

ANTHRO 3502: CULTURAL ECOLOGY

Fall 2013

Instructor: Dr. Eric B. Ross

Tues., Thurs. 2:20-3:35pm

COURSE OVERVIEW:

Cultural Ecology is the study of how human populations, through their culturally-patterned behaviors and associated beliefs, adjust strategically to their environments and of how such adjustments are expressed and maintained through linkages and feedbacks that make human groups an active part of those environments. This course takes as its point of departure the view that such a perspective, especially when applied in an historical and comparative framework, offers unique opportunities to understand the significance of temporal and spatial variation in human cultural patterns and, in doing so, offers a powerful corrective to simplistic generalizations about why people live, produce and reproduce in certain ways and to the common and comfortable assumption that what is different and not immediately intelligible is, therefore, irrational.

COURSE OBJECTIVES:

Students will appreciate the guiding principles of cultural ecological analysis through an understanding of some major examples of its cumulative body of work. In the process, they will become familiar with the challenges and contributions that cultural ecology has made to general anthropological theory and, in particular, to our comparative understanding of the forces that shape and influence cultural patterns and variations. Further, students should finish the course with a broad sense of how to independently and critically interpret and *demystify* cultural phenomena, in their own as well as in more remote or unfamiliar environments, and be able to apply such knowledge productively to on-going debates in the contemporary world.

ASSESSMENT:

There will be a take-home mid-term exam, counting 40% of the final grade, and a term-paper worth 60%. The paper, of approximately 2,500 words, will be on a course-related topic devised by the student *in consultation with the Lecturer*. It will be due on December 10.

READINGS:

The following books are required reading and should be available for purchase at the GW Bookstore.

Harris, Marvin 1977 *Cannibals and Kings: The Origins of Cultures*. New York: Random House.

Netting, Robert McC. 1986 *Cultural Ecology*. Second Edition. Waveland Press.

Weekly Reading, unless available on the Internet, will be available on Blackboard.

SYLLABUS

PART 1: THE LOGIC AND AIMS OF CULTURAL ECOLOGY

Week 1. Introduction to the Course

In this first section, a brief overview of the over-arching aims of the course is presented; the emergence of cultural ecology as a theoretical perspective is considered within an historical framework; and its relevance considered in terms of a more general anthropological perspective on cultural analysis.

- 1 (8.27) Introduction to the Course, the Subject and the Lecturer
- 2 (8.29) The Emergence of the Cultural Mode of Adaptation

Reading:

Netting, Robert, Ecological Perspectives in *Cultural Ecology*.

Clarke, William 1977 The Structure of Permanence: The Relevance of Self-Subsistence Communities for World Ecosystem Management. In T. Bayliss-Smith and R. Feachem (eds.) *Subsistence and Survival*. London: Academic Press. Pp. 363-384.

Steward, Julian 1955 The Concept and Method of Cultural Ecology. In Steward, J., (ed.), *Theory of Cultural Change*. Urbana: University of Illinois Press. Pp. 30-42.

Maruyama, Magorah 1963 The Second Cybernetics: Deviation Amplifying Mutual Causal Processes. *American Scientist* 5(2):164-179.
<http://cleamc11.vub.ac.be/books/maruyama-secondcybernetics.pdf>

. *Science* 49: 18-19.

Odum, Eugene 1977 The Emergence of Ecology as a New Integrative Discipline. *Science* 195: 1289-1293.

Week 2. The Ecology of Non-Accumulating Societies

Some of the first and most interesting developments in cultural ecology began with insights into the subsistence behavior of hunting-gathering populations; here some core concepts will be discussed and considered.

3. (9.3) The Logic and Lessons of Hunter-Gatherer Society
4. (9.5) The Reproductive Ecology of Pre-Industrial Peoples

Reading:

Lee, Richard 1968 What Hunters Do for a Living, or, How to Make Out on Scarce Resources. In Richard Lee and Irven DeVore (eds.) *Man the Hunter*. Chicago: Aldine. <http://faculty.washington.edu/stevehar/lee.pdf>

Lee, Richard Borshay 1969 Eating Christmas in the Kalahari. *Natural History* December. Internet: http://www.naturalhistorymag.com/master.html?http://www.naturalhistorymag.com/editors_pick/1969_12_pick.html

Netting, Robert, Hunter Gatherers in *Cultural Ecology*.

Harris, Marvin and Eric Ross 1998 *Death, Sex and Fertility: Population Regulation in Preindustrial and Developing Societies*. Ch. 1 (Population Regulation among Early Human Foragers). NY: Columbia University Press.

Moore, Omar Khayyam 1957 Divination—A New Perspective. *American Anthropologist* 59(1):69-74. <http://www.readcube.com/articles/10.1525%2Faa.1957.59.1.02a00060>

Frisch, Rose 1978 Population, Food Intake, and Fertility. *Science* 199(4324): 22-30.

Week 3. The Development of Agriculture and Its Health and Environmental Consequences

In contrast to earlier, simplistic assumptions about the nature of the transition to agriculture, anthropological studies increasingly suggest that its emergence was neither simple nor straightforward; but, rather, that it was a contradictory process that created problems as much as it resolved them.

5 (9.10) The Transition to Agriculture

6. (9.12) Contemporary Agricultural Transformations

Livingstone, Frank 1958 Anthropological Implications of Sickle Cell Gene Distribution in West Africa. *American Anthropologist* 60(3):533-562.

Lindenbaum, Shirley 1979 Introduction and Chapter 2 ("Kuru and Sorcery") in *Kuru Sorcery. Disease and Danger in the New Guinea Highlands*. Palo Alto, CA: Mayfield Publishing Company. Pp. 3-30.

_____ 2008 Understanding Kuru: the Contribution of Anthropology and Medicine. *Philosophical Transactions of the Royal Society* 363(1510): 3715-3720.

Harris, Marvin *Cannibals & Kings*, Ch. 3 ("The Origins of Agriculture")

Week 4. The Ecology of “Human Nature”: Warfare as Adaptation

Among the problems that arose with agriculture was a tension between resource productivity and human reproductive potential, creating continual stresses that gave rise to or severely intensified a variety of behavior patterns, including infanticide and warfare. In this section, we explore some of the adaptive features of these seemingly maladaptive practices.

7 (9.17) Population Regulation in Pre-industrial Societies

8 (9.19) Warfare and Animal Resources in Paleo-Technic Economies

Reading:

Roy Rappaport 1967 Ritual Regulation of Environmental Relations Among a New Guinea People. *Ethnology* 6:17-30. Also in Andrew P. Vayda (ed.) *Environment & Cultural Behavior: Ecological Studies in Cultural Anthropology*. Garden City: Natural History Press. Pp. 181-201; and in R. Rappaport 1979 *Ecology, Meaning, and Religion*. Richmond, CA: North Atlantic Books.

Netting, Robert McC. 1973 Fighting, Forest, and the Fly: Some Demographic Regulators among the Kofyar. *Journal of Anthropological Research* 29(3): 164-179

Harris, Marvin, *Cannibals and Kings*, Ch. 4, (“The Origin of War”)

DeBoer, Warren 1981 Buffer Zones in the Cultural Ecology of Aboriginal Amazonia: An Ethnohistorical Approach. *American Antiquity* 46(2): 364-377.

David Mech et. al 1980 Deer Distribution in Relation to Wolf Pack Territory Edges. *Journal of Wildlife Management* 44(1): 253-258.

Week 5. Energetics and the Adaptive “Logic” of Material life

This session offers, as a kind of sidebar, an opportunity to consider how ecological analysis can reveal levels of processual significance in cultural patterns that would otherwise be ignored or misconstrued.

9. (9.24) Contrasts and Convergence: Amazon and New Guinea Trajectories

10. (10.26) FILM: *The Goddess and the Computer*, J. Stephen Lansing and Andre Singer (1988).

Reading:

Lee, Richard **1969** (1966) !Kung Bushman Subsistence: An Input-Output Analysis. In A. P. Vayda (ed.), *Environment & Cultural Behavior*. Pp. 47-79.

Week 6. The Cultural Ecology of Food Preferences in Pre-industrial Societies

Perhaps in no other aspect of cultural life more than in food customs (in particular, preferences and avoidances) are we able to demystify the relationship of human behavior to

resource questions. While this can be done partly by case-by-case analysis, the benefit of an ecological approach is that it enables us also to overcome the constraints of a purely cultural analysis and to generate cross-cultural and comparative generalizations, that is to say to explicate the nature of divergence and convergence at the heart of any evolutionary process.

11. (10.1) The Ecological Correlates of Amazonian Food Preferences and Avoidances
12. (10.3) Evolutionary Transitions in New Guinea Subsistence Ecology

Reading:

Milton, Katherine 1997 Real Men Don't Eat Deer. *Discover* 18(6): 46-53.

Harris, Marvin, *Cannibals and Kings*, Ch. 5 ("Proteins and the Fierce People")

Ross, Eric B. 1978 Food Taboos, Diet and Hunting Strategy: The Adaptation to Animals in Amazon Cultural Ecology. *Current Anthropology* 19(1): 1-36.

Dornstreich, Mark and George Morren 1974 Does New Guinea Cannibalism Have Nutritional Value? *Human Ecology* 2(1):1-12.

Week 7. Adaptational Problems of the (Pre-industrial) State

In this section, we begin to address some of the special ecological questions associated with the rise of paleotechnic civilizations and the contradictions of growth based on problematic resource constraints and opportunities. While the problems faced by such societies are not exactly those that confront contemporary industrial states, there are nevertheless compelling reasons to seek to extract broad lessons from such studies.

13. (10.8) The Ecology and Economy of Aztec Cannibalism
14. (10.10) The Enigmatic Decline of the Mayan Empire

Reading

Harner, Michael 1977 The Ecological Basis for Aztec Sacrifice. *American Ethnologist* 4(1):117-135.

Dumond, D. 1961 Swidden Agriculture and the Rise of Maya Civilization. *Southwestern Journal of Anthropology* 17: 332-34

Lattimore, Owen 1937 Origins of the Great Wall of China: A Frontier Concept in Theory and Practice. *Geographical Review* 27(4): 529-549.

Mitchell, William 1973 The Hydraulic Hypothesis: A Reappraisal. *Current Anthropology* 14(5): 532-534.

http://www.monmouth.edu/academics/history_and_anthropology/reprints/HydraulicHypothesisS.pdf

Harris, Marvin, *Cannibals and Kings*, Ch. 9 ("The Cannibal Kingdom")

White, Lynn 1967 The Historical Roots of Our Ecologic Crisis. *Science* 155 (3767):1203-1207. http://www.theologylived.com/ecology/white_historical_roots.pdf

PART 2: ADAPTING TO THE COLONIAL WORLD SYSTEM

The expansion of European capitalism and the emergence of the modern world, system imposed new pressures and constraints to which local populations were compelled to adapt, though not always in obvious or direct ways. Indeed, most of what we usually know of any cultures (except archaeologically or from limited historical documentation) is generally *after* they have been affected by such changes. Hence, our data –and our theories—tend to be skewed toward a misguided impression of indigenous life.

Week 8: Underdevelopment and Cultural Transformation on the Capitalist Frontier

In this section, we will critically explore a number of cases of the impact of European commercial expansion on cultural patterns often regarded as "traditional." In so doing, we will begin to explore and expose some of the sources of poverty in the contemporary world.

15. (10.15) Cultural Formations in the Colonialized World

16. (10.17) Adaptations to the Demands of European Trade

Reading:

Stuart Piddocke 1965 "The Potlatch System of the Southern Kwakiutl: A New Perspective," *Journal of Anthropology* 21:244-264 (reprinted in A. Vayda (ed.) 1969

Environment & Cultural Behavior: Ecological Studies in Cultural Anthropology, Garden City: Natural History Press. Pp. 130-156.

Netting, Robert, Northwest Coast Fisherman in *Cultural Ecology*.

Ross, Eric B. 1978 The Evolution of the Amazon Peasantry. *Journal of Latin American Studies*, 10(2): 193-218

Murphy, Robert F. and Julian Steward 1956 Tappers and Trappers: Parallel Process in Acculturation. *Economic Development and Cultural Change* 4:335-353.

Alexander, Paul and Jennifer Alexander 1978 Sugar, Rice and Irrigation in Colonial Java. *Ethnohistory* 25(3):207-223.

VIDEO: *Sky Chief* (Scott Robinson, 1971)

<http://www.antropologiavisual.net/2007/sky-chief/>

Week 9.

17. (10.22) Mid-term Overview & Discussion
18. (10.24) **FILM: Nigel Noble The Charcoal People (2000).**

Week 10. Cultural Adaptations to the New Colonial Order

This section continues the previous one, looking in more detail at a number of cases from recent Third World experience, in particular the paradigmatic example of Ireland as a model of subsistence marginalization and crisis.

19. (10.29) Adjustments to Colonial Labor Demands: The Rise of Population
20. (10.31) The Political Ecology of Irish Famines

Reading:

Pereira, Anthony 1999 God, the Devil and Development in Northeast Brazil. *Praxis XV*: 112-136. <http://fletcher.tufts.edu/praxis/archives/xv/Pereira.pdf>

Paul Alexander 1984 Women, Labour and Fertility: Population Growth in Nineteenth Century Java. *Mankind* 14(5): 361-372.

Ross, Eric 1986 Potatoes, Population and the Irish Famine: The Political Economy of Demographic Change. *In* W. Penn Handwerker (ed.), *Culture and Reproduction: An Anthropological Critique of Demographic Transition Theory*. Boulder: Westview Press. Pp. 196-220.

PART 3: CULTURE AND ENVIRONMENT IN COMPLEX SYSTEMS: FROM CULTURAL TO POLITICAL ECOLOGY

Week 11. Sub-Optimal Adaptation: The Contradictions of Poverty

- 21 (11.5) The Logic of Being Poor in Brazil's Northeast
- 22 (11.7) Modern Malthusian Politics and its Fallacies: "The Tragedy of the Commons"

Reading:

Gross, Daniel R., and Barbara Underwood Technological Change and Caloric Costs: Sisal Agriculture in Northeast Brazil. *American Anthropologist* 73: 725-740

Hardin, Garrett 1968 The Tragedy of the Commons. *Science* 162:1243-8. <http://www.cs.wright.edu/~swang/cs409/Hardin.pdf>

Trawick, Paul 2001 Successfully Governing the Commons: Principles of Social Organization in an Andean Irrigation System. *Human Ecology* 29(1): 1-25. <http://www.soc.duke.edu/~pmorgan/trawick.pdf>

Scheper-Hughes 1989 Death Without Weeping. Has Poverty Ravaged Mother Love in the Shantytowns of Brazil? *Natural History* October: 8, 10, 12, 14, 16. <http://www.rci.rutgers.edu/~jdowd/scheper-hughes%20-%20death%20without%20weeping.pdf>

Green, Lawrence 1977 Hyperendemic Goiter, Cretinism, and Social Organization in Highland Ecuador. In L. Greene, ed., *Malnutrition, Behavior, and Social Organization*. NY: Academic, pp. 55-94.

Week 12. Culture, Environment and Population in the World System

23 (11.12) Population, Environment and Politics in Rural Development

24 (11.14) **FILM: *The Legacy of Malthus*. (Deepa Dhanraj 1994).**

Reading:

Ross, Eric B. 2000 The Malthus Factor: Poverty, Politics and Population in Capitalist Development. Cornerhouse Briefing Paper 20.

<http://www.thecornerhouse.org.uk/pdf/briefing/20malth.pdf>

Murray, Gerald 1980 Population Pressure, Land Tenure, and Voodoo: The Economics of Haitian Peasant Ritual. In Eric B. Ross (ed.) *Beyond the Myths of Culture: Essays in Cultural Materialism*. New York: Academic Press. Pp. 297-321.

Week 13. The Fate of Local Food Production in a Global/Globalized System

25. (11.19) The Seeming Paradox of Beef Taboo and "Cow Love" in Hindu India

26. (11.21) The Causes and Consequences of the Ascendancy of the Green Revolution

Reading:

Harris, Marvin 1966 The Cultural Ecology of India's Sacred Cattle. *Current Anthropology* 7(1): 51-66.

Odend'hal, Stewart 1973 Energetics of Indian Cattle in Their Environment. *Human Ecology* 1(1): 3-22.

Leonard, William and R. Brooke Thomas 1989 Biosocial Responses to Seasonal Food Stress in Highland Peru. *Human Biology* 61(1): 65-85.

Ross, Eric B. 1983 The Riddle of the Scottish Pig. *BioScience* 33(2): 99-106.

Mintz, Sidney 1979 Time, Sugar and Sweetness. *Marxist Perspectives* 9: 56-73.

ETC Group 2002 Genetic Pollution in Mexico's Center of Maize Diversity. Food First

Backgrounder 8(2).

Wright, Angus 1994. Introduction and Chapter I in *The Death of Ramon Gonzalez: The Modern Agricultural Dilemma*. Austin: The University of Texas Press. Pp. xi-xvii, 1-9.

Harris, Marvin, *Cannibals and Kings.*, Ch. 12 (“The Origin of the Sacred Cow”)

Hewitt de Alcantara, Cynthia 1973 The “Green Revolution” as History: The Mexican Experience. In Ernest Feder (ed.) *Gewalt und Ausbeutung. Latein-amerikas Landwirtschaft*. Hamburg: Hoffmann und Campe Verlag, Pp. 473-495.

Week 14 Struggles for Land: Ecological Aspects of Food Production in Complex Systems

This section considers some of the complex configurations of modern food production that integrate local resource use with global transfers, in ways that frequently generate conflict between subsistence cultivators, seeking livelihood security, and commercial interests, motivated by profit. Among the cases that will be considered are soy production and the increasing role of a handful of multinational companies that dominate a small number of major world food crops.

27. (12.19) The Multinational Beef System and its Consequences for the Amazon

28. (12.21) The Emergence of the Global Soy Trade and World Food Inequalities

Reading:

Ross, Eric B. 1980 Patterns of Diet and Forces of production: An Economic and Ecological History of the Ascendancy of Beef in the United States Diet. In Eric B. Ross (ed) *Beyond the Myths of Culture: Essays in Cultural Materialism*. New York: Academic Press. Pp. 181-225.

Hecht, Susanna 1993 The Logic of Livestock and Deforestation in Amazonia. *BioScience* 43(10): 687-695.

Abramson, Evon 2008 Soy: A Hunger for Land. *NACLA Report on the Americas*. <http://nacla.org/soyparaguay>

Editors 1992 Development as Enclosure: The Establishment of the Global Economy. *The Ecologist* 22(4): 131-147.

<http://Biblio.iss.nl/opac/uploads/scandocs/DevAsEncl.pdf>

Week 15

In this important film, the late British director Adrian Cowell documents the complex process that draws together international capital, Brazilian development priorities, peasant marginalization and the destruction of the Amazon rain forest.

27. (12.26) FILM: *Decade of Destruction: Killing for Land* (1990)

28. THANKSGIVING

Reading:

Amazon's Jungle Warfare – Brazil. Youtube.

http://www.youtube.com/watch?v=GQe7_g9DZZo&feature=channel

Langevin M.S. & Rosset P. 1997 Land Reform From Below: The Landless Workers Movement in Brazil. Internet: <http://www.mstbrazil.org/rosset.html>

Week 16 (TBA)

29. (12.3)

30. (12.5)

FINAL EXAM

PAPER DUE: December 9