ANTH 399 FOOD ORIGINS IN PREHISTORY
Fall 2009

Professor: Gyoung-Ah Lee
Time: 12:00–1:50 pm
Place: Esslinger 105
Office: 254 Condon Hall
Office Hours: 2:00–3:00 pm on Tue & Thur
Contact: 346-4442 galee@uoregon.edu
Readings: Listed below (all readings are uploaded in Course Blackboard).

Description

This course aims to introduce archaeological discovery regarding to the origins of agriculture and domestication. It covers up-to-date theories and perspectives on why/how some hunter-gatherers became farmers, how crops and domesticated animals dispersed, how societies changed after agriculture emerged, and how agriculture impacted environments. The course explores both anthropological and biological aspects of prehistoric agriculture. The course goal is to make you aware of critical research on each topic covered and to prepare you to applying the knowledge to your own academic interests. Therefore, active participation is a key to complete this course successfully.

During the first phase, the course covers the important archaeological data discovered to date on the prehistoric agriculture. The contents of the first phase lectures will be subject to two quizzes. The Second phase of the course will consist of the lectures and discussions on major perspectives regarding to the origins of agriculture. Prior to each lecture from the Oct 1st class of week 1, you need to submit a 100-word summary of readings assigned. Each summary will contribute to the mark for participation.

Readings

All readings are uploaded at Blackboard (*Reading Materials Folder*).

Evaluation Schemes

Specifics	Marks
Participation	20%
Two quizzes	20% each
Two Reading critiques	20 % each

(Percentage per a final grade)

- There will NOT be a curve. Final letter grades for the course will be figured as follows:

$A^+ \geq 97\%$	$A \geq 93\%$	$A^- \geq 90\%$
$B^+ \geq 87\%$	$B \geq 83\%$	$B^- \geq 80\%$
$C^+ \geq 77\%$	$C \geq 73\%$	$C^- \geq 70\%$
$D^+ \geq 67\%$	$D \geq 63\%$	$D^- \geq 60\%$
$F < 60\%$		

- If the course is taken P/NP, 70% or higher is required to pass the class.

Participation

Participation is essential for successful course completion. Attendance, evidence of reading the assigned articles (summary), and active discussion are all counted for a good participation mark. By one day before each class, you will submit a brief of 100 words for the following two questions.

- Describe the most important theme(s) in each reading assigned (about 100 words)
- Write a concept(s), term(s), definition(s), theory(ies), argument(s), or perspective(s) that you cannot understand.

You will upload a brief to Blackboard (folder, Reading Summary) from the second class of Week 1.

Quizzes

Each quiz lasts one hour (Quiz 1 in Oct 20; Quiz 2 in Nov 10). The quiz consists of five short answer questions (100 words or less for each answer) and one essay-style question (one page of letter-size paper).

Reading Critiques

You will submit two reading critiques on the theories of the agricultural origins during the second half of the courses (Review 1 in Nov 24; Review 2 in Dec 3). You will select two or more articles that are suggested in the 'weekly schedule' to deliver the following points:

- Summarize the important theme(s) in each reading selected.
- Compare the theories/models/perspectives across the readings and argue which models explain the relevant archaeological data more plausibly. You can use data covered in the first phase of the course.

This reading assignment will be written in two pages of the Letter-sized paper. Use a 12-sized, legible font with double space with an inch margin.

Academic Dishonesty

As stated in the University of Oregon Policy on Academic Dishonesty "to present the words, ideas, data or work of another as one's own, or to cheat on an examination corrupts the essential process by which knowledge is advanced". Anyone caught cheating or engaged in any form of academic dishonesty will fail this course. Read carefully the following guideline to avoid plagiarism:

http://libweb.uoregon.edu/guides/plagiarism/students/?tab=5

Physical/Learning Disabilities

If you have a disability that affects your performance in this class, please contact disabilities service to request a letter verifying your disability and any reasonable adjustments necessary for you to complete the course. Please provide me with this letter as early in the term as possible.

Readings

Baker, G. 2006. "Ch. 3. Identifying foragers and farmers," in *The Agricultural Revolution in Prehistory: Why Did Foragers Become Farmers?* pp. 73-103. Oxford: Oxford University Press.

Barker, G. 2006. "Ch. 1. Approaches to the Origins of Agriculture," in *The Agricultural Revolution in Prehistory: Why Did Foragers Become Farmers?* Edited by G. Baker, pp. 1-41. Oxford: Oxford University Press.

Bender, B. 1978. Gaterer-hunter to farmer: a social perspective. *World Archaeology* 10:204-222.

Binford, L. R. 1982. "Post-pleistocene adaptations," in *New Perspectives in Archaeology*. Edited by L. R. Binford and S. Binford, pp. 315-341. New York: Academic Press.

Cavalli-Sforza, L. L. 1996. "The spread of agriculture and nomadic pastoralism: insights from genetics, linguistics and archaeology," in *The Prigins and Spread of Agriculture in Eurasia*. Edited by D. Harris, pp. 51-69. London: UCL Press.

Childe, V. G. 1936. *Man Makes Himself*. London: Watts and Co.

Cohen, M. N. 1975. Archaeological evidence for population pressure in pre-agricultural societies. *American Antiquity* 40:471-475.

Colledge, S., J. Conolly, and S. Shennan. 2004. Archaeobotanical evidence for the spread of farming in the eastern Medierranean. *Current Anthropology* 45 (supplement):35-58.

Crawford, G. W. 2006. "East Asian plant domestication," in *Archaeology of Asia*. Edited by M. Stark, pp. 77-95. New York: Blackwell Publishing.

—. 2008. The Jomon in early agriculture discourse: issues arising from Matsui, Kanehara and Pearson. *World Archaeology* 40:445-465.

Crawford, G. W., and G.-A. Lee. 2003. Agricultural origins in Korean Peninsula. *Antiquity* 7:87-95.

Crawford, G. W., and D. G. Smith. 2003. "Palaeoethnobotany in the Northeast," in *People and Plants in Ancient Eastern North America*. Edited by P. Minnis, pp. 172-257. Washington DC: Smithsonian Institution Press.

D'Andrea, A. C., M. Klee, and J. Casey. 2001. Archaeobotanical evidence of Pearl Millet (*Pennisetum glaucum*) in Sub-Saharan West AfricaPearl Millet (*Pennisetum glaucum*) in Sub-Saharan West Africa. *Antiquity* 75:341-348.

Erickson, D. L., B. D. Smith, A. C. Clarke, D. H. Sandweiss, and N. Tuross. 2005. An Asian origin for a 10,000-year-old domesticated plant in the Americas. *PNAS* 102:18315-18320.

Flannery, K. 1968. "Archaeological systems theory and early Mesoamerica," in *Anthropological Archaeology in the Americas*. Edited by B. J. Megers, pp. 67-87. Washington: Archaeological Society of Washington.

Harlan, J. R. 1995. "Of pride and prejudice," in *The Living Fields: Our Agricultural Heritage*. Edited by J. R. Harlan, pp. 1-29. Cambridge: Cambridge University Press.

Harris, D. 2007. "Agriculture, cultivation and domestication: exploring the conceptual framework of early food production," in *Rethinking Agriculture: ARchaeological and Ethnoarchaeological Perspectivbes*. Edited by T. Denham, J. Iriarte, and L. Vrydaghs, pp. 16-35. Walnut Creek, California: Left Coast Press, Inc.

Hastorf, C. A. 1998. The cultural life of early domestic plant use. *Antiquity* 72:773-782.

—. 2003. Andean Luxury Foods: special food for the ancestors, the deities and the elite. *Antiquity.* 77:110-119.

Hayden, B. 1990. Nimrods, piscators, pluckers and planters: the emergence of food production. *Journal of Anthropological Archaeology* 9.

Hildebrand, E. A. 2007. "A tale of two tuber crops: how attributes of Enset and Yams may hav shaped Prehistoric Human-plant interactions in Southwest Ethiopia," in *Rethinking Agriculture: ARchaeological and Ethnoarchaeological Perspectivbes*. Edited by T. Denham, J. Iriarte, and L. Vrydaghs, pp. 273-298. Walnut Creek, California: Left Coast Press, Inc.

Hillman, G., R. Hedges, A. Moore, S. Colledge, and P. Oettitt. 2001. New evidence of Late Glacial cereal cultivation at Abu hureyra on the Euphrates. *Holocene* 11:383-393.

Hodder, I. 1990. *The Domestication of Europe: Structure and Contingency in Neolithic Societies*. Oxford: Cambridge University Press.

Jones, M., and T. Brown. 2007. "Selection, cultivation and reproductive isolation: a reconsideration of the morphological and molecular signals of domestication," in *Rethinking Agriculture: Archaeological and Ethnoarchaeological Perspectivbes*. Edited by T. Denham, J. Iriarte, and L. Vrydaghs, pp. 36-48. Walnut Creek, California: Left Coast Press, Inc.

Lee, G.-A., G. W. Crawford, L. Liu, and X. Chen. 2007. Plants and people from the Early Neolithic to Shang periods in North China. *oceedings of the National Academy of Sciences of the USA* 104:1087-1092.

Marshall, F. 2007. "African pastoral perspectives on domestication of the donkey: a first synthesis," in *Rethinking Agriculture: ARchaeological and Ethnoarchaeological Perspectivbes*. Edited by T. Denham, J. Iriarte, and L. Vrydaghs, pp. 371-341. Walnut Creek, California: Left Coast Press, Inc.

Matsui, A., and M. Kanehara. 2006. The question of prehistoric plant husbandry during the Jomon period in Japan. *World Archaeology* 38:259-273.

Piperno, D., R., and D. M. Pearsall. 1998. "The relationship of Neotropical food production to food production from other areas of the world," in *The Origins of Agriculture in the Lowland Neotropics*. Edited by D. R. Piperno and D. M. Pearsall, pp. 321-327. San Diego: Academic Press.

Pope, K. O., M. E. D. Pohl, J. G. Jones, D. L. Lentx, C. von Nagy, F. J. Vega, and I. R. Quitmyer. 2001. Origin and envronmental setting of ancient agriculture in the lowlands of Mesoamerica. *Science* 292:1370-1373.

Rindos, D. 1980a. Symbiosis, instability and the origins and spread of agriculture: a new model (and comments and reply). *Current Anthropology* 21:751-772.

—. 1980b. Symbiosis, instability, and the origins and spread of agriculture: a new model. *Current Anthropology* 21:751-772.

Rowley-Conwy, P. 2004. How the West Was Lost: A Reconsideration of Agricultural Origins in Britain, Ireland, and Southern Scandinavia. *Current Anthropology* 45 (supplement):83-113.

Shimada, M., and I. Shimada. 1985. Prehistoric Llama breeding and herding on the north cast of Peru. *American Antiquity* 50:3-26.

Smith, B. D. 1995. *Emergence of Agriculture*. New York: Scientific American Library.

—. 2001. Documenting plant domestication: the coonsilience of biological and archaeologivcal approahces. *Proceedings of the National Academy of Sciences of the USA* 98:1324-1326.

—. 2006. Eastern North America as an independent center of plant domestication. *Proceedings of the National Academy of Sciences of the USA* 103:12223-1228.

Willcox, G. 2007. "The adoption of farming and the beginning of the Neolithic in the Euphrates valley: cereal exploitation between the 12th and 8th millennia cal BC," in *The Origins and Spread of Domestic Plants in Soutwest Asia and Europe*. Edited by S. Colledge and J. Conolly. Walnut Creek, CA: Left Coast Press.

Winterhalder, B., and D. J. Kennett. 2006. "Behavioral ecology and the transition from hunting and gathering to agriculture," in *Behavioral Ecology and the Transition to Agriculture*. Edited by D. J. Kennett and B. Winterhalder, pp. 1-21. Berkeley and LA: University of California Press.

Weekly Schedule

Date	Theme	Readings
PHASE 1 CURRENT ARCHAEOLOGICAL DATA		
Week 1	*Introduction* • Course introduction • Basic terms and concept • Methods for documenting plant uses in the past	Sep 29 Barker 2006 (Ch.3); Harris 2007 Oct 1 Smith 1995 (Ch. 2); Hastorf 1998
Week 2	*Wild plant harvesting to domesticates in Southwest Asia* • Cultural and biological perspectives on plant/animal domestications in SW Asia • Archaeological evidence of early plant managements	Oct 6 Smith 1995 (Ch.4) Oct 8 Hillman et al. 2001; Willcox 2007
Week 3	*Plants and People in East Asia* • How general theories of the emergence of food production are applied into the East Asian cases. • Environmental & social influences on agriculture. • Issues on spread of rice farming technology	Oct 13 Crawford 2006; Lee et al. 2007 Oct 15 Crawford & Lee 2003; Crawford 2008; Matsui & Kaneraha 2006
Week 4	***Quiz 1***	Oct 20
Week 4-5	*Origins of Agriculture in Central & South America* • Domestication of bean, maize, squash • Agricultural impact on society and environment • Tuber use and domestication • Archaeological evidence from the Andes and lowland tropics	Oct 22 Smith 1995 (Ch.7); Piperno & Pearsall 1998 (Pp. 321-327); Smith 2001 Oct 27 Hastorf 2003; Shimada & Shimada 1985
Week 5	*Prehistoric Plant Use in Eastern North America* • Indigenous eastern crop complex • Transition to maize agriculture	Oct 29 Crawford & Smith 2003; Smith 2006; Erickson et al. 2005
Week 6	*Plant use and agricultural development in Africa* • Characters of African cereals (e.g. millet, sorghum) • Sub-Sahara in prehistory	Nov 3 D'Andrea et al. 2001; Hildebrand 2007; Marshall 2007
Week 6	*Agricultural transition in Europe* • Spread and development of the Neolithic agriculture	Nov 5 Cavalli-Sforza 1996; Colledge et al. 2004; Rowley-Conwy 2004
Week 7	***Quiz 2***	Nov 10
PHASE 2 THEROIES AND PERSPECTIVES		
Week 7-8	*Theories on transition to resource productions I* • External push perspectives: environmental models • External push perspectives: population models	Nov 12 Harlan 1995 (Ch.1); Barker 2006 (Ch. 1); Childe 1936 (ch.5) Nov 17 Binford 1982; Cohen 1975
Week 8-9	*Theories on transition to resource productions II* • System theory • Human behavioural model • Ecological, coevolutionary perspectives ***Submit Critical Review 1 in Nov 24***	Nov 19 Flanery 1968; Winterhalder & Kennett 2006 Nov 24 Rindos 1980; Jones & Brown 2007 *Nov 26 Thanksgiving Holiday-no class*
Week 10	*Theories on transition to resource productions III* • Social relation perspectives: Marxist, Individualism • Ideological model ***Submit Critical Review 2 in Dec 3***	Dec 1 Bender 1978; Hayden 1990 Dec 3 Hodder 1990 (Chs. 2, 10)

- The class schedule is subject to change.