

ARCHAEOLOGICAL SITE FORMATION PROCESSES ANTHROPOLOGY 363, McBREARTY, FALL, 2000

COURSE DESCRIPTION

This course examines how forces in the natural environment interact with human behavior to produce the archaeological record. We will look at what types of information initially become preserved, how this information may be transformed by human or natural agencies, and how it may be abstracted to enable us to reconstruct past human habitats and ways of life. We will investigate how the nature of archaeological evidence influences what aspects of the past are knowable, and think about how to formulate research questions appropriate to the nature of archaeological evidence.

SOURCES

Schiffer, M. B. 1987. *Site Formation Processes of the Archaeological Record*.
Albuquerque: University of New Mexico Press.

Rapp, G. & C. L. Hill. 1998. *Geoarchaeology: The Earth-Science Approach to Archaeological Interpretation*. New Haven: Yale University Press.

COURSE FORMAT & REQUIREMENTS

The course will be conducted as a seminar, and your active participation in classroom discussion at each Tuesday's class meeting is essential. Your weekly readings will consist of articles from the books listed above as well as many other sources. Copies of papers to be read will be available to you each week for photocopying. Every Monday, you will hand in at least three short discussion questions based upon the week's reading. Your questions may be simple requests for clarification or factual information, but the ideal discussion question raises central issues encountered in the reading that the class might address in discussion. To hand in your questions you may either: 1) drop them in my mailbox by noon Tuesday, 2) fax them to me at the department (486-1719) by noon Tuesday, or 3) fax them to me at home (860-659-1242) as late as you please on Monday night. You may send messages to my email address, but please do not submit discussion questions or any other written assignments by email!

For your writing assignments, you have a choice of either three moderately short papers, or one short and one longer paper. Your papers may be the product of library research on a given topic or a report on the results of a practical project that you may carry out either alone or with a group. Please discuss your paper topics with me before you begin your research. You will give a short oral presentation to the class on some aspect of your research toward the end of the term. With adequate warning, you may be asked to lead the group in discussion.

SCHEDULE & TOPICS

- SEPT 5 Organizational meeting.
- SEPT 12 Uniformitarianism & time resolution.
- SEPT 19 Taphonomy, part 1: Death, decay, disarticulation, weathering.
- SEPT 26 Taphonomy, part 2: Carnivores, scavenging, cannibalism.
- OCT 3 Fluvial sedimentary environments, fluvial transport.
- First paper due Oct 10.
- OCT 10 Eolian & volcanic sedimentary processes: the Pompeii effect?
- OCT 17 Glacial & periglacial environments.
- OCT 24 Marine & lacustrine sedimentary environments.
- OCT 31 Postdepositional processes.
- NOV 7 Caves.
- Second paper due Nov 14.
- NOV 14 Site structure & ethnoarchaeology.
- NOV 21 Curation, retooling & landscape archaeology.
- NOV 28 Human site modification.
- DEC 5 Wild card
- Third paper due Dec 12.
- DEC 12 Student presentations.

Note: These topics can be altered and I welcome your suggestions.

Class meetings: Tuesdays 2-5 p.m., Beach Hall 4th floor seminar room.

McBrearty's whereabouts

Office: Beach 433, tel: 486-2857, email: mcbrearty@uconn.edu

fax: (dept) 486-1719

Office hours: Wednesdays 3:30-5:30 p.m. or by appointment.

**ANTH 363, SITE FORMATION PROCESSES
FALL, 2000, McBREARTY
READINGS TO BE DISCUSSED SEPT 12
UNIFORMITARIANISM & TIME RESOLUTION.**

QUESTION: What is the archaeological record?

READINGS:

RAPP & HILL. Chapters 1, 2 & 7.

BEHRENSMEYER, A.K. 1992. Fossil deposits and their investigation. In Jones, S., R. Martin & D. Pilbeam, eds., *The Cambridge Encyclopedia of Human Evolution*. Cambridge University Press, pp. 187-190.

BROWN, F.H. & VAN COUVERING, J.A. 1999. Stratigraphy. In Delson, E., Tattersall, I., van Couvering, J., & Brooks, A. S. eds., *Encyclopedia of Human Evolution*. New York: Garland, pp. 674-677.

QUESTIONS & ISSUES: How does the nature of the archaeological record influence what we can know about the past? How do our methods measure up?

BINFORD, L.R. 1963. Archaeological perspectives. In Binford, S.R. & L.R. Binford, eds., *New Perspectives in Archaeology*. University of Chicago Press, pp. 5-32.

QUESTIONS & ISSUES:

How does time resolution influence the nature of archaeological explanation? Are our habits of thinking about time appropriate to our evidence?

STERN, N. 1994. The implications of time-averaging for reconstructing the land-use patterns of early tool-using hominids. *Journal of Human Evolution* 27:89-105.

BROWN, F.H. & VAN COUVERING, J.A. 1999. Time scale. In Delson, E., Tattersall, I., van Couvering, J., & Brooks, A. S. eds., *Encyclopedia of Human Evolution*. New York: Garland, pp. 706-707.

SCHINDELL, D.E. 1982. Gaps in the fossil record. *Nature* 297:282-284.

VAN ANDELL. 1981. Consider the incompleteness of the fossil record. *Nature* 294:397-398.

ANTH 363, ARCHAEOLOGICAL SITE FORMATION PROCESSES

FALL, 2000, MCBREARTY

READINGS TO BE DISCUSSED SEPT 19

TAPHONOMY, PART 1: DEATH, DECAY, DISARTICULATION & WEATHERING

Animal bones from paleontological sites are used in part to reconstruct ancient habitat from the inferred diet and habitat preferences of the animals preserved. At archaeological sites, we also assume the bones can tell us something about human behavior. First, let's consider how bone assemblages were interpreted in the days before taphonomy.

DART, R.A. 1953. The predatory transition from ape to man. *International Anthropological Linguistic Review* 1:201-219.

PERKINS, D. AND D. DALY. 1968. A hunters' village in neolithic Turkey. *Scientific American* 219:96-106.

ISAAC, G. LI. 1978. The food sharing behavior of proto-human hominids. *Scientific American* 238:90-108.

Then, someone asked, "How did this dead animal really get here?"

HILL, A.P. 1978. Taphonomical background to fossil man. In Bishop, W.W., ed., *Geological Background to Fossil Man*. Edinburgh: Scottish Academic Press, pp. 87-101.

Do animals die where they live? What happens when they lie around for a while?

WESTERN, D. 1980. Linking the ecology of past and present mammal communities. In Behrensmeyer, A.K. & A.P. Hill, eds., *Fossils in the Making*. University of Chicago Press, pp. 41-54.

BEHRENSMEYER, A.K. & D. DECHANT BOAZ. 1980. The recent bones of Amboseli Park, Kenya, in relation to East African paleoecology. In Behrensmeyer, A.K. & A.P. Hill, eds., *Fossils in the Making*. University of Chicago Press, pp. 72-92.

GIFFORD, D.P. 1977. Taphonomic specimens, Lake Turkana. *National Geographic Research Reports, 1976 Projects*, pp. 419-428.

Can we know exactly how animals fall apart?

HILL, A.P. 1979. Disarticulation and scattering of mammal skeletons. *Paleobiology* 5:261-274.

What about how the bones fall apart?

BEHRENSMEYER, A.K. 1978. Taphonomic and ecologic information from bone weathering. *Paleobiology* 4:150-162.

Child, A. M. 1995. Microbial taphonomy of archaeological bone. *Studies in conservation* 40:19-30.

ANTHROPOLOGY 363 ARCHAEOLOGICAL SITE FORMATION PROCESSES

FALL, 2000 McBREARTY

READINGS TO BE DISCUSSED SEPT 26

TAPHONOMY, PART 2: CARNIVORE VS. HOMINID BONE DAMAGE

- BRAIN, C.K. 1969. The contribution of Namib Desert Hottentots to an understanding of Australopithecine bone accumulations. *Scientific Papers of the Namib Research Station* 39:13-22.
- HILL, A. P. 1989. Bone modification by modern spotted hyenas. In Bonnichsen, R. and M. Sorg, eds., *Bone Modification*. Orono: Center for the Study of the First Americans, pp. 169-178.
- MAREAN, C. W. & ASSEFA Z. 1999. Zooarchaeological evidence for the faunal exploitation behavior of Neanderthals and early modern humans. *Evolutionary Anthropology* 8:22-37
- HILL, K. 1982. Hunting and human evolution. *Journal of Human Evolution* 11:521-544.
- BLUMENCHINE, R.J. & J.A. CAVALLO. 1992. Scavenging and human evolution. *Scientific American*, October, pp. 90-96.
- ISAAC, G. LI. 1978. (From last week) The food sharing behavior of proto-human hominids. *Scientific American* 238:90-108.
- POTTS, R. 1984. Home bases and early hominids. *American Scientist* 72:338-347.
- SELVAGGIO, M. M. 1998. Evidence for a three-stage sequence of hominid and carnivore involvement with long bones at FLK Zinjanthropous, Olduvai Gorge, Tanzania. *Journal of Archaeological Science* 25:191-202.
- MARSHALL, F. 1994. Food sharing and body part representation in Okiek faunal assemblages. *Journal of Archaeological Science* 21:65-77.
- WINTERHALDER, B. 1996. Social foraging and the behavioral ecology of intragroup resource transfers. *Evolutionary Anthropology* 5:46-57.

ANTHROPOLOGY 363, ARCHAEOLOGICAL SITE FORMATION PROCESSES

FALL, 2000, MCBREARTY

READINGS TO BE DISCUSSED OCT 6: FLUVIAL PROCESSES

Background:

WATERS, M. 1992. Chapter 3. Alluvial environments, pp. 115-184.

GLADFELTER, B.G. 1985. On the interpretation of archaeological sites in alluvial settings. In STEIN, J.K. & W.R. FARRAND, eds., *Archaeological Sediments in Context*. Orono:Center for the Study of Early Man, pp. 41-52.

The effects of flowing water on bones (read 3 or 4):

BEHRENSMEYER, A.K. 1975. Characteristics of recent bones as sedimentary particles. The Taphonomy and Paleoecology of Plio- Pleistocene Vertebrate Assemblages East of Lake Rudolf, Kenya. *Bulletin of the Museum of Comparative Zoology, Harvard University* 146:483-500.

BOAZ, N.T. & A.K. BEHRENSMEYER. 1976. Hominid taphonomy: transport of human skeletal parts in an artificial fluvial environment. *American Journal of Physical Anthropology* 45:53-60.

The effects of flowing water on stone tools:

SCHICK, K. 1992. On making behavioral inferences from early archaeological sites. In Clark, J.D., ed. *Cultural Beginnings*. Bonn: Rudolf Gabelt GMBH, pp. 79-107.

SHACKLEY, M.L. 1974. Stream abrasion of flint implements. *Nature* 248:501-502.

Interpretation on a small scale (Read 7 or 8):

PETRAGLIA, M.D. & R. POTTS. 1994. Water flow and the formation of early Pleistocene artifact sites in Olduvai Gorge, Tanzania. *Journal of Anthropological Archaeology* 13:228-254.

GIFFORD, D.P. & A.K. BEHRENSMEYER. 1977. Observed formation and burial of a recent human occupation site in Kenya. *Quaternary Research* 8:245-266.

Interpretation on a regional scale (read 9 or 10):

WATERS, M.R. 1988. The impact of fluvial processes and landscape evolution of archaeological sites and settlement patterns along the San Xavier reach of the Santa Cruz River, Arizona. *Geoarchaeology* 3:205-219.

The case of arid lands:

HASSAN, F.A. 1985. Fluvial systems and geoarchaeology in arid lands: with examples from North Africa, the Near East and the American Southwest. In STEIN, J.K. & W.R. FARRAND, eds., *Archaeological Sediments in Context*. Orono:Center for the Study of Early Man, pp. 53-68.

Additional Reading:

SCHIFFER, M. 1987.

Chapter 10: Identification of formation processes, pp. 263-303

Chapter 9: Environmental processes: the region, pp. 235-262.

ANTHROPOLOGY 363
ARCHAEOLOGICAL SITE FORMATION PROCESSES
FALL, 2000, McBREARTY
READINGS TO BE DISCUSSED OCT 24
EOLIAN & VOLCANIC SEDIMENTARY PROCESSES

DAWSON, A.G. 1992. Ice age aeolian activity. *Ice Age Earth*. London: Routledge, pp. 162-179.

HAYNES, C.V. 1982. Great Sand Sea and Selima Sand Sheet, Eastern Sahara: geochronology of desertification. *Science* 217:629-633.

FULFORD, M. & A. WALLACE- HADRILL. 1998. Unpeeling Pompeii. *Antiquity* 72:128-145.

BROWN, F.B. 1992. Correlating the East African hominid sites. In Jones, S., R. Martin & D. Pilbeam, eds., *The Cambridge Encyclopedia of Human Evolution*. Cambridge University Press, p. 181.

NEWNHAM, R.M., D.J. LOWE, M.S. McGLONE, J.M. WILMSHURST & T.F.G. HIGHAM. 1998. The Kaharoa tephra as a critical datum for earliest human impact in northern New Zealand. *Antiquity* 25:533-544.

BUCKLAND, P.C., A.J. DUGMORE & K.J. EDWARDS. 1997. Bronze Age myths? Volcanic activity and human response in the Mediterranean and North Atlantic regions. *Antiquity* 71:581-593.

Replies to Buckland *et al*:

BAILLIE, M.G.L. 1998. Bronze Age myths of archaeological shortcomings? A reply to Buckland *et al*. 1997. *Antiquity* 72:425-427.

LOWE, D.J. & T.F.H. HIGHMAN. 1998. Hit-or-myth? Linking a 1259 AD acid spike with an Okataina eruption. *Antiquity* 72:427-431.

HAY, R.L. & M.D. LEAKEY. 1982. The fossil footprints of Laetoli. *Scientific American* 246:50-57.

THORSON, R.M. & K. McBRIDE. 1988. The Bolton Spring sites, Connecticut: early Holocene human occupation and environmental changes in southern New England. *Geoarchaeology* 3:221-234.

KEEFER, D.K., S.D. deFRANCE, M.E. MOSELEY, J.B. RICHARDSON, D.R. SATTERLEE & A. DAY-LEWIS. 1998. Early maritime economy and E. Niño events at Quebrada Tacahuay, Peru. *Science* 281:1833-1835.

ANTHROPOLOGY 363,
ARCHAEOLOGICAL SITE FORMATION PROCESSES
McBREARTY, FALL, 2000
READINGS TO BE DISCUSSED OCT 20.
GLACIAL & PERIGLACIAL ENVIRONMENTS.

1. WATERS, *Glaciers*, pp. 234ff.
Cryoturbation, pp. 292ff.

2. GLACIATION. In Tattersall, I., et al. 1988. *Encyclopedia of Human Evolution and Prehistory*. New York: Garland, pp. 226-233.

PALEOENVIRONMENTS. In Tattersall, I., et al. 1988. *Encyclopedia of Human Evolution and Prehistory*. New York: Garland, pp. 411-412.

SCHWEGER, C. 1985. Geoarchaeology of northern regions: lessons from cryoturbation. In STEIN, J.K. & W.R. FARRAND, eds., *Archaeological Sediments in Context*. Orono: Center for the Study of Early Man, pp. 127-141.

OLIVER, J.S. & R. W. GRAHAM. 1994. A catastrophic kill of ice-trapped coots: time averaged versus scavenger-specific disarticulation processes. *Paleobiology* 20:229-244.

IRVING, W.N., A.V. JOPLING & I. KRITSCH-ARMSTRONG. 1989. Studies of bone technology and taphonomy, Old Crow Basin, Yukon Territory. In Bonnicksen, R. and M. Sorg, eds., *Bone Modification*. Orono: Center for the Study of the First Americans, pp. 347-379.

THORSON, R.M. & R.D. GUTHRIE. 1984. River ice as a taphonomic agent: an alternative hypothesis for bone "artifacts". *Quaternary Research* 22: 172-188.

SUTCLIFFE, A.J. 1985. Frozen mammoths and other beasts. In Sutcliffe, A.J., *On the Track of Ice Age Mammals*. Cambridge: Harvard University Press, pp. 105-116.

SAVELLE, J.M. 1984. Cultural and natural formation processes of a historic Inuit snow dwelling site, Somerset Island, Arctic Canada. *American Antiquity* 49:508-524.

STONE, R. 1998. A bold plan to recreate a long lost Siberian ecosystem. *Science* 282:31-33.

ANTHROPOLOGY 305
ARCHAEOLOGICAL SITE FORMATION PROCESSES
McBREARTY, FALL, 2000
READINGS TO BE DISCUSSED OCT 10
LACUSTRINE & MARINE ENVIRONMENTS

BACKGROUND

- SCHIFFER, Relevant sections of Chapter 9 (ground water, lakes, coastal processes).
VAN COUVERING, J.A. & G.C. KUKLA. Sea-level change. In Tattersall, I., et al. 1988.
Encyclopedia of Human Evolution and Prehistory. New York: Garland, pp. 505-510.

CASE STUDIES, LACUSTRINE

- LARSEN, C.E. 1985. Geoarchaeological interpretation of Great Lakes coastal environments. In STEIN, J.K. & W.R. FARRAND, eds., *Archaeological Sediments in Context*. Orono:Center for the Study of Early Man, pp. 91-110.
DORTCH, B.E. 1997. Prehistory down under: Investigations of submerged Aboriginal sites at Lake Jasper, Western Australia. *Antiquity* 71:116-123.
WILL, R.T. & J.A. CLARK. 1996. Stone artifact movement of impoundment shorelines: a case study from Maine. *American Antiquity* 61:499-519.

CASE STUDIES, MARINE

- KRAFT, J.C. 1985. Marine environments: paleogeographic reconstructions in the littoral region. In STEIN, J.K. & W.R. FARRAND, eds., *Archaeological Sediments in Context*. Orono:Center for the Study of Early Man, pp. 111-126.
DUNBAR, J.S., S.D. WEBB & M. FAUGHT. 1992. Inundated prehistoric sites in Apalachee Bay, Florida, and the search for the Clovis shoreline. In JOHNSON, L.L., ed., *Paleoshorelines and Prehistory*. Boca Raton: CRC Press, pp. 117-148.
WINSLOW, M.A. 1992. Modeling paleoshorelines in geologically active regions: applications to the Shumagin islands, southwest Alaska. In JOHNSON, L.L., ed., *Paleoshorelines and Prehistory*. Boca Raton: CRC Press, pp. 151-170.
THORSON, R.M. & D.C. PLASKETT & E.J. DIXON. 1980. A reported early man site adjacent to southern Alaska's continental shelf: a geologic solution to an archaeological enigma. *Quaternary Research* 13:259-273.

FLOODING OF BLACK SEA IN NEOLITHIC:

- Ryan, W., and Pitman, W. 1998. *Science* Feb 20, p. 1132.
Kerr, R. A. 2000. A victim of the Black Sea flood found. *Science* 289:2021.

ANTHROPOLOGY 363
ARCHAEOLOGICAL SITE FORMATION PROCESSES
FALL, 2000, McBREARTY
READINGS TO BE DISCUSSED OCT 31ST
POSTDEPOSITIONAL PROCESSES

- BEHRENSMEYER, A.K., K. Gordon, & G. Yanagi. 1986. Trampling as a cause of bone surface damage and pseudo-cutmarks. *Nature* 319:768-771.
- McBREARTY, S., L.BISHOP, T. PLUMMER, R DEWAR & N. CONARD. 1998. Tools underfoot: human trampling as an agent of lithic artifact edge modification. *American Antiquity* 63:108-129.
- GIFFORD-GONZALEZ, D.P., D.B. DAMROSCH, D.R. DAMROSCH, J. PRYOR & R.L. THUNEN. 1985. The third dimension in site structure: an experiment in trampling and vertical dispersal. *American Antiquity* 50:803-818.
- VILLA, P. & J. COURTIN. 1983. The interpretation of stratified sites: a view from underground. *Journal of Archaeological Science* 10:267-281.
- WILK, R. & M.E. SCHIFFER. 1979. The archaeology of vacant lots in Tucson, Arizona. *American Antiquity* 44:530-536.
- JOHNSON, D.L. 1989. Tree uprooting: review of impacts on forest ecology. *Vegetatio* 79:165-176.
- ERLANDSON, J.M. 1984. A case study in faunalurbation: delineating the effects of the burrowing pocket gopher on the distribution of archaeological materials. *American Antiquity* 49:785-790.
- McBREARTY, S. 1990. Consider the humble termite: termites as agents of post-depositional disturbance at African archaeological sites. *Journal of Archaeological Science* 17:111-143.
- MOEYERSONS, J. 1978. The behavior of stones and stone implements, buried in consolidating and creeping Kalahari sands. *Earth Surface Processes* 3:115-128.
- STEIN, J.K. 1983. Earthworm activity: a source of potential disturbance of archaeological sites. *American Antiquity* 48:277-289.
- SCHIFFER, M.B. & J. M. SKIBO. 1989. A provisional theory of ceramic abrasion. *American Anthropologist* 91:101-115.

ANTHROPOLOGY 363
ARCHAEOLOGICAL SITE FORMATION PROCESSES
FALL, 2000, McBREARTY
CAVES & ROCKSHELTERS

Background:

- WATERS, M.R. 1992. Rockshelters & caves, *Principles of Geoarchaeology: a North American Perspective*. Tucson: University of Arizona Press, pp. 240 ff.
- FARRAND, W.R. 1985. Rockshelter and cave sediments. In Stein, J.K. & W.R. Farrand, eds., *Archaeological Sediments in Context*. Orono: Center for the Study of Early Man, pp. 21-40.
- SUTCLIFFE, A.J. 1985. Fossils in caves. In Sutcliffe, A.J., *On the Track of Ice Age Mammals*. Cambridge: Harvard University Press, pp. 72-82.
- ANDREWS, P. 1990. Cave formation and taphonomy. *Owls, Caves, and Fossils*. London: Natural History Museum Publications, pp. 91-106.

Case studies:

- Indonesia: GLOVER, I.C. 1979. The effects of sink action on archaeological deposits in caves: an Indonesian example. *World Archaeology* 10:302-317.
- Israel: JELINEK, A.J., W.R. FARRAND, G. HAAS, A. HOROWITZ, & P. GOLDBERG. 1973. New excavations at the Tabun cave, Mount Carmel, Israel, 1969-1972: a preliminary report. *Paléorient* 1:151- 183.
- Montana: OLIVER, J.S. 1989. Analogues and site context: bone damages from Shield Trap Cave (24CB91), Carbon County, Montana, U.S.A. In Bonnichsen, R. & M.H. Sorg, eds., *Bone Modification*. Orono, Maine: Center for the Study of the First Americans, pp. 73-98.
- South Africa, Later Pleistocene:
- DEACON, H.J. 1998. Tsitsikama Coast and Klasies River. Excursion Guide to Sites North and East of Cape Town. Dual Congress, International Association for the Study of Human Paleontology and International Association of Human Biologists, pp. 2-10.
- DEACON, H.J. 1989. Late Pleistocene paleoecology and archaeology in the southern Cape. In Mellars, P. & C.B. Stringer, eds., *The Human Revolution*. Edinburgh: Edinburgh University Press, pp. 547-564.
- GOLDBERG, P. (2000). Micromorphology and site formation at Die Kelders Cave 1, South Africa. *J. hum. Evol.* 38, 43-90.

South Africa, Pliocene & Early Pleistocene:

- BRAIN, C.K. 1967. Procedures and some results in the study of Quaternary cave fillings. In Bishop, W.W and J.D. Clark, eds., *Background to Evolution in Africa*. Chicago University Press, pp. 185-301.
- BRAIN, C.K. 1993. Structure and stratigraphy of the Swartkraans Cave in the light of new excavations. In Brain, C.K., ed., *Swartkraans, a Cave's Chronicle of Early Man*. Pretoria: Transvaal Museum Monograph No. 8, pp. 23-33.
- MAGUIRE, I. M., Pemberton, D, collet, N. H. 1980. The Makapansgat limeworks grey breccia: hominids, hyenas, hystricids or hillwash. *Paleoecology of Africa* 23:75-98.

East Africa

- SUTCLIFFE, a. J. 1973. Caves of the East African Rift Valley. *Transactions of the Cave Research Group* 15:41-65.

France: LAVILLE, H., J.-P RIGAUD & J SACKETT. 1980. Methodological case study: Abri Caminade Est. *Rock Shelters of the Périgord*. New York: Academic Press, pp. 105-127. (Probably a good idea to read introductory and discussion chapters of this book to put you in the picture).

MELLARS, P. A. (1996). Chapter on geology & dating in *The Neanderthal Legacy: An Archaeological Perspective From Western Europe*. Princeton: Princeton University Press.

GARGETT, R.H. 1989. Grave shortcomings: the evidence for Neanderthal burial. *Current Anthropology* 30:157-190.

GARGETT, R. H. (1999). Middle Palaeolithic burial is not a dead issue: the view from Qafseh, Saint-Césaire, Kebara, Amud, and Dederiyeh. *J. hum. Evol.* 37, 27-90.

SCOTT, K. 1989. Mammoth bones modified by humans: evidence from La Cotte de St. Brelade, Jersey, Channel Islands. In Bonnichsen, R. & M.H. Sorg, eds., *Bone Modification*. Orono, Maine: Center for the Study of the First Americans, pp. 335-346.

Dry caves, a curiosity:

TUOHY, D.R. & L.K. NAPTON. 1986. Duck decoys from Lovelock Cave, Nevada, dated by ¹⁴C accelerator mass spectrometry. *American Antiquity* 51:813-816.

ANTHROPOLOGY 363, McBREARTY, 2000
ARCHAEOLOGICAL SITE FORMATION PROCESSES
READINGS TO BE DISCUSSED NOV 7th
ETHNOARCHAEOLOGY: HUMANS AS AGENTS OF SITE FORMATION

- BONNICHSON, R. 1973. Millie's camp: an experiment in archaeology. *World Archaeology* 4:277-291.
- SIMMS, S.R. 1988. The archaeological structure of a bedouin camp. *Journal of Archaeological Science* 15:197-211.
- BINFORD, L.R. 1978. Dimensional analysis of behavior and site structure: learning from an Eskimo hunting stand. *American Antiquity* 43:330-361.
- MURRAY, P. & C. CHANG. 1981. An ethnoarchaeological study of a contemporary herder's camp. *Journal of Field Archaeology* 8:372-381.
- O'CONNELL, J.F. 1987. Alywara site structure and its archaeological implications. *American Antiquity* 52:74-108.
- HAMMOND, G. & N. HAMMOND. 1981. Child's play: a distorting factor in archaeological distribution. *American Antiquity* 46:634-636.
- KENT, S. 1991. The relationship between mobility strategies and site structure. In Kroll, E. M. & T. D. Price, eds., *the Interpretation of Archaeological Spatial Patterning*. New York: Plenum, pp. 33-60.
- O'CONNELL, J.F., K. HAWKES & N. BLURTON JONES. 1991. Distribution of refuse-producing activities at Hadza residential base camps: implications for analyses of archaeological sites structure. . In Kroll, e.M. & T. D. Price, eds., *the Interpretation of Archaeological Spatial Patterning*. New York: Plenum, pp. 61-76.
- HODDER, I. 1987. The meaning of discard: ash and domestic space in Baringo. In Kent, S., ed., *method and Theory for Activity Area Research: an Ethnoarchaeological Perspective*. New York: Columbia University Press, pp. 424-448.
- MURRAY, P. 1980. Discard location: the ethnographic data. *American Antiquity* 45:490-502.
- GALLAGHER, J.P. 1977. Contemporary stone tools in Ethiopia: implications for archaeology. *Journal of Field Archaeology* 4:407-414.
- You might look at this as a general reference:
STEIN, J.K. 1985. Interpreting sediments in cultural settings. In STEIN, J.K. & W.R. FARRAND, eds., *Archaeological Sediments in Context*. Orono:Center for the Study of Early Man, pp. 5-20.

ANTHROPOLOGY 363, McBREARTY, 2000
ARCHAEOLOGICAL SITE FORMATION PROCESSES
READINGS TO BE DISCUSSED NOV 29TH
CURATION, RETOOLING & LANDSCAPE ARCHAEOLOGY.

SCHIFFER, CHAPS 3 & 4: pp. 25-98, CHAP11 & 12, pp. 305-338.

More on human site modification:

WILSON, D. C. 1994. Identification and assessment of secondary refuse aggregates. *Journal of Archaeological Method and Theory* 1: 41-68.

Thinking on a regional scale:

BAKER, C.M. 1978. The size effect: an explanation of variability in surface artifact assemblage content. *American Antiquity* 43:288-293.

KUHN, S.L. 1991. "Unpacking" reduction: lithic raw material economy in the Mousterian of West Central Italy. *Journal of Anthropological Archaeology* 10:76-106.

NELSON, M.C. 1991. The study of technological organization. In Schiffer, ed., *Archaeological Method and Theory* 3:57-100.

STEVENSON, M.G. 1991. Beyond the formation of hearth associated artifacts assemblages. In Kroll, E.M. & T.D. Price, eds. 1991. *The Interpretation of Archaeological Spatial Patterning*. New York: Plenum Press, pp. 269-300.

CAMILLI, E.L. & J.I. EBERT. 1992. Artifact reuse and recycling in continuous surface distributions and implications for interpreting land use patterns. In Rossignol, J. & L. Wandsnider, eds., *Space, Time, and Archaeological Landscapes*. New York: Plenum Press, pp. 113-136.

Case studies for critique:

BUNN, H.T., J.W.K HARRIS, G. LI. ISAAC, Z. KAUFULU, E. KROLL, K. SCHICK, N. TOTH & A.K. BEHRENSMEYER. 1980. FxJj50: an early Pleistocene site in northern Kenya. *World Archaeology* 12:109- 136.

BARTON, R.N.E. & C.A. BERGMAN. 1982. Hunters at Hengistbury: some evidence from experimental archaeology. *World Archaeology* 14:238-247.

YELLEN, J. 1996. Behavioral and taphonomic patterning at Katanda 9: a Middle Stone Age site, Kivu Province, Zaire. *Journal of Archaeological Science* 23:915-932.

ANTHROPOLOGY 363, McBREARTY, 2000
ARCHAEOLOGICAL SITE FORMATION PROCESSES
READINGS TO BE DISCUSSED NOV 14TH
HUMAN SITE MODIFICATION & ABANDONMENT

SCHIFFER, Chapters 5 & 6.

HAYDEN, B. & A. CANNON. 1983. Where the garbage goes: refuse disposal in the Mayan highlands. *Journal of Anthropological Archaeology* 2:117-163.

DEBOER, W.R. & D.W. LATHRAP. 1979. The making and breaking of Shipibo-Conibo ceramics. In Kramer, C., ed. *Ethnoarchaeology: Implications for the Ethnography of Archaeology*. New York: Columbia University Press, pp. 59-74.

DEAL, M. 1985. Household pottery disposal in the Mayan highlands: an ethnoarchaeological interpretation. *Journal of Anthropological Archaeology* 4:243-291.

WILSON, D. C. 1994. Identification and assessment of secondary refuse aggregates. *Journal of Archaeological Method and Theory* 1: 41-68.

ROSEN, A.M. 1986. Mound development. *Cities of Clay: the Geoarchaeology of Tells*. Chicago University Press, pp. 9-24.

STEVONOVIC, M. 1997. The age of clay: social dynamics of house destruction. *Journal of Anthropological Archaeology* 16:334-398.

CAMERON, C.M. 1991. Structure abandonment in villages. *Archaeological Method and Theory* 3:155-194.

STEVENSON, M.G. 1982. Toward an understanding of site abandonment behavior: evidence from historic mining camps in the southwest Yukon. *Journal of Anthropological Archaeology* 1:237-265.

MATHEWS, W., C.A.I. FRENCH, T. LAWRENCE, D.F. CUTLER & M.K. JONES. 1997. Microstratigraphic traces of site formation processes and human activities. *World Archaeology* 29:281-308.

CAHEN, D. & L.H. KEELEY. 1980. Not less than two, not more than three. *World Archaeology* 12:166-180.

Keep in mind:

STEIN, J.K, Interpreting sediments in cultural settings. In STEIN, J.K. & W.R. FARRAND, eds., *Archaeological Sediments in Context*. Orono:Center for the Study of Early Man, pp. 5-20.