

ADAPTIVE UNIVERSITIES

Social Learning and Performance
In the Age of the Unthinkable



The Age of the **Unthinkable**

Why is it unthinkable?

Industrial age vs. Primeval mindset

- Competition vs. Contribution
- Individual vs. Community focus
- Linear vs. Spherical thinking



The *Way* We Think

All objects about which the mind can think must conform to its manner of thought. – Immanuel Kant

Our manner of thought is the culmination at any point in time of our education, experience and the depth of our reflection

- The depth of our reflection, within ourselves, is a measure of how deep we are able to see into the context of the question.



What do you consider to be the first
high-speed internet?

- Roman Roads
- Collapsed the time
- Expanded the reach
- People Self-Synchronized



Social – an informal gathering of people for recreation or amusement; party

- Of or having to do with human beings living together as a group in a situation in which their **dealings** with one another **affect** their **common welfare**



- **Information** at rest will remain at rest until acted on by an outside force.
- **Communication** is information in action.



The Speed of **Transmission**

VS.

The Speed of **Communication**

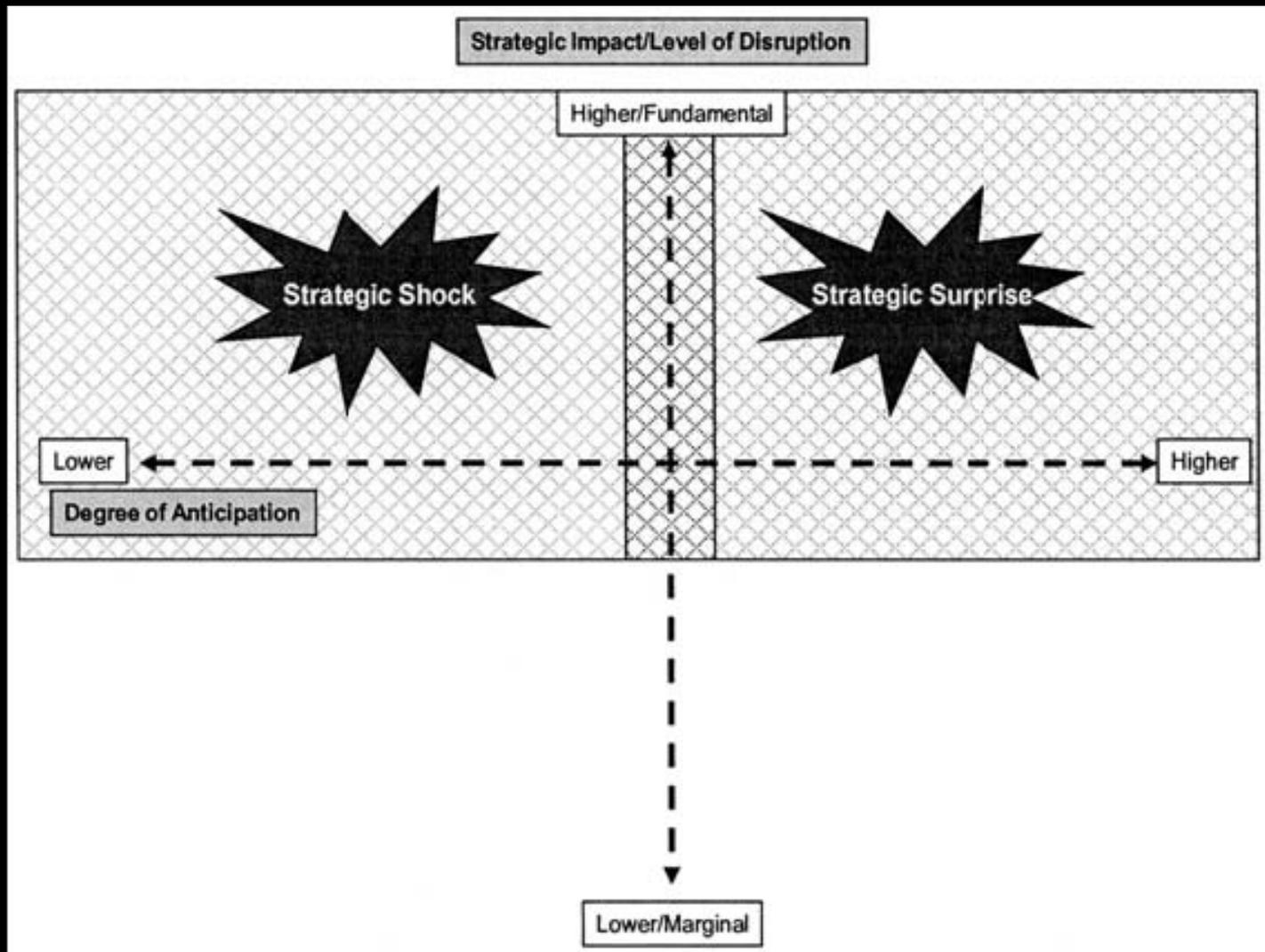
If a fax machine rings in the office
and there is no one there to
receive it does it still
communicate



Per Bak's Sandpile

- Could avalanche be **predicted**?
- Would it be a strategic **shock** or strategic **surprise**?
- Depends on the **strategic value** of the sandpile

Strategic Shock/Surprise





Strategic Shock VS. Strategic Surprise

There is no scientific break point between **strategic shock** and **strategic surprise**. The boundary separating the two is a function of an event's **strategic impact** ...

- Nathan Freier



Resilience, Empathy and Deep Security

Resilience requires adaptability, agility, and momentum

- We have no end-state, we are in constant motion and everything is connected

Empathy – the action of understanding

- Empathy is the depth of our reflection within ourselves to enable us to see into the context of others.



Deep Security

Requires a **complex adaptive system**

For which we need:

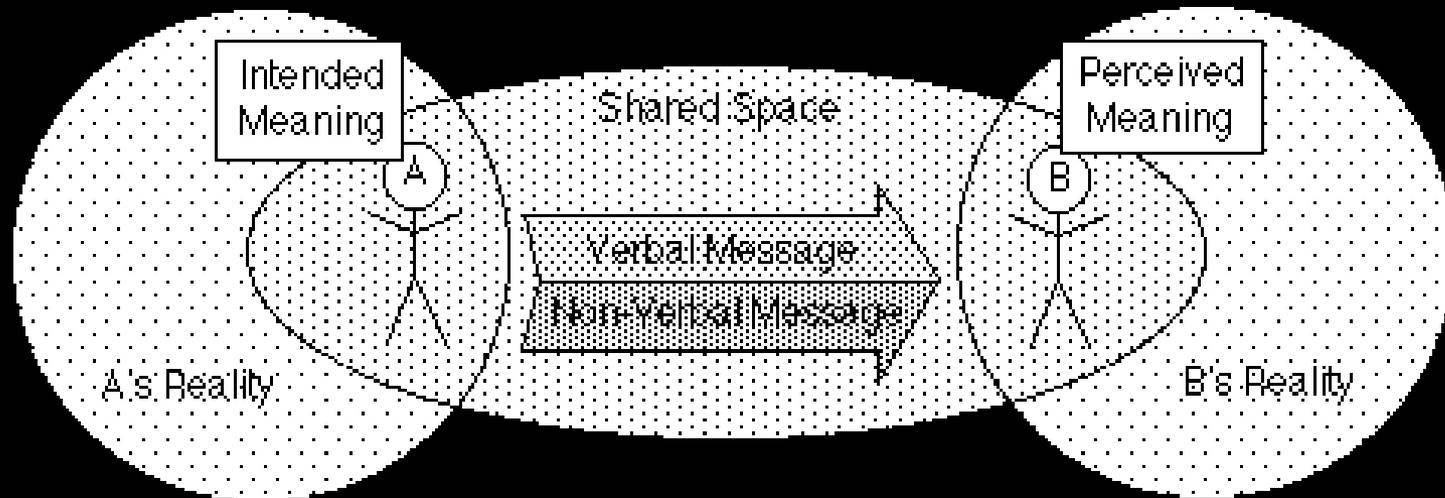
complex adaptive **communication** to
support a complex adaptive **training**
environment to grow a complex
adaptive **network**



Network Centric Warfare

- Metcalf's Law – The **value** of a network grows proportional to the square of the number of nodes
 - But the **power** of a network is a function of the affinity among the people on the network
- The Network is **PEOPLE**.

Communication

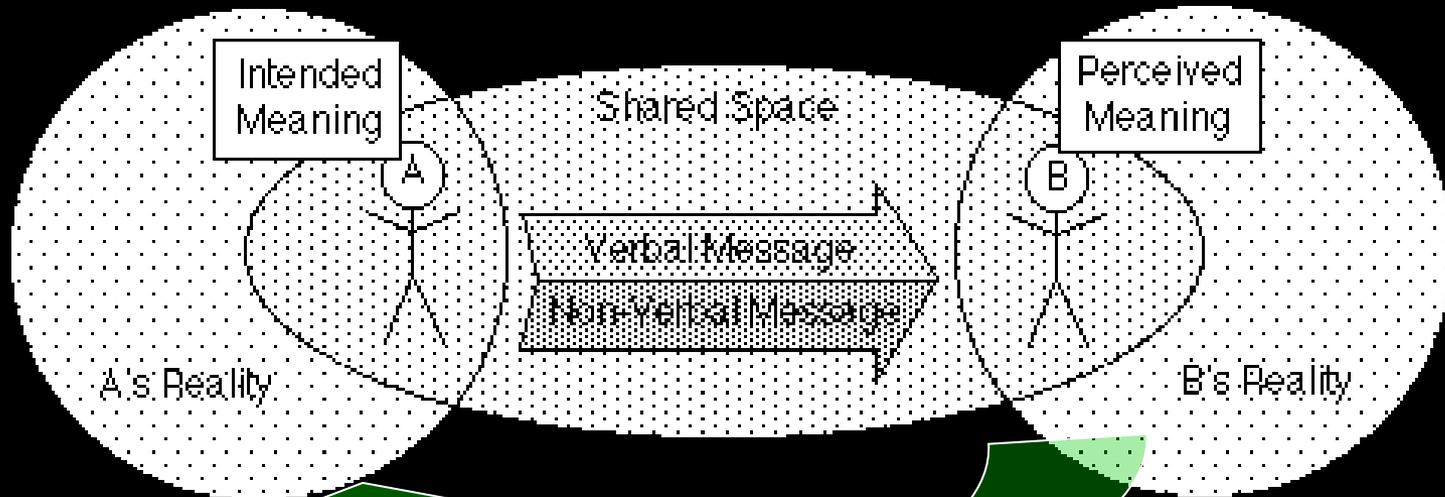


LINEAR



Books, Newspapers, Magazines, TV

Communication



LINEAR



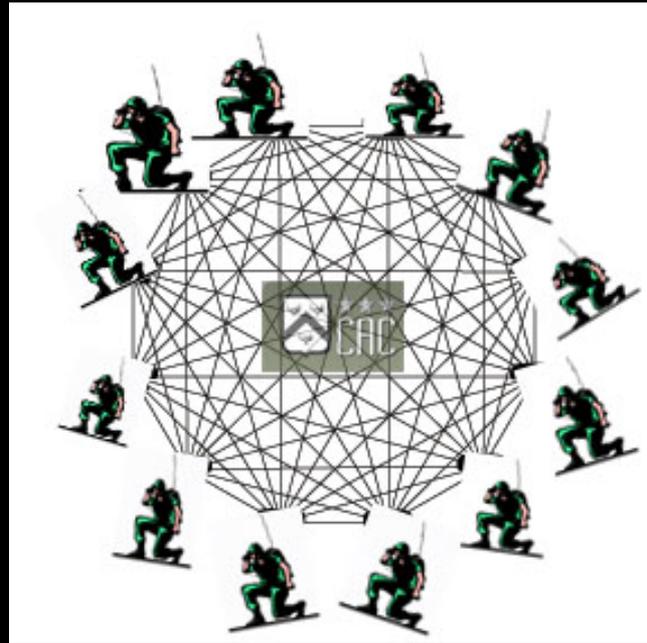
Books, Newspapers, Magazines, TV

INTERACTIVE



Letters, Telephone, Email, IM

Network Effects



Access to knowledge
from the pointy end-of-the-spear to
the comfy end-of-the-couch.

Questions?

Jack Holt
Senior Strategist for Emerging Media
703-695-7676
charles.holt@osd.mil

Network Centric Warfare

- Network Theory
 - Nodes and Ties
- Wave Theory
 - Energy and direction
- Communication Theory
 - Human doings

Network Centric Warfare

- Wave Theory tells us that energy intersecting a wave at certain angles will either increase or decrease the amplitude. The amplitude being the total force of the energy of the wave.
- Communication acts as a wave with information as its energy.

KNOWN UNKNOWNNS

*Defense analysis and strategy are inherently reactive. Historically, defense strategy development and planning have demonstrated three critical flaws. For too long, they have been **overly reactive**. Corporately, they have **lacked sufficient imagination**. And, as a result, both have been **vulnerable to surprise**.*

- Nathan Freier, KNOWN UNKNOWNNS: Unconventional strategic shocks in Defense strategy development, SSI Nov. 2008

- Reactions are based on our **training**
- Training is based on our **imagination**
- Imagination is based on our **thinking**
- Thinking is based on our
 - **Education**
 - **Experience**
 - **Reflection**