



Principles of Protecting the Open Research Environment

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Caveat:

These are **PRINCIPLES**, not
mathematical theorems

Exceptions to the principles can
always be found



Cyber **PROTECTION**

VS

Cyber Security



“The troops were sent
to **protect** the village”

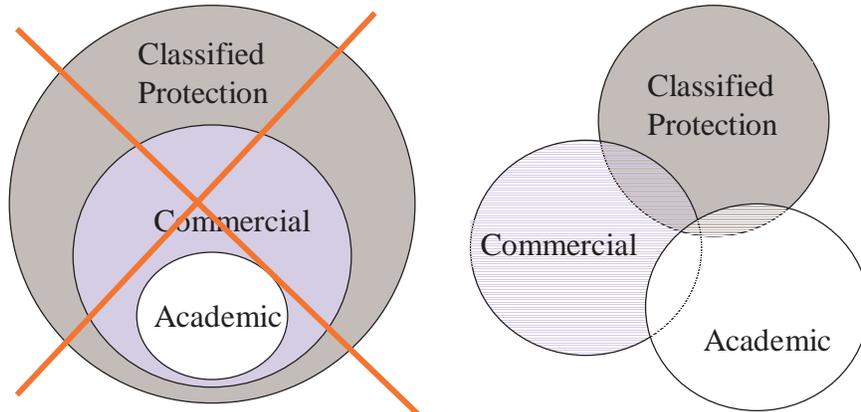


“The troops were sent
to **secure** the village”



Different Environments
require
Different Protective Measures

- What is being protected?
- What is the threat?



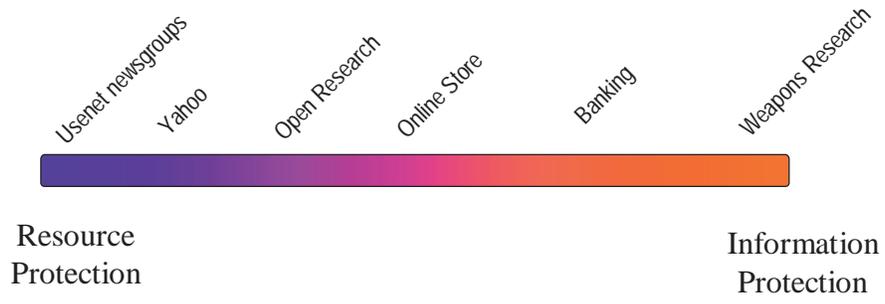
RESOURCE Protection

VS

Information Protection



Primary Protection Concern



Resource Protection

Information Protection



OPEN by default,
restrict only as necessary



Networks open the door to
**Unprecedented Research
COLLABORATION**



Research explores
**New Uses
of Computers**

The research environment does
not maintain computers
to endlessly repeat transactions



The Most Valuable asset of a research organization is the ability to create ideas

**We need to protect
The ABILITY to CREATE Ideas**



The Open Research Environment

- Cyber **PROTECTION** vs Cyber Security
- Open Environments are **DIFFERENT**, not a subset
- RESOURCE** Protection vs Information Protection
- OPEN** by default, restrict only as necessary
- Networks promote **COLLABORATION**
- Research Explores **NEW USES** of computers
- We need to protect **The ABILITY to CREATE** Ideas