## A Reply to Pierotti's (2018) Review of "Evolutionary Ethnobiology": Decolonizing Latin American Science

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## Introduction

In 2018, Dr. Raymond Pierotti published a review of the book *Evolutionary Ethnobiology* (Albuquerque et al. 2015) in *Ethnobiology Letters*. In his review, Pierotti (2018) critiqued several book chapters in a manner that we found offensive, culminating in comments that we perceived as racist and xenophobic. Therefore, we decided to write this response, in collaboration with a group of researchers who expressed their displeasure at how criticisms were presented by Pierotti (2018). In writing this reply, we advocate that future reviews in our study area, and other areas, should be based on respect. We address the review point by point here, followed by a request for corrections.

According to one of Pierotti's (2018:266) criticisms, "Little original research in evolutionary biology is cited, suggesting that many authors are not really conversant with modern approaches to evolution." While it is generally interesting to provide references and a discussion of basic ideas in evolutionary biology, our book did not intend to discuss these ideas. Instead, the authors made a case for how evolutionary approaches may benefit the specific field of evolutionary ethnobiology and how they could be incorporated into our science.

In presenting a wide variety of approaches in different chapters, the authors were concerned with exposing readers to basic evolutionary definitions and highlighting how these might be applied in ethnobiology. In addition, some of the scenarios presented in the book are from modern evolutionary biology, such as niche construction theory, with an entire chapter dedicated to this approach. The authors of the book systematized this approach in ethnobiology with publications in journals specializing in evolutionary biology (see Albuquerque and Ferreira Júnior 2017; Santoro et al. 2017).

Pierotti (2018:266) further pointed out that the chapter "Evolution of humans and by humans" represents a "basic review of human evolution of little relevance to ethnobiology" without further developing his reasons why the chapter is of little relevance. His criticism focused on grammatical errors, but beyond that it is not clear why he judged the work to be of little relevance to ethnobiology. He, therefore, missed a great opportunity to "speak truth to power." Instead, he chose to focus on minor



misuses of words that did not hamper the book's main message nor bring into question the scientific skills of its authors.

Another statement reads, "Failure to include nonhuman animal examples limits the usefulness of this volume" (Pierotti 2018:267). While it is interesting to discuss examples of nonhuman animals, we do not agree that focusing on humans limits the usefulness of the book in any way. Again, the book's objective was to show how evolutionary scenarios can be applied in ethnobiology studies, hereby offering new research perspectives to explain the interactions between humans and their environments. In this sense, the book's content focused on human behavior and cognition in interactions with the environment. Then, why would the absence of nonhuman examples become the reviewer's main criticism? What is the point of expecting nonhuman examples in a book dedicated to ethnobiology? It is also noteworthy that the only chapter (Chapter 5) praised by the author was written by non-Latin Americans and did not receive the same unfounded criticism about the lack of animal examples.

The last paragraph of Pierotti's review is the most problematic and supports our impression that his previous comments were biased with a negative prejudice towards non-anglophone authors. The first paragraph starts (Pierotti 2018:267),

I have not identified specific authors in most comments, as these chapters predominantly have numerous co-authors, averaging more than five authors on twelve of fourteen chapters, rendering it difficult to associate specific ideas with any individual.

This statement is strange to us, as the practice of multiauthorial publications is becoming increasingly standard in all fields of science (e.g., Duffy 2017). In fact, collaborative work is increasingly encouraged.

Further on, Pierotti (2018:267-268) writes:

There is an earlier version of this book, published in 2013 in Portuguese as Etnobiologia: Bases Ecologicas e Evolutivas, also edited by Albuquerque, who coauthored seven of its eight chapters. Thus, Albuquerque has generated 19 publications, including the two books themselves as distinct publications, from this enterprise. In consequence, we have a book published by a major press that presents a very narrow

perspective on how ethnobiology interacts with evolution.

In this section, Pierotti does not recognize that the English version greatly expands on the content of the Portuguese edition. He suggests that the book has a narrow perspective and criticizes that the editors participate as authors in a wide variety of chapters. Why should editors not be frequent coauthors in a volume that they edit? What is the relevance of this comment in a book review? None. This, however, seems to be an important pretext for the main idea that Pierotti (2018:268) expresses in the following sentence: "This is unfortunate because one strength of the book was that it is predominantly authored by scholars of color." There are clearly two elements to his argument. While previously suggesting that the book was of inferior quality, the author next expresses his regret of this perceived lack of quality because it was written mostly by "scholars of color."

The term "scholars of color" is in itself offensive and controversial (even in North America). "People of color" is a term primarily used in the United States and Canada to describe any person who is not white. We recognize that especially in the United States, the term "people of color" has been used to replace even more derogatory terms such as "colored people" and has come to replace the term "minorities," expressing shifts in the country's demographics over time. We also recognize that "people of color" is even seen as a "progressive" term in Untied States society, including in academia. However, given that language is essential in fostering understanding between people, every author needs to recognize that the meaning of a term might differ greatly in different contexts and geographies. While in the United States this term might reflect progress, it is regarded as profoundly racist and derogatory in much of the rest of the world, not only among "non-white" colleagues but also among many colleagues who could be classified as "white." In this sense, we received this term as a racist offense. Ultimately, the term itself is a dichotomous categorization with the main goal of distinguishing "whites" from "nonwhites," thus erasing the ethnic diversity that exists amongst "people of color." This is unacceptable, especially within the academic community. Instead, academia must encourage the inclusion of Black, Indigenous, and People of Color individuals that are historically underrepresented in ecology and evolutionary biology (Massey et al. 2021).



In Pierotti's (2018:268) review, we also notice a negative prejudice against non-anglophone authors, here from Latin America, which becomes evident in the following sentences:

Thirteen of the 14 chapters are authored only by scholars from Latin America, which is potentially ground-breaking. In actuality, however, the issues with topical narrowness, editing and translation result in a disappointing and overpriced volume, rather than what should have been a useful and important collaboration that reveals *how Latin American scholars deal with evolutionary aspects of ethnobiology* (emphasis added).

Similar negative biases against Latin American authors, including more limited citation of their works, have been highlighted in various papers (e.g., Meneghini et al. 2008). We read this as Pierotti setting up a clear dichotomy in which there is an implied 'they,' referring to Latin American authors who have produced low quality material though it is good to see something written by them, and an implied "we" making an argument from an authoritative viewpoint that is North American and anglophone. The reviewer seeks to influence readers by initiating his text by writing, "I am an evolutionary biologist who turned to ethnobiology over 20 years ago" (Pierotti 2018:266).

Finally, going back to the beginning of the review, Pierotti (2018:266) considers:

This book is promoted by Springer as "the first comprehensive book about evolutionary ethnobiology written in English;" the accuracy of this statement depends on how one defines 'evolutionary' in an ethnobiological context, especially if biological and cultural evolution are conflated to the degree that they are in this book.

While we certainly agree that everything depends on perspective and definition, the editors of the book clearly delimit its content in the first chapter, which defines the scope of the book and conceptualizes our understanding of evolutionary ethnobiology, which differs from evolution in an ethnobiological context as described by Pierotti.

A closer look at this racialized review leaves us to conclude that it does not contribute to scientific advancement and has a profound negative prejudice against non-anglophone authors, being particularly disrespectful to the Latin American scientific community. We request that the editors of the journal and the representatives of the Society of Ethnobiology (1) correct the text that we find particularly disrespectful since it harms the principle of respect highlighted in the Code of Ethics of this Society (Society of Ethnobiology 2021), and (2) with this reply, we also want to join the voices of the global ethnobiology community to engage in an urgent and needed decolonization of our science.

## **References Cited**

- Albuquerque, U. P., P. M. Medeiros, and A. Casas, eds. 2015. *Evolutionary Ethnobiology*. Springer International Publishing, Cham, Switzerland.
- Albuquerque, U. P., and W. S. Ferreira Júnior. 2017.
  What Do We Study in Evolutionary Ethnobiology?
  Defining the Theoretical Basis for a Research
  Program. *Evolutionary Biology* 44:206–215.
  DOI:10.1007/s11692-016-9398-z.
- Duffy, M. A. 2017. Last and Corresponding Authorship Practices in Ecology. *Ecology and Evolution* 7:8876–8887. DOI:10.1002/ece3.3435.
- Massey, D. B. M., S. Arif, C. Albury, and V. A. Cluney. 2021. Ecology and Evolutionary Biology Must Elevate BIPOC Scholars. *Ecology Letters* 24:913 –919. DOI:10.1111/ele.13716.
- Meneghini, R., A. L. Packer, and L. Nassi-Calò. 2008. Articles by Latin American Authors in Prestigious Journals Have Fewer Citations. *PLOS ONE* 3:e3804. DOI:10.1371/journal.pone.0003804
- Pierotti, R. 2018. Evolutionary Ethnobiology. Edited by Ulysses Paulino Albuquerque, Patricia Muniz de Medeiros, and Alejandro Casas. 2015. Springer International Publishing, Cham. 197 pp. *Ethnobiology Letters* 9:266–268. DOI:10.14237/ebl.9.2.2018.1381.
- Santoro, F. R., G. C. Santos, W. S. Ferreira Júnior, L. S. Chaves, T. A. S. Araújo, A. L. B. Nascimento, A. Sobral, J. S. Silva, J. L. A. Campos, and U. P. Albuquerque. 2017. Testing an Ethnobiological Evolutionary Hypothesis on Plant-based Remedies to Treat Malaria in Africa. *Evolutionary Biology* 44:216 –226. DOI:10.1007/s11692-016-9400-9.
- Society of Ethnobiology. 2021. Society of Ethnobiology Code of Ethics. Available at: https://ethnobiology.org/about-society-ethnobiology/ethics. Accessed on April 19, 2021.