



Lesson: Introduction to the Methods of Anthropologists

By Margaret A. Palmer, SESYNC &
Alec W. Armstrong, Maryland Institute College of Art | April 20, 2022

Overview:

This lesson introduces research methods used in anthropology to people with primary training in environmental and ecological sciences. The lesson is meant to help students identify complementary approaches to environmental issues and subjects and to understand the scale and scope of data generated by these methods. It is not meant as sufficient training to apply these methods. It can be tailored to advanced undergraduate or graduate classroom students, lab group enrichment, postdoctoral training, or self-directed learning. This lesson is focused on socio-cultural and linguistic anthropological approaches. Instructors who wish to introduce students to methods found in archaeology, forensic anthropology, or behavioral ecology will need to modify the lesson accordingly.

Assumed Prior Knowledge:

Advanced undergraduate or graduate training focused on environmental issues and systems.

Learning Objectives:

- Introduce anthropology's scope of inquiry, epistemological foundations, and methods with emphasis on the development of approaches to understand relationships between people and their environment.
- Recognize types of data generated by anthropological research, as well as the scale and units of analysis often used.

- Identify existing and potential intersections between biophysical science and anthropological approaches to environmental problems and socio-environmental systems thinking.
- Develop knowledge of terminology, basic theory, and epistemology to facilitate further collaborations with anthropologists

Key Terms and Concepts:

Ethnography; participant observation; structured interview; cultural model; cultural consensus

Teaching Assignments:

The following are suggestions for assignments and/or in-class use.

1. Descriptions of Methods

Have students/participants watch this [Paolisso \(2016\) video](#) before or during class. (See Background Information for Instructor at the bottom of this page.) Instructor should then introduce the scope and goals of this lesson and may wish to reinforce key points of Paolisso's video by briefly describing the methods and frameworks discussed.

2. Example of Methods

Carothers et al. 2014 (open access) provides a good example of the iterative, qualitative-to-quantitative inferential process discussed in the Paolisso video and illustrates several of the methods described. It includes examples of participant observation, semi-structured interviews, and cultural consensus modeling based on survey instruments. Presenters may choose to present the paper—describing the methods, the types of data collected, and how the data informed further data collection. Or, the instructor may task students/participants with identifying these features themselves, before or during the meeting time.

- Carothers, C., Brown, C., Moerlein, K. J., López, J. A., Andersen, D. B., & Retherford, B. (2014). Measuring perceptions of climate change in northern Alaska: pairing ethnography with cultural consensus analysis. *Ecology and Society*, 19(4). <http://dx.doi.org/10.5751/ES-06913-190427>.

3. Pair/Share or Group Activity

Have students explore some case studies. Below are four examples of anthropological methods applied to environmental issues. Have groups of students/participants read or skim one of the articles (or sections you wish to emphasize given time constraints). Ask the students to analyze their article, then facilitate discussion of the methods used.

- Basurto, X., Bennett, A., Weaver, A. H., Dyck, S. R. V., & Aceves-Bueno, J. S. (2013). Cooperative and noncooperative strategies for small-scale fisheries' self-governance in the globalization era: implications for conservation. *Ecology and Society*, 18(4). <http://dx.doi.org/10.5751/ES-05673-180438>.
 - *Open-access. Includes examples of participant observation, interviews, and a survey.*
- Paolisso, M., Douglas, E., Enrici, A., Kirshen, P., Watson, C., & Ruth, M. (2012). Climate change, justice, and adaptation among African American communities in the Chesapeake Bay region. *Weather, Climate, and Society*, 4(1), 34-47. <http://dx.doi.org/10.1175/WCAS-D-11-00039.1>
 - *Open-access. Includes examples of cognitive methods like pile sorting and free listing, and multidimensional scaling of results for inference. Made use of informal interviews and participant observation for background information. Also an example of explicitly participatory research framework.*

- Felipe-Lucia, M. R., Martín-López, B., Lavorel, S., Berraquero-Díaz, L., Escalera-Reyes, J., & Comín, F. A. (2015). Ecosystem services flows: why stakeholders' power relationships matter. *PloS one*, 10(7), e0132232. <http://dx.doi.org/10.1371/journal.pone.0132232>
 - Supplemental materials: <https://doi.org/10.1371/journal.pone.0132232.s002>
 - *Open-access. Includes an example of analysis drawing from political ecology background. Includes structural equation modeling that incorporated semi-structured interviews.*
- Potential prompts for article analysis:
 - What were the methods used? Describe how the data was collected, how methods relate to those previously discussed, and what kind of data was generated.
 - What did the authors do with the data generated by each method? Did it inform further analysis? Was it quantitatively analyzed? If qualitative, how did the authors interpret it?
 - How did the authors' research goals or questions inform their choice of methods?
 - How was the study related to environmental or ecological issues? What other methods can be used to study these issues, and why were these anthropological methods employed instead of (or in addition to) other perspectives?
- Potential prompts for class/whole-group discussion:
 - Have each group report their responses to the prompts above for their article.
 - After all groups have reported, ask for comparisons.
 - How were interviews interpreted and used in each study?
 - What was the spatial and temporal scale of each study?
 - How did each study compare in terms of how they used their data?
 - How did the methods used in each study compare to some of the key attributes of anthropological approaches described in the Paolisso video—holistic, people-centered, cultural relativistic, multi-sited?

4. Final Discussion/Presentation

Have students reflect on how anthropological methods are used to understand environmental phenomena and issues. The instructor may wish to reinforce key points about different methods, their commonalities, comparison of scales used, or use of data between anthropological and biophysical approaches.

Background Information for the Instructor

1. Paolisso, M. (2016). [Anthropological Research Methods](#) (SESYNC learning material/video). SESYNC Immersion distinguished scholar workshop: Anthropology.
 - *Describes common approaches in anthropological research, with emphasis on socio-cultural anthropology. (35 min.)*
 - Assign to watch before the class/meeting or choose to watch it live during meeting time. (See Teaching Assignment #1 above.)

2. (Optional) Brondizio, E. (2016). [Household, Populations, and Complex Socio-Environmental Systems](#) (SESYNC learning material/video). SESYNC Immersion distinguished scholar workshop: Anthropology.
 - Instructor can start the video at 16:51 (where the speaker says, “So I’m going to build here…” with the slide titled “Illustrative Research Examples”).
 - *Describes how different methods target different levels of spatial and social organization, and how combining multiple scales may be necessary to explain environmental and social change. (30 min. if started at timestamp indicated, 45 min. total video length)*
 - Assign this video to watch before the class/meeting or choose to watch it live during meeting time. (See Teaching Assignment #1 above.)

Related SESYNC Content

- West, Paige, Brondizio, Eduardo S., Paolisso, Mulder, Monique Borgerhodd, and McCay, Bonnie [Immersion Workshop: Anthropology](#). 2016. SESYNC.
- Armstrong, Alec W. [Collaborating Across Anthropological and Environmental Science Domains](#). 2022. SESYNC.
- Armstrong, Alec W. [Introduction to Anthropology for Socio-Environmental Science](#). 2022. SESYNC.