

ANTHRO 128  
ARCHAEOLOGY AND ANTHROPOLOGY OF THE ENVIRONMENT  
SYLLABUS  
SPRING 2017  
(revised, January 16)

Class Meetings

Tues. and Thurs. 3:30-5  
Room 101, 2251 College

Instructor

Professor Junko Habu

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AIMS OF THE COURSE

This course provides an overview of recent discussions on long-term sustainability of human-environmental interaction in the fields of archaeology, ecological anthropology and related disciplines. The theoretical foundation of this course is that of historical ecology (see e.g., Balée 1998), which conducts comprehensive research into long-term and short-term cultural change while emphasizing the impact of human actions on the environment. Key aspects of human cultures and societies that will be discussed in this course include: 1) food and subsistence diversity, 2) networks (including the mobility of people, goods and information), 3) local autonomy and sovereignty, 4) rituals, traditional ecological knowledge and indigenous rights, and 5) implications of technological developments (see the figure below). The importance of the initiatives of local stakeholders will also be emphasized.

PREREQUISITE

None. Although this is an upper division course in Anthropology, freshmen and sophomores in Anthropology, as well as students in other majors, are encouraged to take this course (but please be prepared to read the assigned readings before each class meeting).

## EVALUATION

Mid-term Class Tests (20%x2) 40% February 16 & March 23

Final In-class Test (20%) 20% April 27

Attendance and Class Participation 20%

Group Presentation 20%

## GROUP PRESENTATION

Group presentations are scheduled in late April (schedule to be confirmed depending on the total number of students). The class will be divided into groups of several individuals, with group composition dependent upon the research areas/topics of individual students. Each group of students will be asked to summarize key issues of a given research area/topic, and to suggest possible future research directions. Each group will be required to give a formal presentation (approximately 15 min.), which will be followed by questions and class discussion. Prepare a handout for your presentation that outlines the main thesis and structure of your presentation along with the list of academic references (i.e., books, journal articles etc.) and other citations. Each group is expected to rehearse its presentation during the instructor's office hours prior to the final presentation and revise the contents. Also, submit your ppt file after your presentation.

## CLASS STRUCTURE

Each class meeting usually starts with a lecture followed by class discussion on assigned readings. Students are expected to attend classes and take notes, since the contents of the class lectures may be quite different from those of the readings. Powerpoint summaries will be posted on BCourses after class meetings. Students are responsible for the contents of lectures as well as the assigned readings.

## SCHEDULE AND ARTICLES/CHAPTERS TO BE READ BEFORE THE CLASS

(Additional readings may be assigned)

### WEEK 1: INTRODUCTION

Jan. 17: Introduction

Jan. 19: Goals and Scope of the Course

Nader, Laura, 2011. Homo Sapiens and the Longue Durée. *Journal of Developing Societies* 24(1): 83-94.

Crumley, Carole, 2015. New paths into the Anthropocene: Applying historical ecologies to the human future. *The Oxford Handbook of Historical Ecology and Applied Anthropology*. (online)

Habu, Junko, 2008. Growth and decline in complex hunter-gatherer societies. *Antiquity* 82: 571-584.

## WEEK 2: ENVIRONMENTAL PROBLEMS AND SO-CALLED "COLLAPSES"

Jan. 24: Collapses or Reorganization?

Diamond, Jarred, 2005. *Collapse*. Prologue (pp. 1-23).

Rees, William, 2010 (originally published in 2005). *Contemplating the Abyss: The role of environmental degradation in the collapse of human societies*. In *The Energy Reader*, edited by Laura Nader, pp. 61-64. Wiley-Blackwell, Columbia.

Holling, C. S., Gunderson, L., and Ludwig D., 2002. In quest of a theory of adaptive change. In C. S. Holling and L. Gunderson, (eds.), *Panarchy: Understanding Transformations in Human and Natural Systems*. Island Press, Washington D.C., pp. 3-22.

Jan. 26: Archaeological Perspectives

Tainter, J.A., 2000. Problem solving: complexity, history, sustainability. *Population and Environment* 22(1):3-41.

Redman, Charles, 2005. Resilience theory in archaeology. *American Anthropologist* 107(1): 70-77.

## WEEK 3: HISTORICAL ECOLOGY: THEORY AND ARCHAEOLOGICAL PRACTICE

Jan. 31: Historical Ecology

Balée, William, 1998. *Advances in Historical Ecology*. Introduction (pp. 1-10) and Chapter 1: Historical ecology: Premises and postulates (pp. 13-29). Columbia University Press, New York.

Feb. 2: Archaeological Perspectives

Erickson, Clark L., 2008. Amazonia: The historical ecology of a domesticated landscape. In *The Handbook of South American Archaeology*, edited by Helaine Silverman and William Isbell, pp. 157-183. Springer, New York.

Erlandson, Jon M., and Torben C. Rick, 2008. Archaeology, marine ecology and human impacts on marine environments. In *Human Impacts on Ancient Marine Ecosystems*, edited by T. C. Rick and J. M. Erlandson, pp. 1-19. University of California Press, California.

## WEEK 4: INDIGENOUS RIGHTS, TRADITIONAL ECOLOGICAL KNOWLEDGE (TEK), AND RITUALS

Feb. 7: Mining, Resources, Developments and Indigenous Rights

Johnston, Barbara Rose, Susan Dawson, and Gary Madsen, 2007. Uranium mining and milling: Navajo experiences in the Southwest. In Sherry L. Smith and Brian Frehner (eds.), *Indians and Energy: Exploitation and Opportunity in the American Southwest*, pp.111-134. School for Advanced Research Press, Santa Fe.

Hayashida, F. M., 2005. Archaeology, ecological history and conservation. *Annual Review of Anthropology* 34: 43-65.

Feb. 9: Ethnographic and Archaeological Perspective

Heizer, Robert F. 1975: Seven Early Accounts of the Pomo Indians and their Culture. Pp. 1-52. Archaeological Research Facility and the Department of Anthropology, UC Berkeley.

WEEK 5: INDIGENOUS RIGHTS, TRADITIONAL ECOLOGICAL KNOWLEDGE (TEK), AND RITUALS (Cont'd)/ MIDTERM 1

Feb. 14: Guest Lecture by Prof. Kent Lightfoot

Feb. 16: Mid-term 1

WEEK 6: DIVERSITY

Feb. 21: Food Diversity and Biodiversity

Altieri, Miguel A., 2004. Linking ecologists and traditional farmers in the search for sustainable agriculture. *Frontiers in Ecology and Environment* 2(1): 35-42.

Escobar, Arturo, 2006. Does biodiversity exist? In *The Environment in Anthropology: A Reader in Ecology, Culture, and Sustainable Living*, edited by Nora Haenn and Richard R. Wilk, pp. 243-245. New York University Press, New York.

Feb. 23: Archaeological Approaches

Morehart, Christopher T., 2015. Diversity, standardization, and the state: The politics of maize agriculture in postclassic central Mexico. In *Viewing the Future in the Past: Historical Ecology Applications to Environmental Issues*, edited by H. Thomas Foster II, Lisa M. Paciulli, and David J. Goldstein, pp. 15-33. University of South Carolina Press, Columbia.

WEEK 7: NETWORKS, MOBILITY AND LANDSCAPE

Feb. 28: Globalization and the Movements of People, Goods and Information

Wallerstein, Immanuel, 2007. Scale and dependency in world-systems: What is rational? In *Rethinking Environmental History*, edited by Alf Hornborg, J. R. McNeill and Joan Martinez-Alier, pp. 379-389. AltaMira Press, Lanham.

Ingold, Tim. 1993. The temporality of the landscape. *World Archaeology* 25(2): 152-174.

Mar. 2: Archaeological Perspectives

Fitzhugh, B. 2012. Hazards, impacts, and resilience among hunter-gatherers of the Kuril Islands. In *Living with Sudden Environmental Change*, J. Cooper and P. Sheets, eds., Boulder: University of Colorado Press, pp. 19-42.

Smith, Bruce D., 2016. Neo-Darwinism, niche construction theory, and the initial domestication of plants and animals. *Evolutionary Ecology* 30: 307-324.

#### WEEK 8: AUTONOMY, SOVEREIGNTY AND SOCIAL INEQUALITY

Mar. 7: Local Autonomy and Sovereignty

Tsosie, Rebecca, 2010. Cultural sovereignty and tribal energy development: creating a land ethic for the twenty-first century. In *Indians and Energy: Exploitation and Opportunity in the American Southwest*, edited by Sherry L. Smith and Brian Frehner, pp.263-279. School for Advanced Research Press, Santa Fe.

Columbi, Benedict J., 2010. Indigenous peoples, large dams, and capital-intensive energy development: a view from the Lower Colorado River. In *Indians and Energy: Exploitation and Opportunity in the American Southwest*, edited by Sherry L. Smith and Brian Frehner, pp. 89-109. School for Advanced Research Press, Santa Fe.

Mar. 9: Archaeological Perspectives

Ames, K. M., 2007. The archaeology of rank. In *Handbook of Archaeological Theories*, edited by R. A. Bentley, H. D. G. Maschner and C. Chippendale, pp. 487-513. AltaMira Press, lanham.

#### WEEK 9: SCALE OF ECONOMY AND COMMUNITY

Mar. 14: Large vs. Small-scale Systems, and the Issue of Demography

Boserup, Ester, 1981. *Population and Technological Change*, pp. 3-28. University of Chicago Press, Chicago.

Shiva, Vandana, 2006. Staying alive: women, ecology and development. In *The Environment in Anthropology: A Reader in Ecology, Culture, and Sustainable Living*, edited by Nora Haenn and Richard R. Wilk, pp. 183-190. New York University Press, New York.

Mar. 16 Archaeological Perspectives

Habu, Junko. 2004. *Ancient Jomon of Japan*. Chapter 1 (pp. 1-25) and 7 (pp. 243-262). Cambridge University Press, Cambridge.

#### WEEK 10: SCALE OF ECONOMY AND COMMUNITY (Cont'd)/ MIDTERM 2

Mar. 21: Guest Lecture (TBA)

Mar. 23: Midterm 2

SPRING RECESS (March 27-31)

## WEEK 11: TECHNOLOGY AND INTENSIFICATION

### Apr. 4: Implications of New Technological Developments

Lovins, Amory B., Imran Sheikh, and Alex Markevich, 2010 (originally published in 2008). Nuclear Power: climate fix or folly? In *The Energy Reader*, edited by Laura Nader, pp. 380-398. Wiley-Blackwell, Malden.

### Apr. 6: Archaeological Perspectives

Kirch, Patrick V. 2006. Agricultural intensification: a Polynesian perspective. In *Agricultural Strategies* edited by Joyce Marcus and Charles Stanish, pp. 191-220.

## WEEK 12: ENVIRONMENTAL CHANGE

### Apr. 11: Climate Change and Human Impacts

Crate, Susan A., 2011. Climate and culture: Anthropology in the era of contemporary climate change. *Annual Review of Anthropology* 40: 175-194.

### Apr. 13: Archaeological Perspectives

Lightfoot, Kent, Rob Cuthrell, Chuck Striplen, and Mark Hylkema. 2013. Rethinking the Study of Landscape Management Practices among Hunter-Gatherers in North America. *American Antiquity* 78(2): 285-301.

Habu, Junko and Mark E. Hall, 2013. Climate change, human impacts on the landscape and subsistence specialization: Historical ecology and changes in Jomon hunter-gatherer lifeways. In *Archaeology and Historical Ecology of Small-scale Economies*, pp. 65-78.

## WEEK 13: GROUP PRESENTATIONS

Apr.18: Group Presentations (1)

Apr.20: Group Presentations (2)

## WEEK 13: GROUP PRESENTATIONS (Cont'd) AND FINAL IN-CLASS TEST

Apr.25: Group Presentations (3)

Apr.27: Final In-class Test

## WEEK 15: RRR WEEK (NO INSTRUCTION)