

War and Technology in the Medieval World

...



Group work

With your group members, write a paragraph of at least six sentences that describes war and technology in the medieval world.

Then, draw a picture depicting a medieval battle.

Please email your description and image to tozzic@rpi.edu, along with the names of your group members.

Lecture goals

- Understand the concept of “medieval.”
- Identify the major technological and military developments of the medieval period.
- Explain how those developments related to social, political, cultural and economic developments.

What is medieval?

The period in European history between the fall of Rome and the Renaissance. Roughly 476-1500 A.D.

Concept is:

- Eurocentric.
- Historically constructed (term coined in 1469 but not widely used until Renaissance).
- Morally inflected.

Middle Ages: stages

Early Middle Ages

- Disorganization, small states, widespread insecurity.
- Transition out of collapse of Roman empire.

High Middle Ages

- Relatively stable economies and states
- Probably what you think of when you think “medieval.”

Late Middle Ages

- Violence increases in frequency; conflicts become drawn-out and indecisive.
- Plague, early overseas colonization.

Overarching themes

Small, weak states (compared to those before and after).

Religious unity in most of Europe; wars over religion with non-Europeans.

Military power and security take priority over learning, cultural development.

- Which means slower pace of technological innovation.

Feudalism and the making of war

Feudalism: A system in which land is exchanged for loyalty, military service or protection.

Why feudalism?

Why feudalism?

- Only way to organize armies given weak state bureaucracy.
- Efficient way of providing security in a highly insecure world.
- Turns land into chief commodity.
 - Advantage in societies with few other ways of storing value (e.g., functioning monetary systems and banks).
- Reinforced by religious value systems.

Problems with the feudal concept

- Originated from narrow interpretation of eleventh-century law books.
- Sweeping generalization
 - Both geographically and chronologically..
- Not used by people at the time.
- Hard to apply to urban societies (e.g., in Italy).
- Used as an epithet for oppressive regimes
 - E.g., by the French revolutionaries, Karl Marx.

Medieval technological innovations

- Modern windmills
- Mechanical clocks
- Hourglasses
- Blast furnace
- Crop rotation
 - Two-field system, three-field system

Medieval technologies: Cavalry

- Stirrup
- Horseshoe

Why develop new technologies for horsemen?

Medieval armor

- Leather
- Scale armor
- Mail armor
- Lamellar armor





ARMSTREET

Crossbow

- Developed in ancient China
 - Probably used in Roman Empire
- But not revived in Europe until the tenth century
- Originally requires special skill and strength to operate
- Medieval European crossbows were easier to operate
 - But also slower to fire: Two bolts per minute as compared to twelve arrows per minute for a longbow





Nature of medieval warfare

- Bipolar: Mobility and raids on the one hand, long sieges on the other
- Relatively few pitched battles (as compared to Roman times and early-modern times)
 - Starts to change in late Middle Ages
- Extensive reliance on cavalry
 - With exceptions, such as English army in Hundred Years' War
- Close-quarters fighting
 - Begins to change by late Middle Ages with increased importance of archers and artillery