



Technological Changes in WWI

How does the nature of warfare change as a result of new technology?



Objective:

SWBAT determine how technological advancements affected the nature of WWI & evaluate the effectiveness of Woodrow Wilson's leadership during and immediately after WWI.

The Machine Gun

Fired 600 bullets/min Stood on tripods – not mobile

More effective vs. bayonet Thought of as weapons of mass destruction







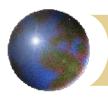
Infantry & Trench Warfare

Becomes backbone of army; had been cavalry (horse soldiers) w/ infantry as follow-up

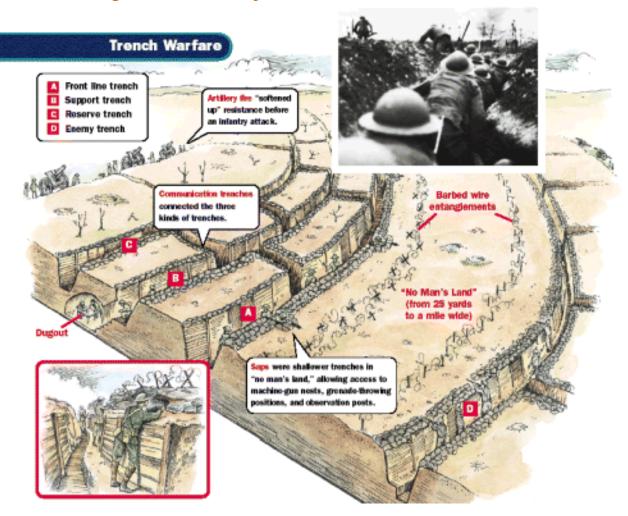
Trench warfare made infantry charge replace the old cavalry charge

Helmets become standard issue

Need for large numbers of infantry so that at least some would remain standing



Trench Warfare System





Artillery



French field gun

Upgraded versions of cannons

High explosive shells and shrapnel shells

Blew away human & ground, making hiding difficult



Germany's Big Bertha





Mustard Gas





Gas Grenades

Highly toxic; very effective

3 types – chlorine, then Phosgene and Mustard, Mustard gas burns lungs, blistering agent

Mustard gas not found in nature – created to combat stalemate

Chlorine gas 1st used by Germans in battle of Ypres 1915





Transportation & Communication



Railroads, truck, taxi,
Battle of Verdun –
taxis from Paris
transport troops
Radios/ telephones
Messengers, dogs,
pigeons still used



Chariots of God





Tanks



Introduced by British at Battle of the Somme (1916)

Carried 1-2 people
Broke down easily, hot,
Allowed for offensive
action

French Tank pictured



Navy

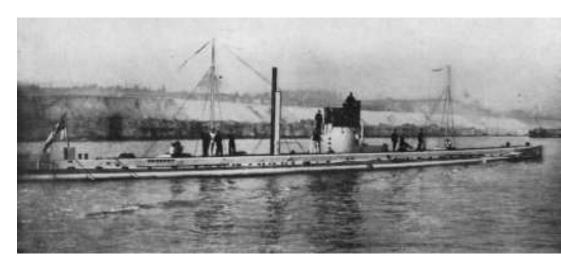
Dreadnought:
revolutionary – had
rotating turret & steam
combine engine -

German U-Boat: used by Germans for blockades — had torpedos I.e. "sinking of the Lusitania"

Combo of civilian and military material on ships – worth the risk?

Evidence of total war





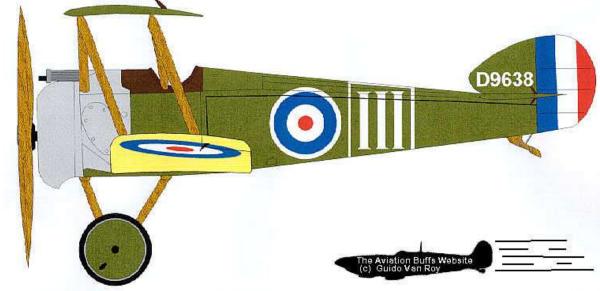


Aircraft

Zepplins (blimp-like bomber)

Aircraft used
toward end of
war, but did not
make decisive
changes in
outcomes





Conclusions: The nature of warfare changed in WWI in the following ways:

Larger casualty rates; infantry

Becomes more hi-tech

Increased need for communication & transportation

Chemical warfare develops

Total Warfare – attacking civilian populations (blockades prevent food shipments)