

## Bio-Cultural Seminar (ANT 520R)

Fall, 2005 TH 3:00 – 6:00 PM 775 Woodruff Library  
Instructors: Joseph Henrich, 218 D Geosciences, 727-5248, [jhenric@emory.edu](mailto:jhenric@emory.edu)  
James K. Rilling, 114 Geosciences, 7-3062, [jrillin@emory.edu](mailto:jrillin@emory.edu)

Office Hours: Henrich: Tuesday 2 - 4pm or by appointment  
Rilling: Tuesday 10am – noon or by appointment

**Course description:** This course will utilize a biocultural perspective to inform our understanding of cross-cultural variation and similarity in human social life. It will draw on comparative ethnography, primatology and human biology. Various theoretical perspectives will be considered, such as cultural models, life history theory, evolutionary psychology, and cultural evolutionary theory. Topics will include: (1) human universals, (2) kinship, (3) pair-bonding and marriage, (4) incest and the incest taboo, (5) homosexuality, (6) emotions, (7) reciprocity, (8) cooperation and social norms, (9) social status, (10) patriarchy, matriarchy and sexual inequity, (11) social inequality, egalitarianism, and within-group violence, (12) Intergroup violence and war, (13) infanticide and suicide.

**Prerequisites:** No prior training in cultural transmission, comparative ethnography or human biology is required.

**Reading and books:** The following texts are required reading. You may purchase them from the Emory Bookstore.

1. Beckerman, S. and P. Valentine, eds. *Cultures with multiple fathers: the theory and practice of partible paternity in lowland South America* (2002) University of Florida Press.
2. Brown, D.E., *Human Universals* (1991) McGraw-Hill.
3. Keeley, L.H., *War before civilization* (1996) Oxford University Press.

The remainder of our course readings are posted on Blackboard.  
<http://classes.emory.edu/webapps/login>

### Grades and Evaluations

Grades will be based on (1) weekly participation (20%), (2) 7 reaction papers (20%), (3) 1 or 2 weeks of discussion leadership (10%) and (4) a final paper (50%). For weekly participation, students should engage the readings, ask questions, defend a position, and challenge those they disagree with. For the reaction papers, students will pick 7 weeks over the course of the semester in which they will write a 2 page reaction paper to the assigned readings. Paper should be turned in at the end of class. If student misses a class they must write a reaction paper for the missed class (one of their seven). For Discussion leadership, the 14 weeks will be divided as evenly as possible, with 2 students assigned as discussion leaders for each week (after the first). Discussion leaders should be

prepared to clarify difficult material, provide some background, pose open ended questions to fertilize discussion, and prevent the dominance of the discussion by overly enthusiastic participants.

Final Paper: Students will be asked to write a 15-20 page paper due on December 12. The topic can be anything under the general heading of biocultural approaches to human behavior, but must be approved by one of the instructors. Outlines and rough drafts can (optionally) be turned in for comments from either professor up to a week ahead of time.

### **Weekly topics and readings**

Week 1 (Thursday, September 8): **Background for Human Biology and Culture.**

Themes: Is culture a part of human biology? Can we reconcile what we know about human brains and biology with the concepts of culture and history that have traditionally dominated anthropology?

1. Boyd, R., and Silk, J. B. (2003) *How Humans Evolved*. New York, WW Norton and Company, pp. 37-51.
2. Kandel and Schwartz, *Principles of Neural Science* (2000) ch. 17 (parts 1-4)
3. Bear, M. F., Connors, B. W., and Paradiso, M. A. (2001) *Neuroscience: Exploring the Brain*, Baltimore, Lippincott Williams and Wilkins. Skim pp. 175-193 and read ch. 22.
4. Henrich, J (forthcoming) A Cultural Species. In *Explaining Culture Scientifically*, University of Washington Press.
5. Henrich, J., and Henrich, N. (forthcoming). Dual Inheritance Theory (Chapter 1): *Culture and the Evolution of Cooperation*, Oxford University Press.

Optional reading:

Hariri, A.R., et al., A susceptibility gene for affective disorders and the response of the human amygdala. *Archives of General Psychiatry*, 2005. **62**: p. 146-152..

Week 2 (Thursday, September 15): **No Class**

Week 3 (Thursday, September 22): **Cross-cultural Variation and Universals**

Themes: Are there any human universals? How have people explained human universals? How does one know if one has found a human universal? Can a human universal explain cultural variation? Is all behavioral variation also cultural variation? (If not, what kind of variation is it?) What are the possible explanations for behavioral variation?

1. Brown, Donald (1991) *Human Universals*, McGraw-Hill.
2. Cavalli-Sforza, L.L. and M.W. Feldman, The application of molecular genetic approaches to the study of human evolution. *Nature Genetics supplement*, 2003. **33**: p. 266-75.

#### Week 4 (Thursday, September 29): **Kinship**

Themes: Can evolutionary theory explain aspects of human kinship? What can't evolutionary theory explain about human kinship? Why do kinship structures vary across societies? What can't evolutionary theory explain about kinship?

1. Dawkins, Richard (1976) *The Selfish Gene*, Chapter 6 pp. 88-108 and Chapter 10: 171-181 (eusocial insects).
2. Sahlins, Marshall (1977). *The Use and Abuse of Biology*, The University of Michigan Press. Chapter II: Scientific Sociobiology: Kin Selection.
3. Beckerman, S. and Valentine, P. (2002). *Cultures with multiple fathers: the theory and practices of partible paternity in lowland South America*. Introduction and Chapters 1, 2, 5 and 8.
4. Silk, Joan B. Adoption in Oceania. *American Anthropologist* 82:799-820.

Optional reading:

1. Silk, J.B., *Kin Selection in Primate Groups*. *International Journal of Primatology*, 2002. **23**(4): p. 849-875.
2. Queller, D.C. and J.E. Strassmann, *Kin Selection and Social Insects*. *Bioscience*, 1998. **48**(3): p. 165-175.
3. Gurven, M., *To give and not to give: the behavioral ecology of human food transfers*. *Behavioral and Brain Sciences*, 2004. **27**(4): p. 543-560, 579-583.

#### Week 5 (Thursday, October 6): **Pair Bonding, and Marriage**

Themes: Do humans pair bond? Is marriage universal? What can evolutionary theory explain about marriage, and what can it not explain? How might variation in marriage patterns be explained? What, if anything, can non-primates teach us about pairing and/or marriage?

1. Hrdy, S. B. (2003). The Optimal Number of Fathers: evolution, demography and history in the shaping of female mate preferences. In *Evolutionary Psychology: Alternative Approaches*, S. J. Scher, and F. Rauscher, eds. (Norwell, MA, Klewer Academic Publishers), pp. 111-133.
2. Fuentes, A., *Re-Evaluating Primate Monogamy*. *American Anthropologist*, 1998. **100**(4): p. 876-889.
3. Fisher, H., *Anatomy of Love*. 1992, New York: Fawcett Columbine. Chapter 6, "When Wild in Woods, the Noble Savage Ran."
4. Hua, Cai (2001). *A society without fathers or husbands: the Na of China*. Urzone Press. Chapter I (background), VII and VIII.

5. Hammock, E. A. D., and Young, L. J. (2005). Microsatellite instability generates diversity in brain and sociobehavioral traits. *Science* 308, 1630-1634.

Week 6 (Thursday, October 13): **Incest and Incest Taboo**

Themes: What's the difference between incest aversion and an incest taboo? How universal is the incest taboo? What aspects of incest are the most difficult to explain? How might the constants and variations in incest prohibitions be explained?

1. Levi-Strauss, Claude (1969). *The Elementary Structures of Kinship*. Chapters I and II.
2. Hopkins, Keith (1980). Brother-Sister Marriage in Roman Egypt. *Comparative Studies in Society and History*, 22 (3), 303-354.
3. Fessler, D.M.T. and Navarrete, C.D. (2004) Third-party attitudes toward sibling incest: Evidence for Westermarck's Hypotheses. *Evolution and Human Behavior* 25(5):277-294.

Week 7 (Thursday, October 20): **Homosexuality**

Themes: Why is homosexuality a conundrum for evolutionary theory? How does the evidence from non-humans inform our understanding of Homosexuality? What are some of the proximate mechanisms? Might these vary from society to society?

1. Kirkpatrick, R. C. (2000). The Evolution of Human Homosexual Behavior. *Current Anthropology* 41, 385-413.
2. Herdt, Gilbert (1993) Semen Transactions in Sambian Culture. In *Ritualized Homosexuality in Melanesia*, edited by Gilbert Herdt (University of California Press)
3. Mustanski, B.S., M.L. Chivers, and J.M. Bailey, *A critical review of recent biological research on human sexual orientation*. Annual Review of Sex Research, 2002. 13: p. 89-140.
4. Imperto-McGinley, J., Peterson, R., Gautier, T., and Sturla, E. (1979). Androgens and the evolution of male-gender identity among male pseudohermaphrodites with 5alpha-reductase deficiency. *New England Journal of Medicine* 300, 1233-1237.

Optional reading:

1. Swaab, D.F., et al., Structural and functional sex differences in the human hypothalamus. *Hormones and Behavior*, 2001. 40: p. 93-98.
2. Mustanski, B.S., et al., A genomewide scan of male sexual orientation. *Human Genetics*, 2005. 116(4): p. 272-8.

3. Zeh, J.A. and D.W. Zeh, Maternal inheritance, sexual conflict and the maladapted male. *Trends in Genetics*, 2005. **21**(5): p. 281-6.

Week 8 (Thursday, October 27): **Emotions**

**Choose topic for Final paper and discuss with an instructor by Week 9.**

Themes: What is the nature of emotions? Do they vary from society to society? What varies (if anything)? How can we integrate research on emotions based on brain and hormone studies with cross-cultural ethnographic work on emotions?

1. Ekman, Paul (1999) Basic Emotions. In *Handbook of Cognition and Emotion*. T. Dalgleish and M. Power (eds.). John Wiley & Sons Ltd., Sussex, U.K.
2. Ekman, Paul (1999) Facial Expressions. In *Handbook of Cognition and Emotion*. T. Dalgleish and M. Power (eds.). John Wiley & Sons Ltd., Sussex, U.K.
3. Fessler, D.M.T. (2004) Shame in two cultures: Implications for evolutionary approaches. *Journal of Cognition and Culture* 4(2):207-262.
4. Lutz, C. and White, G. (1986) The Anthropology of Emotions. *Annual Review of Anthropology*, 15: 405-436.
5. Nesse, R. (1999). The Evolution of Hope and Despair. *Social Research* 66, 429-469.

Optional reading:

1. Bear, M. F., Connors, B. W., and Paradiso, M. A. (2001). *Neuroscience: Exploring the Brain* (Lippincott Williams and Wilkins). Chapter 18

Week 9 (Thursday, November 3): **Reciprocity**

Themes: ultimate perspectives; neurobiology of reciprocal altruism

1. Trivers, R.L., The Evolution of Reciprocal Altruism. *Quarterly Review of Biology*, 1971. **46**: p. 35-57.
2. Axelrod, R., and Hamilton, W. D. (1981). The Evolution of Cooperation. *Science* 211, 1390-1396.
3. Levi-Strauss, Claude (1969). *The Elementary Structures of Kinship*. Chapter V.
4. Gouldner, Alvin (1960). The Norm of Reciprocity: A Preliminary Statement, *American Sociological Review*, 25 (2), 161-178.
5. Rilling, J. K., Gutman, D. A., Zeh, T. R., Pagnoni, G., Berns, G. S., and Kilts, C. D. (2002). A neural basis for social cooperation. *Neuron* 35, 395-405.

Optional readings:

1. McCabe, K., Houser, D., Ryan, L., Smith, V., and Trouard, T. (2001). A functional imaging study of cooperation in two-person reciprocal exchange. *PNAS* 98, 11832-11835.
2. King-Casas, B., Tomlin, D., Anen, C., Camerer, C. F., Quartz, S. R., and Montague, P. R. (2005). Getting to know you: reputation and trust in a two-person economic exchange. *Science* 308, 78-83.

Week 10 (Thursday, November 10): **Cooperation and Social Norms**

Themes: How is human cooperation different from other animals? How might the cultural nature of humans help explain this?

1. Henrich, J., R. Boyd, S. Bowles, H. Gintis, E. Fehr, C. Camerer, R. McElreath, M. Gurven, K. Hill, A. Barr, J. Ensminger, D. Tracer, F. Marlow, J. Patton, M. Alvard, F. Gil-White and N. Smith (forthcoming). 'Economic Man' in Cross-Cultural Perspective: Ethnography and Experiments from 15 small-scale societies. *Behavioral and Brain Sciences*. (Target Article)
2. Henrich, Joseph (2004) Cultural Group Selection, coevolutionary processes and large-scale cooperation. At target article in *Journal of Economic Behavior and Organization*, 53: 3-35.
3. Joan B. Silk, Sarah F. Brosnan, Jennifer Vonk, Joseph Henrich, Daniel J. Povinelli, Amanda S. Richardson, Susan P. Lambeth, Jenny Mascaro, & Steven J. Shapiro. Chimpanzees are indifferent to the welfare of unrelated group members

Optional reading:

1. de Quervain, D. J., Fischbacher, U., Treyer, V., Schellhammer, M., Schnyder, U., Buck, A., and Fehr, E. (2004). The neural basis of altruistic punishment. *Science* 305, 1254-1258.

Week 11 (Thursday, November 17): **Status, Prestige and Domiance**

Themes: What are the phylogenetic foundations of human status? How does human status differ from non-human status? Why is ethology so important? Why are so many people preoccupied with social status? What are the reproductive and endocrine correlates of status.

1. Henrich, Joseph & Francisco Gil-White (2001) The Evolution of Prestige: freely conferred status as a mechanism for enhancing the benefits of cultural transmission. *Evolution and Human Behavior*, 22, 1-32.
2. Goffman, E., To be announced.
3. Sapolsky, R. M. (1990). Stress in the Wild. *Scientific American* 262, 116-123.
4. Altmann, J., Alberts, S. C., Haines, S. A., Dubach, J., Muruthi, P., Coote, T., Geffen, E., Cheesman, D. J., Mututua, R. S., Saiyalel, S. N., *et al.* (1996). Behavior predicts genes structure in a wild primate group. *Proceedings of the National Academy of Sciences of the United States of America* 93, 5797-5801.

Optional reading:

1. Morgan, D., Grant, K. A., Gage, H. D., Mach, R. H., Kaplan, J. R., Prioleau, O., Nader, S. H., Buchheimer, N., Ehrenkauf, R. L., and Nader, M. A. (2002). Social dominance in monkeys: dopamine D2 receptors and cocaine self-administration. *Nature Neurosci* 5, 169-174.

Week 12 (**Monday, November 21 from 6-9 PM**): **Patriarchy, Matriarchy and Sexual Inequity**

Themes: dominance in chimpanzees, bonobos and humans compared and contrasted; cross-cultural perspectives

1. Wrangham, R.W. and D. Peterson, *Demonic males: apes and the origins of human violence*. 1996, Boston: Houghton Mifflin. 350. Chapter 10, "The Gentle Ape"
2. Peggy Sandy (1981) *Female power and male dominance: on the origins of inequity* (Cambridge University Press)
3. Rogers, Susan Female Forms of Power and the Myth of Male Dominance: A Model of Female/Male Interaction in Peasant Society. *American Ethnologist*, 2(4), 727-756.
4. Smuts, Barbara B. Male aggression against women: An evolutionary perspective. *Human Nature*. Vol 3(1) 1992, 1-44.

Week 13 (Thursday, December 1): **Inequality, Egalitarianism and within-group Violence**

Themes: Are human societies naturally unequal? How can we explain the relative egalitarian nature of foraging societies?

1. Boehm, C. (1993) Egalitarian Behavior and Reverse Dominance Hierarchy, *Current Anthropology*, 34(3), 227-254.
2. Knauft, B., Violence and Sociality in Human Evolution. *Current Anthropology*, 1991. **32**: p. 391-428.
3. Konner, M.J., *The Tangled Wing: biological constraints on the human spirit*. 2002, New York: Henry Holt and Company. 540. Chapter 9, "Rage".

Optional readings:

1. Higley, J. D., Mehlman, P. T., Poland, R. E., Taub, D. M., Vickers, J., Suomi, S. J., and Linnoila, M. (1996). CSF testosterone and 5-HIAA correlate with different types of aggressive behaviors. *Biological Psychiatry* 40, 1067-1082.
2. Muehlenbein, M. P., Watts, D. P., and Whitten, P. L. (2004). Dominance rank and fecal testosterone levels in adult male chimpanzees (*Pan troglodytes schweinfurthii*) at Ngogo, Kibale National Park, Uganda. *American Journal of Primatology* 64, 71-82.

Week 14 (Thursday, December 8): **Intergroup violence and warfare**

Themes: Is warfare part of human nature? Are modern societies more violent than the small-scale societies? Are humans a particularly violent species?

1. Wrangham, R.W., *The evolution of coalitionary killing*. Yearbook of Physical Anthropology, 1999. **42**: p. 1-30.
2. Keeley, Lawrence (1996) *War before Civilization*. Oxford University Press.

Week 15 (**Tuesday, December 13 from 4-7 PM**): **Infanticide and Suicide**

Themes: How can an understanding of human biology, evolution, and culture assist us in understanding infanticide and suicide? How can evolutionary theory possibility explain killing one's child? Is suicide cultural?

1. Daly, M., and Wilson, M. (1984). A sociobiological analysis of human infanticide. In *Infanticide: comparative and evolutionary perspectives*, G. H. a. S. B. Hrdy, ed. (New York, Aldine de Gruyter), pp. 487-502.
2. N. Scheper-Hughes, Culture, scarcity, and maternal thinking: Maternal detachment and infant survival in a Brazilian shantytown. *Ethos* 13 (1985): 291-317.
3. Stack, Steven (1993) The media and suicide: A non-additive model 1968-1980. *Suicide & Life-Threatening Behavior*, 23 (1), 63-66.
4. Mann, J. (2003). Neurobiology of suicidal behaviour . *Nature Reviews Neuroscience* 4, 819-828.
5. Atran, Scott Genesis of Suicide Terrorism *Science*, 299, 1534-1539. Plus later commentaries.

Optional reading:

1. Hrdy, S. (1979). Infanticide among animals: a review, classification and examination of the implications for the reproductive strategies of females. *Ethology and Sociobiology* 1, 13-40.

**\*\* Final papers due Friday, December 16 \*\***