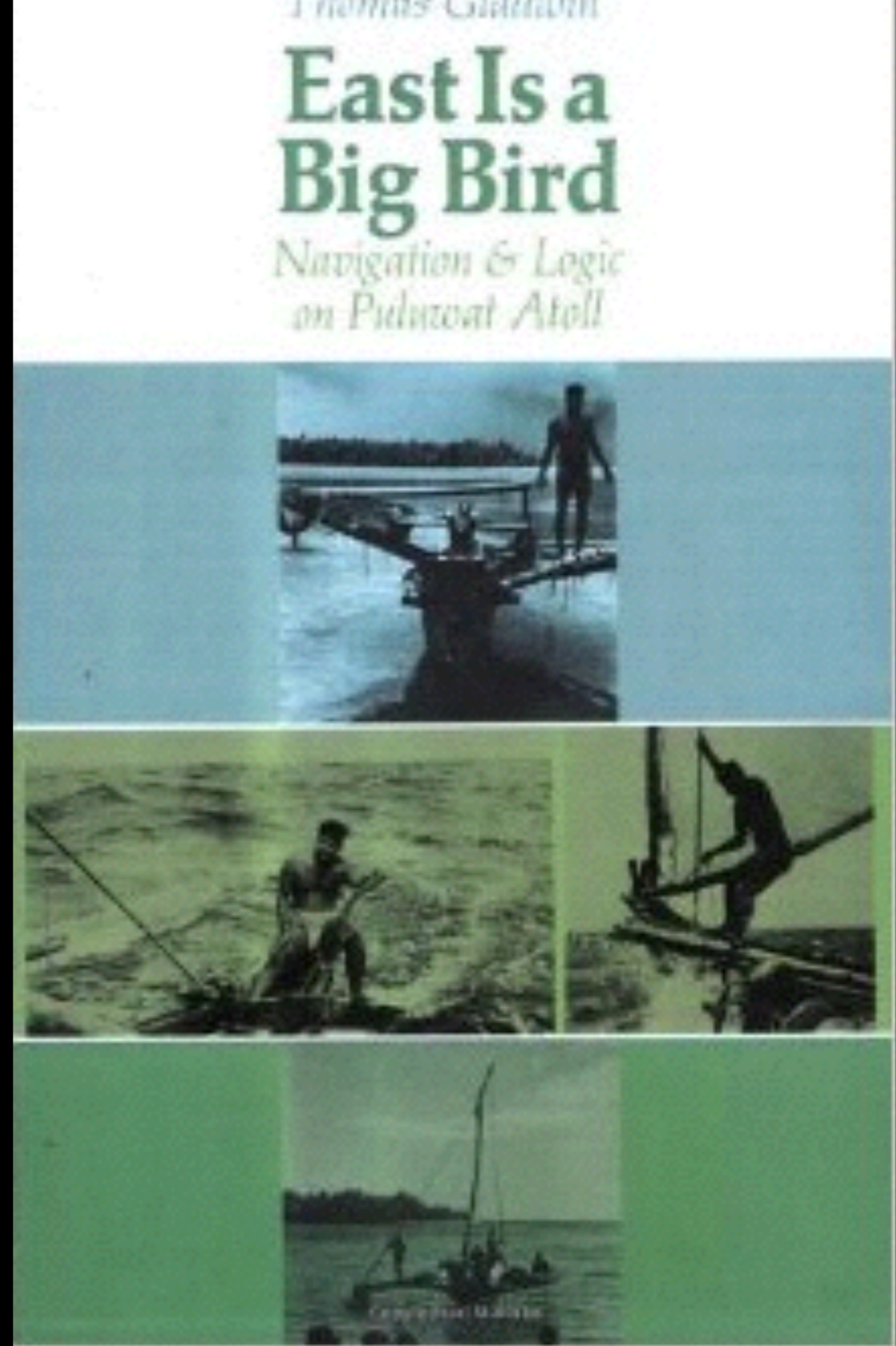


# Culture and Environment: Practices that account for the differences

Lecture 12

Research on cognition - some anthropologists examine logic or the processes of thinking and problem solving

- Thomas Gladwin
- 1970



# Thomas Gladwin:

- a different type of intelligence
- how non-Westerners are extremely intelligent and clearly have formal operational thought and logic.
- All peoples achieve formal operations in spheres **familiar** to them
- Lancy

# Poor people consistently disadvantaged in tests

- In school
- On jobs
- In testing for intelligence and achievement

- Disadvantage NOT entirely due to discrimination.
- Difference in strategies of problem solving + a divergence in priorities between poor and more affluent.

Gladwin - solution = move the  
criterion for intelligence away  
from its narrow scholastic base.

Find some way to assess problem-solving skills which would relate to adult performance

Find new criteria of intelligence.



# To do this 2 things were required:

- population uncontaminated effects of Western education and opportunity structure.
- accomplishment of people without formal education - recognized in the West as highly intelligent behavior.

- behavior analyzed as a logical system.
- criteria of intelligence different than Western intelligence tests.

- Seaways = lines of travel which lie between various islands

# means to navigate by:

- stars and planets
- sky and wildlife
- water
- **ALL AT THE SAME TIME**

# stars

- Star tracks = the vertical movement in the equatorial stars. They remain constant in direction and are used as a vast compass (32).
- can name and follow over 220 stars

# sky

- clouds - brown=strong winds, high= no wind but rain, movement = strength, movement of wind,
- sky - darker over island, red at sunset, sunrise = humidity, halo around moon = rain, number of stars within =intensity of the storm < 10 bad!, double halo = gale

# wildlife

- dolphins swimming toward shelter = storm, frigate bird toward sea = calm, white turn = 200 km, brown turn = 65 km, boobies 40 km

# ocean

- can distinguish 5 different swells against the hull (generated by pressure systems), identify distant atolls beyond horizon by distinct reverberation patten of waves against hull,



# PLUS dead reckoning:

- Puluat - **Dead reckoning** = one's position at any time is determined solely on the basis of distance and direction traveled since leaving the last known location
- Western navigation - don't need to know where have been. Do need sextant (star-tracking), chronometer (time-keeping), or computers

# dead reckoning

- every bit of data - wind, currents, speed, direction, distance, time accord over the distance of the voyage had to be kept within the memory of the navigator
- do not sleep, sit alone on a special perch at the stern of the vessel tracking with their minds
- tacking?

# Navigators:

- selected at 1
- no written records - memory
- tidal pools, dragged behind, testicles tied to rigging

The Hokule'a (1975)

Tahiti to Hawai'i  
Mau

# conclusion:

- This is not “primitive” thinking!
- Our thinking about intelligence is culture-bound.

# Reading:

- Venkatesh Chapters 2 (40 – 65) & 3