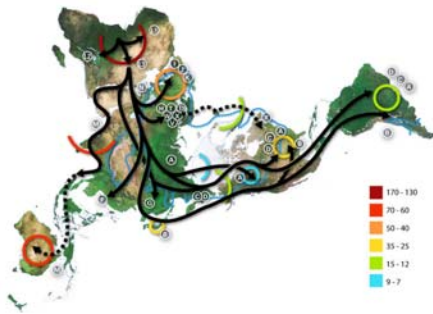


## The Great Reunion

The Human Story  
In three acts

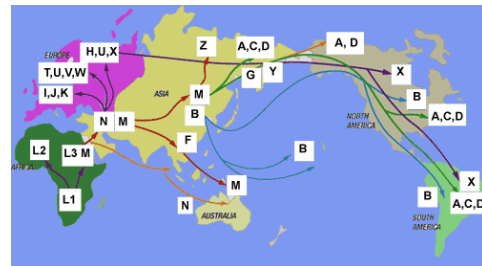
- The Diaspora
  - Slow expansion out of Africa and across the face of the earth
- The long separation
  - 60,000 years of independent development
- The sudden reunion
  - 600 years of mutual discovery and interaction

## Out of Africa



## Human Migrations

According to Mitochondrial population genetics



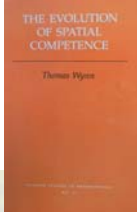
## The cognitive consequences of language and culture

## Collaboration and Communication in Children and Chimpanzees

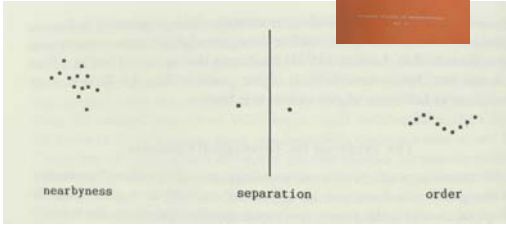
Michael Tomasello  
Max Planck Institute for Evolutionary Anthropology

- Monday, April 6th @ 4pm; Center Hall, room 216
- Human beings share many cognitive skills with their nearest primate relatives, especially those for dealing with the physical world of objects (and categories and quantities of objects) in space and their causal interrelations. But humans are in addition biologically adapted for cultural life in ways that other primates are not. Specifically, humans have evolved unique motivations and cognitive skills for understanding other persons as cooperative agents with whom one can share emotions, experience, and collaborative actions (shared intentionality). These motivations and skills first emerge in human ontogeny at around one year of age, as infants begin to participate with other persons in various kinds of collaborative and joint attentional activities. Participation in such activities leads humans to construct during ontogeny perspectival and dialogical cognitive representations.

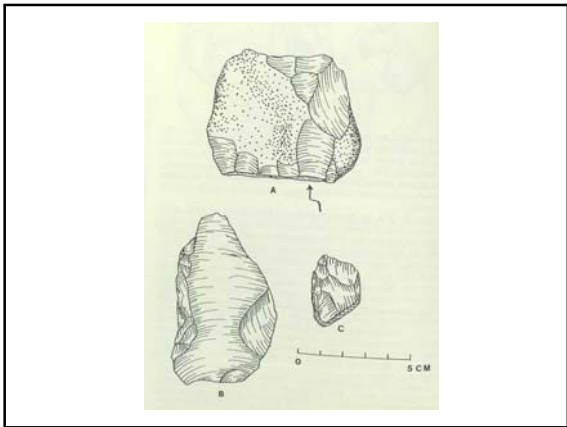
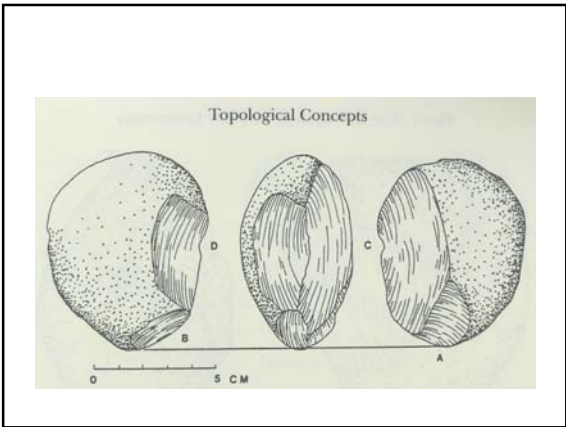
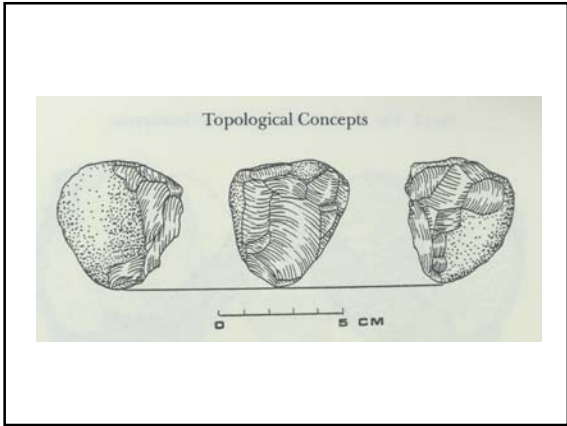
### Cognitive strategies for making stone tools



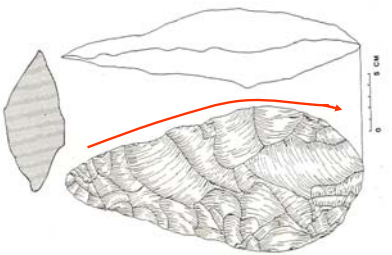
THE EVOLUTION OF SPATIAL COMPETENCE  
Thomas Wynn



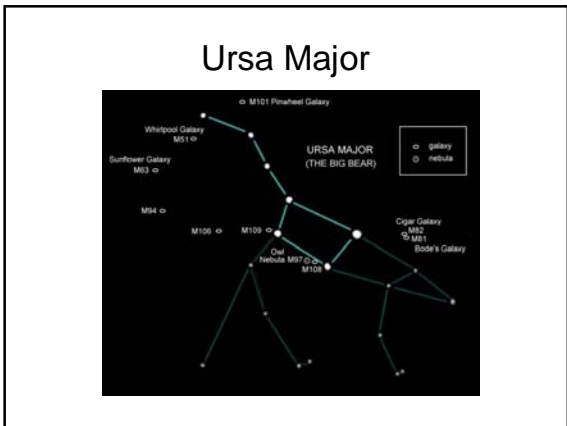
nearbyness      separation      order



300,000 years ago (Wynn, 1989) imagining a trajectory of attention to produce an ordered sequence of blows

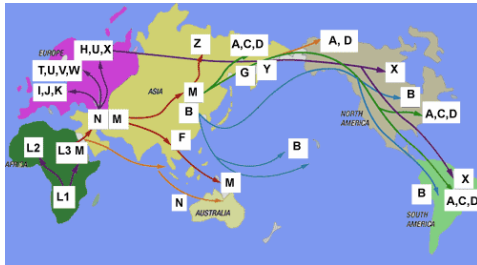


0      5 CM



## Human Migrations

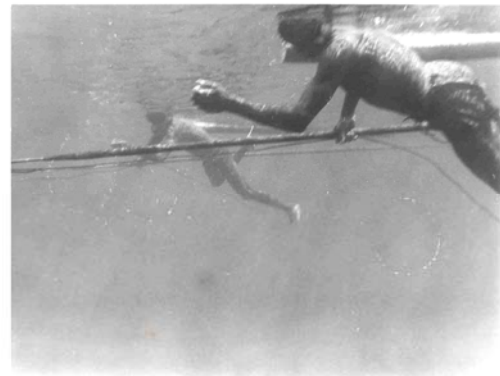
According to Mitochondrial population genetics

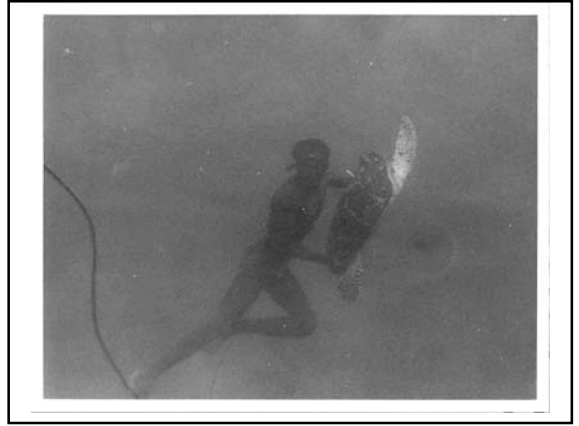
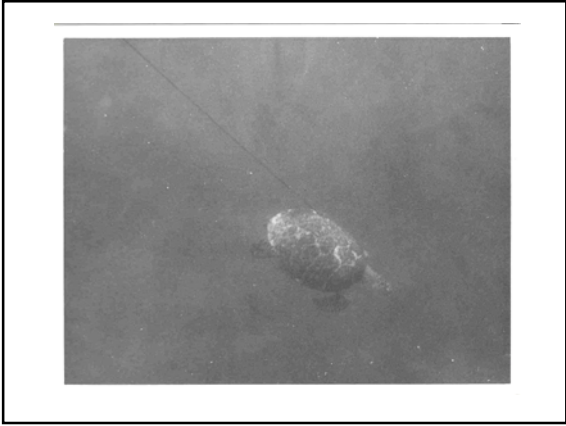


## Sea-faring People of the Pacific



## Turtle Hunting near Baluan Island August 25, 1973





6000 ybp

- Agriculture
- Domestication of plants and animals
- Cities
- Monotheistic religions
- The ability to alter local climates
- Writing!

Early Accounting Systems



Six ovoid tokens representing an account of six units of oil

Early Accounting Systems



Plain tokens. Mesopotamia, 4000 B.C.

Early Accounting Systems



An envelope and its contents representing 7 units of oil

Early Accounting Systems



An envelope, its contents of tokens, and corresponding markings. 3300 B.C.

Early Accounting Systems



Complex tokens. Sheep, oil, metal, garment. 3300 B.C.

## Early Accounting Systems



Impressed tablet showing an account of grain. 3100 B.C.

## Early Accounting Systems



Pictographic tablet showing 33 units of oil. 3100 B.C.

## Properties of Spoken and Written Language

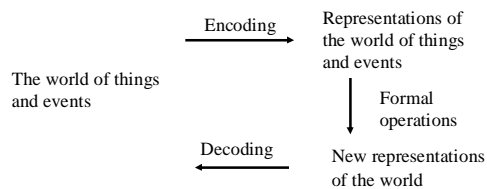
- |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Spoken             <ul style="list-style-type: none"> <li>- Ephemeral</li> <li>- Dynamic</li> <li>- Auditory (sound)</li> <li>- Structure in time</li> <li>- In context</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Written             <ul style="list-style-type: none"> <li>- Semi-permanent</li> <li>- Static</li> <li>- Visual (sight)</li> <li>- Structure in space</li> <li>- Decontextualized</li> </ul> </li> </ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## decontextualization

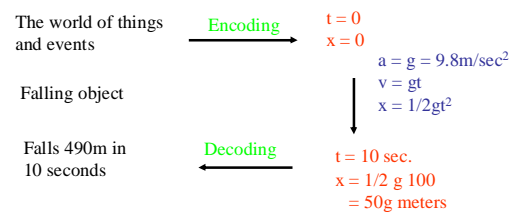
decontextualization

weave or surrounds  
with relation to  
not to make or take  
the act

## The Secret of Our Success



## The Secret of Our Success

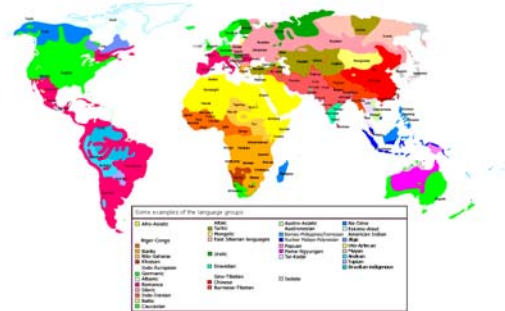




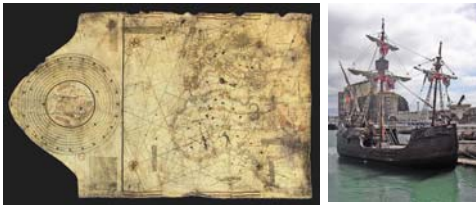
## Getting symbols to behave in a way that fits the world

- Why does this turn out to be possible?
- Why is the world a place that can be modeled by mathematics?
- No one knows, but it DOES work!

## The world's language groups



## The beginning of the colonial expansion: Columbus



## Astrolabe



## Colonial Holdings 1900



## Independence Day

- Us and Them
- Extinction of languages

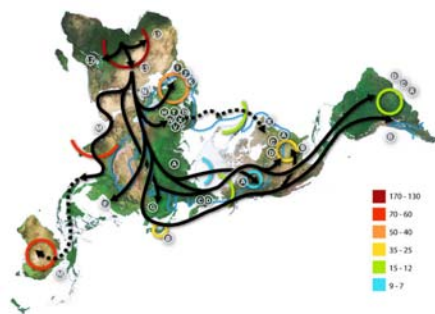
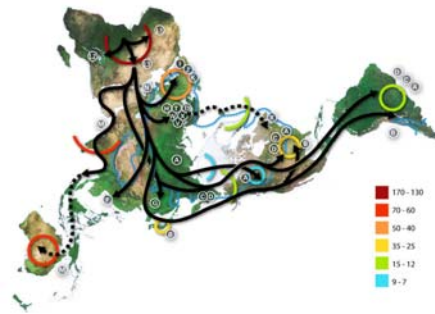
## Selassie's speech

- *That until the philosophy which holds one race superior and another inferior is finally and permanently discredited and abandoned; That until there are no longer first-class and second class citizens of any nation; That until the color of a man's skin is of no more significance than the color of his eyes; That until the basic human rights are equally guaranteed to all without regard to race; That until that day, the dream of lasting peace and world citizenship and the rule of international morality will remain but a fleeting illusion, to be pursued but never attained; ...*

## Selassie's speech (continued)

- *And until the ignoble and unhappy regimes that hold our brothers in [Angola](#), in [Mozambique](#) and in [South Africa](#) in subhuman bondage have been toppled and destroyed; Until bigotry and prejudice and malicious and inhuman self-interest have been replaced by understanding and tolerance and good-will; Until all Africans stand and speak as free beings, equal in the eyes of all men, as they are in the eyes of Heaven; Until that day, the African continent will not know peace. We Africans will fight, if necessary, and we know that we shall win, as we are confident in the victory of good over evil. – Haile Selassie I*

## The Global Village



## Human Migrations

According to Mitochondrial population genetics

