

Dr. Cronk
Anthropology 325: Evolution and Culture (01:070:325:01)
Fall 2019
Index number 18911

Class web site: Available through the main Rutgers Sakai portal: <http://sakai.rutgers.edu>.

Class time and location: Mondays and Thursdays 12:35pm to 1:55pm in Biological Sciences Building room 205.

Office: 309 Biological Sciences Building, Douglass Campus. Email: lcronk@anthropology.rutgers.edu; office phone: 848-932-9285.

Office hours: Wednesdays 12:30pm to 2pm and by appointment.

Course description: Examination of current research on the relationship between evolutionary biology and culture. Topics include animal culture studies, cultural transmission theory, gene-culture coevolution, and the application of signaling theory to human cultural phenomena.

Course background: In 1896, Franz Boas published a very influential article in which he criticized the application of evolutionary theory to cultural phenomena. What was not understood at the time was that his critique, while powerful, applied only to pre-Darwinian approaches to the issue, not to Darwinian ones. As a result, despite the fact that Boas' own approach and a Darwinian approach are fundamentally compatible, generations of anthropologists were taught that it was wrong to take an evolutionary approach to culture. But what if that mistake had not been made? What if anthropologists had understood the complementarity between Boas' historical particularism and a truly Darwinian approach to cultural phenomena? That's what this course is all about. Thus, one way to think about this course is as an "Intro to Cultural Anthropology" class that has somehow crossed over from an alternate universe in which early 20th century anthropologists did understand the correct application of Boas' critique as well as what it means to take a Darwinian approach to culture.

Course objectives: After taking this course, students will be able to

- Understand the differences between pre-Darwinian and Darwinian approaches to biological and cultural evolution.
- Know what is meant by an "ideational" definition of culture and appreciate the reasons why evolutionary anthropologists favor such a definition.
- Understand and be able to recognize and apply the main types of cultural transmission
- Understand and be able to provide some examples of gene-culture coevolution
- Appreciate the important role that maladaptive behaviors play in research on cultural transmission
- Apply basic principles of signaling theory, including honest signaling theory and receiver psychology, to both human and nonhuman signals.

Readings: Required readings are listed below in the weekly schedule. All required readings are all available online through this class's Sakai site (<http://sakai.rutgers.edu>). If you find the subject matter of this class especially interesting, you might also want to read some of these optional books:

Cronk, Lee. 1999. *That complex whole: Culture and the evolution of human behavior*. Boulder, CO: Westview Press. (available in its entirety as a pdf on Sakai)

Maynard Smith, John, and David Harper. 2003. *Animal signals*. Oxford: Oxford University Press.

Mesoudi, Alex. 2011. *Cultural evolution: How Darwinian theory can explain human culture and synthesize the social sciences*. Chicago: University of Chicago Press.

Whitehead, Hal, and Luke Rendell. 2015. *The cultural lives of whales and dolphins*. Chicago: University of Chicago Press.

Exams: There will be two exams. Both will be a mixture of short answer and essay questions. The first exam will cover the first half of the course and the second will cover the second half. Each one will be worth one third of your grade for the semester. Although the second exam will not be cumulative, your grade on it will certainly be improved if you remember material covered during the first half of the semester. Review sheets for the exams will be distributed through the class web site.

Make-up exams: You are required to take the exams at the regularly scheduled times. Make-up exams will be given only to those students who are able to provide well-documented written excuses that have been approved in writing by an appropriate college dean. Legitimate excuses are limited to your own serious illness, family emergencies, and religious observances. Arrangements for make-ups should be made as soon as possible after you have missed an exam.

Exercises and reaction papers: Over the course of the semester you are to complete five exercises and/or reaction papers. Details are provided at the end of the syllabus. The five exercises and/or reaction papers taken together will make up one third of your grade for the semester.

Inclusion: This is an inclusive classroom that is welcoming of all people and perspectives, including those of diverse races, religions, ethnicities, ages, gender identities and sexual orientations. If you go by a name or gender that is different from the one on official Rutgers documents, please let us know so that we can use the proper name and pronouns.

Attendance: Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website <https://sims.rutgers.edu/ssra/> to indicate the date and reason for your absence. An email is automatically sent to me.

Academic Integrity: Violations of Rutgers policy in regard to cheating will be taken seriously and will result in an F in the course and referral to the appropriate dean. See http://academicintegrity.rutgers.edu/files/documents/AI_Policy_9_01_2011.pdf

Academic Support: Students with documented disabilities, or who feel that they may have a disability, are advised to let me know as soon as possible so that accommodations can be made. Please go here for additional information: <http://disabilityservices.rutgers.edu/request.html>.

Evaluation:

<u>Assignment</u>	<u>Due date</u>	<u>Points</u>
Exercises and reaction papers	Throughout the semester	5 X 10 = 50
First exam	10/31/19	50
Second exam	12/9/19	50
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Total		150

Grades will be assigned according to the usual system of ten percentage points per passing grade (A = 90 - 100%, B+ = 88 - 89%, B = 80 - 87%, C+ = 78 - 79%, C = 70 - 77%, D = 60 - 69%, F = 0 - 59%).

Course outline and reading assignments:

Week 1 (Thursday 9/5): Introduction.

Week 2 (Monday 9/9 and Thursday 9/12): A brief history of thought on evolution and culture, *or* how did anthropologists get so confused about culture and evolution?

Mayr, Ernst. 2001. Selection from *What Evolution Is*. New York: Basic Books.

Week 3 (Monday 9/16 and Thursday 9/19): What is culture?

Cronk, Lee. 1999. Righting culture. Chapter One of *That Complex Whole: Culture and the Evolution of Human Behavior*. Boulder, CO: Westview Press.

Week 4 (Monday 9/23 and Thursday 9/26): Detecting the presence of culture

Note: The topics for weeks 5-14 are motivated by this question: *What does culture do?*

Week 5 (Monday 9/30 and Thursday 10/3): Culture gets transmitted and evolves.

Dugatkin, Lee Alan. 2000. Chapters 3, 4, 6, and 7 from *The Imitation Factor*. New York: The Free Press.

Wasielewski, Helen. 2014. Imitation is necessary for cumulative cultural evolution in an unfamiliar, opaque task. *Human Nature* 25:161–179.

Week 6 (Monday 10/7 and Thursday 10/10): Culture mutates, drifts, gets remembered, gets misremembered, and gets forgotten.

Roediger, H. L. III, and K. A. DeSoto. 2014. Forgetting the presidents. *Science* 346:1106-1109.

Week 7 (Monday 10/14 and Thursday 10/17): Culture influences people's behavior.

Cronk, Lee. 1999. Natural Kinds. Chapter Two of *That Complex Whole: Culture and the Evolution of Human Behavior*. Boulder, CO: Westview Press.

Cronk, Lee. 2017. Culture's influence on behavior: Steps toward a theory. *Evolutionary Behavioral Sciences* 11(1):36-52.

Cronk, Lee, Dieter Steklis, Netzin Steklis, Olmo van den Akker, and Athena Aktipis. 2019. Kin terms and fitness interdependence. *Evolution and Human Behavior* 40(3):281-291.

Week 8 (Monday 10/21 and Thursday 10/24): Culture helps people adapt.

Chagnon, Napoleon A. 1988. Life histories, blood revenge, and warfare in a tribal population. *Science* 239:985-992.

Cronk, Lee. 2004. Chapter 3 from *From Mukogodo to Maasai: Ethnicity and Cultural Change in Kenya*. Boulder, CO: Westview Press.

Week 9 (Monday 10/28 and Thursday 10/31): Culture sometimes leads to maladaptation (Monday) and first exam (Thursday).

Durham, William. 1991. Neutrality and opposition: From cultural reason to cannibalism. Chapter Seven from *Coevolution: Genes, Culture, and Human Diversity*. Stanford: Stanford University Press.

Week 10 (Monday 11/4 and Thursday 11/7): Culture co-evolves with genes.

Laland, Kevin N., John Odling-Smee, and Sean Myles. 2010. How culture shaped the human genome: bringing genetics and the human sciences together. *Nature Reviews Genetics* 11:137-148.

Week 11 (Monday 11/11 and Thursday 11/4): Culture creates differences among groups of people, which can lead to cultural group selection.

Efferson, Charles, Rafael Lalive, and Ernst Fehr. 2008. The coevolution of cultural groups and ingroup favoritism. *Science* 321:1844-1849.

Week 12 (Monday 11/18 and Thursday 11/21): Culture is used by people in signals.

Breed, Michael. D. 2001. "Communication." Chapter Four of *Animal Behavior: An Online Textbook* (<http://www.animalbehavioronline.com>). Be sure to follow all of the links in order to read the entire chapter.

Cronk, Lee. 2005. The application of animal signaling theory to human phenomena: Some thoughts and clarifications. *Social Science Information/Information sur les Sciences Sociales* 44(4):603-620.

Soler, Montserrat, Lee Cronk, and Frank Batiste. 2014. In the eye (and ears) of the beholder: receiver psychology and human signal design. *Evolutionary Anthropology* 23:136-145.

Week 13 (Monday 11/25 and Tuesday 11/26 [reassigned day]): Culture and signals, continued.

Week 14 (Monday 12/2 and Thursday 12/5): Culture and signals, continued. Review for second exam.

Week 15 (Monday 12/9): Second exam

Exercises and reaction papers:

All exercises and reaction papers are due at the beginning of class on the second day of class in the week indicated. Essays should be about three typed, double-spaced pages long, with one inch margins, page numbers, and a font no smaller than 11 and no larger than 12 points. Hard copies only are accepted, and they may be turned in only in class.

If you turn a paper in late, 10% per day it is late will be deducted from its grade (i.e., one point out of a possible ten). Turning papers in late is not recommended. If you cannot get a particular paper done on time, forget about it and do a later one, instead.

Other ways to lose points include not stapling your paper (paper clips are not an acceptable substitute), not mentioning the readings, and not including page numbers. I will take additional points off if your paper is not on the topic assigned, is poorly written, or is written in a perfunctory manner.

Before the end of the semester you need to turn in five exercises or reaction papers. You can do any mix of reaction papers and exercises, including all reaction papers or all exercises.

A reaction paper is a short paper regarding one of the readings for that week. You should briefly summarize the reading and then comment on it in light of what we are learning in this course.

An exercise is an activity that requires you to do something in addition to simply reading and reacting. Details are provided below. Note that opportunities to do exercises are limited to just seven specific weeks during the semester.

At the top of each paper, please include either “Reaction paper” or “Exercise,” in boldface type. That will make them a bit easier to grade. Failure to do this will result in lost points.

Week 3: Find an example of someone using the word “culture” in popular discourse (e.g., a newspaper or magazine article; online resources like LexisNexis may be helpful in finding one). Compare the ways in which the writer is using the term with the ways in which anthropologists have defined it, as discussed in class and described in your readings.

Week 4: Observe an individual squirrel, pigeon, or other wild animal for about ten or fifteen minutes. Then go to a public place, identify a single individual human, and observe his or her behavior for a similar period of time. Take notes regarding what each of them does during that

time. Pretend that all you know about the species in question comes from these brief periods of observation. Are the behaviors you observed products of culture? On what do you base your answer? If you cannot provide a confident answer, what more information you would need in order to do so?

Week 5: Identify a skill, belief, or other cultural trait that you have and that you acquired from one of your parents and another skill, belief, or other cultural trait that you have and that you acquired from a peer. Write an essay describing how you acquired those traits, what if anything you have done to make them spread beyond yourself, and what you know about their patterns of transmission before they reached you. Relate your description of the traits and their patterns of transmission to cultural transmission theory as described in class and in the readings.

Week 7: Social coordination norms are culture traits that help us coordinate our behaviors with those of others. Driving on a particular side of the road and conventional mealtimes are two everyday examples. Think about your life and identify at least two or three other social coordination norms that shape the ways in which you interact with other people. How do the norms help you to coordinate your behavior? Do they help you coordinate your behavior with everyone or with just certain people? Are they widespread, or particular to some group of people with which you routinely interact (e.g., family, coworkers, teammates)?

Week 8: Write down terms you use for people in your life, focusing on your use of kin terms. The terms can be in English or any other language. Discuss whether the people you refer to using those terms are technically in the category that term usually used for. Do you, for example, use some kin terms metaphorically? If so, how? How does the way you use kin terms shape the way you relate to the people in your life?

Week 11: Consider the groups to which you have belonged during your life: sports teams, workplaces, schools, religious congregations, and so on. Choose one of them and write a short essay about the benefits you derived from membership in that group, the costs you paid in order to be a member of that group, and how that group fared in competition with other groups of the same type. Relate your description to the theory of cultural group selection discussed in class and in the readings.

Week 12: First, identify two classes of individuals that routinely send signals to one another (males and females, parents and children, teachers and students, merchants and shoppers, etc.). Second, consider the potential for conflicts and confluences of interests between those classes of signaler and receiver. Third, go to a public place and observe interactions and signaling between individuals belonging to the two classes (e.g., parents and children on a public playground). Finally, relate your observations back to the theories of signaling discussed in class and in the readings.

Week 13: As discussed in class, one way to get a handle on the strategies and tactics of signalers is to look for audience effects. To explore this, go to a bookstore and buy two magazines, one aimed primarily at men and another aimed primarily at women. Select magazines that contain advertisements for the exact same product or very similar products (e.g., two different brands of antiperspirant or toothpaste). Compare and contrast the advertisements in the two magazines. Do their similarities or differences reflect something about their intended audiences? Do they provide different or similar sorts of information about the product?