



### Intelligence and Military Victory

#### Optimists

- Intelligence and National Security, November 2007:
  the possibility to 'relinquish pre-conceived notions'
- US military doctrine: Technological superiority and 'Dominant Battle-space Awareness'

#### Sceptics

- Clausewitz, intelligence and uncertainty
- From C3I to C4SI
- The enduring challenge of uncertainty



# Nature versus Character of Intelligence



### The Nature of Intelligence: four limiting factors

- Time and Space
- Structure and Organisation
- Politicisation
- Cognition



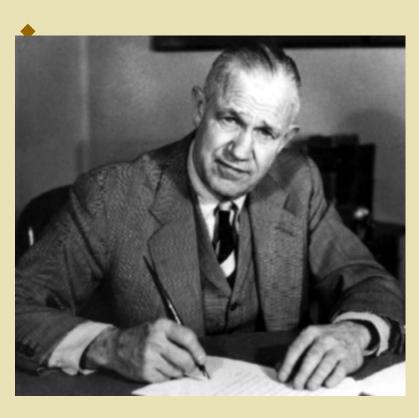
## Wellington and the problem of *Time*

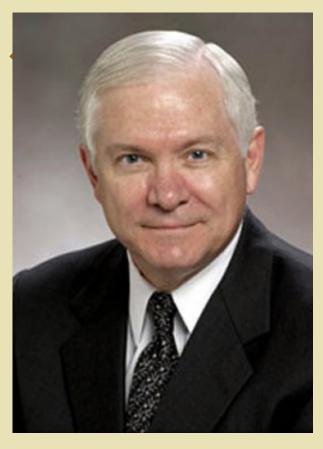


 'How true it is that in military operations time is everything'



### Politicisation: Kent versus Gates







# Clausewitz and the problem of uncertainty



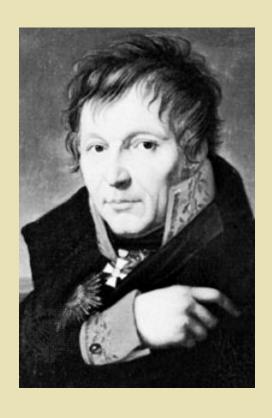


# The Revolutionary and Napoleonic Wars





### The Prussian Staff System: Gerhard von Scharnhorst





### Technological Change in the 19<sup>th</sup> Century

- Telegraphs
- Steam engines
- Combustible engines (early twentieth century)
- Aircraft (early twentieth century)



### The First World War and the rise of Modern Intelligence

- Radio traffic and military operations
- Increasing resources devoted to intelligence



### The Intelligence Revolution of the Second World War

- Machine cryptanalysis and computer codebreaking
- Industrial scale intelligence collection
- Truly global communications
- Rise of intelligence leviathans within the state and security structure
- Best example of the ability of intelligence to close the 'time-space' equation



### Technological Change in the late 20<sup>th</sup> Century

- Computers and Supercomputers
- Satellites
- The Internet



### Enduring limitations

- Time and space
- Structures
- Politicisation
- Cognition



#### From C3I to C4ISR

- C3I: Command, Control, Intelligence
- C4ISR: Command, Control,
  Communications, Computers, Intelligence,
  Surveillance and Reconnaissance
- Concept of 'Net-centric warfare'.



### Conclusion

- The 'mitigation of uncertainty'
- Not a replacement for strategy or decisionmaking
- Rarely a reliable basis for planning at the strategic, operational or tactical levels of war