The Origins of Virtue – Spring 2012

Course: Anthropology 189J
Time: Thursdays, 1:15–4:00 pm
Place: Hahn 216
Professor: Karthik Panchanathan
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Office: Hahn 207
Office Hours: Tuesdays and Thursdays, 11:00am–12:00pm

“I will not here enter on these several cases, but will confine myself to one special difficulty, which at first appeared to me insuperable, and actually fatal to the whole theory. I allude to the neuters or sterile females in insect communities: for these neuters often differ widely in instinct and in structure from both the males and fertile females, and yet, from being sterile, they cannot propagate their kind.”
— Charles Darwin on altruism, from the Origin of Species (Sixth Edition)

Course Objectives: The goal of the course is to develop an appreciation of how evolutionary biologists do their work. Like a detective, biologists are presented with evidence—some aspect of a living organism, either morphological or behavioral—and must use their inferential powers to explain why the organism exhibits this particular adaptation (i.e., what selection pressures lead to the adaptation?). In this course, we will seek an explanation for the evolution cooperation.

Readings: Matt Ridley, 1996, The Origins of Virtue
Francis-Noël Thomas and Mark Turner, 2011, Clear and Simple as the Truth (Second Edition)
Selected readings posted on the course website

Grading: Participation 20%
Discussion Questions 20%
Research Paper 50%
Final Presentation 10%

Writing advice: If you need help, come talk to me, the writing fellows, or visit the Writing Center in Pearsons 010, which offers free consultations at any stage of the writing process. The Writing Center offers consultations by online appointment (http://writing.pomona.edu) or through drop-in hours on Sundays and Wednesdays from 8–10pm in Pearsons 003. Read Thomas and Turner’s book on writing in classic style. Here are some additional writing guides: Stephen Toulmin’s The Uses of Argument for constructing an argument, Dierdre McCloskey’s Economical Writing for writing well, and William Strunk, Jr., and E.B. White’s The Elements of Style for writing good grammar.

Students with disabilities: If you have a disability, please come talk to me or contact your college’s dean: Marcelle Holmes at Pomona (mdc0474@pomona.edu), Rochelle Brown at Pitzer (rochelle_brown@pitzer.edu), Jill Hawthorne at Scripps (jill.hawthorne@scrippscollege.edu), Maggie Browning at Harvey Mudd (maggie_browning@hmc.edu), and Julia Easley at CMC (julia.easley@claremontmckenna.edu). The colleges offer various support programs. It’s crucial that you seek out help early in the semester, so we can set up a plan.

Resources:
- The Library – Librarians are there to help you – http://libraries.claremont.edu/
- Web of Knowledge – Find research articles – http://isiknowledge.com/
- Google Scholar – Find research articles – http://scholar.google.com/
- Citation Guide – http://unitproj.library.ucla.edu/col/bruinsuccess/files/mlaguide.pdf

Academic Integrity:
Consult the Academic Honesty Policy and Procedures in the Student Handbook
Course Requirements

**Participation:** Attendance is mandatory. You will be evaluated on how well you participate. This means doing the readings before class and contributing to the discussions. To facilitate active discussion, cell phones and laptops are not permitted in class. Take notes the old fashion way—on paper.

Each week, one or two of you will lead discussion. Here are some tips for discussion leaders:

- Read the assignments extra carefully, preferably more than once.
- Think about what you want to get across: What are the main points? How do the readings relate to one another?
- Think about how you want to lead discussion: Do you want to divide the class into small discussion groups? Do you want to give a short introduction and then moderate a large-group discussion?
- If there are two discussion leaders, decide how you want to divide things up.
- When leading discussion remember not to answer your own questions before you ask them (e.g., “I thought Ridley did a bad job when discussing altruism in chimps. What did you think?”). Avoid “yes”/”no” questions. Ask open-ended questions that will get people to share their own ideas about the readings.
- Be organized. Sketch out a general map of how you think the discussion might go. Work from organized notes.
- Don’t expect to follow the map exactly—and don’t force it! Often, the best part of discussions are the unexpected turns. Be flexible. Allow a few minutes here and there to see where tangents might go. Bring the discussion back to the plan when the tangents seem to be going nowhere.

**Discussion Questions:** Submit two discussion questions by email on the Tuesday before class. Each question should come from a different reading. These should be open-ended questions which can lead to a good discussion, not simple clarifying questions (e.g., What is the definition of altruism?). Paste these questions in the body of the email, not as a separate attachment. Make sure you clearly indicate the reading for each question.

**Research Paper:** Choose a fictional character (not too obscure, please) who exhibits some behavior you would like to better understand. Write a ten page paper aimed at a smart reader (but not a specialist) that explains this behavior from an evolutionary perspective. This is a research paper, not creative writing assignment! You should read a lot to understand your topic, mostly research articles, not newspapers or websites. Your final paper should have at least five high-quality citations. Your assignment isn’t necessarily to come up with a novel evolutionary explanation; since there is plenty of bad science, you can criticize existing explanations. You have complete freedom to choose the character and behavior. Example essays are posted on the course website. If you need help in coming up with a question or finding sources, don’t hesitate to contact me. At the end of the quarter, with your permission, I will compile the essays into a book, called *The Science of Fiction, Volume III*, and distribute copies to everyone in the class. Below are the deadlines for the paper.

- **Feb 2:** Bring in a (vague) research question and/or fictional character
- **Feb 16:** Annotated Bibliography – a detailed summary of at least 3 articles
- **March 1:** Bring in a one-page research proposal
- **March 22:** Rough draft due – Email a copy to me and to your writing fellow!
- **April 26:** Presentations – email me files by 5 pm the night before!
- **May 3:** Final draft due

**Writing Fellows:** There are two writing fellows assigned to this course, Emily Miner (emilycmminer@gmail.com) and Nicole Bauthier (njb02010@mymail.pomona.edu). You will be meeting with them to discuss your essays. They are there to help you with the writing. I will assign each of you to one of the fellows later in the semester. You will need to meet with the fellows at least twice this semester, once between 02/09–03/08 to brainstorm, and once between 03/29–04/19 to review your drafts. You may be able to meet with the fellows more than twice. Ask them.

**Presentation:** On April 26, each of you will present a summary of your research paper to the class. Oral presentations are fine. If you need one, I’ll have a projector. Keep the presentation brief (10 minutes, 5-7 slides) so we can accommodate everyone.

**Journal:** Keep a journal to observe your study species, *Homo sapiens*. Good science begins with good questions, and good questions often arise from careful observation. Spend time each week watching people and write down what you see. This journal is also a good place to work through problems arising from the course readings and your research paper. Your journal is for you; I will not read it. Bring your journals to class though, so you’ll have discussion material.
Course Schedule

January 19: Course introduction

January 26: NO CLASS

February 2: Dawkins, 1986, Chapters 1, 2, 4, 5, and Epilogue
  Dawkins, 2007, Chapters 1 and 2

February 9: Library Day

February 16: Ridley, Prologue and Chapter 1
  Feynman, “The Value of Science”
  Schwartz, “The importance of stupidity in scientific research”
  “Genomic Imprinting: A Talk with David Haig”
  Minsky, Excerpt from The Society of Mind

February 23: Ridley: Chapter 2 and 3
  Huang, “Bees and Social Insects” and “Division of labor in social insects”
  Griffin, “Naked mole-rat”
  Epstein, “Why Model?”
  Kokko, “Modelling Philosophy”

March 1: Ridley: Chapter 4 and 5
  New et al., “Spatial adaptations for plant foraging”
  Henrich et al., “Markets, Religion, Community Size...”
  Silk et al., “Chimps are indifferent to the welfare of unrelated group members”
  Detto et al., “When and Why Do Territorial Coalitions Occur?”

March 8: Ridley: Chapter 6 and 7
  Gurven and Hill, “Why Do Men Hunt?” – read to page 62; commentary optional
  Bateson et al., “Cues of being watched enhance cooperation”
  Fehr et al., “Egalitarianism in young children”

March 22: Ridley: Chapter 8 and 9
  Kohn, “The Needs of the Many”
  Richerson and Boyd, “Culture and Genes Co-evolve”
  Bowles, “Conflict: Altruism’s midwife”

March 29: Research paper workshop

April 5: Huxley, “Evolution and Ethics”
  Sandel, “The Case Against Perfection”
  Gould and Lewontin, “The Spandrels of San Marco”
  Sahlins, “Critique of Vulgar Sociobiology”

April 12: Ridley: Chapter 10 and 11
  Bshary and Noe, “Biological Markets”
  Grief, “Reputation and Coalitions in Medieval Trade”
  Diamond, “The Ends of the World as We Know Them”

April 19: Ridley: Chapter 12 and 13
  Gurerk et al., “The Competitive Advantage of Sanctioning Institutions”
  Hirsh, “Fish Shares and Sharing Fish”
  Acheson, “Lobster and Groundfish Management in the Gulf of Maine”

April 26: Class Presentations