 knowledge and traditions (Gokkon, 2018). Several papers in *Biotropica* have reflected on biases in the  
149 composition of contributing authors (Stocks et al., 2008; Cayuela et al., 2017), and provided suggestions to



150 improve engagement and knowledge exchange with local stakeholders (Duchelle et al., 2009; Perez and  
151 Hogan, 2018). In a similar vein, political ecologists, who are interested in the relationships between  
152 political, economic and social factors with environmental issues and changes (Biersack, 2006), have  
153 explored the social impacts of protected areas and conservation practices, demonstrating that environmental  
154 conservation can lead to ‘winners and losers’ (Brockington et al., 2008) with the losers usually being the  
155 rural, indigenous and poor (Ybarra, 2017).

156 Criticism from political ecologists has often been met by scepticism (or even anger) by more  
157 traditional conservationists and ecologists (Brockington et al., 2008). Ethical concerns should be  
158 constructively engaged with; they can stimulate thought of how indigeneity to place necessitates rich bio-  
159 cultural knowledges – ‘an ever-changing array of other ways of knowing and doing’ (Briggs and Sharpe  
160 (2004, 673) - and can contribute positively to our understanding of ecological systems (Endicott, 2016).  
161 Engaging with such knowledges would make research relevant to those who live in the sites under study  
162 (see Overdeest et al., 2004; Whitmer et al., 2010). If ecologists neglect to incorporate these perspectives,  
163 and to reflect work through local idioms, then research will fail to reach the very people it purports to  
164 represent.

165

## 166 **RESEARCHER POSITIONALITY**

167 Positionality is a mature ethical research in human geography given that exchanges with people are  
168 a necessary product of their research. Although for ecologists dealings with people are mostly logistical,  
169 these issues cannot be entirely elided. An ethical issue for human geographers is the extent to which ‘local’  
170 voices are appropriated and mobilised to the ends of ‘high-impact’ research publications. Accordingly,  
171 scholars have sought to move away from models of ‘speaking for’ others towards different approaches -  
172 ‘talking back’ (hooks 1989), ‘being with’ (Probyn 2010) and ‘abiding by’ (Ismail 2005) - that each attempt  
173 to incorporate the voices of the people and communities that inform and facilitate their research (see  
174 Griffiths 2018). These models and approaches are imperfect but nevertheless address the issue of how  
175 perspectives from the South are included or excluded from research outputs.

176           To describe research as if carried out from a neutral perspective is to pretend to a ‘view from  
177 nowhere’ (see Shapin 1998) that has been robustly critiqued by both feminist (Haraway 1988) and  
178 postcolonial writers (Spivak 1988). Instead researchers should act to make visible the structural privileges  
179 that are integral to the production of knowledge. It matters what passport we carry, the colour of our skin,  
180 our assigned sex, where we work and study, and the language we speak, because their perceived status is  
181 tied to histories of colonial domination and exploitation. This is true, of course, for this commentary: we  
182 each owe our ability to be heard to desirable passports, whiteness and affiliations to prestigious European  
183 institutions. We are thus situated within the skewed geographies of knowledge production in which the  
184 overwhelming majority of submissions to this journal and the *Journal of Tropical Ecology* are made by  
185 lead authors based outside of the country in which research is conducted (see Stocks et al. 2007). Ecologists  
186 should consider how race (Besio 2003), gender (England 1994) and social class (Griffiths 2017) enable or  
187 hinder the processes of research.

188           There is no ready solution but one method from humanities research, and one that we have chosen  
189 to use below, is a positionality statement that explicates something of the power relations that made the  
190 research possible. A further step could be a more meaningful approach to acknowledgements that goes  
191 beyond a generic appreciation of ‘local staff’. Where essential intellectual input has come from local people,  
192 there seems little reason not include them as co-authors (e.g. Moore et al., 2016), though this in itself is  
193 insufficient - we should also be ready to build the capacities of those who are not able to access the  
194 educational and publishing platforms based in the Global North and collectively work towards a day when  
195 capacity-building is no longer necessary.

196

## 197 **CONCLUSIONS**

198           In this commentary we have sought to connect tropical ecologists and conservation biologists with  
199 literature from human geographers, political economists and historians of science on the topic of  
200 decolonizing research practices. We hope that this initial exploration of the areas of objectivity, local  
201 knowledge and positionality can provide a platform for ecologists to reflect on the design and conduct of

202 field studies. Questions to ask may include: how many local scientists are involved in collaboration or co-  
203 creation? Are the local scientists also authors on the published work? Who has access to and interprets the  
204 resulting datasets? Who applies knowledges? Consideration of such questions should be undertaken  
205 alongside – and led by – partners at field sites, from researchers and practitioners in the Global South to the  
206 communities whose lives can depend on ecological systems. Only through such critical examination can  
207 ecologists recognize and reduce uneven power relations in research practices and thus work towards a  
208 decolonized approach to fieldwork in tropical host countries.

209

### 210 E. ACKNOWLEDGMENTS

211 Thank you to the British Ecological Society for organising a workshop in June 2018 to discuss all issues  
212 connected to conducting field research which two of the authors (K.B., M.P.E.) attended. The Department  
213 of Geography at King’s College London is thanked for investing in its PhD community where two of the  
214 authors studied together (K.B., M.G). The foundations of trust and understanding built during this time  
215 enabled this paper to be written. Working across disciplines requires institutions to invest in scientific  
216 community engagement for the benefit of research. We thank the two reviewers for thoughtful comments  
217 which greatly improved the manuscript.

218

### 219 POSITIONALITY STATEMENT

220 The three authors are academics based at European universities and have research interests in a number of  
221 tropical countries. K.B. is a geographer who has conducted aquatic field research in Negara Brunei  
222 Darussalam. Reflections on this issue were triggered after realising that the literature being produced by  
223 social scientists, environmental historians and cultural geographers on the topic of decolonizing research  
224 was not being engaged with ecologists or physical geographers. This lack of engagement was causing  
225 frustration and a divide between the disciplines. M.P.E. is a forest ecologist who has worked with orang  
226 asal peoples in Malaysia. His reflections were triggered by Tok We, senior shaman of the Che Wong group,

227 who remarked that although he had worked with many international researchers, nothing had ever changed.  
228 M.G is a human geographer whose work focuses on the ethics of fieldwork in the Global South. He is a  
229 British citizen whose work in India and Palestine recognises and interrogates the colonial histories that are  
230 detectable in contemporary political struggles in both states.

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#### 234 **F. DATA AVAILABILITY STATEMENT**

235 There is no data used in this study

236

#### 237 **G. LITERATURE CITED**

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- 322
- 323 **H. TABLES**
- 324 No Tables

325

326 **I. FIGURE LEGENDS**

327 No Figures

328

329 **J. FIGURES**

330 No Figures

331 **K. SUPPORTING INFORMATION**

332 No supporting information