

GRANDE PRAIRIE REGIONAL COLLEGE  
DEPARTMENT OF ARTS, COMMERCE AND EDUCATION  
INTRODUCTORY ANTHROPOLOGY  
ANTHROPOLOGY 1010 3(3-0-0), UT, FALL 2005

Instructor: Dr. Laurie Nock  
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Drop-ins welcome.

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Delivery method: lecture

Pre-requisites: None

Calendar description: The study of mankind is provided through primate and cultural evolution, symbolic systems, cultural theory and culture change.

REQUIRED TEXTS

Ember, Carol R., Ember, Melvin and Peregrine, Peter N. (2005). Anthropology. Upper Saddle River, N.J.: Prentice Hall.

Podolefsky, Aaron and Brown, Peter J., Eds. (2003). Applying anthropology: an introductory reader. Boston, Mass.: McGraw-Hill Higher Education.

RECOMMENDED READING

ANTHROPOLOGY 1010 SCRAPBOOK—on reserve in the Library.

COURSE DESCRIPTION

Anthropology seeks to understand all aspects of what it means to be a human being. In the attempt to define and comprehend the human experience, anthropologists constantly seek differences and similarities: through time, between species, between social groups. This course will look into various branches of anthropology that approach the study of humanity from different perspectives. We will study physical anthropology (including human evolution and primatology), archeology, anthropological linguistics, and socio-cultural anthropology. Our immediate goal is to learn of the theoretical questions posed by anthropologists, the methods by which they seek answers, the insights they can provide and the practical implications of their findings. Our ultimate aim is to learn new ways of examining and analyzing our own experience.

## REQUIREMENTS AND EVALUATION

There will be two principal kinds of assignments which will determine course grades: Reading Reflections and responses to Take-Home questions posed by the instructor. (For a description of Reading Reflections, see below.) Students will submit at least three of each, at a rate of not more than one a week, by 1 p.m. on Mondays. Each will be worth 12.5% of the final course grade (75% in total). If more than the required number of assignments is submitted, the lowest marks will be dropped from calculation of the course grade. Excessive grammatical or spelling errors may result in the loss of points. One and only one late assignment may be handed in any Monday until Week 14, as long as only one assignment is submitted that week. E-mailed assignments are not accepted.

Twenty-five percent of the course grade will be based on in-class assignments throughout the term. Many opportunities to earn points will be provided, so there will be no make-ups for these. As a bonus “in-class” assignment worth ten points, students may meet with me for an in-depth writing tutorial on one of their assignments (or to discuss any topic related to the course) at any point during the term before the last week of classes. For these in-class assignments ONLY, calculate your mark as a percentage of total marks obtainable.

<b>Alpha grade</b>	<b>4-point equivalent</b>	<b>Percentage</b>
A+	4.3	80-100
A	4.0	76-79
A-	3.7	73-75
B+	3.3	70-72
B	3.0	67-69
B-	2.7	64-66
C+	2.3	60-63
C	2.0	55-59
C-	1.7	50-54
D+	1.3	45-49
D	1.0	40-44
F	0.0	< 40

All other assignments are marked on the alpha system.

## FOR STUDENT USE

You may wish to keep track of your grades here.

### READING REFLECTIONS

Date	Topic	Grade
1.		
2.		
3.		
4.		

### TAKE-HOME QUESTIONS

Date	Topic	Grade
1.		
2.		
3.		
4.		

### IN-CLASS ASSIGNMENTS

For this portion of this the course ONLY, calculate your mark as a percentage of total marks obtainable.

DATE	MARK	DATE	MARK
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## READING REFLECTIONS

Reading Reflections are to assist students to focus their reading on topics to be covered in class. From the set of readings listed with each topic outline, select concepts or ideas that you have experienced or in which you are interested. Relate and apply these to your life, your community, your experience, your concerns, and/or your understanding. Demonstrate your understanding of the concepts with good examples and with proper use of anthropological terminology. STANDARD CITATION PROCEDURES ARE EXPECTED. (See next page). Reading Reflections should be double-spaced and approximately five pages (1250 words) in length.

Some pointers:

- Be sure to make the connection between your own experience or interest and anthropology. Make sure you use (and spell) anthropological concepts and terms correctly.
- Your opinion is not at issue here; your conclusions are. Avoid using "I think" and especially "I believe". Beware of "should"! Your statements (conclusions) should follow logically from the evidence you provide. Seek to understand rather than to judge.
- Define important terms and concepts, referring to readings.
- The purpose of these assignments is not to summarize readings.
- Do not use "you" unless giving advice or instructions, both of which are unlikely!
- Use citations when summarizing the ideas or descriptions of others, not only to accompany verbatim quotes.
- Include a list of references! This is often the only way to ensure you are actually connecting your topic to anthropology; the text will almost certainly form part of it.
- Organization is important! Outline your paper (whether before or after writing it) to check that ideas follow logically and that you do not have serious contradictions.
- Pay attention to grammar and spelling! (Ask what my pet peeve is.)
- Attention to clarity of expression is expected.
- It is quite permissible (even encouraged!) to use your own experience as evidence (which is different from opinion), and to use "I" and "my".
- Number your pages!
- Pay attention to notes and comments on your work. Their purpose is to help you improve your writing in form, expression and content--and also allow the instructor to communicate with you! If you need clarification, or can't read my writing--

Above all, if in doubt, talk to me!

## GUIDE TO REFERENCES

If you use a direct quote (or a diagram, or statistics) from an author, your source must be acknowledged. The quotation must be exact! For example:

“There is a basic contradiction in the structure of girls’ social relationships. Friends are supposed to be equal and everyone is supposed to get along, but in fact they don’t always. Conflict must be resolved, but a girl cannot assert social power or superiority as an individual to resolve it” (Maltz & Borker, 2003, pp. 164-165).

If you paraphrase an author or use ideas which are not your own, your source must still be acknowledged. Include the name of the author, publication date, and (usually) page number. For example:

Poverty and ignorance are not necessarily the best explanation for why people avoid drinking milk. Lactase production is not common among adults around the world (Ember, Ember & Peregrine, 2005, p. 2).

In referring to an author whose work is cited in a text you are using, refer to the latter, not to the original source. For example:

Easter Island was apparently covered by subtropical forest for thousands of years before it lost its trees (Flenley & King as paraphrased in Diamond, 2003, p. 95).

References to information downloaded from the Internet are similar to those used for print materials. For example,

In seventeenth-century Turkish cafes, coffee was accompanied by smoking tobacco from elaborate *narghile* (Gercek, 1986).

## REFERENCES

- Barnes, N., et al. (coproducers), and Weitz, P. and Weitz, C. (Directors) (2002). About a boy. Universal Pictures.
- Diamond, J. (2003) . Easter's end. In Aaron Podolefsky and Peter J. Brown (Eds.), *Applying anthropology: an introductory reader* (pp. 92-97). Boston, Mass.: McGraw-Hill Higher Education.
- Ember, C.R., Ember, M. & Peregrine, P.N. (2005). *Anthropology*. Upper Saddle River, N.J.: Prentice Hall.
- Gerkec, G. (1986). Narghiles. *Antikas, the Turkish journal of collectable art*, 11. Retrieved December 22, 2002 from <http://hookahkings.com/articles/article4.htm>
- Maltz, D.N. & Borker, R.A. (2003). A cultural approach to male-female miscommunication. In Aaron Podolefsky & Peter J. Brown (Eds.), *Applying anthropology: an introductory reader* (pp. 160-171). Boston, Mass.: McGraw-Hill Higher Education.
- Moyers, B. (Executive Editor) & Tatge, C. (Producer) (1988). The first storytellers, Program Three of *The power of myth*. New York, NY: Mystic Fire Video, Inc.
- Theroux, P. (2002, December). Hawai'i: Preserving the breath. National Geographic 202 (6), 2-41.

These go in alphabetical order according to the (first) author's surname. Anthology articles (and journal articles) are attributed to the author/s of the article, not the editors of the volume. The year of publication is the year of the anthology, not the original year of publication of the article. Underline titles of books or journals. Consult an APA style guide (some of which are available on-line), if you have doubts. (This one might work for you.)

<http://www.wooster.edu/psychology/apa-crib.html>

GRANDE PRAIRIE REGIONAL COLLEGE  
DEPARTMENT OF ARTS, COMMERCE AND EDUCATION  
ANTHROPOLOGY 1010: INTRODUCTORY ANTHROPOLOGY  
BRIEF LECTURE OUTLINES, READINGS AND WEEKLY QUESTIONS

Week 1 ends on the second Friday of the term; Week 14 ends on the Friday following the last week of classes. You are advised to complete readings before a topic is covered in class and before attempting Take-Home questions or Reading Reflections. Class discussions are intended to clarify and supplement readings, not summarize them. In-class assignments (often quizzes) and essay questions are based on the readings and class discussions covered that week. Reread instructions for Reading Reflections and Reference Guidelines each time you do an assignment.

Answers to essay questions (the number corresponds to the week) or Reading Reflections (each worth 12.5% of the final course mark) must be submitted by 1 p.m. Mondays, at a rate of only one per week. (E.g. Week 1 assignments must be submitted by 1 p.m. on Monday of Week 2.) At least three of each must be submitted in total. You should have completed at least two assignments by Week 7. Pay close attention to the topic of the week and to due dates for questions! These may change during the term. Both types of assignments are likely to be three to five pages in length, or up to 1250 words. Double-space all written work. The topic for Week 8 (which may be marked as a Question or Reading Reflection) must be done; it is not optional. (See Week 6 as well.) One and only one late assignment may be handed in any Monday until Week 14, as long as only one assignment is submitted that week. E-mailed assignments are not accepted.

There will be approximately ten in-class assignments during the term, held at the instructor's discretion. There are no make-ups for these.

Readings are in

EE&P = Ember, Carol R., Ember, Melvin and Peregrine, Peter N. (2005). Anthropology. Upper Saddle River, N.J.: Prentice Hall.

and/or

AA = Podolefsky, Aaron and Brown, Peter J., Eds. (2003). Applying anthropology: an introductory reader. Boston, Mass.: McGraw-Hill Higher Education.

Except for those marked "Related", all of the readings are required. Any assigned reading may be the topic of Reading Reflections during the appropriate week. Also see the AN1010 SCRAPBOOK, on reserve in the Library.

## Week 1 INTRODUCTION TO ANTHROPOLOGY

### Anthropology as a social science

subdisciplines of anthropology: biological, linguistic, archeological, socio-cultural  
themes of description, comparison, diversity, change through time

### READINGS

EE&P What is anthropology? (1)

AA Aaron Podolefsky and Peter Brown, Introduction

### QUESTION 1

Briefly describe the four diverse subfields of anthropology and provide good examples of their subject matter. How does the concept of HOLISM help to link their subject areas into one discipline? (In other words, how do the four subject areas work together?)



## WEEK 2      CULTURE

Culture:      ". . . is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society." (Edward B. Tylor, 1871, PRIMITIVE CULTURE. London: J.M. Murray. p.1)  
"everything that people have, think and do as members of a society."  
(Gary Ferraro, 1998, CULTURAL ANTHROPOLOGY: AN APPLIED PERSPECTIVE. Belmont, CA: West/Wadsworth. p.18)

Human beings born into culture; can't survive without it  
material and non-material

Culture both possible and necessary w/ biological characteristics  
brain, hands, bipedalism, physical vulnerability  
lack of specialization

Must transform environment - and can  
adaptation through culture; environmental effects on culture

Must live together in organized groups to develop and share culture--society  
organization requires culture  
symbols for communicating culture  
culture is learned - enculturation

Knowledge of past, projection of future, near, far  
place in space and time defined by culture

Cultures are programs for governing behavior  
maintained and modified through practice through experience and creativity  
dynamic, changeable

Cultural diversity – subcultures, countercultures, different social statuses

Culture as a way of life  
economic organization, social structure, political order, ideological system  
meaningfully understood in relation to one another: holistic view  
hence cultural relativism  
avoid ethnocentrism

Kinship terminology

## READINGS

EE&P The concept of culture (13)

AA Aaron Podolefsky and Peter Brown, Part III: Cultural Anthropology  
(Introduction)

Horace Miner, Body ritual among the Nacirema

Margaret Mead, Letter from Peri—Manus II

Jill Dubisch, You are what you eat.

Eugene Cooper, Chinese table manners

Bruce Bower, Slumber's unexplored landscape

Claire E. Sterk, Tricking and tripping: fieldwork on prostitution in the era of  
AIDS (Related)

Jennifer J. Laabs, Corporate anthropologists (Related)

## QUESTION 2

In order to explore the concept of culture and how it functions to organize our thinking and our behavior, consider three to five rooms in your house.

- a) What is it named? (What is not named?)
- b) Who uses it? (Who does not?)
- c) For what purposes? When?

Write a good conclusion on what this tells us about culture.

## Week 3

## COMMUNICATION AND LANGUAGE

### Importance of study of linguistics

- different culture, often different language
- culture learned through language
- helps to understand human mind
- learn of past of human groups
- non-verbal communication too
  - talk / communicate / write

### Characteristics of human speech

- vocal-auditory channel; heard and fades
- arbitrary--why "oink"?
- open system--innovations, combinations
- displacement
- traditional--taught and learned
- symbolic

### Types of linguistic study

- structural or descriptive – rules of sound, order, meaning
- ethnolinguistics – language and perception, language and culture
- historical linguistics – origins and relationships between languages and dialects
  - and language and dialect communities
- sociolinguistics – language and social differences; ethnography of speaking
- paralinguistics – behaviors supplementary to spoken language
- ethnosemantics – subculture vocabulary

### Language is political

- unites and separates
- facilitates and inhibits communication
- can mark conflict, dominant/subordinate

### READINGS

- EE&P Communication and language (15)
- AA Laura Bohannon, Shakespeare in the bush
- Daniel N. Maltz and Ruth A. Borker, A cultural approach to male-female communication
- Keith Basso, To give up on words...

### QUESTION 3

Describe the following fields of study. Provide an example of the kind of research which would be of interest to scholars in each field.

- a) a descriptive linguist
- b) a comparative (or historical) linguist
- c) a sociolinguist
- d) a paralinguist (student of non-verbal communication)

Which of these approaches to the study of communication is a layperson (non-academic) most likely to use? Why?

## Week 4-5 ECONOMIC SYSTEMS

Typology of adaptive strategies:

foraging, horticulture, pastoralism, agriculture, industrialism/world system

### FACTORS IMPORTANT TO UNDERSTANDING OF CULTURE, SOCIETY, ECONOMIC AND POLITICAL SYSTEMS

WHAT ARE THE RESOURCES? Resources are not products  
ecological niche: resources in the environment used by society  
environment gives possibilities and imposes limitations  
different cultures use an environment differently  
human activities also affect the environment  
Who has access to / control over them?  
wealthy vs. poor

WHAT IS THE TECHNOLOGY (tools and knowledge)?  
portable, made by all from local materials  
fixed, imported, made by specialists  
Who has access to / control over it?

HOW IS WORK ALLOCATED AND ORGANIZED?  
Division of labor: age, sex, race, inheritance, by kin  
specialization: part or full-time  
Who organizes / has the right to demand or command labor?

WHAT IS PRODUCED, IN WHAT QUANTITIES, FOR WHAT PURPOSE?  
subsistence, trade or tribute surplus  
Who makes production decisions?

HOW ARE PRODUCTS DISTRIBUTED?  
governs consumption  
reciprocity: exchange between equals  
    generalized: equitable sharing, don't await or count return;  
    balanced: await return, but not immediate  
    barter: usually immediate; different goods and services  
gifts  
redistribution: tribute goes up, redistributed down  
market: profit, supply and demand, money  
Who controls products and distribution?  
Combines elements of resources, work, technology, social relationships  
Through work to obtain food, shelter, clothing, etc.  
we perpetuate (reproduce) culture and society

## REVIEW COURSE OUTLINE

### READINGS

- EE&P Getting food (16)
- Economic systems (17)
- AA Jared Diamond, The worst mistake
- Richard Borshay Lee, Eating Christmas in the Kalahari
- Lee Cronk, Strings attached
- Noreene Janus, Advertising and global culture
- John H. Bodley, The price of progress
- Philippe Bourgois, Crack in Spanish Harlem (Related)
- Alan H. Goodman and George J. Armelagos, Disease and death at Dr. Dickson's Mounds (Related)

### QUESTION 4

Which adaptive strategy is most likely to be most damaged by, and which is most likely to benefit from each of the following events or processes? Justify your choices.

- a) damming of river systems
- b) fencing grasslands
- c) deforestation
- d) power outages
- e) collapse of the monetary system.

Be sure to consult all assigned readings when answering this question.

## Week 5-6    POLITICAL STRUCTURE

Typology of cultures, based on political system: band, village/tribe, chiefdom, state, world system

SIGNIFICANT VARIABLES:

Subsistence system

Region occupied: area and homo / heterogeneity

Population of political unit

Control over

- access to resources and technology,

- production and distribution

- trade, weapons

Concentration of power, stratification

Formality of leadership

Control over people - social control

Conflict resolution—from joking duels to arbitration to feud

External relations

Reliance on kinship, age, gender / impersonal relations--nationality

Forms of ideological control

Foraging bands loosely structured by kinship, etc.

- headman lacks power

- resources, products shared

More structure among villages of tropical forest farmers

- "big man", headman not authority

- uses oratory, charisma, example to get help

- must be generous, redistribute what all can produce

- can be removed, lose position

- does not own means of production—land

Tribal organization can be of autonomous villages or bands

- usually in response to outside threat

- requires multilocal linkages

- kinship, age grades, associations

Chiefdoms in areas of more ecological diversity

- trade between uniform communities

- "chief" is a position occupied by individuals

- redistributes goods of different areas and groups of people

States redistribute too, but syphons off much for elite

- socio-economic stratification; power at the top

- authority legitimized, institutionalized

- difference in power allows--results from--exploitation

State must

- control population: know numbers, determine citizenship, status regulate

- behavior through law and order
- protect its sovereignty
- tax and conscript people for revenue and defense
- keep prevailing structure and property relations
  - class and caste systems
- manage trade, warfare, subsistence
- because of inequality, must also use ideological control

State vs. nation

World system reproduces this at global scale

States started in Europe

- went overseas for raw materials, spices and gold
- local inhabitants forced to produce
  - when necessary, laborers transported--slavery
- conquest of "empty" areas, and of indigenous states
- movement of millions of poor and landless from Europe
- with independence, new nations created w/ arbitrary boundaries
  - not in response to local needs

Integrate the world, each region less self-sufficient

- some more powerful
- profit from, live well because of the poverty of the rest.

Racism a consequence of global inequality

Democracy and peace?

## READINGS

EE&P Social stratification: class, ethnicity, and racism (18)

Political life: social order and disorder (23)

AA Aaron Podolefsky, Contemporary warfare in the New Guinea Highlands

## QUESTION 5

Describe two of the five principle types of political organization (bands, cultivating villages, chiefdoms, pre-industrial states, world system) in terms of

- control over resources, especially land
- control over products and their distribution
- concentration of wealth and power (i.e. control over people).

## QUESTION 6

Ember, Ember and Peregrine (2005, pp. 417-423) discuss various means of "peaceful" conflict resolution. All can be said to be used in contemporary Canadian society. Discuss and provide examples of each.



[SEE WEEK 8]

## Week 7      MARRIAGE, THE FAMILY AND KINSHIP

All societies have to solve certain problems, fulfill certain needs  
responsibility for children: supporting them, training them  
economic cooperation: for support of individuals,  
    especially children; for continuity  
control sexual relations  
establish relationships with other social groups  
establish property relations

These are often achieved through some form of marriage and family

Family: nuclear ideal of foragers and industry:

- two parents and dependent children
- for most societies, extended family
- families: people related by ties of blood and/or marriage, who live together
  - cooperating subsistence or economic unit
  - share work, resources, care of children
- division of labor between men and women, old and young
- old teach young, young will support old

Marriage creates relationships between groups

- hence levirate, sororate
- political alliance, social exchange--kinship
- property relationships
  - bride price (wealth), progeny price, bride service
  - compensation for women's production and reproduction
- dowry, woman's property or compensation for taking a woman
- circulation of marriage wealth
- polygyny, polyandry, polygamy, monogamy

POSTMARITAL RESIDENCE: This is closely related to access to resources and to descent. It determines who leaves the domestic group, their family of orientation, and who stays; who will be "home" after marriage. Ideal types:

Unilocal

- Patrilocal, virilocal

- Matrilocal, uxorilocal (avunculocal: live with MB)

Bilocal: some time in each; Ambilocal: some people in each,

Neolocal

Multilocal; single parent? joint custody?

DESCENT is the calculation of who is descended from whom,  
may determine access to rank, property, and group membership

Bilateral: through both parents equally, including everyone  
individual's relatives are kindred;  
only siblings have same kindred

Unilineal:

Patrilineal, Matrilineal go w/ societies w/ lineages  
belong to same group as father OR mother

Ambilineal: through either parent; zigzagging.

lineage: descendants of common ancestor

clan: several lineages, descendants of a common (mythical) ancestor

lineage and clan exogamous; continue despite death of members  
other relatives recognized but don't belong to same lineage

History of marriage and the family

industrial revolution forced urbanization,  
individual wage employment, breakup of extended family  
nuclear family needed, reinforced  
largest unit that could be mobile for work

woman isolated in nuclear family

defined out of wage employment

defined as being worth less; underpaid, dependent

recent change w/ women in the workforce; independent

but largely responsible for children

increasing divorce and single-parent families

individual independence; LOVE

reproduction gets in the way of production

but production needed for reproduction

conflict between career and family for men and women

who benefits from divorce?

## READINGS

- EE&P Marriage and the family (20)  
Marital residence and kinship (21) except "Kinship terminology",  
pp.385-388
- AA Melvyn C. Goldstein, When brothers share a wife  
Philip L. Kilbride, African polygyny: family values and contemporary  
changes  
Sarah Blaffer Hrdy, Mothers and others

## QUESTION 7

Using anthropological terminology, with reference to North American culture and society, discuss

- a) the ideal forms of marriage, post-marital residence and family ("ideal culture"),  
and
- b) actual practices ("real culture").
- c) Explain how ideal and actual forms reflect our socio-economic system.

## QUESTION OR READING REFLECTION 8 INTERVIEW WITH ENGLISH LANGUAGE STUDENT

Your task this week is to interview an English Language student on any anthropological topic you like. (The instructor will arrange interviews.) You must understand the anthropological perspective on this subject and, in your interview, seek information and perspectives that will allow you to make a comparison between his or her culture and society and your own. You may choose to deal with more than one topic. The topics you wish to discuss must be submitted in Week 6.

Your write-up of this interview should make clear that you are dealing with topics of interest to anthropology, make social and cultural comparisons, and include a description of the interview process. Use anthropological terminology where appropriate.

This will also be graded as an in-class assignment worth 10 points. 5 will be awarded for submitting interview topics in Week 6, and 5 for attending class punctually on the day interviews take place.

## WEEK 9 GENDER, SEXUALITY AND REPRODUCTION

All societies have methods of controlling reproduction - increasing or decreasing  
all are rational  
few see long-term implications

Who determines / decides about pregnancy and giving birth?  
see social patterns  
contraceptives: prescribed and proscribed

Under what conditions is the decision to have many children? Few?  
relation between production and reproduction

What are the strategies to implement reproduction plans?

Study of family essential to understanding gender relations  
production and reproduction  
in foraging societies, status of women high  
horticultural societies--frequency of warfare crucial  
pastoral and agricultural societies  
strict inheritance rules of livestock and/or land  
men work on these; men inherit  
class differences; reproductive freedom ends;  
European colonialism expanded European gender relations  
along w/ European economic, political, social system  
gender relations in our society  
men expected to be providers  
men get economic and hence political influence  
women expected to care for family  
women w/ children out of economic and political influence  
in most (all?) societies,  
women have ultimate responsibility for day - to - day care and sustenance  
food, childcare, clothing, shelter  
men have responsibility for emergencies (politics, long-distance trade,  
war)

Who has power?

## READINGS

EE&P Sex, gender and culture (19)

AA Heather Pringle, New women of the Ice Age

Meredith F. Small, Our babies, ourselves

John van Willigen and V.C. Channa, Law, custom, and crimes  
against women

Ernestine Friedl, Society and sex roles

Corinne A. Kratz, Circumcision, pluralism, and dilemmas of cultural  
relativism

## QUESTION 9

Thus far, gender roles in all human societies have been different. Does “difference” necessarily mean “unequal”? Use examples from class discussions and assigned readings to support your conclusions.

## Week 10    PHYSICAL ANTHROPOLOGY: GENETICS AND HUMAN VARIATION

Includes study of

- our physical makeup and characteristics

- possibilities and limitations for our behavior

- interacting with environment:

- nutrition, activities, disease

- genetics: heredity from ancestors through parents

- human variation: differences and similarities between populations

- evolution: reconstructing ancient life forms and life ways

- primatology and ethology: similarities and differences with other animals

Genetics underlies all; evolution through inherited genes

- human cells w/ 46 chromosomes in 23 pairs; variability

- one of each pair from each parent

- chromosome pairs split up to form sex cells (sperm and ova)

- matter of chance which 23 from one parent will join

- with which 23 from the other

- chromosomes carry genes (pair is allele)

- matter of chance which genes will be inherited

- from which parent

- genes inherited: genotype

- homozygous: identical genes governing a trait inherited

- from both parents

- heterozygous: different genes governing a trait inherited

- some genes appear dominant, some recessive

- e.g. Yellow/green, Round/wrinkled peas

- independent assortment, e.g. mother's nose and father's eyes

- polygenic: traits governed by more than one gene, e.g. height

- particulate inheritance (not blending)

- genotype interacts with environment to form phenotype

- appearance, physical characteristics; adaptation and adjustments

Biological evolution: takes place when population gene frequency is altered

- mutation: variation in DNA code of genes, change in structure

- or number of chromosomes; source of variation

- can be due to physical, chemical factors, radiation

- genetic drift: proportion of genes in each generation

- can differ by chance, e.g. small, isolated population;

- migration of small group

- gene flow: interbreeding among populations of a species; miscegenation

- e.g. Africans w/ Europeans w/ Native Americans

- natural selection: most powerful.

- environment selects for variable fitness of genes and traits

- fitness: reproductive success, number of progeny—humans?

- caution in application to short-term human behavior



human cultural and social adaptation

Populations with different gene frequencies

due to reproductive isolation and natural selection

shows history of and relationships between populations

see adaptation to different environments over long period

study of human variation and ethnocentrism

sickle-cell anemia

homozygous: debilitating if not fatal

heterozygous: resistance to malaria

skin color: dark provides protection from sun

light skin allows in--Vitamin D synthesis

lactase insufficiency: absent where dairy products significant

body shape: large, massive--cold; thin, long--hot

diabetes, Tay Sachs

“Race”: group w/ members socially defined as sharing physical characteristics

socially and culturally selected traits

to explain social and cultural phenomena

not biological

## READINGS

EE&P Genetics and evolution (3)

Human variation (12)

Social stratification (18) pp. 324-327

AA Aaron Podolefsky and Peter Brown, Part I: Biological Anthropology  
(Introduction)

Barry Bogin, The tall and the short of it

Jared Diamond, Race without color

Peggy McIntosh, White privilege

American Anthropological Association, Draft official statement of “race”  
(Related)

Deborah Friedman Lustig, Of Kwanzaa, Cinco de Mayo, and whispering:  
the need for intercultural education (Related)

## QUESTION 10

Explain three arguments which make it difficult to establish a racial classification of human beings using biological characteristics. Given these difficulties, why do we continue to speak of "African-Americans", "First Nations", "Euro-Canadians", "Asians", etc.?

## Week 11     PRIMATOLOGY AND HUMAN NATURE

Primatology studied to distinguish humans from and  
incorporate us into the animal world  
compare anatomy  
compare social life  
compare intellect

Evolutionary tendencies among primates  
extremities: mobile digits, opposable big thumbs and toes  
precision grip to pinch and grasp, tactile pads on digits,  
fingers replace nose for feeling  
nails replace claws, climb by grasping  
vision: eyes to front, overlapping vision field for depth,  
color vision, vision replaces smell  
posture: upright, changes in vertebral column, chest, skeleton  
brain: developed, more variation and complex behavior  
infancy: prolonged gestation and dependency  
teeth: fewer, changed shape,  
change in econiche, social behavior, locomotion, etc.

Primatologists have helped learn  
differences in human/non-human behavior quantity, degree  
not quality  
kinship, dominance, tool-making, language abilities  
social relationships, aggression, sharing, parenting  
emotions, gender

Sociobiology: search for biological bases of behavior  
avoid determinism, comparing the incomparable  
seek human universals (incest avoidance, facial expressions)  
facilitate cross-cultural communication, empathy  
without losing sight of diversity

### READINGS

- EE&P The living primates (4)  
Primate evolution (Related) (5)
- AA Barbara Smuts, What are friends for?  
Meredith Small, What's love got to do with it?

### QUESTION 11

Anthropologists study living non-human primates in order to improve their understanding of human physical, intellectual and social characteristics or behaviors. Describe important similarities and differences in each of these three areas.

## HUMAN BEINGS IN THE ANIMAL WORLD

- Kingdom: Animalia  
traits: mobile, multicelled, obtain energy from eating other organisms  
not: plants, bacteria, one-celled fungi  
split: Paleozoic, 570 million years before the present (myr B.P.)
- Phylum: Chordata  
traits: notochord, gives internal structure to body, gill pouches, hollow nerve chord ending in brain  
not: sponges, jellyfish, flatworms, mollusks, insects, crustaceans, spiders  
split: Paleozoic, 400 myr B.P.
- Subphylum: Vertebrata  
traits: vertebrae surround or replace notochord, brain encased in skull  
split: Paleozoic, 400 myr B.P.
- Superclass: Tetrapoda  
traits: four-footed  
not: fish  
split: Paleozoic, 400 myr B.P.
- Class: Mammalia  
traits: mammarys, constant temperature, hair, teeth (incisor, canine, molar)  
not: amphibians and reptiles, birds  
split: Mesozoic, 225 myr B.P.
- Subclass: Theria  
traits: do not lay eggs  
not: duckbill, anteater  
split: Cretaceous, 100 myr B.P.
- Infraclass: Eutheria  
traits: placenta to nourish young within mother  
not: marsupials  
split: Cretaceous, 75 myr B.P.
- Order: Primates  
traits: extremities: prehensile hands and feet, opposable thumb and big toe, flexible, rotating arms; vision: large eyes, stereoscopic color vision, poor smell; complex social behavior: few offspring/birth--two mammary glands, prolonged pregnancy, prolonged infant dependence on mother, group life to support mother/child, large brain to process social and physical information, communication  
not: dog, cat, etc.  
split: Paleocene, 60 myr B.P.
- Suborder: Anthrozoidea (monkeys, apes, man)  
traits: large, round skull; flat face; dry nose; mobile, dry, hairy upper lip  
not: Prosimii (lorises, lemurs) with rhinarium (moist strip joining lip and nose),  
2.1.3.3. dental formula  
split: Eocene, 40 myr B.P.

Infraorder: Catarrhini (Old World monkeys, apes, man)  
     traits: sharp-nosed, 2.1.2.3.  
     not: Platyrrhini (New World monkeys) 2.1.3.2., all arboreal, often prehensile tails, mobile spine  
 Superfamily: Hominoidea: man and apes  
     traits: relatively large, seldom on all fours, brachiate, knuckle-walk, bipedal, intelligent, no tails; terrestrial  
     not: Cercopithecoidea (Old World Monkeys), ischial callosity, terrestrial and arboreal (baboons, macaques)  
     split: Oligocene, 30 myr B.P.  
 Family: Hominidae  
     traits: arms and hands carry heavy objects; dextrous; strong, long thumb  
     bipedal: foot with arch, parallel toes, long legs, gluteal muscles; pelvic girdle flat, basin-like, weight-bearing; vertebral column curved, long neck, head centered, foramen magnum (hole for vertebral column) directly under skull--upright posture; rest of skeleton--pelvis, legs--shows bipedalism; skull sutures form after birth--immature birth; small birth canal,  
     head: smooth, round--more brain room, small jaw, directly under eyes; parabolic dental arcade, high, narrow molars, small canines  
     females sexually receptive throughout cycle  
     not: Pongidae: great apes, grasping feet--orangutans, gorillas, chimpanzees  
     Hylobatidae: lesser apes--siamang, gibbon  
     dryopiths, ramapiths, Gigantopithecus  
     split: Pliocene, 5 myr B.P.  
 Genus: Homo  
     traits: larger brain; hunters; relatively smaller back teeth, relatively larger front teeth as grinding tools take the place of teeth, no estrus  
     not: Australopithecus  
         graciles 4 myr B.P.: sharp, large canines, large molars for grinding seeds and fibrous food, large cheekbones to hold chewing muscles, small brain case; sexual dimorphism; prognathism  
         robust 2.6 myr B.P.: bigger, larger skulls, bigger back teeth, thicker faces, sagittal crest  
     split: Pleistocene, 2 myr B.P.

Species: sapiens sapiens (100-200,000 B.P., Upper Paleolithic) (e.g. Cro-Magnon)  
traits: blade tools, more standardized types of tools, slighter bodies as tools  
took over work, less sexual dimorphism, more cultural diversity,  
not: habilis (2 myr B.P.) Olduvai industry--pebble tools,  
erectus (1.5 myr B.P.) Lower Paleolithic, fire, Acheulian tool industry--  
worked stone core, cooperative hunters and gatherers, large brain;  
low, sloping forehead w/ brow ridge; language possible;  
sapiens archaic (300,000 B.P.)  
sapiens? neandertal; (130,000 B.P.) robust, adapted to cold weather,  
Middle Paleolithic, Mousterian tool industry--flaked stone, broad  
face, large front teeth, heavy brow ridge, low slanting forehead,  
sexual dimorphism

## Week 12 HUMAN EVOLUTION

### Basic human traits, evolutionary trends

Australopithecus through Homo

large and reorganized brain

culture, manipulation of environment and each other

brain case enlarges as bone and teeth shrink

more digestible foods, tools, fire

seen in cranium

bipedalism: mobility, free hands,

seen in post-cranial skeleton: small and light to heavy to medium

dentition: use in eating, as a tool

seen in dental apparatus

manufacture and use of tools, increasing complexity

seen in tool remains

tool types come to be characteristics of evolution stage

all these are preserved in fossil record

but vocal apparatus is not; don't know when speech arose

non-stone tools are not

### Basic process:

primates moved to ground from trees, became savanna foragers

large canines for defense and group control

molars enlarged to chew food and sand

bipedalism--mobility, work and carry with hands

increases immaturity at birth

increases need for group to protect and rear

increases sharing and cooperation

hunting requires sharing and cooperation

(visibility of hunting technology)

larger social group, also gender division of labor

w/ tools and weapons, canines shrink, face shrinks

leaves room for brain

w/ grinding tools, molars shrink

with less physical defense, more cultural defense

for culture, more language needed

w/ culture, longer infant dependency

enculturation

evidence: fossil and bone skeletal remains, tools, animal remains

## HOMINIDS AND LITHICS

Genus            species

Australopithecus—"southern ape"; bipedal

gracile—A. anamensis (4.2myBP), A. afarensis (4-3myBP),  
A. africanus (3myBP)

robust—A. aethiopicus (2.7myBP), A. robustus (2.5myBP), A. boisei

Homo

H. habilis (2.3myBP)

lithic tools: Oldowan—core and flakes  
sharp edges, few blows; choppers

H. erectus (1.8myBP)

lithic tools: Acheulian—large, standardized tools  
many flakes (Lower Paleolithic)

H. neandertal (200tyBP)

lithic tools: Mousterian/post Acheulian—more small flake tools, scrapers  
retouched flakes, prepared cores (Middle Paleolithic)

H. sapiens Cro-Magnon (35tyBP)

H. sapiens sapiens

lithic tools: blades, microliths, (Upper Paleolithic)  
(Neolithic – 10tyBP)

## READINGS

EE&P The first hominids (6)

The origins of culture and the emergence of Homo (7)

The emergence of Homo sapiens (8)

The upper Paleolithic world (9)

AA Robert Root-Bernstein and Donald L. McEachron, Teaching  
theories: the evolution-creation controversy

Elizabeth D. Whitaker, Ancient bodies, modern customs, and our  
health

S. Boyd Eaton and Melvin Konner, Ancient genes and modern  
health

## QUESTION 12

How are bipedalism, brain size and infant dependency interconnected in hominid evolution? How are they related to socio-cultural evolution?





## IN-CLASS ASSIGNMENT: SKULLS

Gorilla gorilla, Australopithecus africanus, Australopithecus boisei, Homo erectus, Homo neandertal, Homo sapiens sapiens

Describe in relative terms:

skull

- size, weight
- brow ridges
- sagittal crest
- forehead—sloped or vertical
- cranial capacity
- sutures

dentition

- jaw—prognathism
- chin—prominent or receding
- dental arcade—shape
- canines—prominence
- size of front vs. back teeth

posture—bipedalism

- location of foramen magnum

Use scientific terminology in naming species. You may use popular terms in addition, but not instead.

## Week 13                    ARCHAEOLOGY

### Subsistence system and material remains

Archaeologists, looters, collectors, museums and ethics  
To whom does the past belong?

Archeological site is perceived location of human activity  
artifacts, cultural objects made by people  
ecofacts, not made by people: pollen grains, food, bones,  
features: not movable from site  
excavation = destruction  
CONTEXT

Strategies of anthropology  
ideational approach: how people understand the world,  
structure it, think about it  
adaptive approach: adaptation to social and economic environment  
most arky here

Trends in scientific archeology  
hobby of the rich to C20, search for treasures  
Contemporary archaeology w/ 3 hierarchical goals  
each includes previous and is ongoing  
construct cultural chronologies  
reconstruct past lifeways  
understand cultural processes

Construct cultural chronologies  
“classificatory period” to World War I  
description, typologies, classifications, chronologies  
stratification - law of superposition: older deposits under young  
careful excavation by grids, by levels, visible or measured  
quantification of types of artifacts found in each  
proportions change through time: battleship curves  
artifact type coincides w/ culture type  
seriation: place stylistic periods in time  
component: culturally homogeneous stratigraphic unit in a site  
phase: similar components at several sites in a region  
gives relative dating  
computerization, statistics

- absolute dating ideal, not always possible
  - dendochronology, obsidian hydration,
  - amino-acid racemization on bones,
  - potassium-argon dating in rocks, radiocarbon dating
  - electron spin resonance, thermoluminescence

Reconstruct lifeways on basis of sequence of cultures, as seen in artifact types

- adaptation to social and natural environment
- horizontal perspective, region rather than site, ecofacts
- subsistence patterns: faunal remains, plant remains
  - much of this missed when artifacts were sole interest
  - lacked technology for analysis
- settlement patterns: one site not enough
  - seasonal variation, sites for different purposes
  - population density, distribution, specialization
- social organization: context of artifact essential, showing use and meaning
  - domestic group, economic specialization, social status,
- religious organization: symbols, important sites, ceremonial sites
- astroarchaeology

Cultural processes, e.g. emergence of agriculture, settlement, city

- rise and fall of states, migrations
- 1960s on, "revolution", new archaeology
  - search to make arky relevant
  - cultural evolution, human ecology, social organization
- new methods: aerial surveys, pixel archeology
- emphasis on cultural ecology
  - relationship to environment—effects of environment on people
    - e.g. earthquakes, climate change
  - relationship to environment—effects of people on environment
    - e.g. deforestation, desertification, soil depletion
- political relations
  - warfare, disease, social inequality, disease, tribute demands, trade

## READINGS

- EE&P How we discover the past (2)
  - Origins of food production and settled life (10)
  - Origins of cities and states (11)
- AA Aaron Podolefsky and Peter Brown, Part II: Archaeology (Introduction)
  - Baird Straughan, The secrets of ancient Tiwanaku
  - Payson D. Sheets, Dawn of a new Stone Age in eye surgery
  - Robson Bonnichsen and Alan L. Schneider, Battle of the bones
  - Gail G. Harrison, William L. Rathje & Wilson W. Hughes, Food waste behavior

## QUESTION 13

In archeological research, what kinds of evidence can provide information about a people's

- adaptive strategy / subsistence system
- state of health
- trade patterns
- social hierarchies
- belief systems?

Answer this question using specific reference to assigned readings.

## IN-CLASS ASSIGNMENT: ARCHEOLOGICAL MATERIALS

Comment on the contents of each set of archeological artifacts, considering materials, construction, decoration and use.

1. Blue box
2. Red bag (archeology students' lab)
3. Lithics with shells (Patagonia)
4. Materials from Carriacou (Caribbean)
5. Sarmaga collection (Bezanson)
6. Posters
7. Trudel cache (display case opposite J102)
8. Other