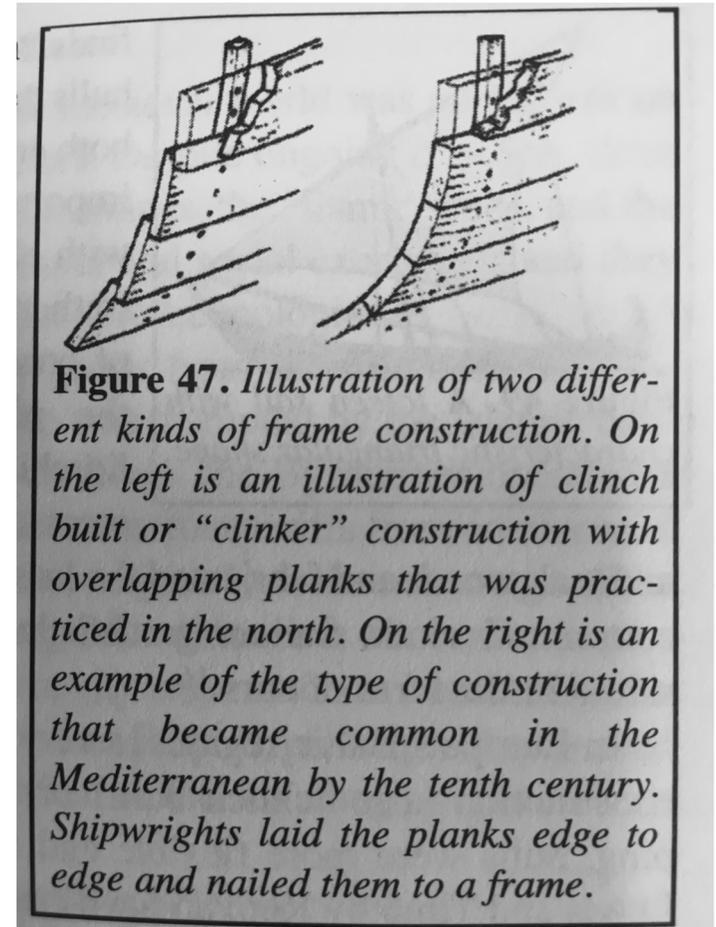
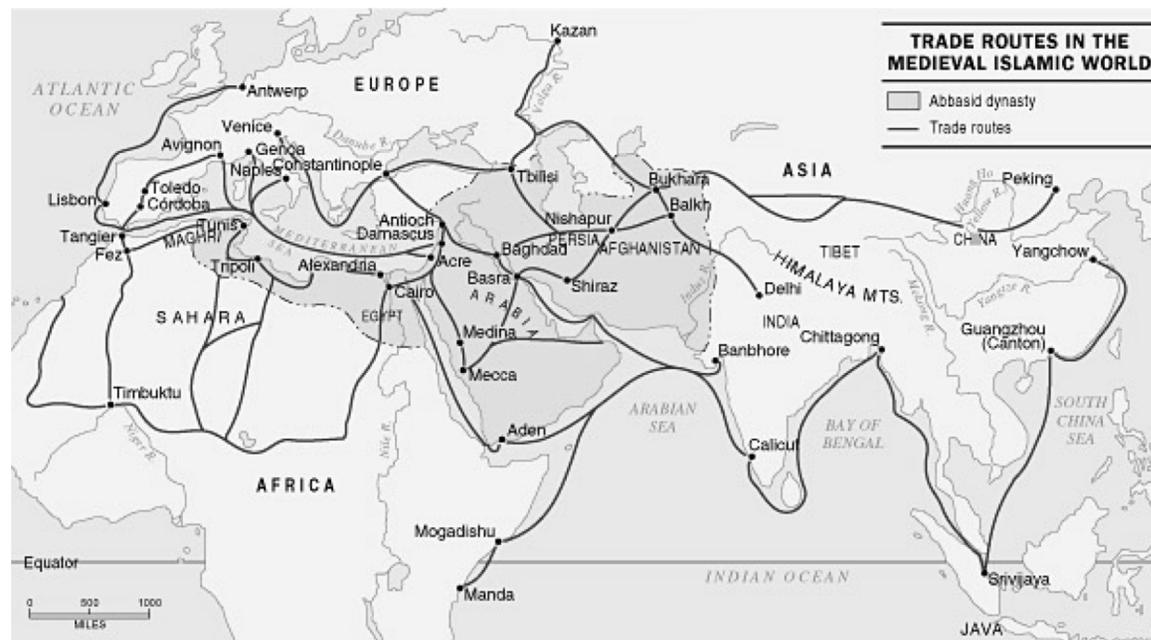


- **Transportation**
- conveyance + infrastructure
- conveyance
  - wheeled carts, wagons, sledges
  - animals (donkeys, horses, mules, camels, etc.)
    - major change in move from oxen to horses in 12<sup>th</sup>/13<sup>th</sup> centuries
  - ships, boats
- infrastructure
  - roads, bridges, ports, caravansaries
  - roads in the Western Europe were extremely poor quality
    - roman roads had fallen into disrepair
- how did the use of roads and wheels evolve in the Middle East?
  - read Long p. 79
    - asks us to think of ‘progress’ in terms of social and geographical context
- ships, boats
  - what were they used for?
    - moving people and goods
  - early medieval: two types of ships
    - clinch-built (or clinker) construction in northern Europe
    - mortise and tenon in the Mediterranean
      - inherited from Romans
  - late medieval: both abandoned
    - based on internal skeleton
      - strength of hull depended on frame
      - leaked more

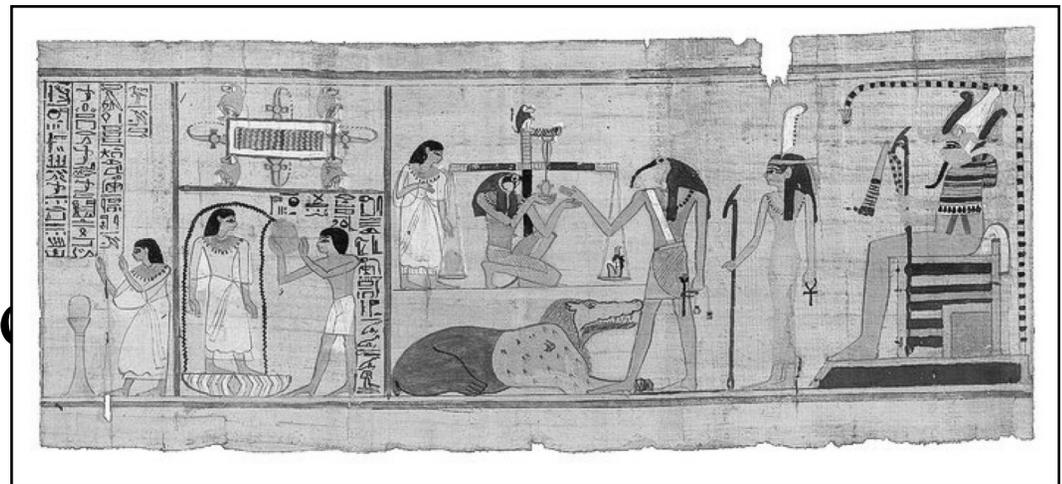


- Transportation vastly expanded commercial range of activities in medieval period
  - read p. Long p. 83
- question of “connectivity”
  - issue of local
    - local economic processes were always important
    - read p. 85
  - long-distance connectivity?
    - often enabled by war and conflict (e.g., the Crusades)
    - or Islamic contacts



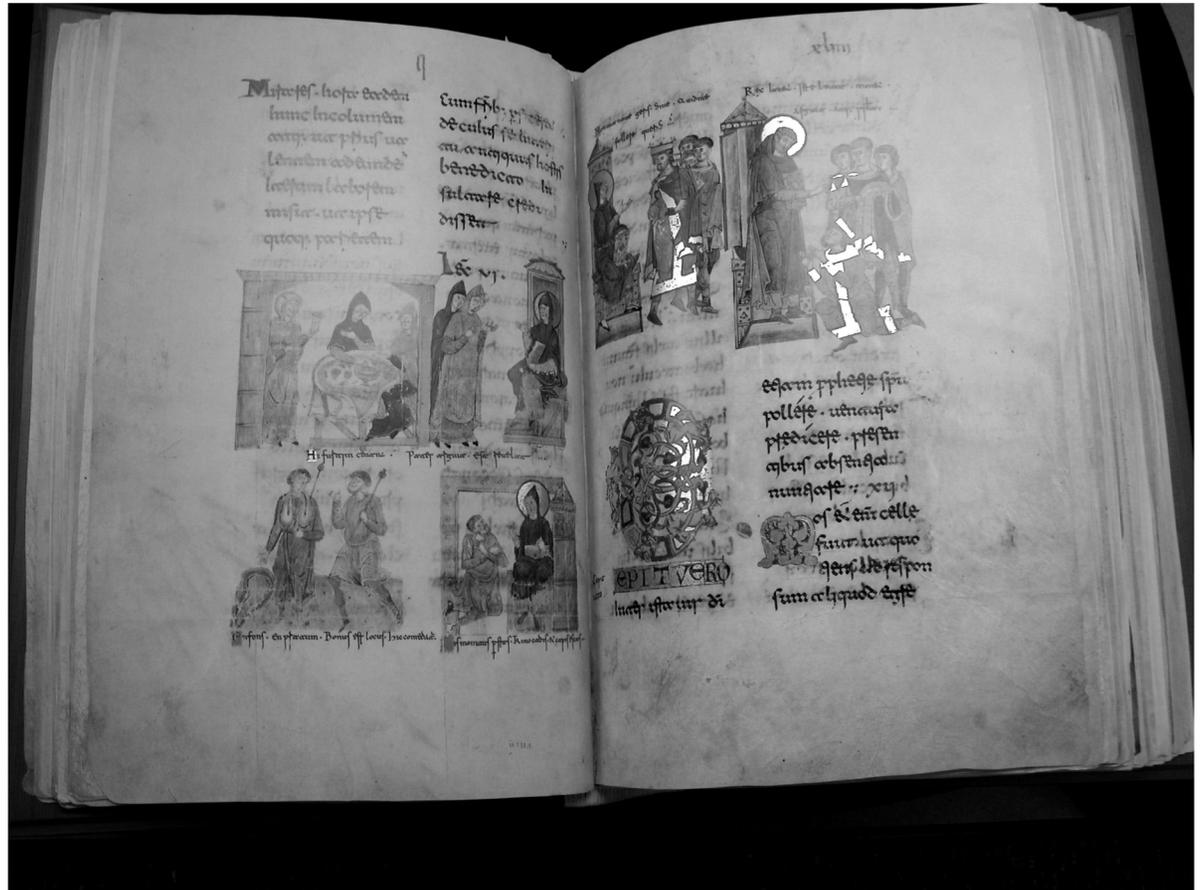
# Technologies of Communication: Writing/Reading

- the technology of how to preserve writing
- three elements:
  - what to write on
  - what to write with
  - how to put it together
- Egypt: use of *papyrus* to make *scrolls*



## Further developments

- in late antiquity introduction of:
  - parchment
    - sheepskin,
    - goatskin
  - codex (4<sup>th</sup> century)
    - type of binding
    - what kind of advantages?
- Paper came to West via China, Islamic states
- By 11<sup>th</sup>/12<sup>th</sup> centuries, use of paper and binding in the West



*Codex Benedictus* (11<sup>th</sup> century manuscript from Monte Cassino)

## Book Production in the West

- initially done in monasteries
- the *pecia* system
  - developed in the 13<sup>th</sup> century in Italian universities
  - broke up book into sections (*peciae*)
  - copied simultaneously
- books made from “gatherings” of parchment
- two stages
  - forwarding
  - finishing

# Literacy

- Literacy as a concept is very contextual
- orality vs. literacy
- in the medieval world, more people could read than write
  - reading aloud was a valuable skill
  - liturgy
- literacy = education, rationality
- distinction between Latin and vernacular languages

## **Monasticism and Literacy**

- as Monasticism expanded in Europe, monasteries became centers of religious culture and learning
  - education before the advent of universities
- after 11<sup>th</sup> century, began a slow shift from oral culture to written culture
  - rise of commerce
  - growth of towns
  - universities
  - production and retention of records