



The Essence of Strategy: *Patterns of Conflict* and Beyond

Chet Richards

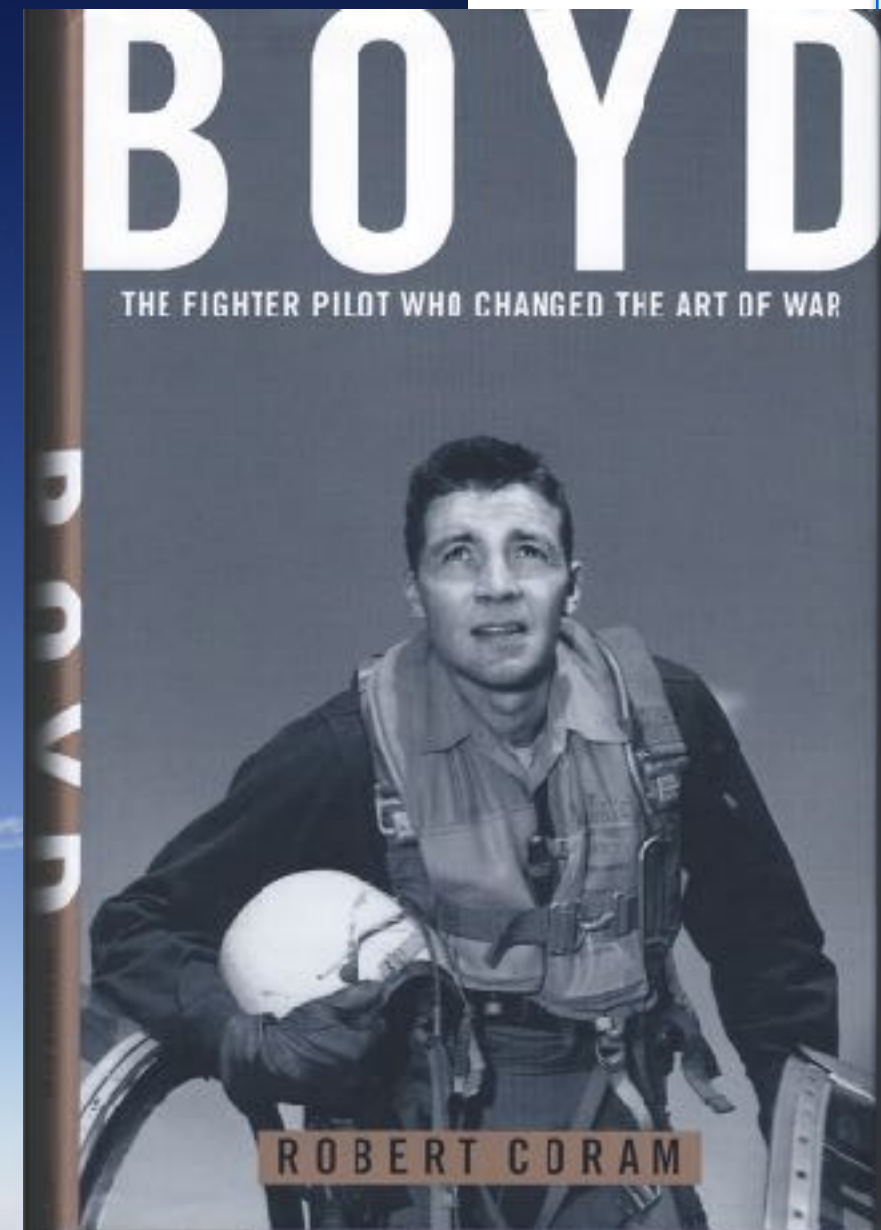
November 2017



Observe, orient, decide, act: words to live or die by. Right now, Persephone is disoriented — on the run, cut off. It's time to go on the offensive, work out where she is and what's going on, then get the hell out of this trap.

Charles Stross, *The Apocalypse Codex*, p. 160

**But first, advice
from our guru**



Good advice for our times

You should not be convinced by:

- unconfirmed reports
- tradition
- hearsay
- scriptures
- reflection on superficial appearances

You should not be convinced by:

- logical reasoning
- delighting in opinions and speculation
- the appearance of plausibility
- or because you think, *This person is our teacher.*

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- or because you think, *This person is our teacher.*

**Oops, sorry.
Wrong guru**

That was a lot older than Boyd

From the *Kalama Sutta*
c. 400 BCE



This is Boyd's advice

- Don't be a member of Clausewitz's school, because a lot has happened since 1832.
- Don't be a member of Sun Tzu's school because an awful lot has happened since 500 BCE.
- And if you're going to regard my stuff as some kind of gospel or dogma ...

John R. Boye

A
DISCOURSE
ON
WINNING AND LOSING

John R. Boye
August 1987

ABSTRACT

PATTERNS

This is Boyd's advice

- And if you're going to regard my stuff as some kind of gospel or dogma, stop. **Take it out and burn it. Now.**
- Instead, gather interesting thoughts from a variety of sources and disciplines, then **BE YOUR OWN GURU!**



Our journey begins:
Somewhere in China, around 400 BCE

"War was to be preceded by measures designed to make it easy to win ... Only when the enemy could not be overcome by these measures was there recourse to armed force,"



Somewhere in China, around 400 BCE

which was to be applied so that victory was gained:

- a) in the shortest possible time;
 - b) at the least possible cost in lives and effort;
 - c) with the infliction on the enemy of the fewest possible casualties
- (Griffith's Commentary on Sun Tzu)



Using Sun Tzu

A useful framework for bringing Sun Tzu into the modern era was developed by John Boyd (1927 – 1997)

- Instructor fighter pilot at the USAF Fighter Weapons School
- Creator of "energy - maneuverability" / "father" of F-15, F-16, F-18

Energy-Maneuverability

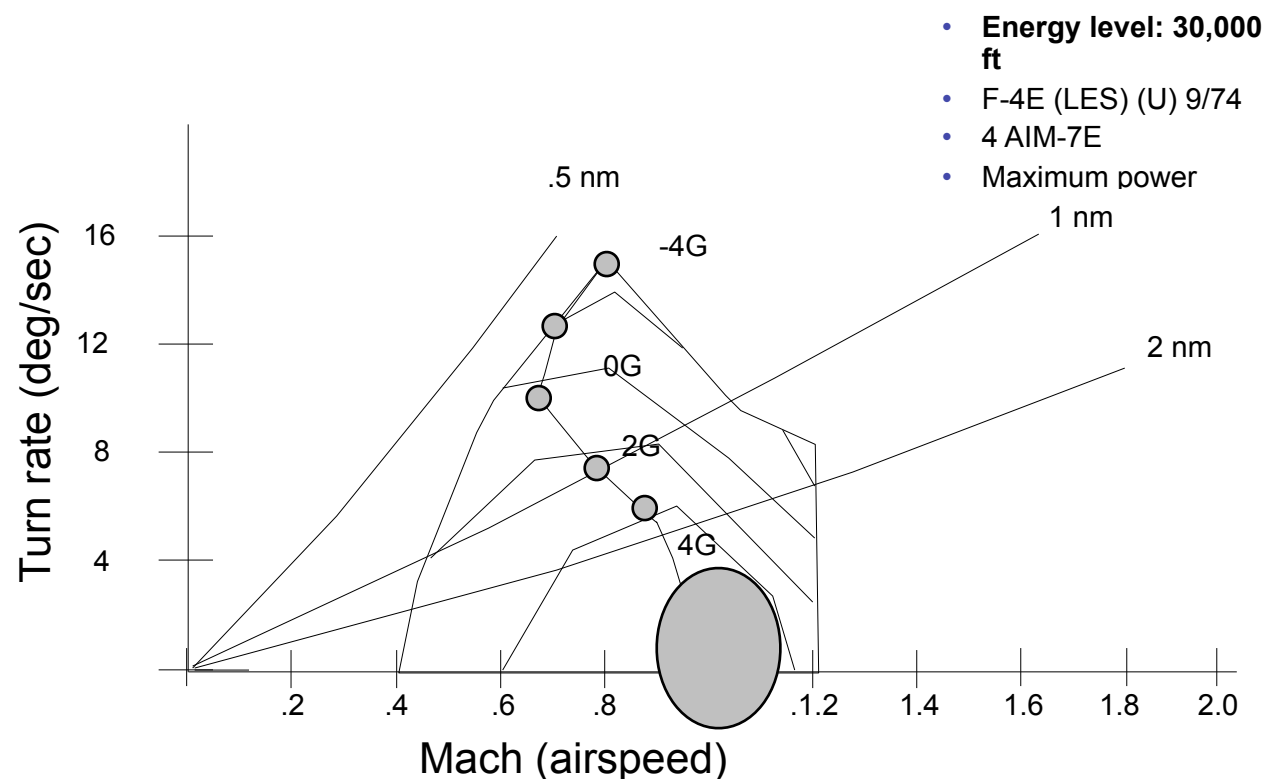
Mathematically,

$$P_s = \frac{T - D}{W} \cdot S$$

Big Engines



Big Wings





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- *A Discourse on Winning and Losing* (1976-1997)
- Foundation of USMC doctrine
- Embraced by US special operations forces
- Finding wider application to business, sports, politics, etc.



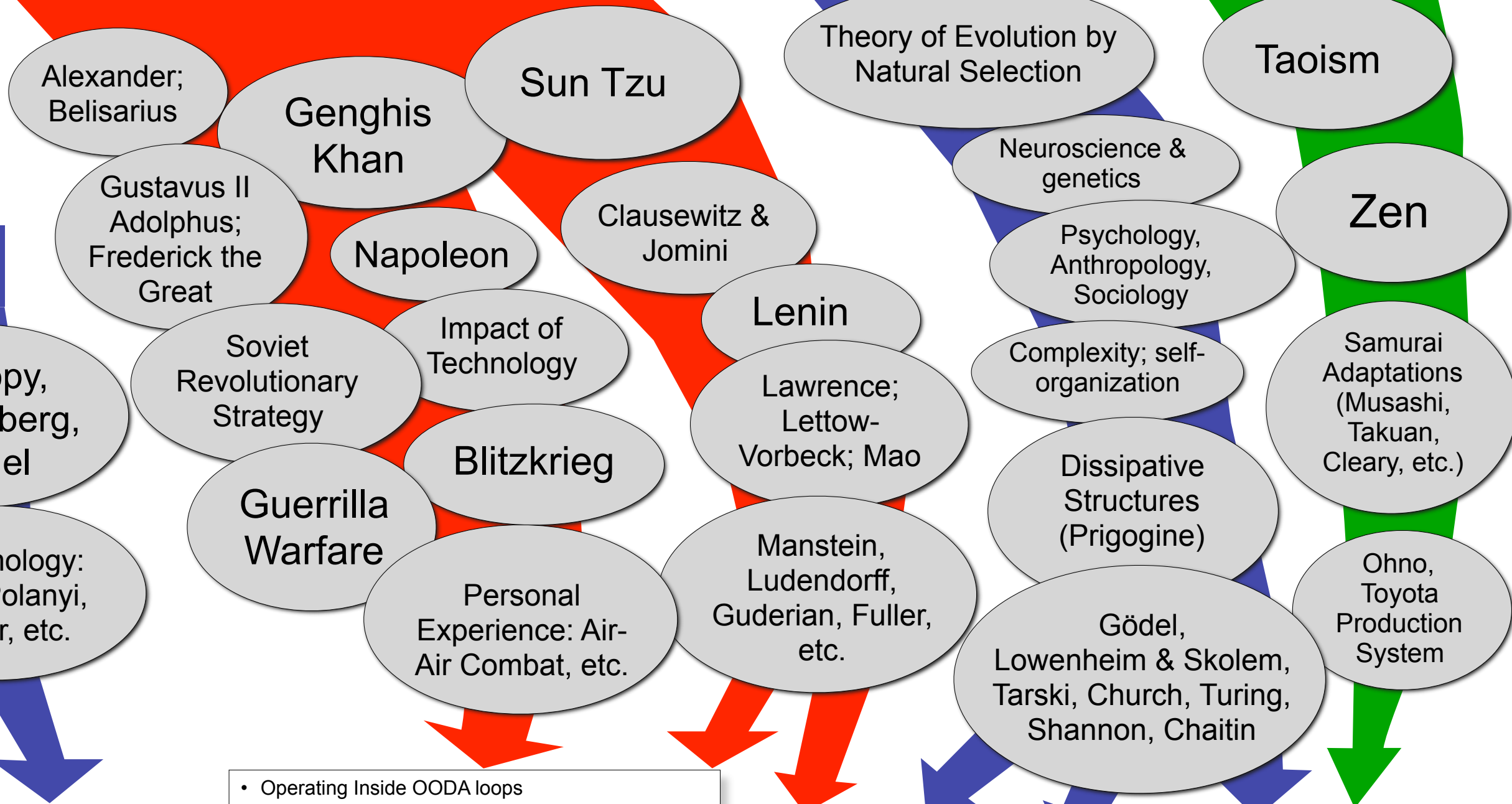
Who was John Boyd?

Product	Date	Slides	Words	Words/Slide
<i>New Conception for Air-Air Combat</i>	<i>8/1976</i>	<i>24</i>	<i>825</i>	<i>34</i>
<i>Destruction & Creation</i>	<i>9/1976</i>	<i>—</i>	<i>3,900</i>	<i>—</i>
<i>Patterns of Conflict</i>	<i>12/1986</i>	<i>185</i>	<i>21,000</i>	<i>113.5</i>
<i>Organic Design for Command & Control</i>	<i>5/1987</i>	<i>37</i>	<i>3,400</i>	<i>92</i>
<i>Strategic Game of ? and ?</i>	<i>6/1987</i>	<i>59</i>	<i>4,700</i>	<i>80</i>
<i>Conceptual Spiral</i>	<i>8/1992</i>	<i>38</i>	<i>2,900</i>	<i>76</i>
<i>The Essence of Winning and Losing</i>	<i>1/1996</i>	<i>4</i>	<i>350</i>	<i>87.5</i>
Total		<i>347</i>	<i>37,075</i>	<i>96</i>

Theory and History of Conflict

Science & Math

Eastern Philosophy



We cannot determine the character or nature of a system within itself, and attempts to do so will produce confusion and disorder.

1976

- Operating Inside OODA loops
- Harmonizing Tactics, Operations, Strategy, and Grand Strategy to Achieve National Goal
- Attrition Warfare; Maneuver & Moral Conflict
- Theme for Vitality & Growth: *IOHA!*

1976-1986

Interaction & Isolation

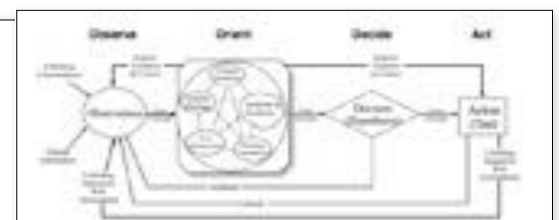
Leadership & Appreciation

1987

Conceptual spiral of insight, imagination, and initiative

1992

Final Version of OODA Loop



1996



Boyd's Big Ideas

We can sort Boyd's concepts into categories regarding:

- What you do with **opponents**: Operate inside their OODA loops
- What you do with **your own organization**: Create a climate / culture that makes it possible for you to operate inside opponent's OODA loops (EBFAS)
- What you do with **allies and the uncommitted**: Grand strategy
- How you **learn and operate**: The OODA "loop" itself



First Big Idea

**Operating inside their
OODA loops**



Where he got the idea

He noticed something fundamentally the same about the following 3 cases:

Fighter aircraft ■ F-86 vs. MiG-15 (1951-53); YF-16 vs YF-17 (1974)

Special operation ■ The Entebbe raid by Israel (1976)

Mental state ■ Blitzkrieg vs. Maginot Line mentality (1940)



Message

Note – the blue background indicates Boyd's original charts. All are from *Patterns of Conflict* unless another briefing is cited. Note original page numbers in bottom right corner.

He who can handle the quickest
rate of change survives.

Quick rates of change — “Fast transients” as they appeared in *Patterns of Conflict*

- Idea of fast transients suggests that, in order to win, we should operate at a **faster tempo or rhythm** than our adversaries—or, better yet, get inside adversary’s **observation-orientation-decision-action time cycle or loop**.
- Why? Such activity will make us appear **ambiguous** (unpredictable) thereby generate **confusion** and **disorder** among our adversaries—since our adversaries will be **unable** to generate mental images or pictures that agree with the **menacing** as well as **faster** transient rhythm or patterns they are competing against.



In other words, Boyd is claiming that

Operating inside
their OODA
loops

Is this true? Does it
agree with your
experience?

Ambiguity

Plus
MENACE

Panic,
Confusion &
Disorder

Boyd's take on Sun Tzu's Fundamental concepts

Theme

- Harmony and trust
- Justice and well being
- Inscrutability and enigma
- Deception and subversion
- Rapidity and fluidity
- Dispersion and concentration
- Surprise and shock

Desired outcome

- Subdue enemy without fighting
- Avoid protracted war

Strategy

- Probe enemy's organization and dispositions to unmask his strengths, weaknesses, patterns of movement and intentions.
- "Shape" enemy's perception of world to manipulate his plans and actions.
- Attack enemy's plans as best policy. Next best disrupt his alliances. Next best attack his army. Attack cities only when there is no alternative.
- Employ *cheng* and *ch'i* maneuvers to quickly and unexpectedly hurl strength against weaknesses.

Historical pattern

Early commanders

- Alexander
- Hannibal
- Belisarius
- Genghis Khan
- Tamerlane

Action

Cheng and *ch'i**

Impression

- Early commanders seem consistent with ideas of Sun Tzu
- Western commanders more directly concerned with winning the battle
- Eastern commanders closer to Sun Tzu in attempting to shatter adversary prior to battle

* *Cheng/ch'i* maneuver schemes were employed by early commanders to expose adversary vulnerabilities and weaknesses (a la *cheng*) for exploitation and decisive stroke (via *ch'i*).

Historical pattern

Keeping in mind the ideas of Sun Tzu and our comments about early commanders, let's take a look at an early tactical theme and some battle (grand tactical) situations **to gain a feel for the different ways that the *cheng/ch'i* game has been (and can be) played.** [CR: my emphasis]

Historical pattern

Genghis Khan and the Mongols

Key asymmetries

- Superior mobility
- Superior communications
- Superior intelligence
- Superior leadership

Aim

Conquest, as basis to create, preserve, and expand Mongol nation

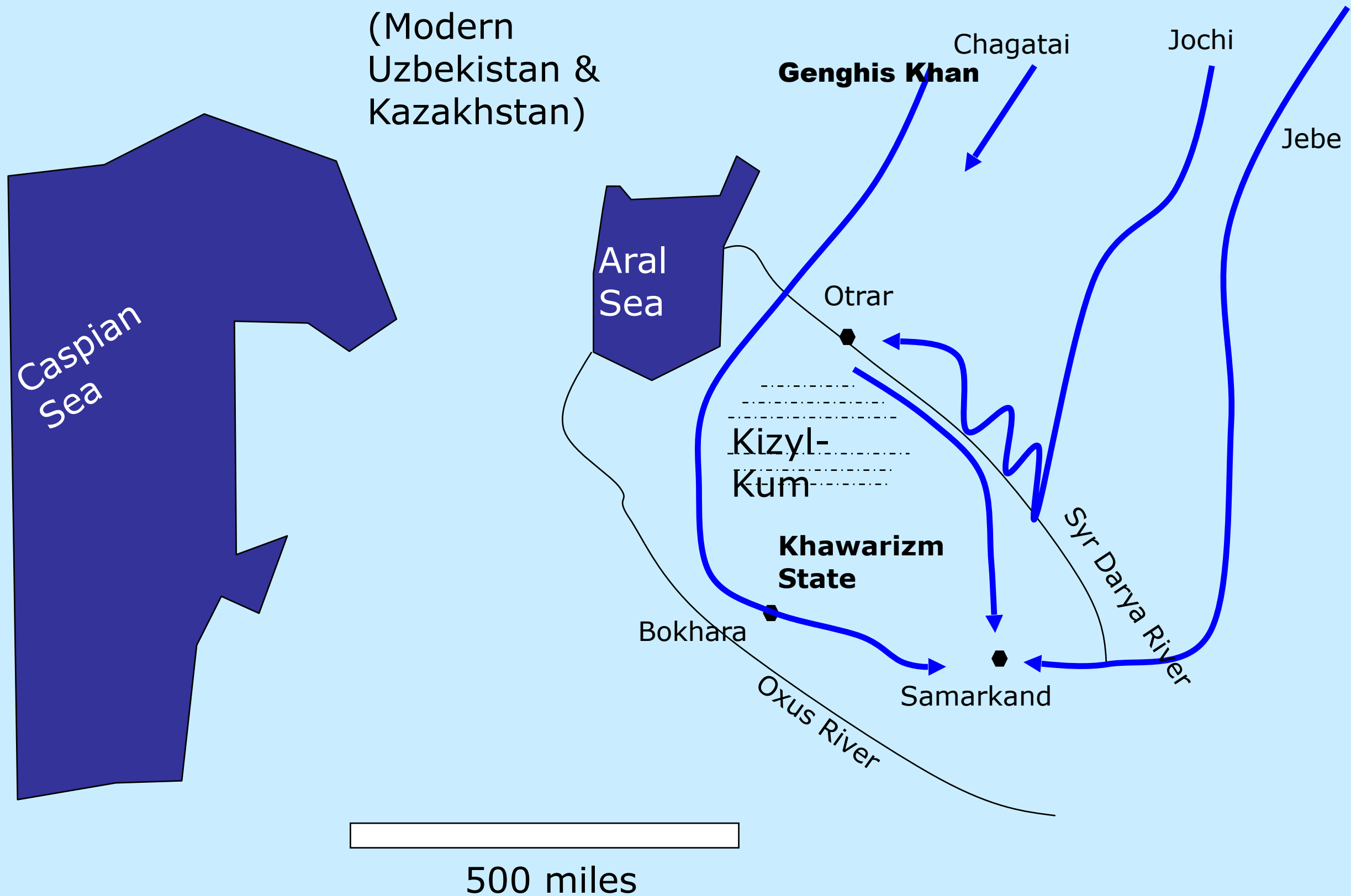
Theme

- Widely separated strategic maneuvers, with appropriate stratagems, baited retreats, hard-hitting tactical thrusts, and swirling envelopments to uncover and exploit adversary vulnerabilities and weaknesses.

in conjunction with

- Clever and calculated use of propaganda and terror to play upon adversary's doubts, fears, and superstitions in order to undermine his resolve and destroy his will to resist.

Mongol strategic maneuver (1219-1220)



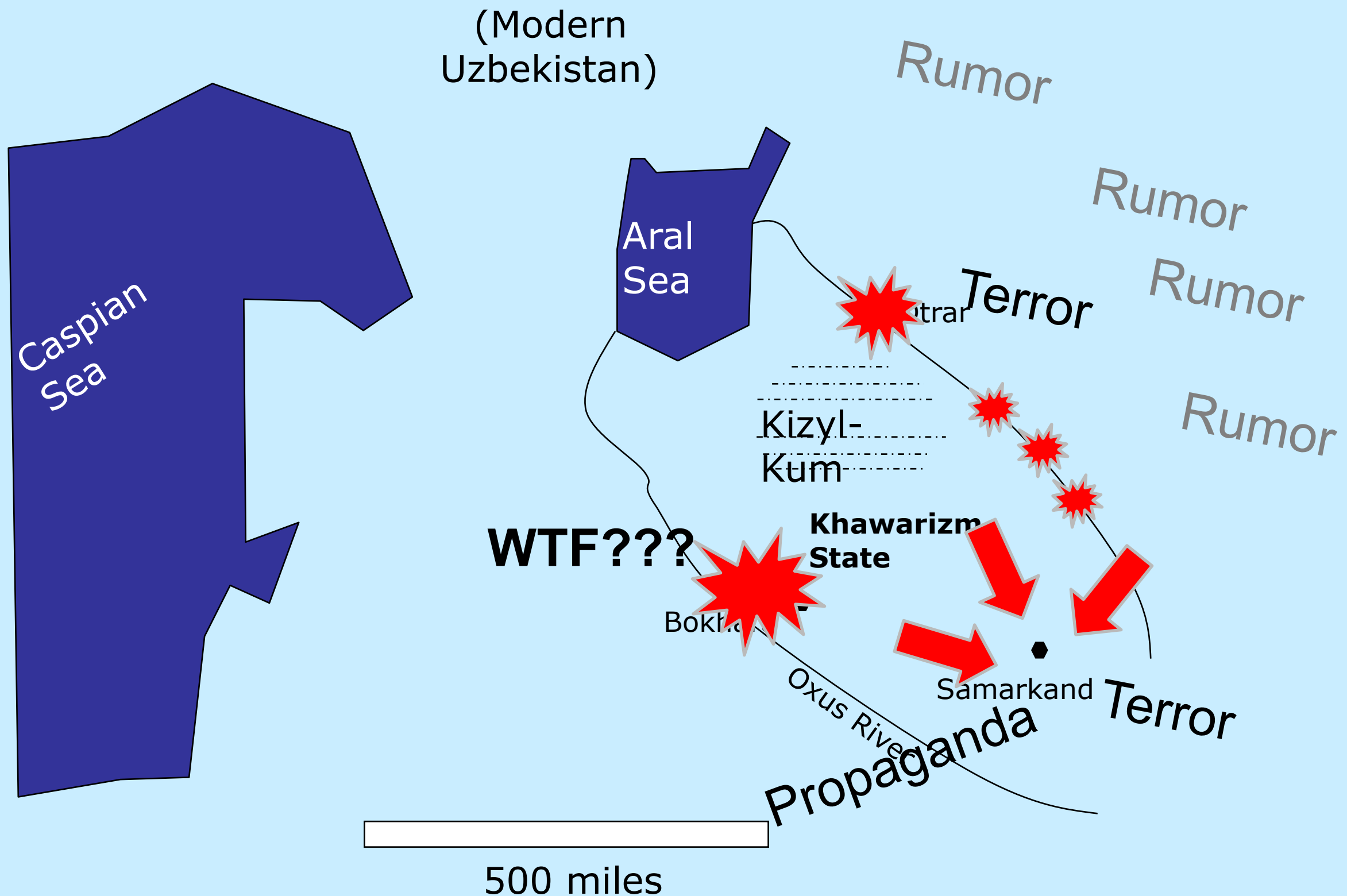
? Raises nagging question ?

Even though outnumbered, why were Mongols able to maneuver in widely scattered arrays without being defeated separately or in detail?

Never divide your forces in the presence of a superior enemy.

LTC George A. Custer, 1876.

What the Khawarizm leader actually saw



Historical patterns

Genghis Khan and the Mongols

Message

- By exploiting superior leadership, intelligence, communications, and mobility as well as by playing upon adversary's fears and doubts via propaganda and terror, **Mongols operated inside adversary observation-orientation-decision-action loops.**

Result

- Outnumbered Mongols created impressions of terrifying strength—by seeming to come out of nowhere yet be everywhere.

Hence,

- Subversive propaganda, clever stratagems, fast breaking maneuvers, and calculated terror not only created vulnerabilities and weaknesses but also played upon moral factors that drain away resolve, produce panic, and bring about collapse.

Historical pattern

Napoleon's art of war

Revolutionary army gifts to Napoleon

- Moral and physical energy of citizen-soldiers and new leaders generated by the revolution and magnified by successes against invading allied armies
- Subdivision of army into smaller self-contained but mutually supporting units (divisions)
- Ability to travel light and live off countryside without extensive baggage, many supply wagons, and slow-moving resupply efforts
- Rapid march associated with 120 instead of the standard 70 steps per minute
- Discontinued adherence to 1791 Drill Regulations pertaining to the well regulated and stereotype use of column and line formations for movement and fighting

Beneficial asymmetry

- Mobility/fluidity of force dramatically better than that possessed by potential adversaries.

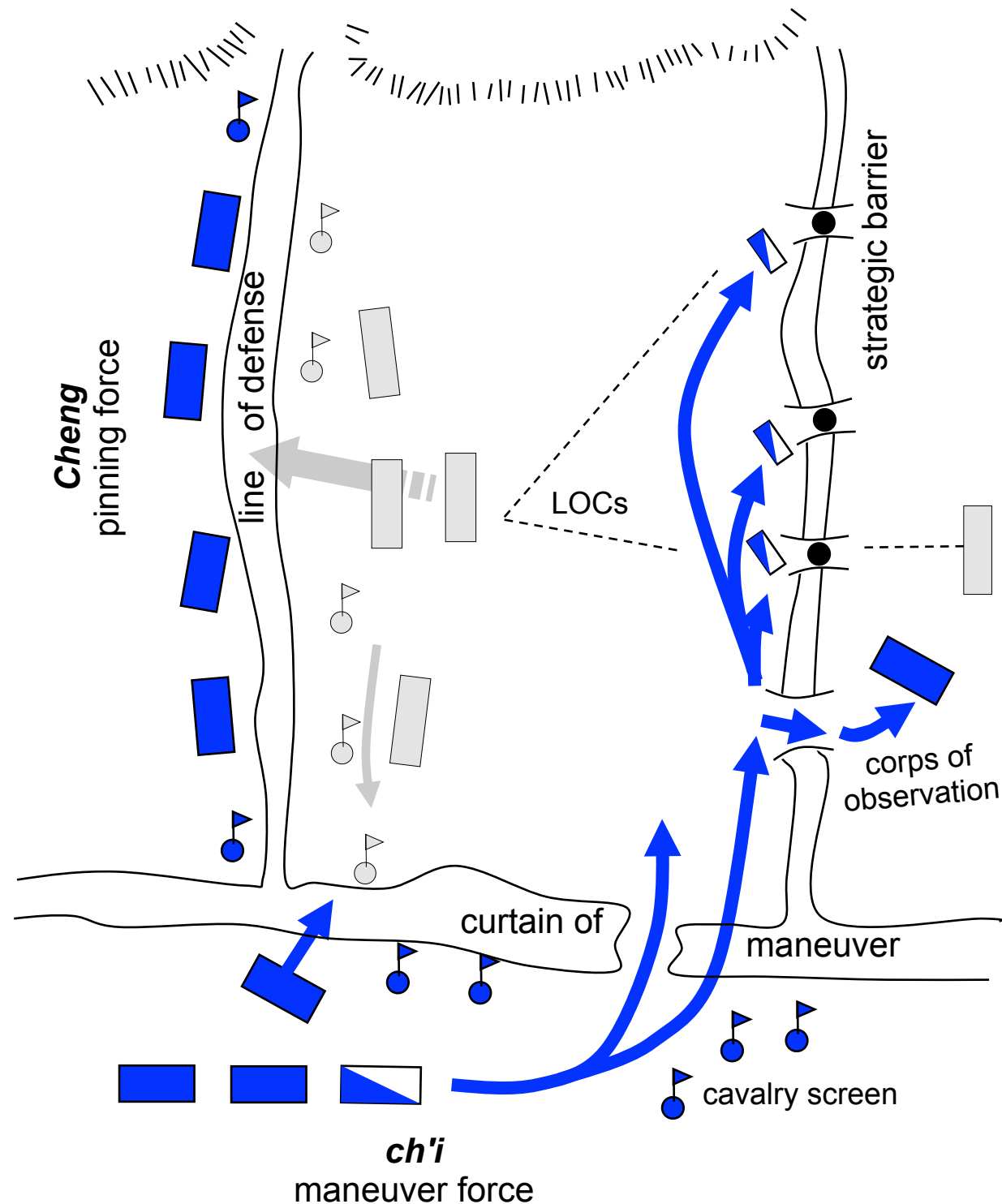
? Raises question ?

How did Napoleon exploit this superior mobility/fluidity of force?

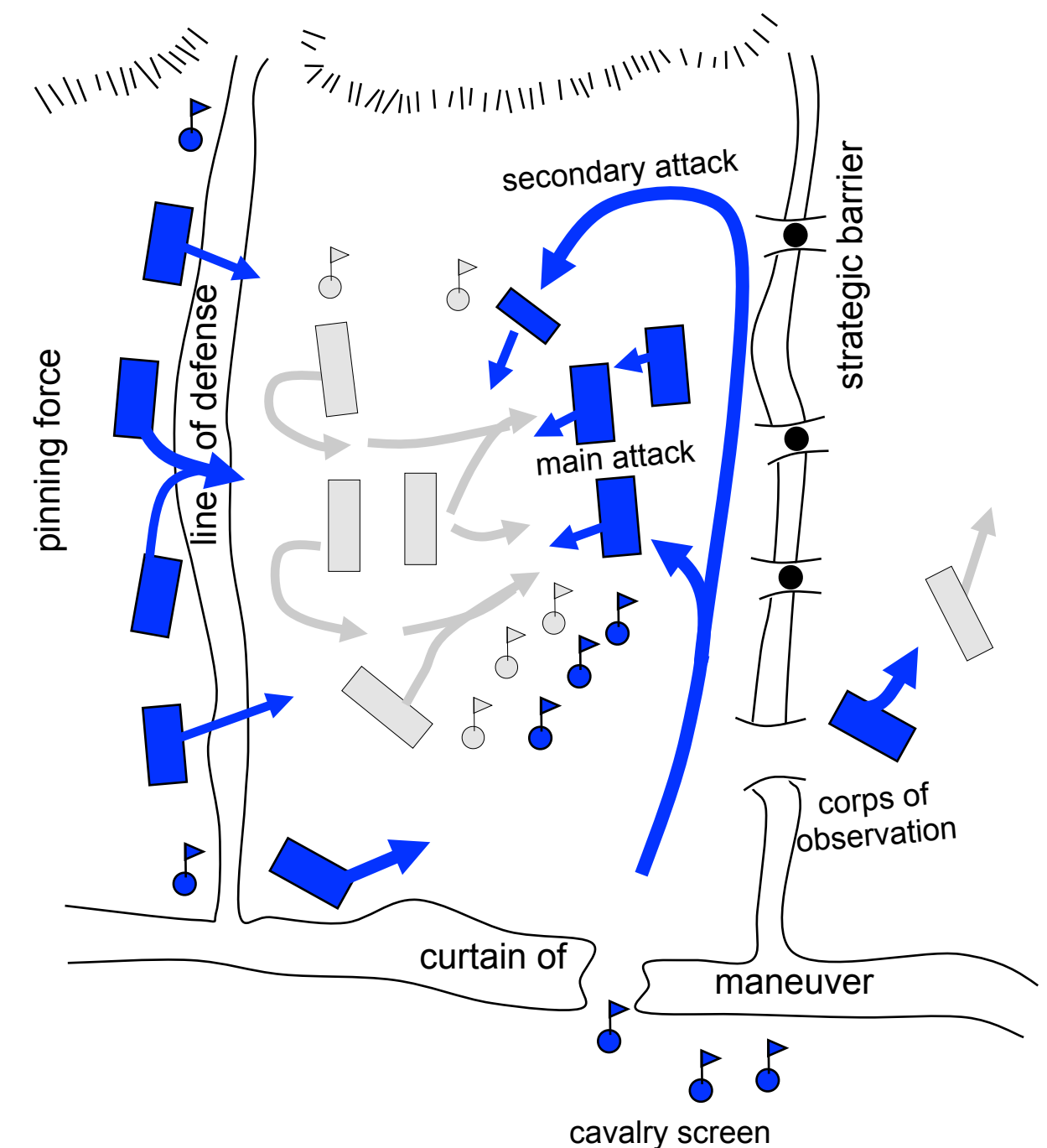
Strategy of envelopment

(idealized schematic)

I. The Envelopment March



II. The Reversed Front Battle

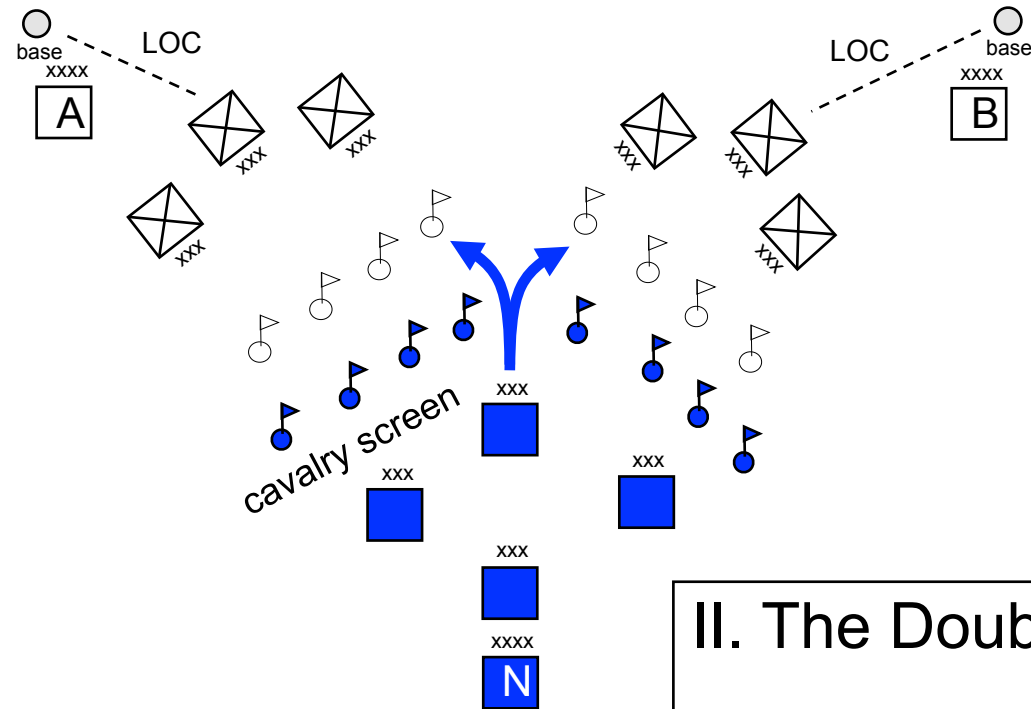


Source: David G. Chandler, *Waterloo: The Hundred Days*, 1980.

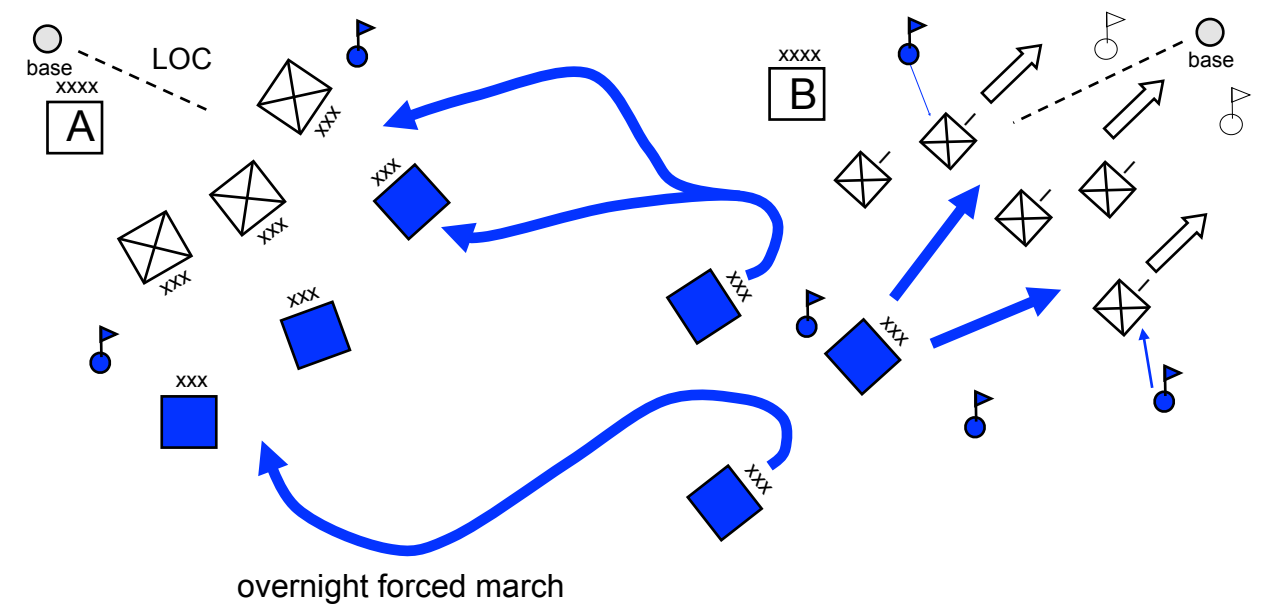
The strategy of central position

(idealized schematic)

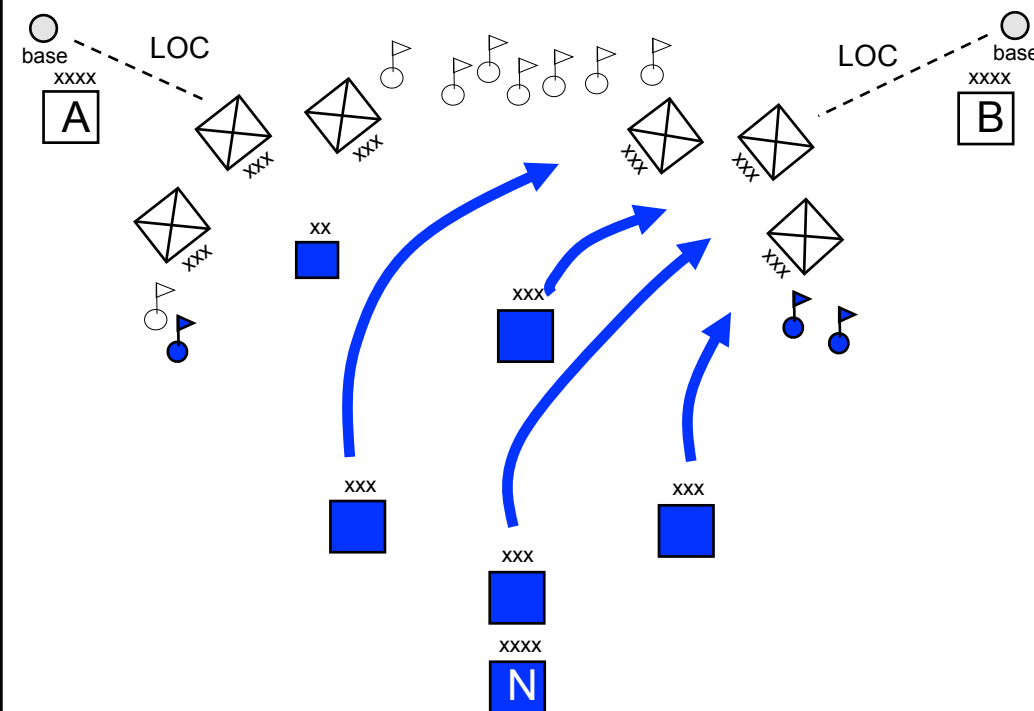
I. Advance to Contact



III. The Coup de Grace



II. The Double Battle



Source: David G. Chandler,
Waterloo: The Hundred Days, 1980.

Historical pattern

Napoleon's art of war

Early tactic

“The action was opened by a cloud of sharpshooters, some mounted, some on foot, who were sent forward **to carry out a general rather than a minutely-regulated mission**; they proceeded to harass the enemy, escaping from his superior numbers by their mobility, from the effect of his cannon by their dispersal. They were constantly relieved to ensure that the fire did not slacken, and they also received considerable reinforcement to increase their over-all effect ... **Once the chink in foe's armour had been revealed** ... the horse artillery would gallop up and open fire with canister at close range. The attacking force would meantime be moving up in the indicated direction, the infantry advancing in column, the cavalry in regiments or squadrons, ready to make its presence felt anywhere or everywhere as required. Then, when the hail of enemy bullets or cannon balls began to slacken ... The soldiers would begin to run forward, those in the front ranks crossing their bayonets, as the drums beat the charge; the sky would ring a thousand battle-cries constantly repeated: “*En avant. En avant. Vive la Republique.*”

Later tactics

“At the outset, a **heavy bombardment** would be loosed against the enemy formations, causing fearful losses if they failed to seek shelter, and generally lowering their power of resistance. Under cover of this fire, swarms of *voltigeurs* would advance to within musketry range and add a disconcerting ‘**nuisance**’ element by sniping at officers and the like. This preliminary phase would be followed by a series of **heavy cavalry** and **infantry** attacks. **The secret of these was careful timing and coordination.** The first cavalry charges were designed to defeat the hostile cavalry and compel the enemy infantry to form squares”, thereby reduce fire in any one direction and enable the columns to get to close grips before the enemy could resume his linear formation. The infantry (deployed or not) and accompanying horse artillery would then blaze a gap in the enemy formation and finally the cavalry would sweep forward, again, to exploit the breakthrough.

Essential point

Early tactics, without apparent design, operate in a fluid, adaptable manner to uncover, expand and exploit adversary vulnerabilities and weaknesses, while later tactics emphasize massed firepower and stereotyped formations working formally together to smash adversary strength.

Impact of 19th century technology on war

Key ingredients

- Railroad/telegraph
- Quick fire artillery
- Machine gun
- Repeating rifle
- Barbed wire
- Trenches

Early trends

- Emphasis toward massed firepower and large armies supported by rail logistics
- Increased emphasis on a holding defense and flanking or wide turning maneuvers into adversary rear to gain a decision
- Continued use of frontal assaults by large stereotyped infantry formations (e.g. regiments, battalions), supported by artillery barrages, against regions of strong resistance

Result

Huge armies and massed firepower and other vast needs supported through a narrow fixed logistics network, together with tactical assaults by large stereotyped formations, suppressed **ambiguity**, **deception**, and **mobility** hence **surprise** of any operation.



Between Genghis and World War I

<i>Battle</i>	<i>Date</i>	<i>Casualties</i>	<i>Remarks</i>
<i>Cowpens</i>	<i>January 17, 1781</i>	<i>400 kld/wnd</i>	<i>Forces: 1,100 Brit 1,000 Am.</i>
<i>Antietam</i>	<i>September 17, 1862</i>	<i>22,700 k/w</i>	<i>>110,000</i>
<i>Gettysburg</i>	<i>July 1-3, 1863</i>	<i>46,000 k/w</i>	<i>164,000</i>
<i>Somme</i>	<i>1 July - 18 Nov 1916</i>	<i>>1,200,000 k/w</i>	<i>Total penetration 6 miles</i>

World War I

A way out

Idea	Authors
<ul style="list-style-type: none">• Infiltration tactics	<ul style="list-style-type: none">• Capt. Andre Laffargue• Gen. von Hutier?• Gen. Ludendorff
<ul style="list-style-type: none">• Guerrilla tactics	<ul style="list-style-type: none">• T.E. Lawrence• Paul von Lettow-Vorbeck

World War I

Infiltration tactics

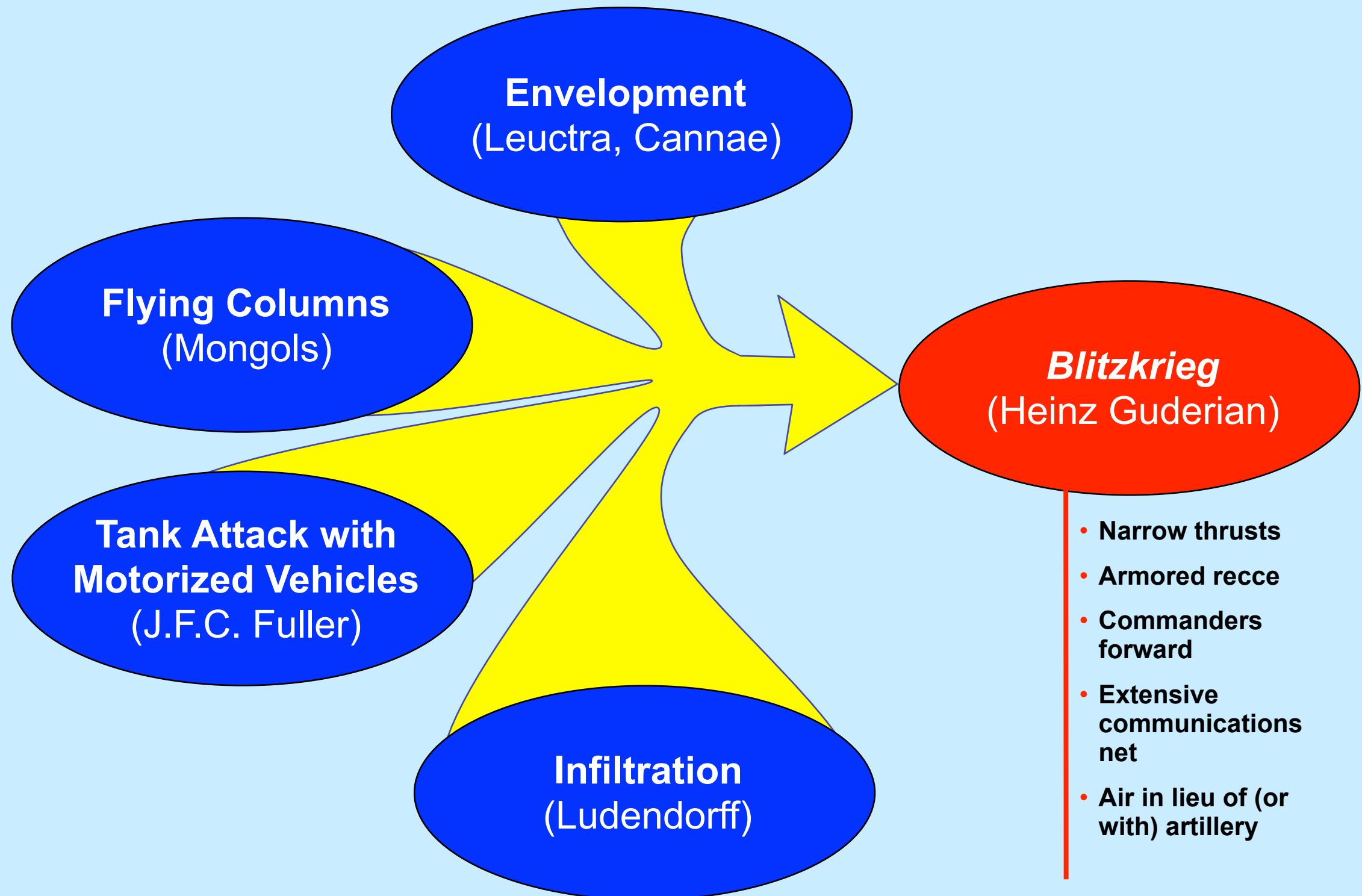
Key points

- Fire at all levels by artillery, mortars, and machine guns is exploited to hold adversary attention and pin him down, hence—
- Fire together with gas and smoke (as well as fog and mist) represent an immediate and ominous threat to capture adversary attention, force heads down, and dramatically obscure view, thereby cloak infiltrators' movements.
- Dispersed and irregular character of moving swarms (as opposed to well defined line-abreast formations) permit infiltrators to blend against irregular and changing terrain features as they push forward.
- Taken together, the captured attention, the obscured view, and the indistinct character of moving dispersed/irregular swarms deny adversary the opportunity to picture what is taking place.

Result

- Infiltration teams appear to suddenly loom up out of nowhere to blow thru, around, and behind disoriented defenders.

Creation of the Blitzkrieg



Blitzkrieg results

Successful	
Poland	1939
France	1940
Balkans	1941
Russia	1941
North Africa	1941-42
Russia	Summer 1942
Russia	Feb-Mar 1943
Advance thru France	1944
Manchuria	1945
Middle East	1967
Czechoslovakia	1968
Middle East	1973

Unsuccessful	
Russia	Winter 1941-42
Russia	Fall-Winter 1942-43
North Africa	1942
Russia	Summer 1943
Ardenne	Winter 1944-45

World War I

Guerrilla Warfare

(a la T.E. Lawrence)

Action

- Gain support of population. Must “arrange the minds” of friend, foe and neutral alike. Must “**get inside their minds**”.
- Must “be an idea or thing invulnerable, without front or back, drifting about like a gas” (**inconspicuousness and fluidity-of action**). Must be an “attack-in-depth”.
- Tactics “should be tip-and-run, not pushes but strokes” with “use of the smallest force in the quickest time at the farthest place”.
- Should be a war of detachment (avoiding contact and presenting a threat everywhere) using **mobility/fluidity-of-action** and **environmental background** (vast unknown desert) as basis for “never affording a target” and “never on the defensive except by accident and in error”.

Idea

- Disintegrate existing regime’s ability to govern.

Guerrilla results

Successful	
American colonies	1775-1781
Spain	1808-1814
Russia	1812
German East Africa	1914-1918
Arabia	1916-1918
China	1927-1949
Russia	1941-1945
Yugoslavia	1941-1945
Indochina	1945-1954
Algeria	1954-1962
Cuba	1956-1959
South Vietnam	1958-1975

Unsuccessful	
Philippines	1899-1902
South Africa	1900-1902
Greece	1944-1949
Philippines*	1946-1954
Malaya*	1948-1960

* Regime exercised particular care not to inflict casualties and to protect population.

Blitz/guerrilla theme

Essence

- **Avoid battles**—instead penetrate adversary to **subvert, disrupt, or seize** those connections, centers, and activities that provide **cohesion** (e.g., psychological/moral bonds, communications, lines of communication, command and supply centers ...)
- Exploit ambiguity, deception, superior mobility, and sudden violence to generate initial **surprise** and **shock** followed by **surprise** and **shock** again, again, again ...
- Roll up/wipe out the isolated units or remnants created by the subversion, surprise, shock, disruption, and seizure.

Intent

- Exploit subversion, surprise, shock, disruption, and seizure to generate **confusion, disorder, panic**, etc., thereby **shatter cohesion, paralyze effort, and bring about adversary collapse**.

? Key question ?

Why have blitz and guerrilla tactics been so extraordinarily successful?

Message

- Blitz and guerrillas, by being able to operate in a **directed**, yet **more indistinct**, **more irregular**, and **quicker manner** than their adversaries, can:
 - Repeatedly concentrate or disperse more inconspicuously and/or more quickly from or to lower levels of distinction (organizational, operational, and environmental) without losing internal harmony, as well as,
 - Repeatedly and unexpectedly **infiltrate** or **penetrate** adversaries' vulnerabilities and weaknesses in order to splinter, isolate or envelop, and overwhelm disconnected remnants of adversary organism.

Or put another way,

- Blitz and guerrillas, by operating in a directed, yet more indistinct, more irregular, and quicker manner, **operate inside** their adversaries' observation-orientation-decision-action loops or **get inside** their mind-time-space as basis to **penetrate** the moral-mental-physical being of their adversaries in order to pull them apart and bring about their collapse.

Underlying idea

- Such amorphous, lethal, and unpredictable activity by blitz and guerrillas make them appear awesome and unstoppable, which altogether produce uncertainty, doubt, mistrust, confusion, disorder, fear, panic ... and ultimately collapse—a notion implied by Sun Tzu around 400 B.C. and more recently by J.F.C. Fuller after observing the impact of Ludendorff's infiltration tactics in 1918.

Counter-guerrilla campaign

Action

- Undermine guerrilla cause and destroy their cohesion by demonstrating integrity and competence of government to represent and serve needs of people—rather than exploit and impoverish them for the benefit of a greedy elite.*
- Take political initiative to root out and visibly punish corruption. Select new leaders with recognized competence as well as popular appeal. Ensure that they deliver justice, eliminate grievances, and connect government with grass roots.*
- Infiltrate guerrilla movement as well as employ population for intelligence about guerrilla plans, operations, and organization.
- [6 bullets omitted in the interests of readability.]

Idea

- Break guerrillas' moral-mental-physical hold over the population, destroy their cohesion, and bring about their collapse via political initiative that demonstrates **moral legitimacy** and **vitality** of government and by relentless military operations that emphasize **stealth/fast-tempo/fluidity-of-action** and **cohesion** of overall effort.

* If you cannot realize such a political program, you might consider changing sides!

Summary: Operating inside their OODA loops

- Change situation faster than other side can figure you out
 - And then change it again, and again
- Cat and mouse game
- Results in confusion, deception, surprise, paralysis, chaos

Tempo



Second Big Idea

**BUILDING AN ORGANIZATION
THAT CAN DO IT**

What makes it hard?

"And change it again, and again, ..."

- Misunderstanding
- Disagreements
- Other leadership problems ("fog of war")
- "Friction" - Clausewitz
- "Entropy" - Boyd

Here's the secret

Pump up the creativity and initiative of everybody in the organization and harmonize them to achieve the purposes of the organization.

Impression of the Blitzkrieg penetration

Thrust and roll out/roll up tactics

JRB Comment:
Bundles of
multiple thrusts
inside multiple
thrusts

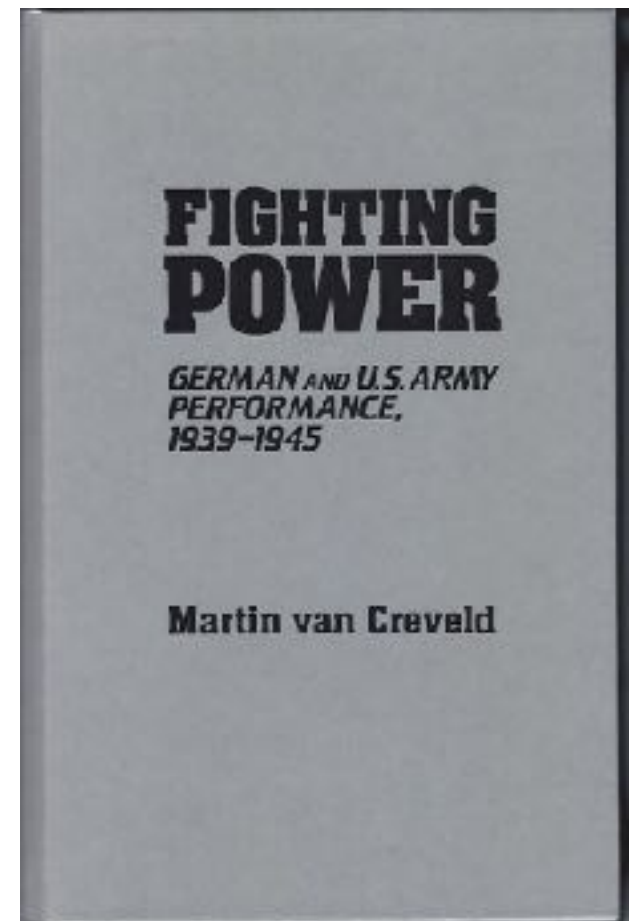
CR comment: These routes
cannot have been planned
out in advance because
they take advantage of the
situation as it is being
developed.

CR 2nd comment: Virtually
all the “taking advantage”
must be done by the people
on the spot



Boyd's organizational climate enables the actions we just studied

- *Fingerspitzengefühl*
- *Einheit*
- *Schwerpunkt*
- *Auftragstaktik*
- *Behendigkeit*



It is absolutely essential that you develop a **deep understanding** of these concepts. They apply to all groups who must work together under conditions of stress and uncertainty.

Fingerspitzengefühl



Literally “Finger-tip Feeling”

Field Marshall Erwin Rommel
(15 November 1891 – 14 October 1944)



Developing Fingerspitzengefühl

Knowing the way of the long sword means, when one knows the method well, to wield freely even with two fingers the sword one customarily carries....

Your entire body will move at your will ... the movements of your body and legs will be in coordination with your spirit ...

Practicing a thousand days is said to be discipline and practicing ten thousand days is said to be refining.

Miyamoto Musashi, *The Book of Five Rings* (1645),
Book Two

But it's not that simple ...

? What's the point of all this ?

- We can't just look at our own personal experiences or use the same mental recipes over and over again; we've got to look at other disciplines and activities and relate or connect them to what we know from our experiences and the strategic world we live in.

If we can do this,

- We will be able to surface new repertoires and (hopefully) develop *Fingerspitzengefühl* for folding our adversaries back inside themselves, morally-mentally-physically—so that they can neither appreciate nor cope with what's happening—without suffering the same fate ourselves.

Ancient strategists would probably agree

- Do not harbor sinister designs
- Diligently pursue the path
- Cultivate a wide range of interests in the arts
- Be knowledgeable in a wide variety of occupations
- Be discreet regarding one's commercial dealings
- Nurture the ability to perceive the truth in all matters
- Perceive that which cannot be seen with the eye
- Do not be negligent, even in trifle matters
- Do not engage in useless activity

Miyamoto Musashi, *The Book of Five Rings*,
Epilogue to Book One,
“The Earth Book.” (1645)

Einheit

Literally “One-ness” “Unity”

Teamwork is everything — Taiichi Ohno, one of the originators of the Toyota Production System

Einheit

A military interpretation

Without a common outlook, superiors cannot give subordinates freedom of action and maintain coherency of ongoing action.

Implication:

A common outlook possessed by “a body of officers” represents a unifying theme that can be used to simultaneously encourage subordinate initiative yet realize superior intent.

Boyd, *Patterns of Conflict*, p. 74

How do we get Einheit?

Arrange setting and circumstances so that leaders and subordinates alike are given opportunity to continuously interact with external world, and with each other, in order to more quickly make many-sided implicit cross-referencing projections, empathies, correlations, and rejections as well as create the similar images or impressions, hence a similar implicit orientation, needed to form an organic whole.

Boyd, *Organic Design for Command and Control*, p. 23

It is another ancient idea

“The Way” means inducing the people to have the same aim as the leadership so that they will share death and share life, without fear or danger. Sun Tzu, Chapter 1 (Cleary Trans).

A large, bold, black Chinese character '道' (Dào) is positioned on the right side of the slide. The character is written in a traditional, slightly calligraphic style with a soft shadow effect behind it, giving it a three-dimensional appearance. It is the Chinese character for 'The Way' or 'Dao'.

With Einheit You can read minds

We believe that implicit communication—to communicate through mutual understanding, using a minimum of key, well-understood phrases or even anticipating each others' thoughts—is a faster, more effective way to communicate than through the use of detailed, explicit instructions. We develop this ability through familiarity and trust, which are based on a shared philosophy and shared experience.

Marine Corps Doctrine Publication 1, *Warfighting*, page 79.

With Einheit You can read minds

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Marine Corps Doctrine Publication 1, *Warfighting*, page 79.

Schwerpunkt

Literally “Hard, difficult, heavy” point”

Schwerpunkt

- Usually: center of gravity, focus of main effort, focus and direction
- Stephen Bungay: Tell me what you want, what you really, really want
- Idea: When in doubt, use your creativity and initiative to take the action that best accomplishes the organization's *Schwerpunkt*.

An example

We will not accept the lack of orders as justification for inaction; it is each Marine's *duty* to take initiative as the situation demands. We must not tolerate the avoidance of responsibility or necessary risk.



USMC Doctrine Pub 1, *Warfighting*, p. 58.

Schwerpunkt

Schwerpunkt acts as a center or axis or harmonizing agent that is used to help shape commitment and convey or carry out intent at all levels from theater to platoon, hence an image around which:

Maneuver of all arms and supporting elements are focused to exploit opportunities and maintain tempo of operations,
and

Initiative of many subordinates is harmonized with superior intent.

Boyd, *Patterns of Conflict*, p. 78

Auftragstaktik



From *Auftrag* — a contract

Classic Auftragstaktik

Commander: Lt. Smith, secure the Village of Bindlach by 1700 hrs and prevent the advance of enemy forces in your sector. 3rd Platoon is the Schwerpunkt and will be attacking on your right.

Lt. Smith: I can do it, but it may take until 1900 because I don't have the use of two of my heavy machine guns.

Commander: Very well. Just keep me informed of your progress.

A different way to do Auftragstaktik

CDR David Marquet: I vowed henceforth never to give an order, any order. *Turn the Ship Around!*, chapter 11.

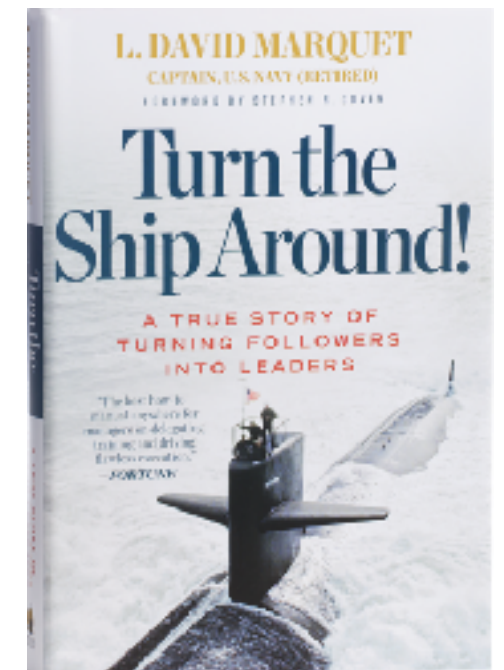
Key point: An order, any order, even a mission order (*Auftrag*), has the potential to limit creativity and initiative.

Key Point #2: There may be other ways to accomplish the purpose of an *Auftrag*, without actually giving an order. Depends on your organization and what you are trying to accomplish.

Auftragstaktik — Another view

Officer of the Deck: Captain, the hatch is secured, the depth is adequate, and all men are at diving stations. The ship is rigged for dive, and I've certified my watch team. I intend to dive the boat.

Captain: Very well.



How Toyota does Auftragstaktik

Line supervisor: We are having a persistent problem operating the 5-axis milling machine within specs.

Manager: Interesting. What is the problem?

LS: After 25 cycles, the machine drifts out of spec while rotating in the B-axis and moving in the Z-axis.

M: Well, what could cause that?

LS: It could be a worn pneumatic seal, or bearing beginning to go bad, but I checked all those.

M: What about the hydraulic fluid?

LS: It is within its use-by date.

M: Yes, but have you tested it once the machine starts wandering out of spec?

How Toyota does Auftragstaktik

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M: Yes, but have you tested it once the machine starts wandering out of spec?

You can tell whether a man is clever
by his answers. You can tell whether a
man is wise by his questions.

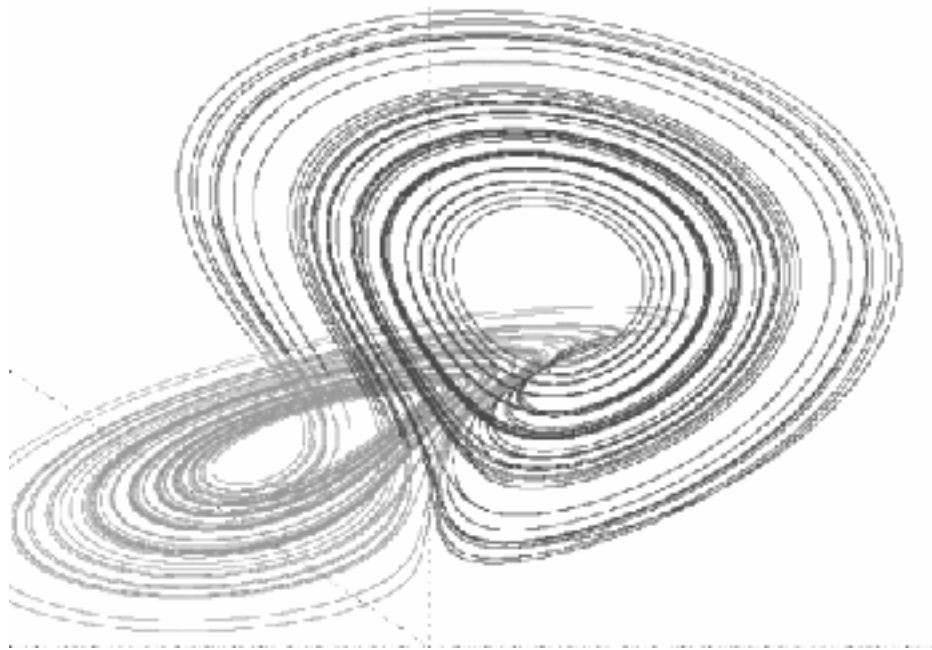
Naguib Mahfouz

Behendigkeit

Literally “Agility”

Behendigkeit

Behendigkeit, the way Boyd used it, is the ability to break out of long-standing patterns, **even if they have been successful.**

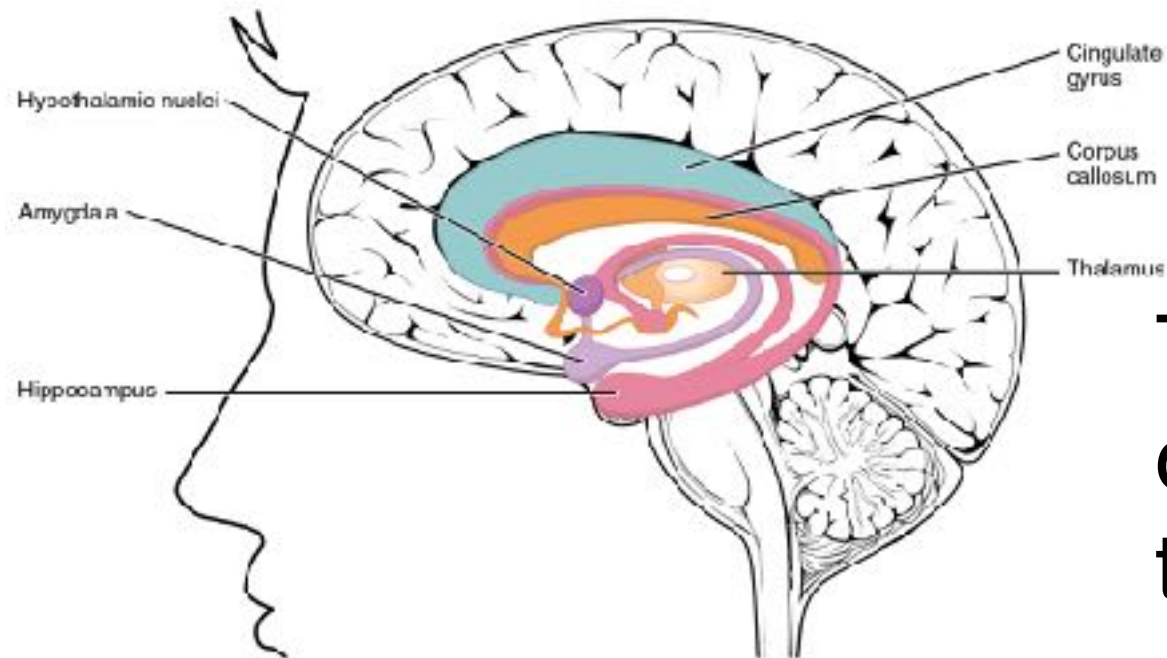


Behendigkeit

Tough to do, since:

- Need to foresee that current methods soon won't work (even though they may be working now).
- The more you understand your current philosophy — especially if you helped create it — the more logical, even inevitable, it seems.

Where the heart leads, the mind will follow



The sensory cortex, motor cortex, and association areas of the cerebral cortex enable you to perform complex tasks, but it is largely the limbic system that makes you want to do them.

You may give up facts before you give up ideas

In 2006, the political scientists Brendan Nyhan and Jason Reifler identified a phenomenon called the “backfire effect.” They showed that **efforts to debunk inaccurate political information can leave people more convinced that false information is true** than they would have been otherwise. Nyhan isn’t sure why this happens, but it appears to be more prevalent when the bad information helps bolster a favored worldview or ideology.

Maggie Koreth-Baker,
“Why Rational People Buy Into Conspiracy Theories,”
New York Times, May 21, 2013.

Achieving Behendigkeit

The secret is to achieve non-attachment (another ancient concept, *vairagya*) by going outside your system.

Going outside: “Willingness to support and promote unconventional or difficult subordinates who accept danger, demonstrate initiative, take risks, and come up with new ways toward mission accomplishment;”

Boyd, quoting Gen Hermann Balck,
Patterns of Conflict, p. 120

Einheit, but also a few crazies

Here's to the crazy ones. The misfits. The rebels. The troublemakers. The round pegs in the square holes. The ones who see things differently. They're not fond of rules. And they have no respect for the status quo. ... Because the people who are crazy enough to think they can change the world, are the ones who do.

Steve Jobs

Behendigkeit

A way to tell you're doing it right:

Through deep understanding, you break ancient trade-offs:

- Accuracy / complexity — Ptolemaic model vs. Copernican model
- Affordability / quality — Toyota Production System
- Control / initiative — Maneuver warfare

“But having exceptional functional performance and human warmth are somewhat contradictory to each other. Suzuki, however, believed that he could have both.”

Evolutionary Epistemology*

**A Personal View of John Boyd's
“Destruction and Creation”
... and its centrality to the ...
OODA Loop**

Franklin C. Spinney
V2.4 (Dec. 2014)

* Although I came up with this title on my own, it turns out that I am not the first to use this term, as I explain at this link:
<http://slightlyeastofnew.com/tag/chuck-spinney/>.

All about
complexity \Leftrightarrow accuracy

(Available at [Slightly East of New](http://slightlyeastofnew.com))

Einheit: Your best C&C system

Including:

- A shared moral code. For example, “If you say you're going to do it, do it. If you mess up, ‘fess up, and make it right.”
- A doctrine that is generally understood and accepted. The Toyota Production System is a doctrine for manufacturing. Some of this needs to be explicit, which is why the military writes doctrine manuals.
- Shared concept of what we’re trying to accomplish, including the Schwerpunkt(s)

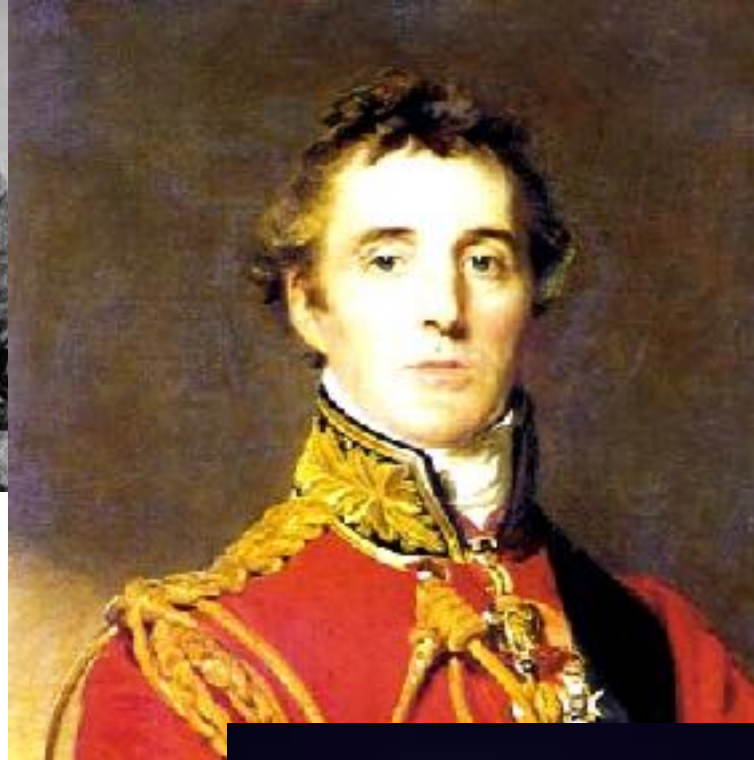
Einheit: Your best C&C system

Including:

- Shared — and accurate — mental model of the current, evolving situation. This includes both what's going on outside the organization as well as an appreciation of how well we are working together to accomplish our mission (“How's it going?”)
- Mutual appreciation of our capabilities and limitations: Who has *Fingerspitzengefühl* and who doesn't

I didn't want to "control" my Marines. I wanted to unleash them on the enemy. Col Mike Wyly, "Thinking like Marines."

Any leadership style you want



So long as it has ...

An organizational
climate
encompassing:

- *Fingerspitzengefühl*
- *Einheit*
- *Schwerpunkt*
- *Auftragstaktik*
- *Behendigkeit*

So long as it has ...

Real leadership is evolving a climate that has these attributes.

encompassing:

- *Fingerspitzengefühl*
- *Einheit*
- *Schwerpunkt*
- *Auftragstaktik*
- *Behendigkeit*



Third Big Idea

GRAND STRATEGY

Grand strategy:
battles AND

Absolutely critical for guerrilla warfare, insurgency, and peacekeeping operations.

Boyd's suggestions for what a grand strategy should, and can, do:

- Support national goal.
- Pump-up our resolve, drain-away adversary resolve, and attract the uncommitted.
- End conflict on favorable terms.
- Ensure that conflict and peace terms do not provide seeds for (unfavorable) future conflict.

How do we do it?

- **Morally** we **interact** with others by avoiding mismatches between what we say we are, what we are, and the world we have to deal with, as well as by abiding by those other cultural codes or standards that we are expected to uphold.
- **Morally** adversaries **isolate** themselves ... by violating codes of conduct or behavior patterns that they profess to uphold or others expect them to uphold.

In other words

This is not a great idea.

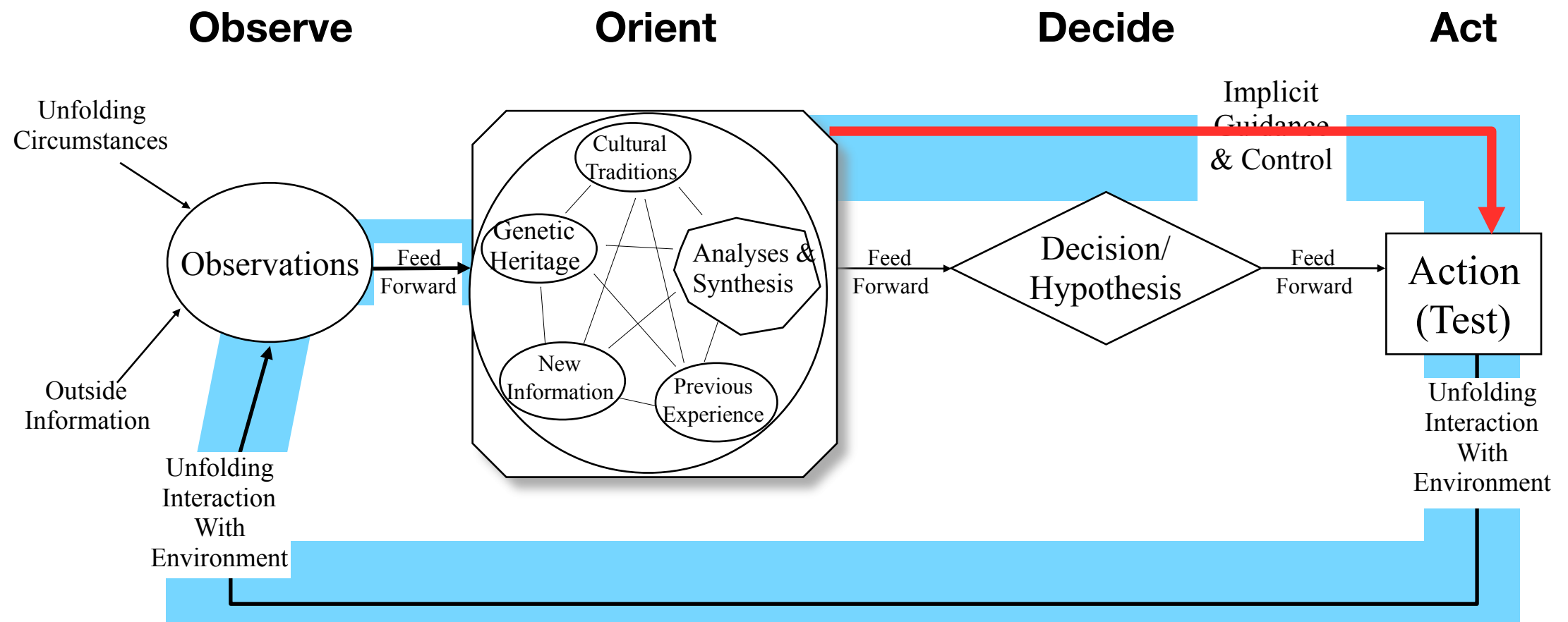




It's really pretty simple

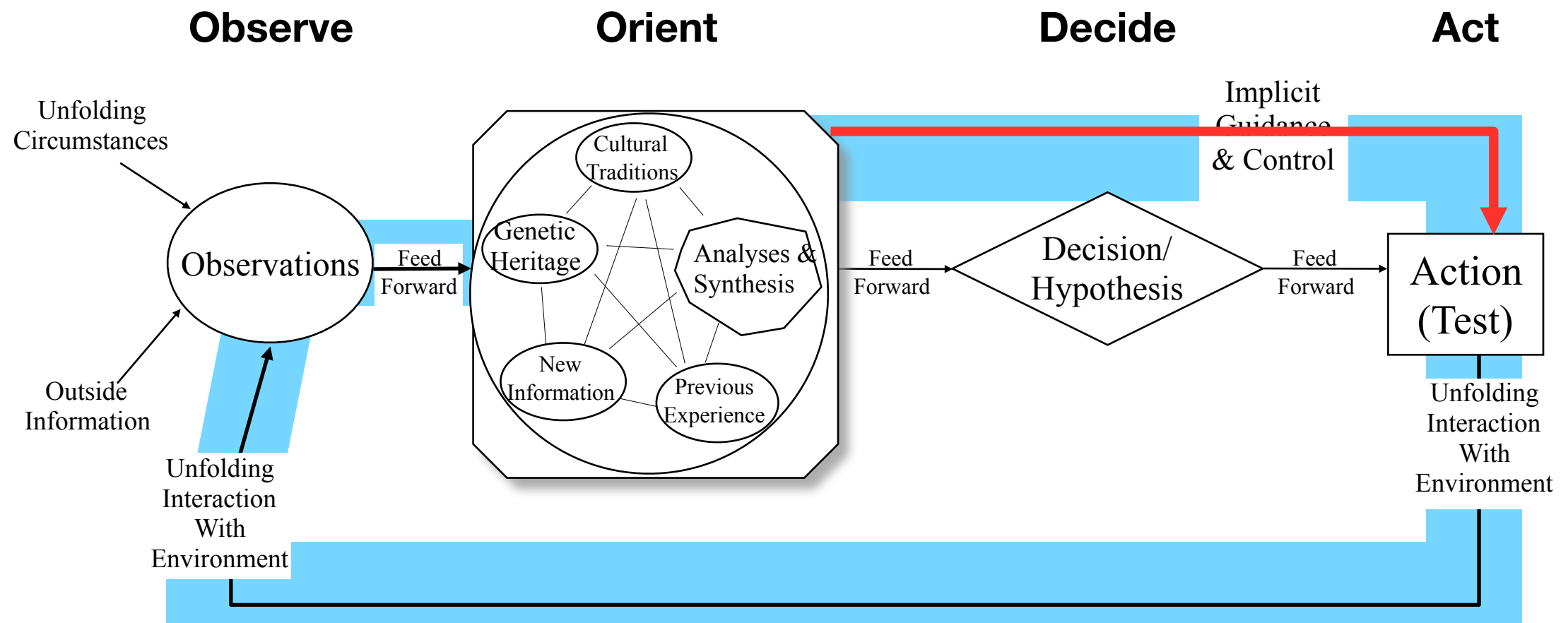
**WHAT ABOUT THE
INFAMOUS "OODA LOOP?"**

We act intuitively: Actions flow directly from Orientation

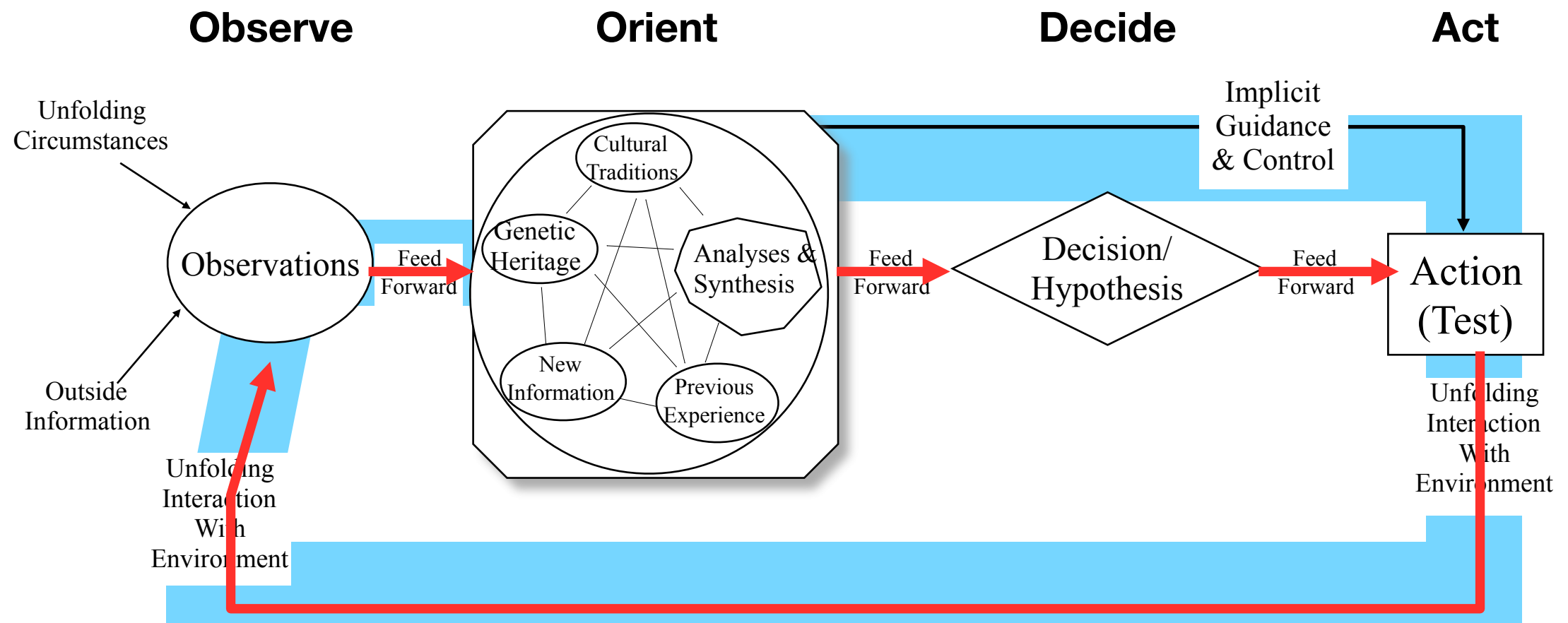


We act intuitively
flow directly from

*Boyd: The key idea is to **emphasize implicit over explicit** in order to gain a favorable mismatch in friction and time ...*

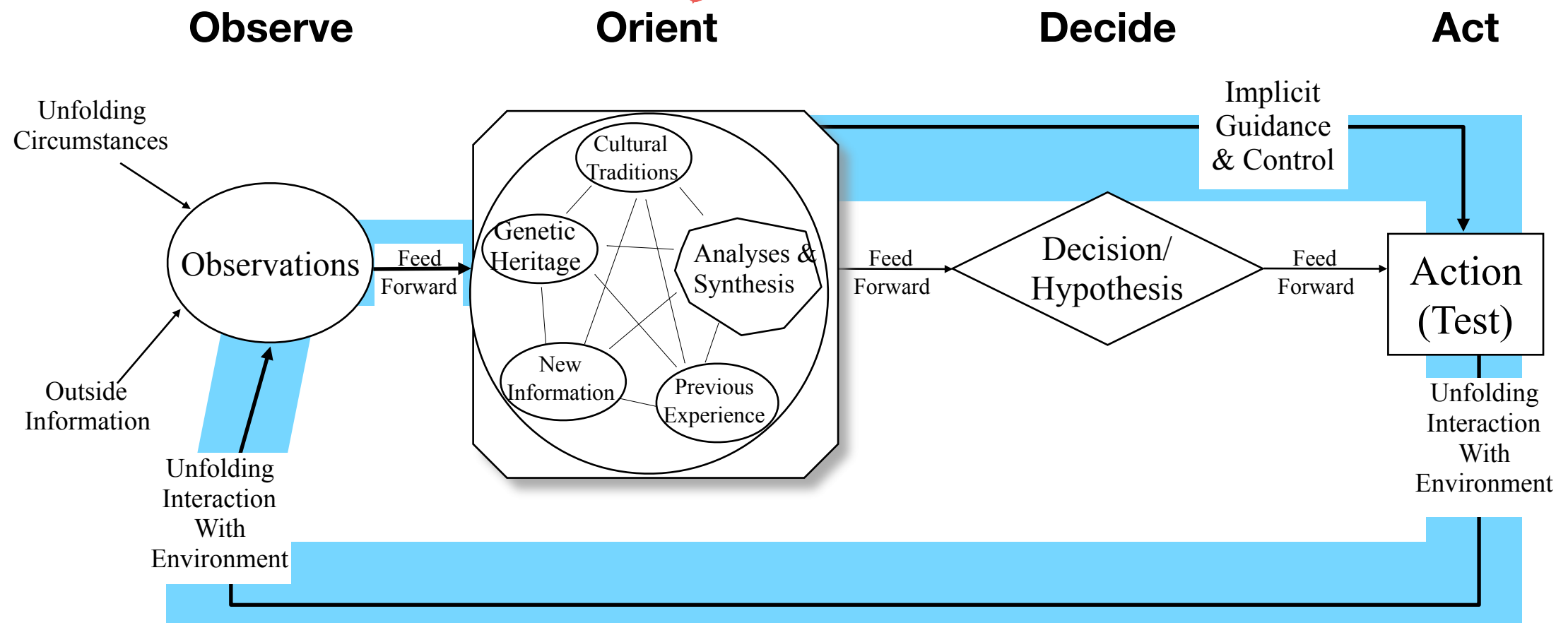


To stay better we have to
keep learning: Add new
actions to repertoire and
update Orientation



The trick is: both at the same time

And Orientation controls everything!



All things are ready
if our minds be so.

Shakespeare, *Henry V*,
Act 4, Scene 3

October 25th, 2015, was the 600th
anniversary of the battle of Agincourt



Where we began

WE SHOULD END



Boyd's Big Ideas

1. Operating inside their OODA loops
2. The EBFAS Climate – how you build organizations that can operate inside their OODA loops
3. Grand Strategy and the focus on moral strength, alliances, and attracting the uncommitted.
4. The OODA “loop” itself: a model of acting and learning

Boyd's list of fundamental concepts

- Compress own time and stretch-out adversary time.
- Generate unequal distributions as basis to focus moral-mental-physical effort for local superiority and decisive leverage.
- Diminish own friction (or entropy) and magnify adversary friction (or entropy).
- Operate inside adversary's observation—orientation-decision-action loops or get inside his mind-time-space.
- Penetrate adversary organism and bring about his collapse.
- Amplify our spirit and strength, drain-away adversaries' and attract the uncommitted.

Boyd's fundamental concepts

But much more important ...

- Compress own time and space
- Generate unequal distributions as basis to mental-physical effort for local superiority and decisive leverage.
- Diminish own friction (or entropy) and magnify adversary friction (or entropy).
- Operate inside adversary's observation—orientation-decision-action loops or get inside his mind-time-space.
- Penetrate adversary organism and bring about his collapse.
- Amplify our spirit and strength, drain-away adversaries' and attract the uncommitted.



What are yours?



Your face here

