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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

7 **Authors:** Kate Baker^{*}, Centre for Water Systems, University of Exeter, Harrison Building,

8 North Park Road, Exeter EX4 4QF, UK,

9 Markus P. Eichhorn, School of Biological, Earth and Environmental Sciences, University

10 College Cork, Distillery Fields, North Mall, Cork T23 N73K, Ireland and Environmental

11 Research Institute, University College Cork, Lee Road, Cork, T23 XE10, Ireland

12 Mark Griffiths, Centre for International Development, Northumbria University, Newcastle

13 upon Tyne, NE1 8ST, UK

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16 ^{*} Corresponding Author: k.baker2@exeter.ac.uk

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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

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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

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329 **J. FIGURES**

330 No Figures

331 **K. SUPPORTING INFORMATION**

332 No supporting information