

The History of Wargaming

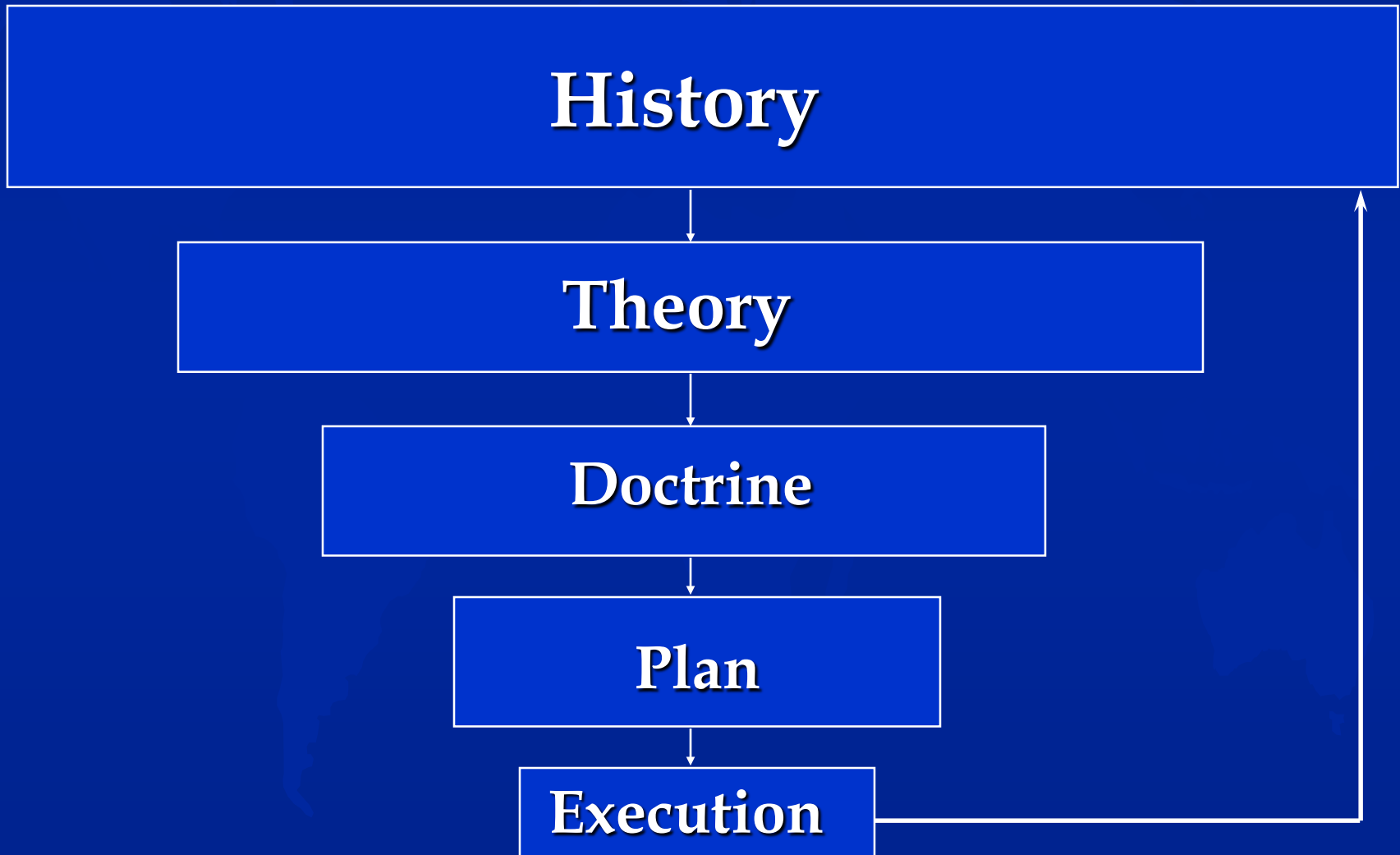
Matthew B. Caffrey Jr.
17 July 2018

How Do We Test Hypotheses?

↪ Set Up Experiments?

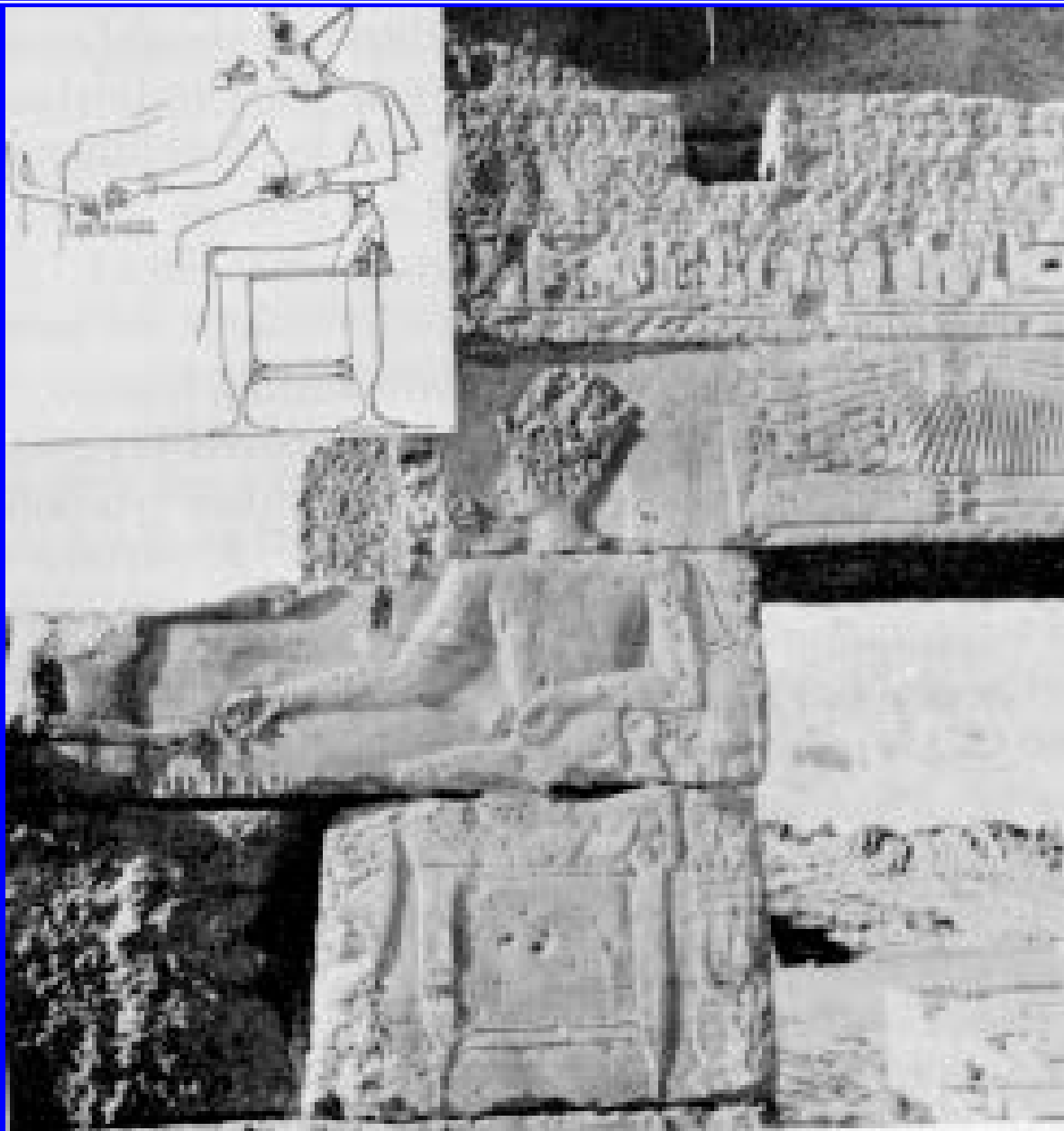
↪ Find Natural Experiments

Innovation Cycle



In the Beginning

- ↪ It all started with language - and toys
- ↪ The Royal Toys



In the Beginning

Egypt

Rome

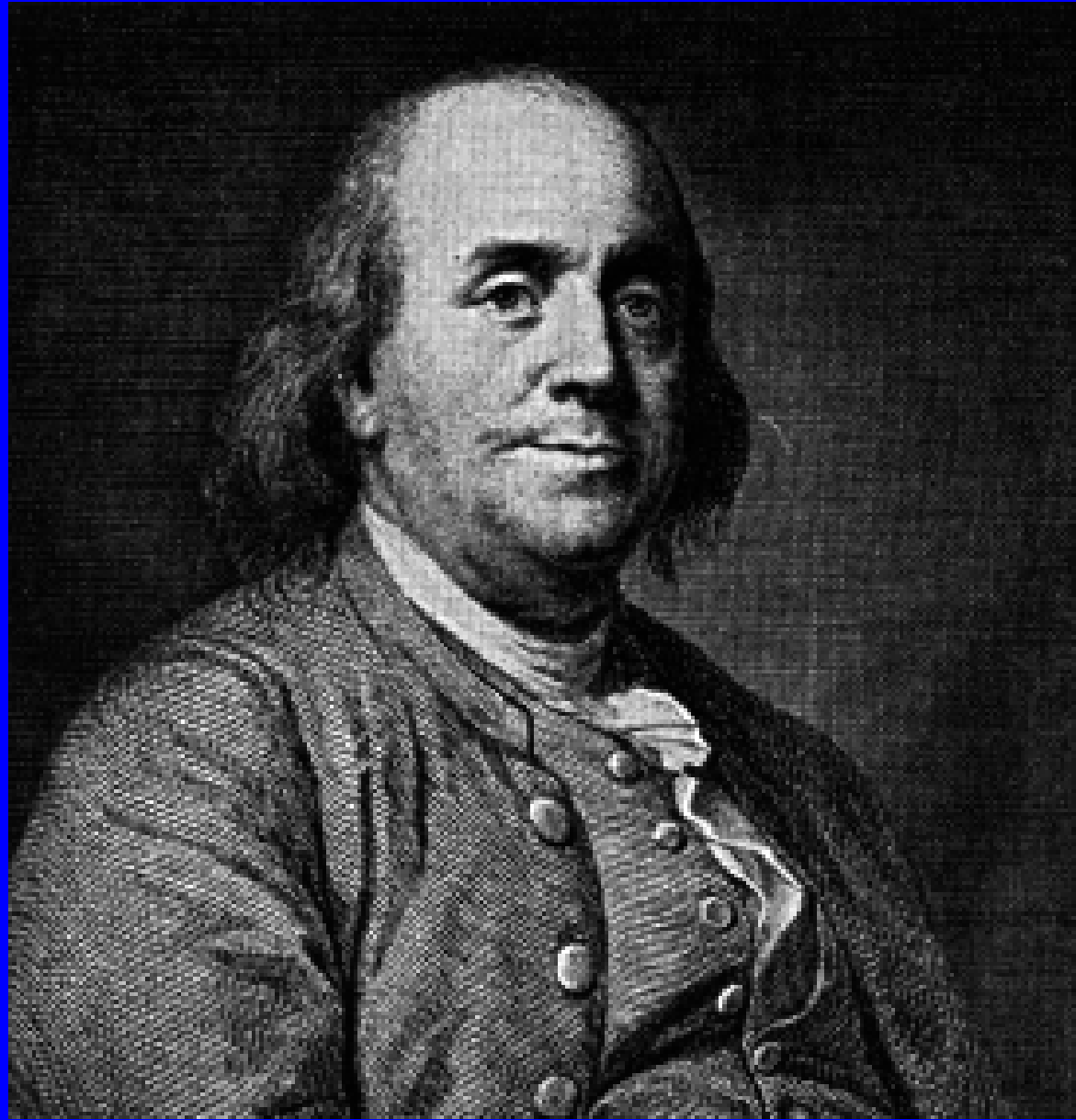
China

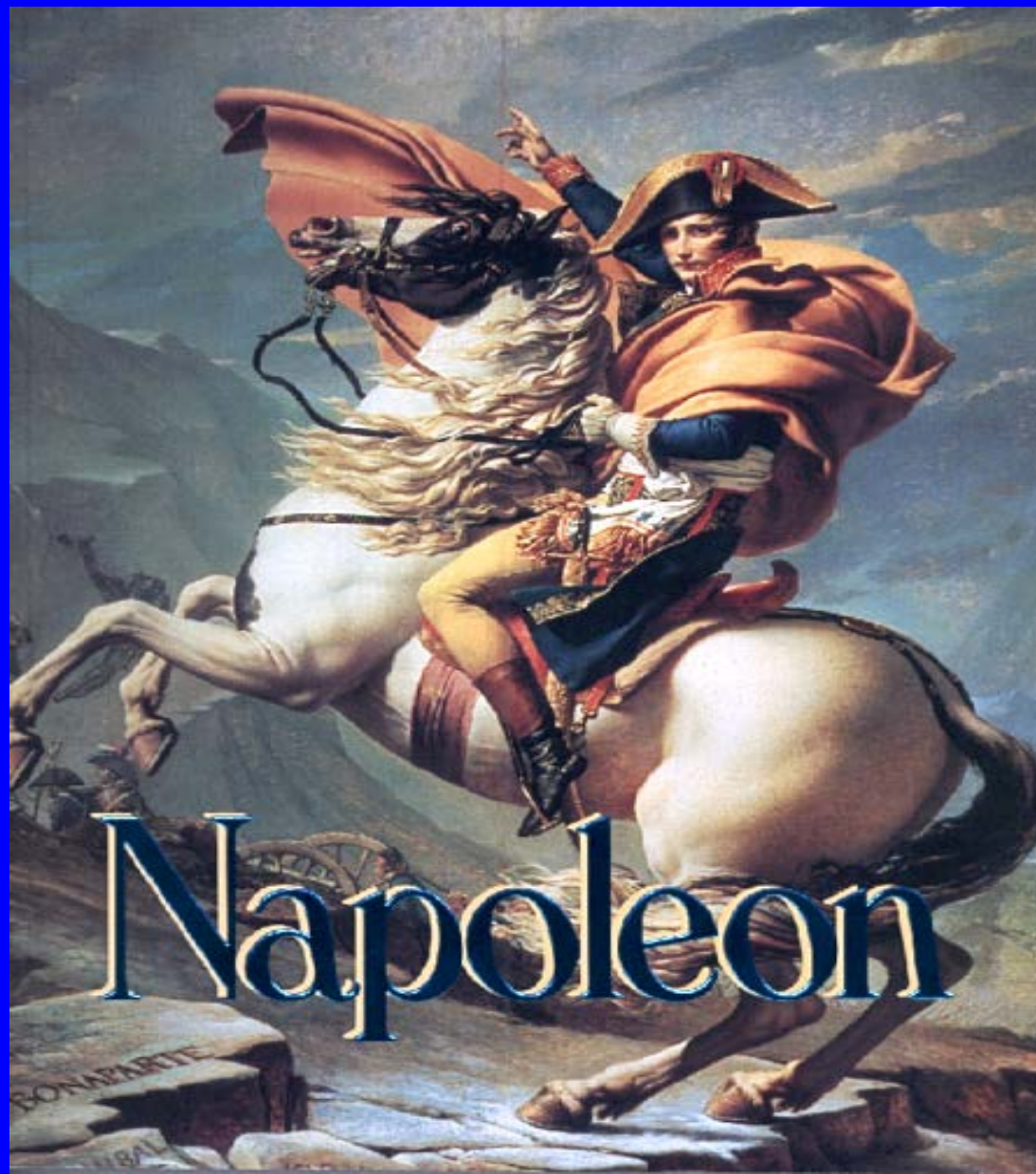
India

On The Brink



- ⇒ Fredrick's use of maps
- ⇒ Clerk models naval combat
- ⇒ Abstract games grow less abstract:
 - ⇒ 1664 Koinigspiel
 - ⇒ 1780 Kriegschach
 - ⇒ 1797 New Kriegspiel





Napoleon's Advantages

↪ Technology*

↪ Genius

↪ Meritocracy

↪ Numbers

The Origins of Modern Wargaming

1811 - Herr von Reisswitz - a base of sand

1824 - Lt Reisswitz - the expanding circle





Moltke's Process

- Offsite
- Brain Storming
- Wargame
- Exercise
- Deliberate Planning

World Wide Wargaming

1866

Austro-Hungarian

1872 / 1883

England

1873

Italy

1874 / 1889

France

1820 / 1875 / 1905

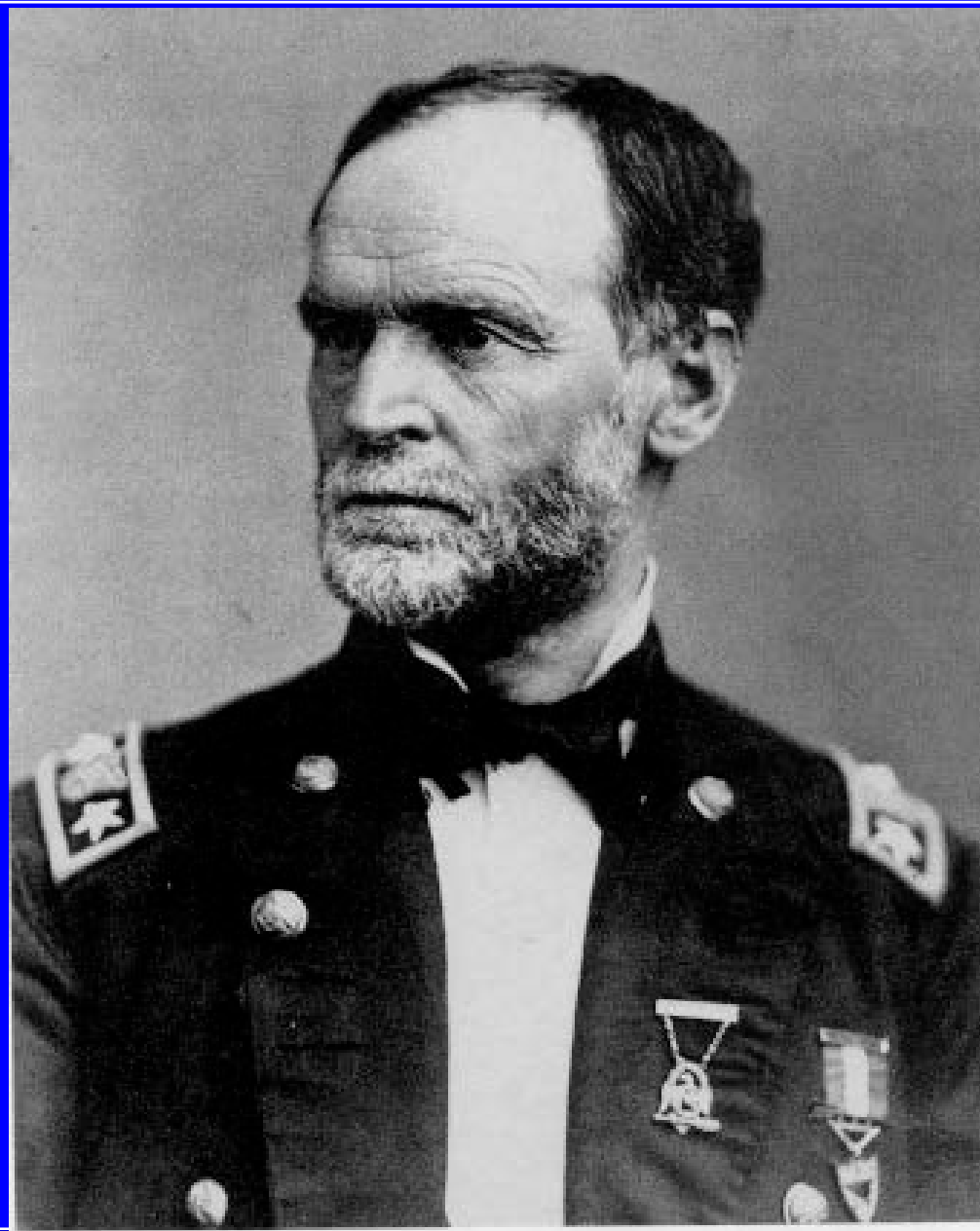
Russia

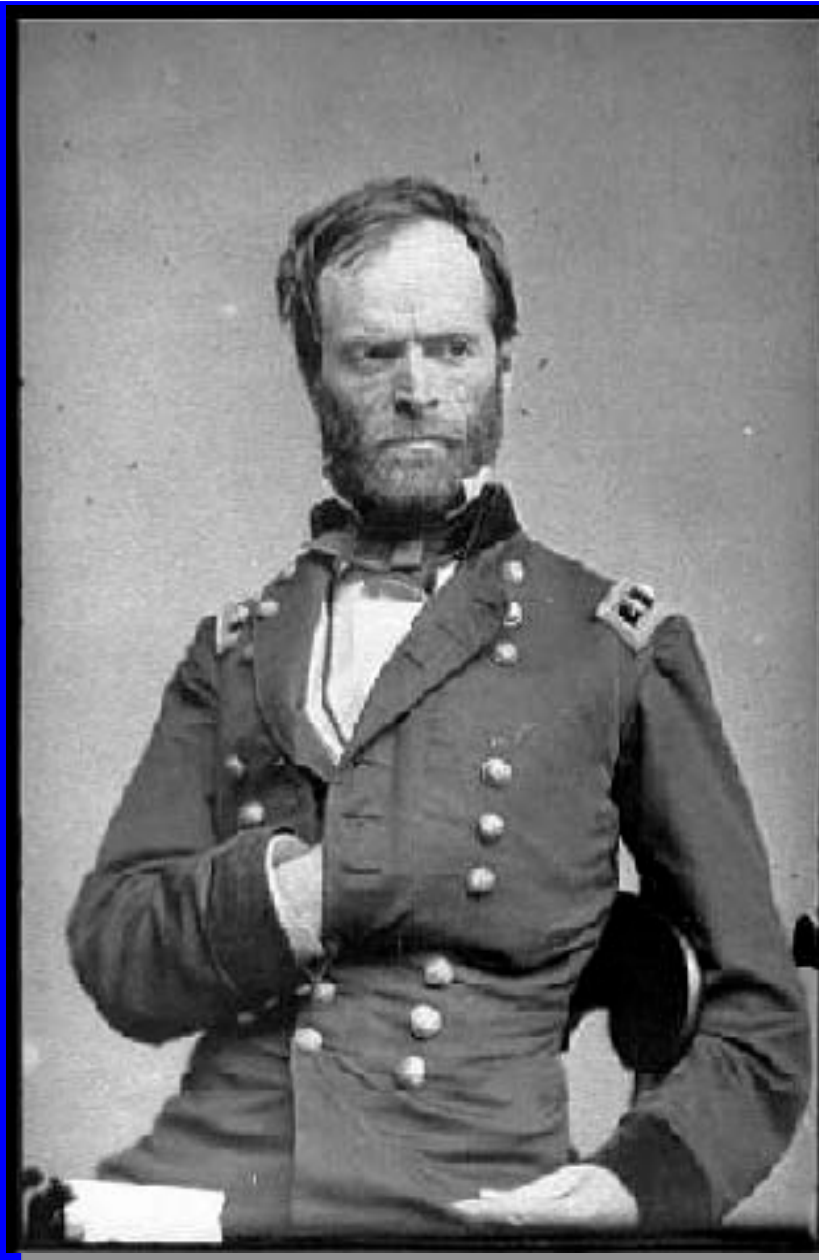
Secondary diffusion

Japan, Turkey, Latin Am.

Coming to America

↪ 1883 - Major (later Col) Livermore





Coming to America

1883 - Major Livermore

↗ 1886 - US Naval War College



Coming to America

1883 - Major Livermore

1886 - US Naval War College

↪ 1890s - US Army Command and
General Staff College

Coming to America

| | Wargame | Practice |
|--------------|----------------|----------------|
| Constructive | Map Maneuver | Map Exercise |
| Live | Field Maneuver | Field Exercise |

Innovation & Decline in Germany

↪ Innovation

**Morale
Factors**

**Free
War-
gaming**

↪ Decline

**Cmd
Influ-
ence**

**Face
Time**

Birth of Modern Civilian Wargaming

The Reserve Connection

↪ 1873- Wilkinson - one man's impact

↪ 1890s Delbrück - first duty of the new rulers

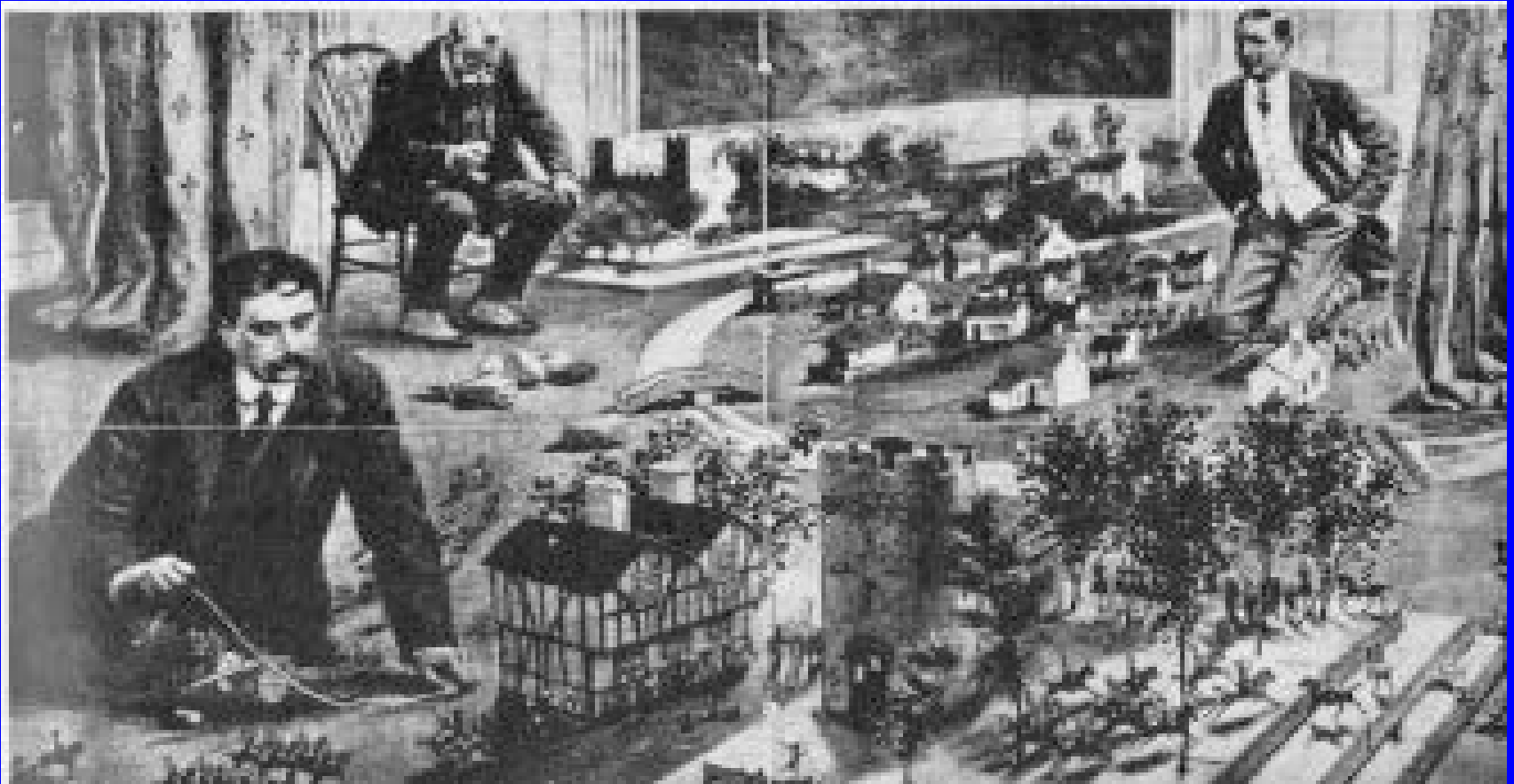
Birth of Modern Civilian Wargaming

The Popularizers



Birth of Modern Civilian Wargaming

The Popularizes



Wargaming & the Great War

↗ Pre-war Wargaming

- 1905 The wargames that shaped the world
- 1910s Moltke the Younger - the return of rigor
- 1914 The wg that didn't change history

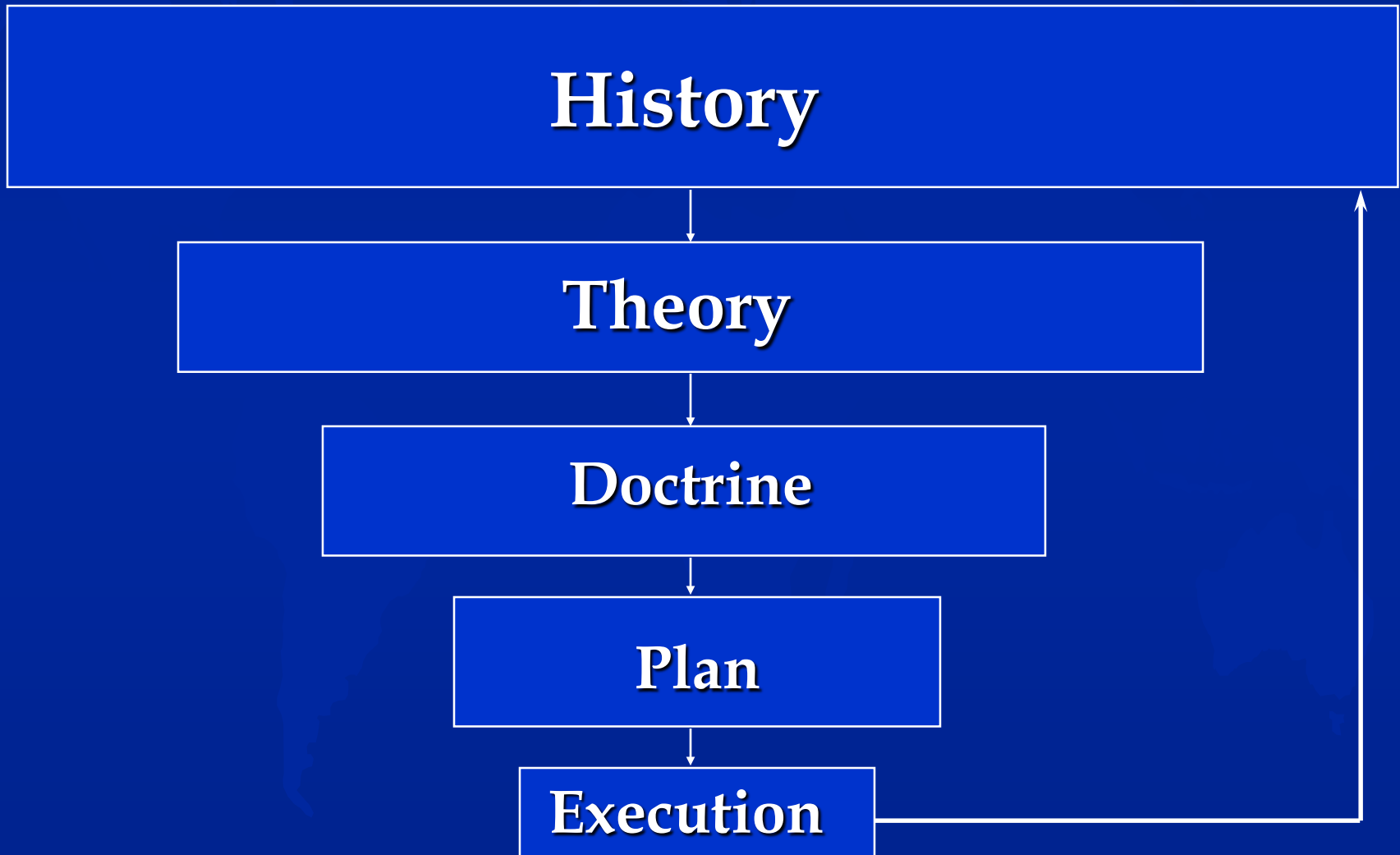
↗ Wargaming & the Great War

- The Peace offensive –
 - German
 - UK

Inter War Wargaming

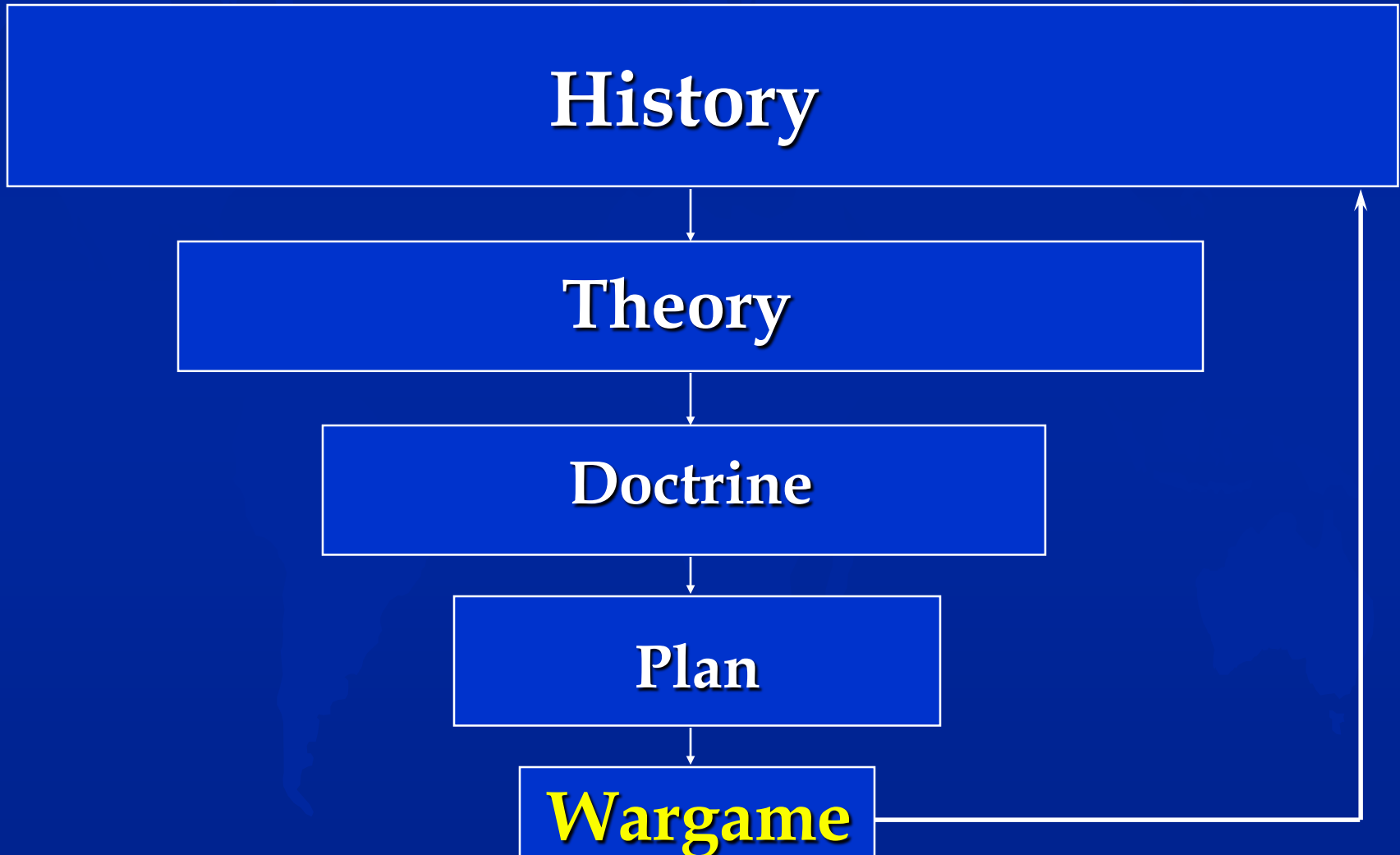
- ↗ Germany – Strategic Innovation
 - ↗ > “Blood & Mud”
 - ↗ - Operational Innovation
 - ↗ > Blitzkrieg
 - ↗ > Wolf Packs

Innovation Cycle



Innovation Cycle

With Wargamig



Inter War Wargaming

↗ Germany – Strat Innovation > “Blood & Soil”
- Ops Innovation > Blitzkrieg

↗ US

| | |
|--|-------------------------|
| Navy PME: Teach how to learn, cycle of WGs USMC: Accelerate RMA | Army: Just in Time |
| | Air Corps: A false dawn |

↗ UK - Negative example

↗ French – Innovation vs training – Playing Red

↗ USSR - Victory through defeat

World War II

Germany

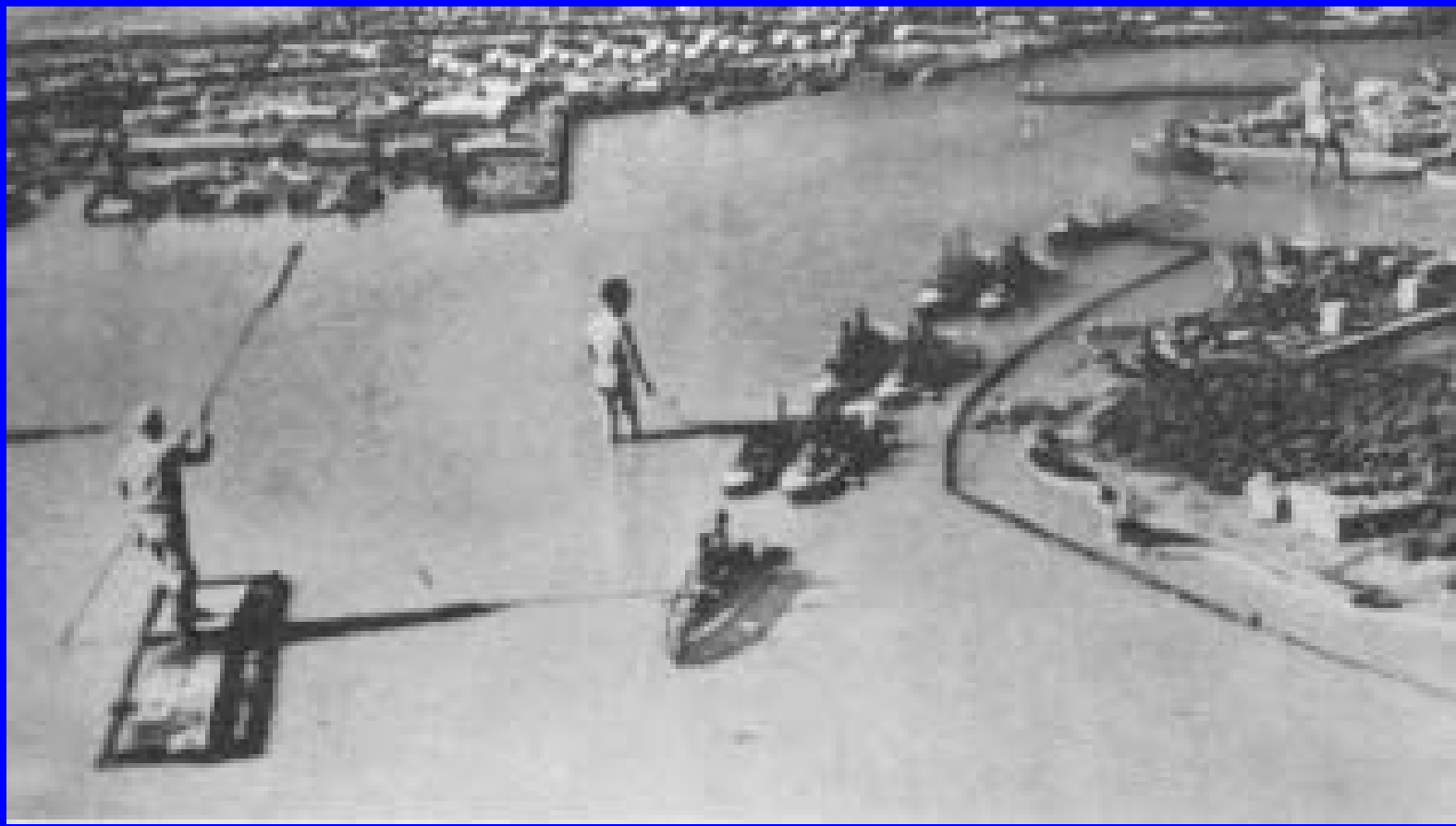
- Mannstein makes his case
- Barbarossa - an accurate mistake
- Victory at Normandy, twice

World War II

Japan

↪ The Total War Research Institute

World War II



World War II

Japan

The Total War Research Institute

↪ Both attacks on Pearl Harbor

World War II



World War II

Japan

The Total War Research Institute

Both attacks on Pearl Harbor

Both battles of Midway

Why did Japan keep on fighting

World War II

↪ UK

↪ Both extremes



12A1 Sir Henry Tizard and General Sir Bernard Montgomery, Oxford, March, 1944

World War II

↪ UK

↪ Both extremes

↪ US

↪ US Army Ground Forces – shortage

↪ US Army Air Forces - sorely missed

↪ USMC “eerie” success, then..

↪ Navy success - but ...

World War II

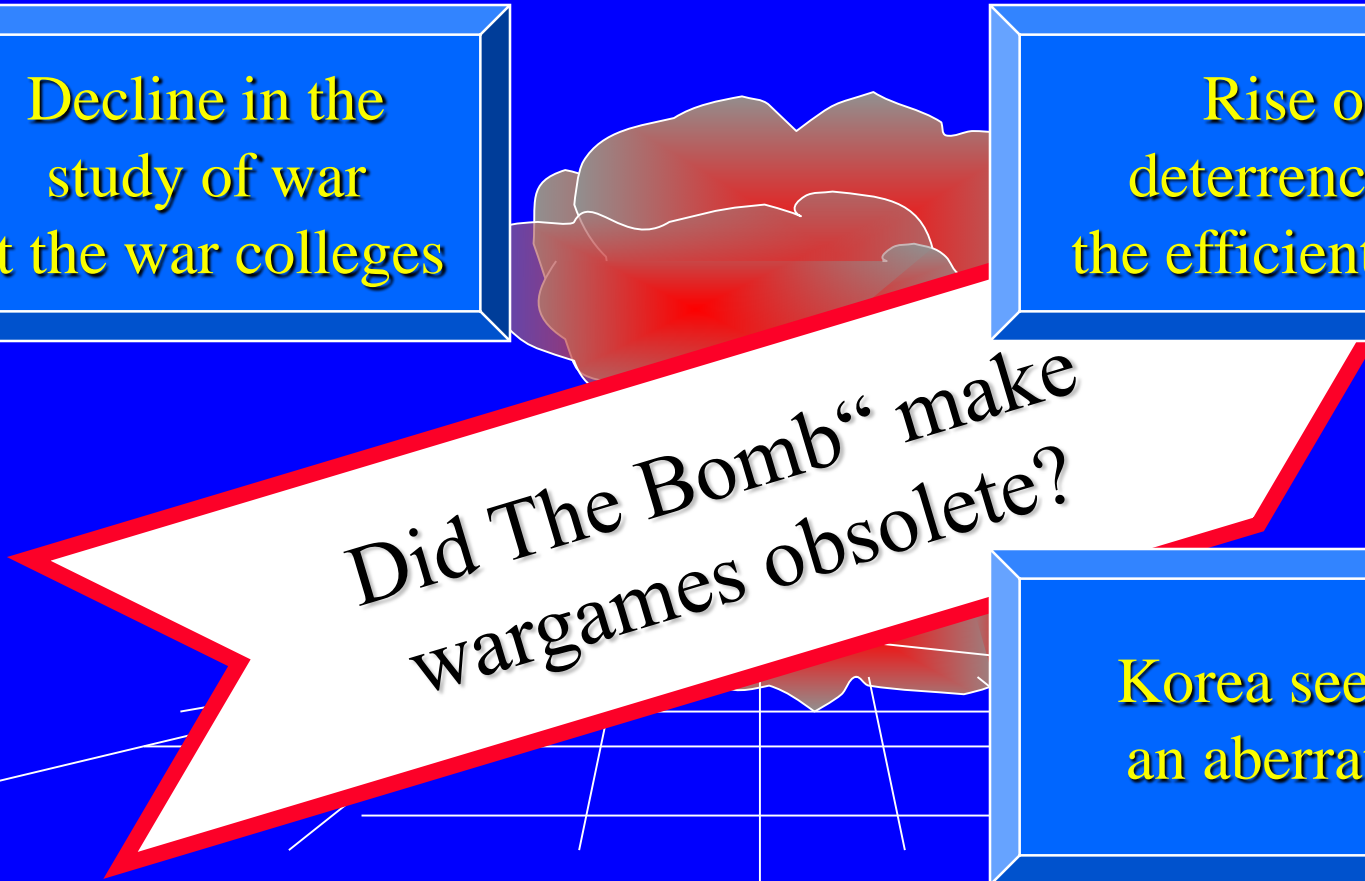
The war with Japan had been [enacted] in the game room here by so many people in so many different ways that nothing that happened during the war was a surprise, – absolutely nothing except the Kamikaze...”.

Fleet Admiral Chester Nimitz

Eclipse

Decline in the
study of war
at the war colleges

Rise of
deterrence &
the efficient DoD



Did The Bomb“ make
wargames obsolete?

Korea seen as
an aberration

Why was Wargaming Reborn?

↗ The onset of the Cold War

↗ Assumed credibility of computers

↗ The obsolescence of war had been greatly exaggerated

1950s Analysis models

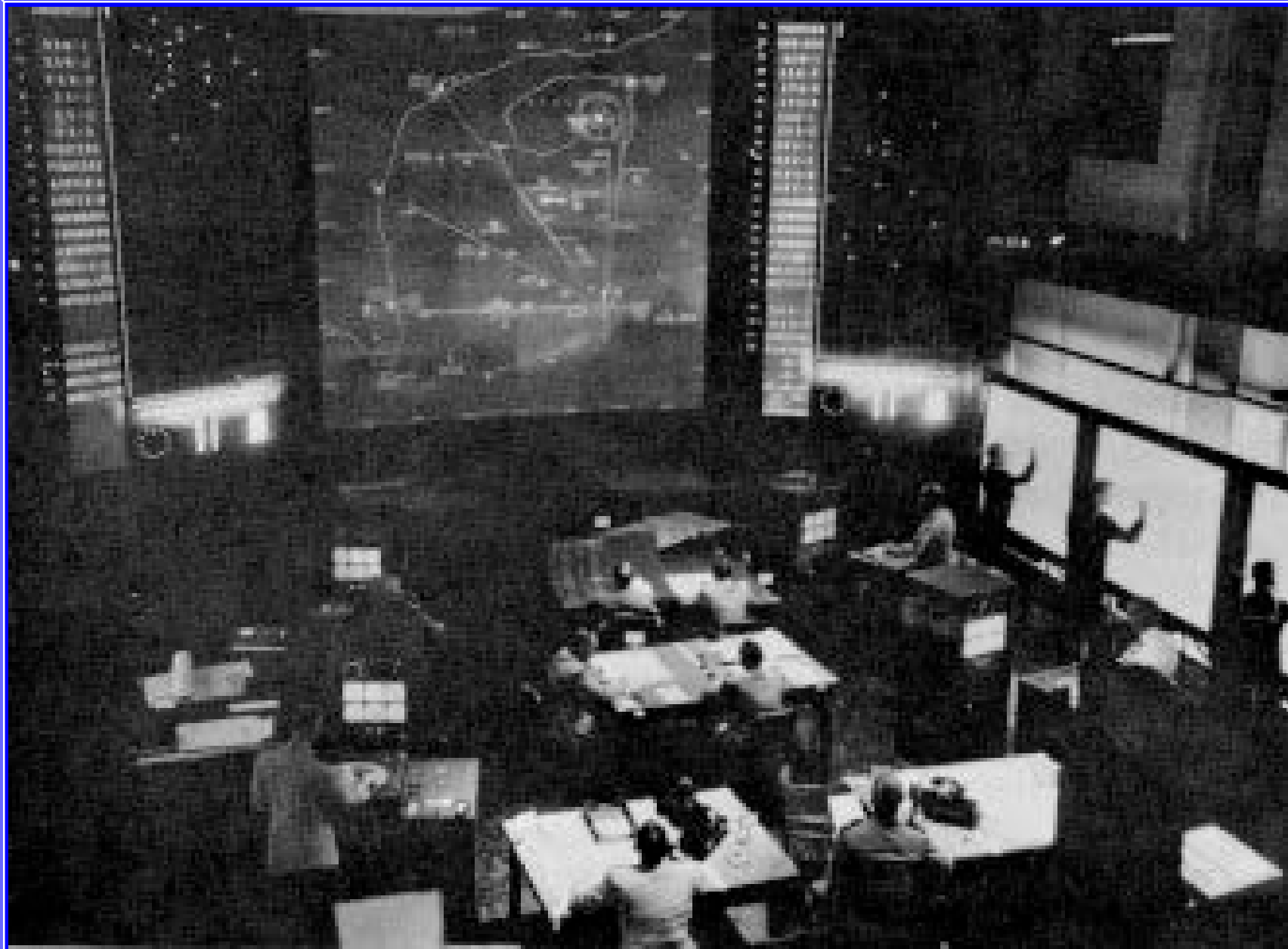
↪ US

- ↪ Naval - “NEWS” from the Naval War College
- ↪ USMC - Landing Force Wargame series
- ↪ Army - “Aggressors,” at least a start
- ↪ Air Force - RAND & wargaming

↪ International

- ↪ Soviet historical rigor
- ↪ UK OR





Wargaming - The Korean War

North Vietnam

- Soviet, initial planning?
- China, road not taken

US



1960s Pentagon Games

↪ US

↪ Joint - Wargaming at the heart

↪ Naval - NWC goes to “WARS”

↪ Army - Making the case for Air Mobile

↪ Air Force – Skybolt, gains PME WG

↪ International - UK & Canadian OR

Wargaming - The Vietnam War

North Vietnam

- Soviet method of wargaming
- Partial explanation of lack of radio use, style of fighting

US

↪ Wargame predicted stalemate -- NOT continued to conflict resolution

↪ Limited in theater use

↪ Wargame predicted victory?

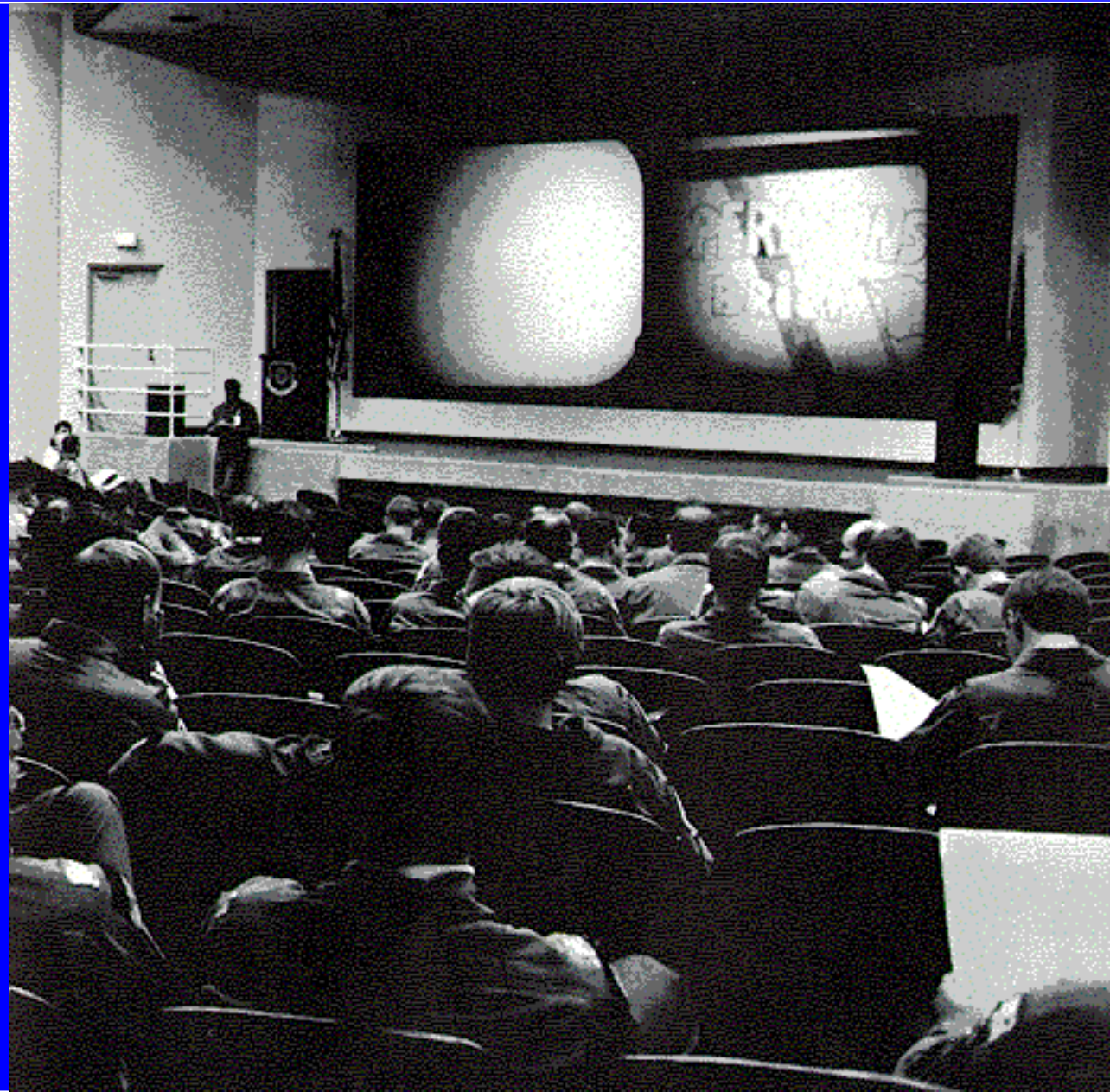
1970s Education and Training

↪ US

↪ Naval - Top Gun, to CRP, to Global

↪ Army - Tech solution to a people problem?

↪ Air Force - Red Flag!



1980s O-Plan Development

↪ Services

↪ Naval - The golden age of Global

↪ Army - From III Corps to NTC

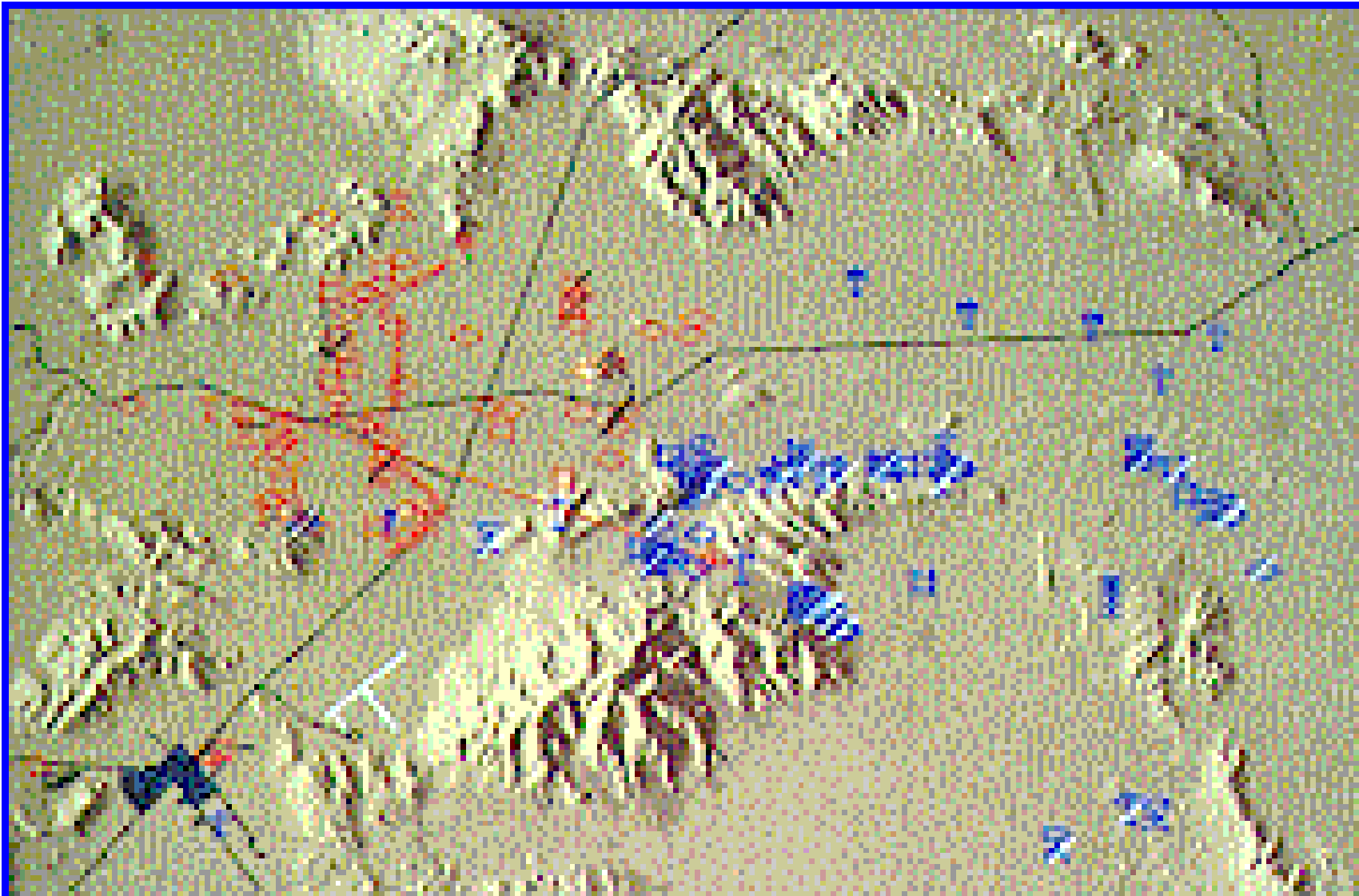
↪ Air Force - Air Force Wargaming Center

↪ USMC – The right wargame for each need

↪ Joint

↪ CENTCOM takes the lead

↪ DARPA's modest innovation



Wargaming - The Gulf War

↩ Iraqi

- ↩ Exercise in the Desert - Patriots accelerated
- ↩ Internal Look 90 - a reason we moved so fast?
- ↩ Wargamers at war - the road not taken
- ↩ Wargames in the field
- ↩ The US training edge

↩ US

1990s US - Jointness

↪ Services

↪ Naval – Global – transformation event

↪ Army – Initiates Title 10 wargame

↪ Air Force – Initiates Title 10 wargame

↪ USMC – Starts then stops Title 10 WG

↪ Joint

↪ Service Wargames “talk” to each other

↪ Fewer, more Joint “engines” JSIMS, JWARS

1990s Globally - “Expanded” Use

- ↗ Congressional Liaison
- ↗ Procurement Decisions
- ↗ Tactics Development
- ↗ Force Tradeoffs
- ↗ Growing use of virtual wargaming
- ↗ International Study US

DoD Wargaming at a Crossroads

➡ More money going to wargaming

Relatively
less
expensive

No
environ-
mental
impact

Secure
from
“overhead”
observation

Exploits
more
computing
power for
less money

Credibility
with
Congress

DoD Wargaming at a Crossroads

- ↗ More money going to wargaming
- ↗ More doubts than any time since the late 40s
 - High Desert Storm Casualty Predictions
 - RAND's Base of Sand Paper
 - HQ USAF concerns
 - Irrelevance in armed conflict with Serbia
 - "Competition" from commercial wargames

DOD / Commercial War Games 1950 - 1990



The Rise of Commercial Wargaming

➤ More Accessible Wargames

- 1950s Charles Roberts
- 1960s Eric Dott & Avalon Hill
- 1970s James Dunnigan & the S&T Staff +
- 1980s Chris Crawford & Gary Grigsby
- 1990s 25 Billion dollar global industry
- 2000s Computer Gaming passes Hollywood

The Rise of Commercial Wargaming

➤ More People Playing Wargames

- 1950s Thousands
- 1960s Tens of Thousands
- 1970s Hundreds of Thousands
- 1980s Millions
- 1990s Tens of Millions
- 2000s Billions

Commercial/DOD Integration



Post 9/11

Old bothersome problems become major needs

↪ OEF too fast to wargame

↪ OIF

↪ “This is not the enemy we wargamed against.” Lt Gen Wallace, V Corps CC

How do you wargame Phase IV?

Post 9/11

- Navy:
 - The death and rebirth of Global
 - “Groups”
- Army: Pause in Futures
- USAF: AFWI to LeMay Center Wargaming Institute
- USMC: Sustaining the capability
- COCOMs: Millennial Challenge

Post 9/11

- International:
 - Connections UK, Australia, NL
 - China's wargame Institute

Post Memos

- ↗ The return of conventional threats
- ↗ Secretary of Defense – Innovation, wargaming
- ↗ Deputy Secretary – reverse “atrophy”
 - ↗ 2 Memos
 - ↗ 2 Four Star Summits
 - ↗ Incentive money
 - ↗ Repository
 - ↗ Support of practitioners
- ↗ International: Increased NATO interest

To Learn More

- ◆ The Art of Wargaming, Peter Perla, 1990
- ◆ <http://www.airpower.maxwell.af.mil/airchronicles/cc/caffrey.html>
- ◆ On Wargaming, Matt Caffrey, 2018
(any day now)

Questions?

Comments?

Discussion?

Material for the 2nd Edition