Agility and Appropriateness: Matching Shift to Scale
Submission 133, Topic 1
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What is Agility?

The variety of system behaviors available to a given system*

- Atkinson and Moffat

* e.g. Command and Control HQ

What is Appropriateness?

A functioning system can be understood to be appropriate when "the (system) parts fit and work together, not merely how well each performs when considered independently."

- Russell Ackoff

Agility and Appropriateness
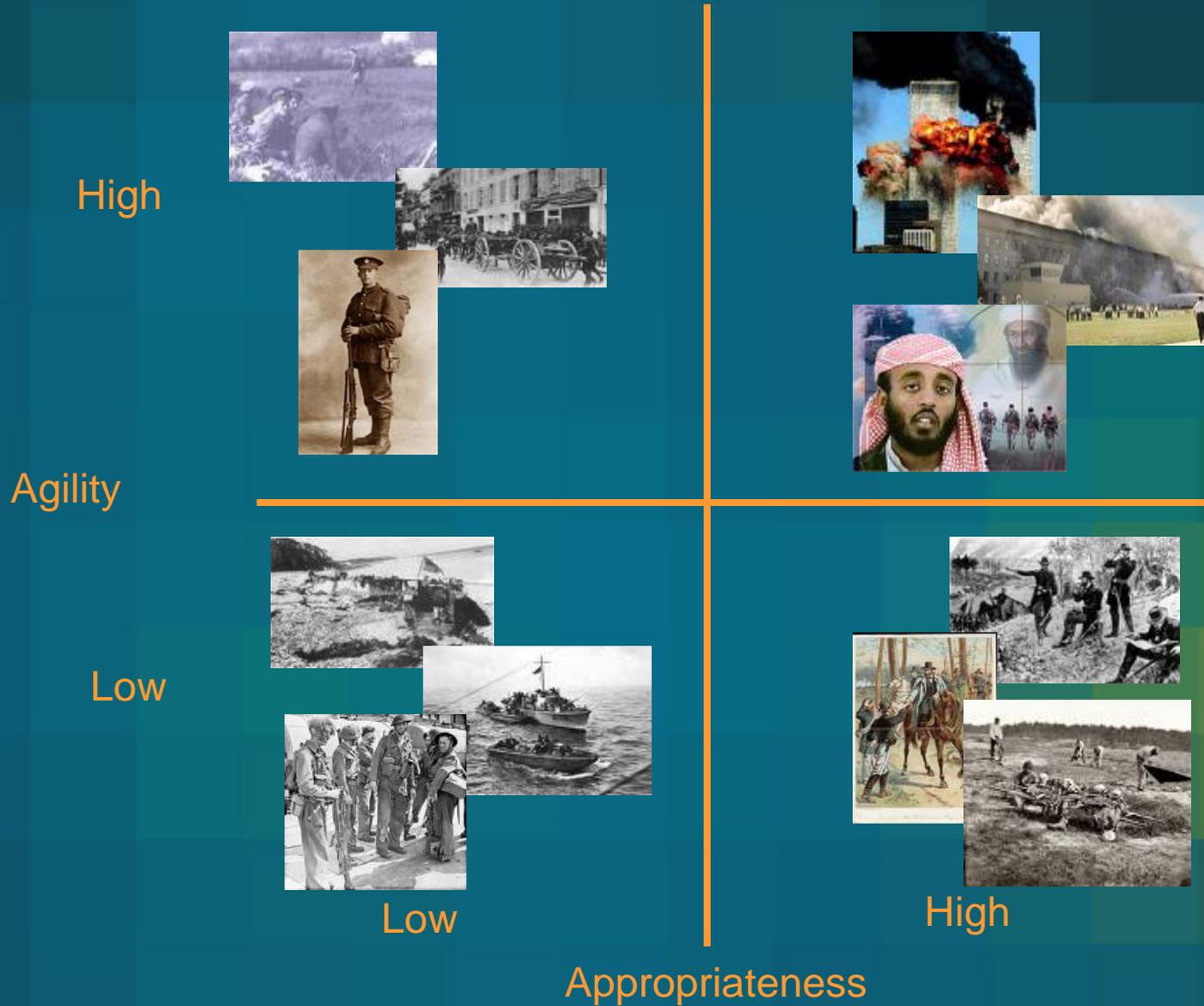
Other Campaign Illustrations

High

-IRAQI FREEDOM
-Khe Sanh
-Pursuit to Yalu
-MNF II Beirut
-UNOSOM II

-Germans in FALL GELB
-Soviets in BAGRATION
-US in CARTWHEEL
-US in FORAGER
-Coalition in ENDURING FREEDOM
-French at Austerlitz

AGILITY

Low   High

-Prussians at Jena
-Union at F'dksburg
-USN at 1st G'Canal
-AAF at Ploesti

-Japanese at Pearl Harbor
-WACHT AM RHEIN
-Allies at Normandy
-Soviets in URANUS
-All British Major WWII Opns
-SIOP ??

Low

APPROPRIATENESS

Summary and Observations

- Agility <u>and</u> Appropriateness necessary
- …but not sufficient
- Adaptability rules!
- Adaptability depends on Agility and Appropriateness, but also
  - Robustness
  - Resilience
  - Redundancy
- All of which are manipulated with:
  - Space
  - Time
  - Energy
  - Mass (Matter)
  - Information

L = Robustness (latitude)
R = Redundancy (resistance)
Pr= Resilience (precariousness)
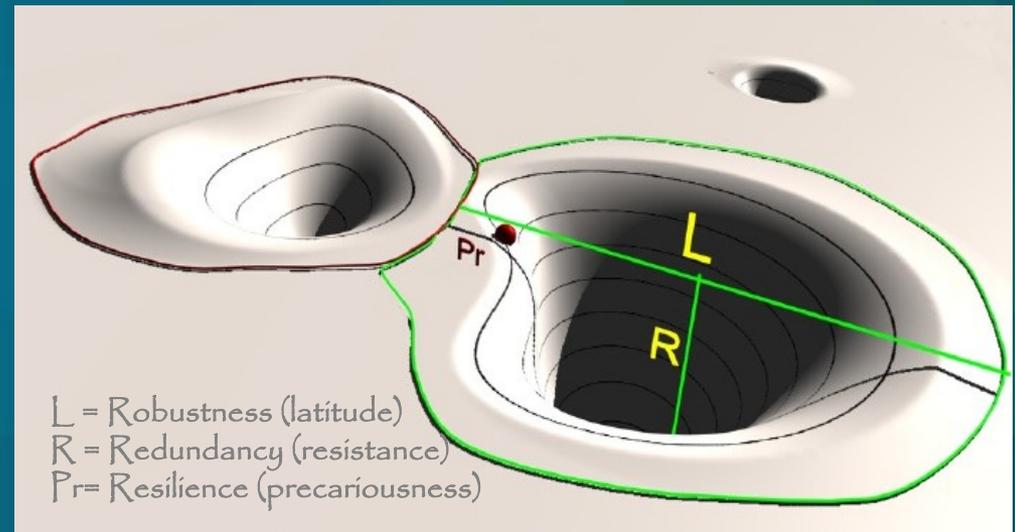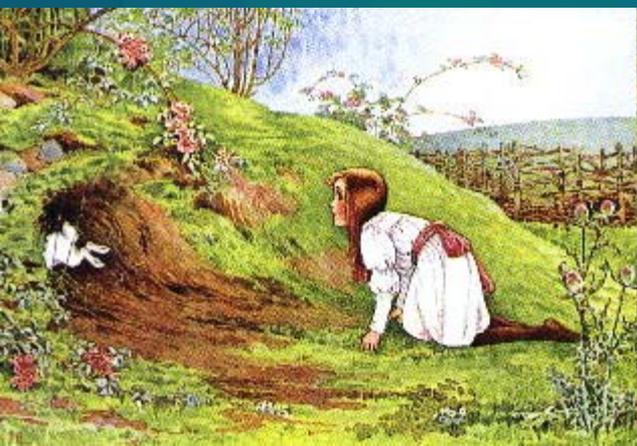
Putting Things Together….

Agility is the variety of behavior available to an operation, given a certain environment.

Appropriateness is the fit of the command, units, doctrine, equipment, logistics, intelligence, and training to that certain environment.

Operational adaptation is a capability of complex organizational systems to change according to circumstances and need. It is composed of agility and appropriateness. The operational command system and strategic direction determine the composition.

An Illustration

War	Side	Adaptation	Agility	Appropriate
Afghanistan (2001-Present)	Allied	Medium	High	Medium
	Taliban/AQ	Medium	Medium	High
Iraq (2003-Present)	Allied	Medium	High	Medium
	Saddam/AQ	Low/Medium	Medium	Medium
Kuwait (1990-1991)	Allied	Medium	High	Medium
	Iraqi	Low	Low	Medium
Vietnam (1965-1975)	US/RVN/Allies	Medium	Medium	Medium
	DVN/Allies	High	High	High
Korea (1950-1953)	UN	Medium	Medium	Medium
	DPRK/PRC	Medium	Medium	Medium
WWII ETO (1939-1945)	Allies	Medium/High	Medium	High
	Axis	Medium	High	Low
WWII PTO (1941-1945)	Allies	Medium/High	Medium/High	High
	Axis	Low/Medium	Medium	Low
WWI West (1914-1918)	Entente	Low/Medium	Low	High
	Alliance	Low/Medium	Medium	Low

Law of Laws

LL1: *He that adapts best wins...always.*

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