## Why Cognition in the Wild?
- Cognitive anthropology, following cognitive science left society and practice behind
- Culture as ideas - the *ideational* definition
- Culture only affects content of thought
- An obsolete division of intellectual labor -
  - psychologists can be responsible for process,
  - anthropologists deal with content.

## What is Cognition in the Wild?
- Human cognition in its natural habitat -
  - naturally occurring,
  - culturally constituted
  - human activity.
- Contrast cognition in captivity.

## Cognitive Ecology
- Human cognition adapts to its natural surroundings (*Leaky mind*).
- Multiple time scales
  - on-going activity
  - learning in a lifetime
  - historical changes in activity systems
  - evolution of the human mind

## Why Ship Navigation?
- Navigation is an interesting and complex, obviously cognitive, human activity system with a long, well-documented history.
- In order to understand human cognition we *must* carefully observe the complex ways in which cognition adapts to naturally occurring culturally constituted activity.
- This can only be done by attending to the fine details of some real activity system.

## Why Ship Navigation?
- The focus is on navigation to the extent that it is necessary to understand how cognition is situated in that activity.
- The discoveries to be made here are about *cognition*, not about navigation.

## What is Ethnography?
- The scientific study of culture...especially using participant observer methods.
  - live in a community
  - learn the language
  - do what the members of the community do
  - learn to see the world as it is seen by the natives
The Ethnographer’s responsibility

- To understand what things mean and why things mean what they mean.
- To make the grounds for interpretation explicit.
- This goes beyond just becoming a member of the community.

Navigation Duties

- Safety and accountability
- Advice for conning officer
- Limited set of well-understood problems
- Event driven - cannot quit or call “time out”.

Researcher Duty

- Civilian scientist
- Recording data
  - notes
  - audio and video recordings
  - still photos
- Transforming the data into other representations so that the cognitive properties of the system are visible.
Three kinds of space that matter for cognition

1. Physical space
   - Street, base, ship, navigation bridge
2. Social space
   - Civilian, military, navy, amphib navy, QMs
3. Conceptual space
   - Everyday wayfinding, technology-based professional navigation
     - What information goes where, when, in what form?

Why physical space matters

- What is near to what
- What can be seen from each position
- Architecture and cognition
- How bodies fit in space
- Arrangements of physical space affect where information can easily go.

Why social space matters

- Social organization (groups, identities, statuses, roles, and ranks) all affect the flow of information.
- They therefore affect the cognitive properties of social groups.
- Social arrangements affect where information is likely to go.

Why conceptual space matters

- The conceptual structures of ship navigation determine the content of the information and the organization of the representations in which information is encoded.

Finding out what people do

- Read the standard procedures (only the beginning)
- Observe and document actual work practices.
What information goes where, when, in what form?

Tools determine the forms of information
View through the Alidade

3-scale nomogram
Fathometer/Depth Sounder

DRAI

Bridge Layout

The Fix Cycle

Things to do

• Do the plagiarism tutorial and quiz
• Do exercise #1
• Turn in
  – The essay (required) 1000 words or less
  – appendices (optional)
  – self-evaluation (required)
• Keep your essays and self-evals when you get them back