Information & Intelligence

History of Information

October 29
and so, intelligence

**common issues**
- transmitting
- collecting
- preventing
- sorting
- retrieving
- drowning

**technological matters**
- transmission
- interception

**familiar concerns**
- national interest
- commercial interest
- private interest
collecting and preventing

tapping the network
  speech
  post
  press
  cable
  telephone
  computers

restricting communication
  censorship
  licensing
All warfare is based on deception

Hence, when able to attack, we must seem unable; when using our forces, we must seem inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near

Hold out baits to entice the enemy. Feign disorder, and crush him

If he is secure at all points, be prepared for him. If he is in superior strength, evade him

If your opponent is of choleric temper, seek to irritate him. Pretend to be weak, that he may grow arrogant

If he is taking his ease, give him no rest. If his forces are united, separate them

Attack him where he is unprepared, appear where you are not expected.
Thus the highest form of generalship is to balk the enemy's plans.

Hence the saying: If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat.
Sun Tzu

simulated disorder postulates perfect discipline,
simulated fear postulates courage; simulated weakness
postulates strength

Hiding order beneath the cloak of disorder is simply a
question of subdivision; concealing courage under a show of
timidity presupposes a fund of latent energy; masking
strength with weakness is to be effected by tactical
dispositions

Thus one who is skillful at keeping the enemy on the move
maintains deceitful appearances, according to which the enemy
will act. He sacrifices something, that the enemy may snatch
at it

By holding out baits, he keeps him on the march; then with a
body of picked men he lies in wait for him.
Sun Tzu

We cannot enter into alliances until we are acquainted with the designs of our neighbors.

The rising of birds in their flight is the sign of an ambuscade. Startled beasts indicate that a sudden attack is coming.

When there is dust rising in a high column, it is the sign of chariots advancing; when the dust is low, but spread over a wide area, it betokens the approach of infantry. When it branches out in different directions, it shows that parties have been sent to collect firewood. A few clouds of dust moving to and fro signify that the army is encamping.
"To remain in ignorance of the enemy's condition simply because one grudges the outlay of a hundred ounces of silver in honours and emoluments, is the height of humanity"
(1) Local spies [native agents]: employing the services of the inhabitants of a district.

(2) Inward spies [inside agents]: making use of officials of the enemy.

(3) Converted spies [double agents]: getting hold of the enemy's spies and using them for our own purposes.

(4) Doomed spies [expendable agents, agents provocateurs]: doing certain things openly for purposes of deception, and allowing our spies to know of them and report them to the enemy.

(5) Surviving spies [living agents]: who bring back news from the enemy's camp.
When these five kinds of spy are all at work, none can discover the secret system. This is called the "divine manipulation of the threads." It is the sovereign's most precious faulty.

Spymasters cannot be usefully employed without a certain intuitive sagacity.

a complete picture?
placing intelligence

truth
fact
news
speculation
comment
rumour
gossip
hoax
falsehood
questions of quality

true
fact
news
intelligence
speculation
comment
intelligence
rumour
gossip
hoax
intelligence
falsehood

President Delivers "State of the Union"
The U.S. Capitol
9:01 P.M. EST

THE PRESIDENT: Mr. Speaker, Vice President Cheney, members of Congress, distinguished citizens and fellow citizens. Every year, by law and by custom, we meet here to consider the state of the union. This year, we gather in this

The International Atomic Energy Agency confirmed in the 1990s that Saddam Hussein had an advanced nuclear weapons development program, had a design for a nuclear weapon and was working on five different methods of enriching uranium for a bomb. The British government has learned that Saddam Hussein recently sought significant quantities of uranium from Africa. Our intelligence sources tell us that he has attempted to purchase high-strength aluminum tubes suitable for nuclear weapons production. Saddam Hussein has not credibly explained these
"Without subtle ingenuity of mind, one cannot make certain of the truth of their reports"

Sun Tzu

philosophers as midwives

Women do not bring into the world at one time real children, and at another time counterfeits which are with difficulty distinguished from them.

--Socrates

If falsehood, like truth, had only one face, we would be in better shape, for we would take as certain the opposite of what the liar said. But the reverse of truth has a hundred thousand shapes and a limitless field.

--Montaigne
Goodhart's law

"any observed statistical regularity will tend to collapse once pressure is placed upon it for control purposes"

equally

"any reliable source of information is likely to become unreliable once it is clear that it is being used"

Mabillon & diplomatics
trusted agents

diplomats
monks
journalists
merchants
women
scholars
the development of espionage in Europe

a very brief & selective history

15th century Italy & the city states
   diplomats and spies

16th century England
   Walsingham (1532-1590) and his network
   John Dee (1527-1609) (& Trithemius)
   Christopher Marlowe (1564-1605)
   & the Cambridge connection
double games

suspect populations

entrapment

Mary, Queen of Scots (1542-1587)

Thomas Phelipes (1556-1625)
"cryptographer, forger, and gatherer of secret correspondence"

"although he has promised to do me service, I know he that he is playing a double game"
the rise of cryptography

sign systems
public
private

tachygraphy vs cryptography
Pepys' diary
Thomas Shelton, *Tutor to Tachygraphy* (1642)
telegraphy

encryption

morse code

coded addresses

coded communications
back to the seventeenth century England

a protestant "skein"

Henry Wotton (1568-1639) in Venice (1604-1612)

"An ambassador is a man of virtue sent to lie abroad for his country; a news-writer is a man without virtue who lies at home for himself"
Sir Henry Wotton
"number one argus"
John Thurloe (1616-1668)
the Posts & the Press

Mercurius Politicus & Public Intelligencer
£70,000 intelligence budget

Secretary Morrice did this day in the House when he talked of intelligence, say that he was allowed but £700 a-year for intelligence, whereas, in Cromwell's time, he did allow £70,000 a year for it; and was confirmed therein by Colonel Birch, who said that thereby Cromwell carried the secrets of all the princes of Europe.

--Pepys, Feb. 14, 1687/8

Hofl Intel - 21
$43.5 Billion Spying Budget for Year, Not Including Military

By MARK MAZZETTI
Published: October 31, 2007

WASHINGTON, Oct. 30 — Congress authorized spending of $43.5 billion over the past year to operate spy satellites, remote surveillance stations and CIA outposts overseas, according to a budget figure released Tuesday by Mike McConnell, director of national intelligence.

Government officials have refused for years to disclose the intelligence budget, citing risks to national security if the United States’ adversaries learned what it spent annually on spy services.

But lawmakers, acting on a recommendation by the Sept. 11 commission, pushed a law through Congress this summer requiring that the director of national intelligence reveal the spending authorization figure within 30 days after the close of the fiscal year, which ended Sept. 30.

The number released Tuesday does not include the billions of dollars that military services spend...
eighteenth century
ARLINGTON, Va. — The Defense Department Inspector General’s Office has widened its review of America Supports You to include Stars and Stripes, Defense officials said.

Citations Issued in Education Case

WASHINGTON, Oct. 18 (Reuters) — The Federal Communications Commission on Thursday against a conservative commentator for promoting the education plan without disclosing that he had been paid to do so.

The commentator, Armstrong Williams, whose firm was also cited, was not subject to any fines for a first violation of F.C.C. rules, because he and his company are not broadcasters.

But the agency said it had fined two broadcasting companies, including the Sinclair Broadcast Group, for putting on the air programs distributed by Mr. Williams and his company, the Graham Williams group, without properly disclosing who had sponsored them.

Mr. Williams could not immediately be reached for comment. He has denied any wrongdoing but has acknowledged that the Education Department’s outside media firm paid $240,000 to promote the No Child I Behind policy on a television show on which he was the host.

Mr. Williams has said he was a strong backer of No Child Left Behind and was not influenced by outside parties.

in-house journalists

Jeff Gannon
Maggie Gallaher
Armstrong Williams
maps, intelligence, information

"There were no uniform maps in the era when the voyages were made"
-- Headrick

no European maps

Pei Xiu, (224-271) *Yugong Diutu Xu*

6 principles of mapmaking:
- scale
- square grid
- right-angled triangles to derive distance
- projections
- elevation
- gradient
- direction
the need for (and risk of) maps

the Portuguese

the French

the English & the Ordinance Survey

the US

Stonewall Jackson's campaign

"Not until 1863 did the [Northern] Army of the Potomac have an accurate map of Northern Virginia, its theatre of operations"

--Williams, Lincoln and His Generals

Jedediah Hotchkiss (1828-1889)
nineteenth century

"the great game"

Richard Burton (1821-1890)
Mirza Abdullah of Bushehr

science & intelligence
pilgrim to the forbidden cities
nineteenth century

"the great game"

Richard Burton (1821-1890)
Mirza Abdullah of Bushehr

science & intelligence
pilgrim to the forbidden cities

US army enlists anthropologists
By Kambiz Fattahi
BBC Persian Service, Washington

The Pentagon is pulling out all the stops in Iraq and Afghanistan.
empire & information
political intelligence, indigenous informants, possible rebels

mapping India
the India survey & "the great arc"
"Pandit" Nain Singh Rawat

Kim
Rudyard Kipling
Harry St. John Philby (1885-1960)

Harold "Kim" Philby (1912-1988)
and Kim

Harry St. John Philby (1885-1960)

Harold "Kim" Philby (1912-1988)
boys will be ...

Boer War
Baden-Powell (1857-1941)

Aids to Scouting (1899)

Scouting for Boys (1908)
twentieth century

a writer's view

Erskine Childers
John Buchan
Somerset Maugham
Graham Greene
John le Carré
institutionalized spying

1909
MO5 (army)/MI5
SSB (navy)/MI6

1942-1945
OSS

1947
CIA
NSC
alternative views

the double agents
Philby
Burgess
MacLean
Blunt
alternative views

Room 40

Bletchley Park

Alan Turing (1912-1954)

Enigma Collossus