Exploring, Collecting, and Classifying

STS.003, Fall 2010
Review:

- Curiosity about the natural world
- Great skill with description and theorizing
- Natural world still infused with myth and meaning
Unit 2: Nature

(1a) Are humans part of nature? Are they distinct from nature? Do they make nature?

(1b) Are living things, in particular species, changing or unchanging?

(2) Science and commerce
The Birth of Science?

- 16th century Dutch traders: Brazil, Africa, India, Spice Islands, Japan
- New products of commercial and medicinal value
- Needed consensus about description and classification
- Cook’s Claim: This fueled the emergence of an objective, materialist, fact-based (modern) natural history
Thirdly, Of Fishes.

Pliny and Isadore write there are not above 144 kinds of Fishes, but to my knowledge there are nearer 300: I suppose America was not known to Pliny and Isadore.

A CHRONOLOGICAL TABLE
of the most remarkable Passages in that Country amongst the English.
Illustrated with C'UTS.

By JOHN JOSSELYN, Gent.

London, Printed for G. Widdowes at the Green Dragon in St. Paul's Church-yard, 1672.
Overview:

- Natural history in early modern Europe and the Enlightenment
- How to organize and understand new discoveries
- The place of humans in systems of nature
- Science and commerce
- Classification and race
John James Audubon
A commercial market for natural history
Classification: Aristotle

- Blooded - Bloodless
- Viviparous - Oviparous
- Quadrapeds, marine mammals, birds, fish, mollusks, crustaceans, insects...
“Birds, like all other animals, may be divided into various species in accordance with their sexual relations, their parturition, their methods of procuring food, their variations in residence at different seasons of the year (chiefly as a result of alterations in temperature), and their change in diet”
New-Englands RARITIES Discovered: IN Birds, Beasts, Fishes, Serpents, and plants of that Country. Together with the Physical and Chyrurgical Remedies wherewith the Natives constantly use to Cure their Distempers, Wounds, and Sores. ALSO A perfect Description of an Indian SQUA, in all her Bravery; with a POEM not improperly conferred upon her. LASTLY A CHRONOLOGICAL TABLE of the most remarkable Passages in that Country amongst the English. Illustrated with CUTS.

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Carl Linnaeus
(1707-1778)

- Swedish physician, botanist
- Only one trip outside Sweden, to England
- Chaos in botanical nomenclature, “the first step toward barbarism”
- Goal: classify everything, “the alphabet of nature”
Why study nature?

Theology: “Surely for no other reason than that the observer of the wonderful work might admire and praise its Maker.”

Commerce: “All that is useful to man originates from these natural objects”
Are all taxonomies arbitrary?
Georges-Louis Leclerc, Comte de Buffon
The Great Chain of Being

- Linnaeus:
  - Minerals grow
  - Plants grow and live
  - Animals grow, live, and feel
Humans in the Systema Naturae

Ordo i.

PRIMATES.

Dentes primores superiores IV pararelli.
Mammæ pectorales, bina.

1. HOMO noce Te ipsum.

1. H. diurnus. (*) vagam cultura, loca.
   a. H. rufus, cholericus, rectus.
   b. H. albus, fanguineus torulos.
   c. H. luridus, melancholicus rigidus.
   d. H. Niger, phlegmaticus, laxus.
   e. H. monstrofus folio (a), vel arte (h. c.)
      a. Alpinis parvi, agiles, timidi; Patagonici magni, segaes.
      b. Monarchides ut minus ferriles; Hottentotti.

2. Homo nocturnus. Oorang Oorang Bont. nov. 84, t. 84.

Genus Troglobite seu Oorang Oorang ab Homine vero diffusum, additum quamvis omnis attentione, obtine non potui, nisi absque omnem nostrum lubricam, in aliis generibus non constamus. Nunc Dentes Ianiarii minime a reliquis remotius nec Nymphae calidum, quiad carent. Simiae, brevem ad Simias reducere admissem. Inquirant autem esse in vivo, qua ratione, modo nesci alique existat, ad Hominiis generi separari quidem, nam inter Simias verfanthem oportet esse Simiam. Apeludor.
"There is a physical difference between the white and black races which I believe will forever forbid the two races living together on terms of social and political equality ... I as much as any other man am in favor of having the superior position assigned to the white race." -- Abraham Lincoln, 1858
STS.003 The Rise of Modern Science
Fall 2010

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