1.2: Anthropology as a Science

Anthropological Imagination

The anthropological imagination (anthropological perspective) is how anthropologists see the world. Anthropology differs from other sciences because it emphasizes holism and genealogy. The emphasis on genealogy for cultural anthropology implies a focus on the family (domestic structure). The emphasis on genealogy for physical anthropology extends the metaphor of the family tree from an individual and their family, to a family tree writ-large that uses phylogenetic taxonomy to contextualize the human species. Anthropology's emphasis on holism implies a balance between different approaches and many subfields. The four main subfields of anthropology are cultural anthropology, physical (biological) anthropology, archaeology, and linguistics. Anthropologists balance objective and subjective epistemologies.

I think the best way to get a sense of how anthropology differs from other branches of science is to understand the anthropological imagination. I borrowed the concept of the anthropological imagination from one of my professors, Dr. Wade Pendleton, who in turn borrowed it from an introductory anthropology book (Dimen-Schein 1977), who based it on an important sociology book, *The Sociological Imagination* by C. Wright Mills (1959).

There isn't much published about the anthropological imagination, but it is basically the same thing as what most anthropologists call the "anthropological perspective" (Jurmain 2011:19-20; Field 2011). I like the connotations of "imagination" in the way it has been used by John Lennon and recent social movements to recognize the agency that people have to go beyond their cultural constraints. Franz Boas (1858-1942), one of the founders of anthropology, described this as people's need to break the "shackles of tradition" (*Franz Boas: Shackles of Tradition*). It is especially related to cultural anthropology, where "the world is as you see it", the idea that if people believe in ghosts, then you as a scientist need to start with the hypothesis that those ghosts really exist. That might seem weird to many scientists, but anthropologists need to balance a detached, objective, way of seeing, with the subjective reality of the people they join.
Anthropologists balance several seemingly contradictory philosophies. I like to see the anthropological imagination as tendencies between two extreme poles, and though they may lean towards one side or the other, they can never really go to the extreme in any direction.

The principle method of fieldwork in cultural anthropology is called participant-observation, and participant observation exemplifies the balance of anthropology. Anthropologists must objectively study people as an outsider, but they also become part of that culture. They must be culturally relative, and not judge a foreign culture by the standards of the researcher's culture, but they also have their own ethical principles that come from the anthropologist's own culture, and there are limits to how dogmatic anthropologists can be about cultural relativism, and scientists (myself included) need to be a little bit ethnocentric to support things like the United Nations Declaration of Human Rights and tell another culture that they're doing it wrong. Because our science is so tied to humans we can't avoid asking ethical questions, or as Sir Raymond Firth put it "Cui bonum?" For Whose Good? (Schepher-Huhges1981) What is the purpose of doing anthropology?

This is true to a lesser extent in our class, regarding physical anthropology. We are objectively discussing some aspects of a biological species that has been around hundreds of thousands of years, and has a few distinct characteristics from other animals, but at the same time, we are talking about ourselves, my relatives, the people who gave me the genes I have now, that enable me to think, and type, and wish that this font was easier to read on this crappy screen.
I think the two most distinctive characteristics of anthropology are that it is holistic and it emphasizes genealogy. Holism means that it tries to understand all facets of the human condition. This has many implications. Anthropology is multi-disciplinary, it involves many branches of knowledge. By the early 1900's Franz Boas solidified anthropology into four interrelated subfields: cultural anthropology, physical anthropology, archaeology, and linguistics. As anthropologists began solving real world problems, some advocated for a fifth subfield: applied anthropology. For each of these subfields you can combine practically any other branch of science to make sub-sub-fields, depending on your specialization. Don’t get too hung up about the correct taxonomy for these branches of knowledge. It can be rewritten in many forms depending which branch you want to emphasize. But in anthropology, all specialists need to have a broad overview to fit their research into the larger questions of what it means to be human, and this incorporation of specific issues into broad questions requires a holistic approach. A good example for physical anthropology is the concept of **biocultural evolution**, the idea that to understand human evolution we need to look at both biology and culture.

If you take a cultural anthropology class you will see the study of culture requires a holistic approach in its own right because culture is integrated and all-encompassing; you need to study all the elements of culture together and their interaction. Another consequence of holism, and the multi-disciplinary approach of anthropology, is that anthropologists tend to be skeptical of unicausal arguments. A unicausal argument is something like "people have wars because they have an aggressive nature." Anthropologists understand that human nature is supremely complex, and that culture can drastically change any human characteristic that people try to claim is biologically determined. Sure, people are aggressive, you can look at chimpanzees and hominid weapons, but humans are also peaceful, you can look at bonobos and the amazing art of the Upper Paleolithic. Try to keep this point in mind when you’re writing for this class: avoid unicausal arguments, give all sides of an issues, avoid oversimplification, explore the evidence that supports each position.

Exercise \(\PageIndex{1}\)

**Compare ETHNOGRAPY to ETHNOLOGY**

Another general emphasis in anthropology is on genealogy. In cultural anthropology, the structure of the family is usually a core element of a culture. In physical anthropology, I like to view our emphasis on classification and taxonomy as just an attempt to better understand the branches of our own family tree.

The anthropological imagination is also something that you as an individual will use to better understand yourself and your place in the world. Biological and cultural explanations can be useful in solving your own problems. Having an answer to "Why am I sweating right now?" means understanding the cooling mechanisms that our ancestors evolved over tens of millions of year, and the fight-or-flight response in response to stress that involves putting your own personal financial problems into a cultural context where education is touted as the method of class mobility, yet restricted by public policy that raises tuition, textbook prices, and limits financial aid.

**Subfields of Anthropology**

Exercise \(\PageIndex{1}\)

Read Dennis O'Neil: The Subfields of Anthropology and Wikipedia's Explanation
Many anthropologists consider applied anthropology as a fifth subfield. I prefer to think of it as a research goal or purpose that cross-cuts all of the four subfields. For example, there are projects that can be considered applied linguistics [language renewal], or applied archaeology [Incan agronomy]. There are many applications for physical anthropology, especially in medicine. The word forensic means "legal", but most forensic anthropology tends to be a subfield of physical anthropology - we use what we know about human biology to help solve crimes.

Notes

• The Argentine Forensic Anthropology Team is a good example of forensic anthropology. They have been recently working to identify the 43 missing students from Ayotzinapa, Mexico.
• Check out careers in genetic counseling
• The Health and Medicine chapter from a cultural anthropology textbook
• Desmond Morris' The Language of the Body: a good video combining physical anthropology, cultural anthropology and linguistics

Conclusion: Anthropology and Science

In conclusion, anthropology is mostly a science, but has many aspects of humanism. For a more traditional introduction to anthropology and science read the Dennis O'Neil overview of anthropology.

Epistemology for Physical Anthropology

Epistemology means the study of how we know what we do. Taxonomy comes from the Greek word for “branches”. Here is a taxonomy of knowledge for this class:
You add or subtract boxes, and draw the arrows differently depending on what you want to focus on, and because anthropology is holistic these charts don’t make much difference; anthropologists include all relevant aspects of knowledge. We will focus on the bottom part of the flowchart, but always keep the bigger picture in the back of your mind.

**Vocabulary**

- anthropology
- archaeology
- biology
- culture
- epistemology
- ethnography
- ethnology
- linguistics
- participant-observation
- phylogenetic
- taxonomy

**Imagination Question**

How does the anthropological approach to understanding human beings differ from other classes you’ve taken?