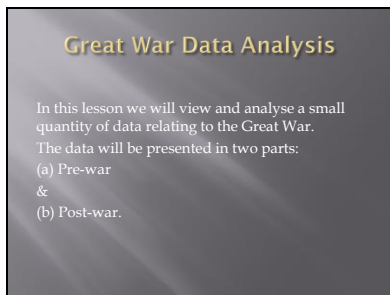


Slide 1



Slide 2



Slide 3

World Industrial Production in 1870 & 1913

	1870	1913
USA	23.3%	35.8%
Germany	13.2%	15.7%
UK	31.8%	14.0%
France	10.3%	6.4%
Russia	3.7%	5.5%
Italy	2.4%	2.7%
Others	15.3%	19.9%

Form into NGT pairs and then fours to consider the above table:

Identify three pieces of information that can be drawn from this table.

1. The relatively rapid rate of industrialization by the USA during that period
2. UK & France were declining industrially relative to Germany and Russia (the latter nation was coming from a low base)
3. 'Others' were making significant progress but from low bases (Japan).

Slide 4

Industrialization

To what extent would you agree that by 1914 the nations on the European continent had commenced an industrial decline relative to some other nations of the world?

Slide 5

Strengths of the European Armies in 1914

	Population	Peacetime Strength	Wartime Strength	Infantry Divisions	Cavalry Divisions
Triple Entente					
Russia	164,000,000	1,445,000	3,400,000	114	36
France	36,600,000	827,000	1,800,000	80	10
Britain	46,000,000	248,000	248,000	6	1
Total	246,600,000	2,520,000	5,448,000	200	47
Central Powers					
Germany	67,000,000	761,000	2,147,000	87	11
Austria	51,000,000	478,000	1,338,000	49	11
Hungary					
Total	118,000,000	1,239,000	3,485,000	136	22

How much greater was the total population of the Triple Entente nations in 1914 compared to the total population of the Central Powers nations in pre-war Europe?

In terms of 'wartime strength' and 'infantry divisions' how much stronger was the Triple Entente' compared to the Central Powers in 1914?

Slide 6

Table: Naval Strengths in 1914

Ship Type	Britain	France	Russia	Germany
Dreadnaughts*	35	12	7	20
Battle cruisers**	171	48	29	78
Destroyers	221	81	62	98
Submarines	72	18	25	31

Source: P. G. Halpern – A Naval History of WW1 (London: UCL Press 1994)

After considering the relative strengths of the various navies, why would the German nation in 1914 have been particularly vulnerable?

* Available & being built

** All Classes

Slide 7

Group Discussion Question

□ Based on the data contained in the Pre war tables, which of the adversaries should logically have won the War and Why?

Discussion

Slide 8

Discussion Question

Why did the German military leadership in 1914 believe it could win a war against enemies on two sides that were significantly stronger in manpower & materiel?

My first Enigmatic Question about the Great War

NB – Willhelm's dictatorial attitude and opposition to democracy
The lack of a truly democratic parliament meant that Germany's militarist decisions were not subjected to civilian oversight, balance and control.

This can be compared with Britain's partially democratic system of government

The German and Allied leaders totally underestimated the enormous destructive power of the military

technologies that would be unleashed in a modern version of war

Slide 9

Artillery

“The war of 1914-1918 was an artillery war.
Artillery was the battle winner, artillery was what caused the greatest loss of life, the most dreadful wounds and the deepest fear”

John Terraine ‘White Heat’

Slide 10

Artillery Shells Fired during the Great War

French Artillery	200,000,000
Russian Artillery	20,000,000
Total Allied Artillery	420,000,000
German Artillery*	250,000,000
Austria-Hungarian Artillery	70,000,000
Total Alliance	320,000,000
Grand Total of Shells Expended	740,000,000
<small>*All Fronts</small>	

(Source: The Western Front Companion (Mark Adkin)

This next series of tables provides data dealing primarily with the Casualty figures that resulted from the Great War.

Figures Rounded

If one allows that the Germans probably fired 50 million of their shells on the Eastern Front (ie the same number as the Russians) and that Britain and France each expended 10 million shells in other theatres such as Gallipoli and Salonika (probably an exaggerated number)

then we can extrapolate that some 550 million shells were expended by both sides on the Western Front over the course of the War.

Of that quantity, Britain and France were likely to have despatched about 350 million shells compared to a German figure of about 200 million.

That was an Allied artillery superiority ratio approaching 2:1.

This Allied artillery superiority leads us to the next slides dealing with Casualties.

Slide 11



If one allows that the Germans probably fired 50 million of their shells on the Eastern Front (ie the same number as the Russians) and that Britain and France each expended 10 million shells in other theatres such as Gallipoli and Salonika (probably an exaggerated number) then we can extrapolate that some 550 million shells were expended by both sides on the Western Front over the course of the War. Of that quantity, Britain and France were likely to have despatched about 350 million shells compared to a German figure of about 200 million. That was a ratio approaching 2:1.

Slide 12

Total WW1 Deaths (All Nations – All Fronts)
Source: First World War – The Year that World Ended

Nation	Allied Deaths	Central Powers Deaths
Australia	61,000	10,000
Canada	64,976	10,420
Indian Empire	74,187	20,170
New Zealand	18,000	5,000
Newfoundland	1,000	1,000
United Kingdom	880,000	1,000,000
Total British Empire	1,114,000	1,000,000
France	1,300,000	1,300,000
Russian Empire	1,000,000 (est.)	1,000,000 (est.)
United States	700,000	700,000
Other Entente Powers	1,000,000	1,000,000
Total Entente Powers	5,712,370	12,800,200
Germany (All Fronts)	2,000,000	4,172,000
Other Central Powers	1,000,000	1,000,000
Total Central Powers	4,010,241	9,419,533

By what number (& %) did Allied (Entente) deaths exceed those of the Germans over the course of the War?

By what number (& %) did Allied (Entente) deaths exceed those of the Germans over the course of the War?

Slide 13

Deaths by Year & Nation – Western Front

Country	1914	1915	1916	1917	1918	Totals
Belgium	8,199	2,996	2,072	2,414	9,048	24,729
France	304,124	210,879	295,368	169,430	210,162	1,189,963
Great Britain	17,174	66,415	150,131	226,450	162,613	622,783
United States	0	0	0	0	85,252	85,252
TOTAL	329,497	289,290	447,571	398,294	467,875	1,922,727
Germany	85,021	113,438	142,823	121,622	206,359	669,263

Source : John Mosier – ‘The Myth of the Great War’

Which Allied / Entente Nation suffered the greatest loss of life on the Western Front over the course of the War?
(France)

In which year of the War did that country sustain it highest losses? (In less than six months in 1914)

By what number and approximate % did Allied deaths on the Western Front over the course of the War exceed those of the Germans?
(1,253,464) (280%)

In which year of the War on the Western Front were the Allies most successful in killing Germans (1918) For every one German killed in that year, approximately how many Allied soldiers died? (2.25)

Slide 14

A Comparison of British & German Dead in Western Front Battles Against Each Other
(Source: United Kingdom War Office) - Reference John Moser Page 7.

Year	British Dead	German Dead
1914 Mons Le Cateau Marne 1 st Ypres	17,174	Not provided German dead on the whole Western Front for that year totalled 85,021.
1915 Artois Neuve Chapelle 2 nd Ypres Loos	42,940	20,652
1916 Somme	109,399	49,450
1917 Arras, Bellecourt, Passchendaele, Cambrai	136,141	72,668
1918 Kaiser Battles 100 Days Campaign	108,539	108,508
Total Dead	397,109	251,278

For each of the years 1915, 1916 and 1917 on the western Front, for each German soldier killed in fighting the British, the latter lost two killed on average! A Kill ratio of 2:1
 Yet in 1918 the kill ratio between the two foes is 1:1 – Why was that so?
 What did the British armies do differently in 1918?

Slide 15

Artillery

"The war of 1914-1918 was an artillery war.
 Artillery was the battle winner, artillery was what caused the greatest loss of life, the most dreadful wounds and the deepest fear"

John Terraine 'White Heat'

NGT activity
 What questions does the data raise with respect to John Terraine's assertions about the role of artillery in the Great War?

Slide 16

Conclusions

What Key Questions can you frame after reviewing the Casualty Figures for the Western Front?

Have each group draft another relevant question based on the data

Slide 17

My Enigmatic Question

Why were the German armies on the Western Front significantly more efficient than The Allies in conducting the business of war?