

# Dylan Blah

## Lecture 9 Military Revolution + New Horizons

Story - centralizing states

- spread of knowledge from Italy & East knowledge

Gunpowder - incredibly important technology for our period  
- interconnections & influence from neighboring sources

1. Sulfur

2. Saltpeter

3. ?

- invented in China during post-classical era

- spread through Islamic age

- Silk Roads & Maritime Mongols spread

European developments

- Corrod gunpowder - preserves & makes more effective

- Advances in metallurgy

Development & applications of gunpowder for war

↳ China - not super warry, it was there but not game changing

↳ Europe - war use

Military Revolution

- Infantry changes

- artillery changes

- artillery power changes

Medieval Warfare

- Knights on horseback

- Developments in bow tech

- Heavy cavalry

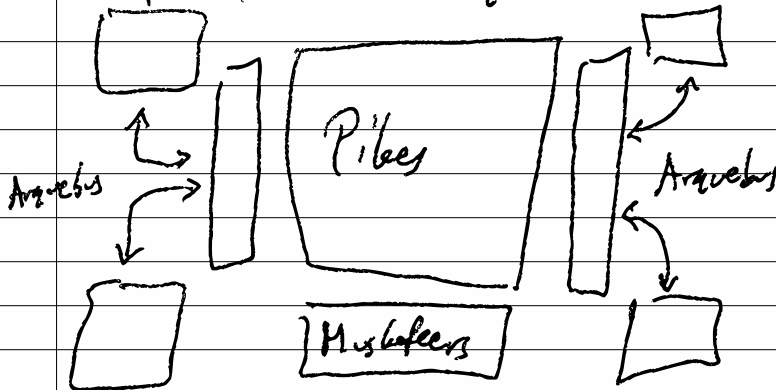
- armor, horses, extensive training

## Changes in Infantry

- infantry - foot soldiers
- late medieval infantry
  - tight formations w/ long pikes
    - ↳ Swiss phalanx - pikemen & halberdier
    - ↳ Spanish tercio - 150 yr win streak
- Mutual support - cover fire, missile weapons
- handheld firearms like the arquebus

## Renaissance

- pike formations with arquebuses & musketeers



## Pike Squares

- when it falls apart - call in cavalry

## Changes in Artillery

- medieval fortifications
  - castles - stone, thin walls, but tall
  - round towers, etc.
  - ex. Avila, Spain, Avignon
  - built to withstand trebuchets, catapults
- Development of the cannon
  - early gunpowder artillery used to complement
  - changed the game with range & force

- Super bombard
- Turks, Scots, etc.
- Hundred Years War - 1453
  - French gun
- Fall of Constantinople - 1453
- Campaigns of Charles VIII - Italian wars 1494-98

### Artillery Fortresses (trace italienne)

- reaction to rise of gun powder
- built walls that resist fire
- No spot uncovered from flanking fire - No dead zones
  - Star shaped bastions
  - ex. Castel St Angelo, Bourtang, Netherland

Fighting war is now crazy expensive

### Recap

- Cavalry → pike + shot
  - Gun powder artillery
  - trace italienne
  - Royalization + Professionalization of warfare
  - Kings take more out of equation relatively
    - Centralization
- "War made the state & the state made war"

Revolutionary but in stages

- Punctuated equilibrium evolution

Connections w/ civil humanism & Renaissance humanism

- Leon Battista Alberti (1404-1472)
- Filippo Brunelleschi
- Linear perspective → put plans on paper

Renaissance humanists build these libraries

- Alberti + Michelangelo
- Manicelli

Renaissance connecting between

- education

- art

- tech

- science

- politics

Rise of the New Monarchies

3 powers

- France

- England

- Spain

} United, centralizing powers

- Religion bureaucracy, fewer nobles, kings men

France

Hundred Year War

- France emerges victorious

Louis XI of France (1461-1483)

- Universal Spider

- Rivals - Dukes of Burgundy between France & Germany

- Much of the low countries & Burgundy itself

- French Guilt

- Burgundy ruler dies in battle, Louis XI pounces,  
not done until French Revolution

Estates General

Parlements - judicial courts, about extending state

- ex. parlement in Bordeaux never Aquitaine involved

Venality of office - sell off pos, try to highest bidder

## Noblesse d'épée vs. Noblesse de robe

### England

- Magna Carta (1215), King John
  - participation of nobles
  - codify principle of resisting absolute rule
- Parliament - kings have to rely on it
  - House of Lords
  - House of Commons
  - Push back against king
  - Supply vs. redress of grievances
- State is centralizing but other institutions limit monarchy
- Henry VII. Tudor
  - comes to power after the War of the Roses
- War of the Roses
  - York vs. Lancaster fight over throne
  - Battle of Bosworth Field - 1485
    - "Tudor Revolution in Government"
    - departments around the crown
  - Tudor Rose

### Spain

- Allies of the English
- Reconquista - 1492 under Ferdinand & Isabella.