## 02.2 Theories of Technology

Holley 1953 Innovation	Posen 1984 p.58-9 (Org), 78-9 (BOP, Tech, Geog) Innovation		
		Low	High
are related 2.Lack of adoption of doctrine for use of weapons 3.Failure to devise techniques to innovate	BOP		S1.Expansionist Powers S2.Threats to Security S3.Threat of War S4.Pol Isolated S5.Disasters
4.Not devising an organization to select weapons 5.Pressure of need for standardization	Tech		S6.High Damage
Innovation			
1.Innovation carries costs 2.The effect of it depends on circumstances	Geog		S4.Encircled
<ul> <li>3. Technology superiority difficult to maintain</li> <li>4. Many reasons why should beware enthusiasm</li> <li>5. War is a bad climate for invention</li> <li>6. Technology is not just hardware</li> </ul>	Org	O1.Stakeholders O2.Increases Uncertainty O3.Technologies untried	Client(O4) or Own(O5) Combat experience with new technology O6.Battlefield Failure O7.Civilian Intervention

## Krepinevich 1994

Revolutions in Military Affairs (or RMA)

"...the application of new technologies into a significant number of military systems combine[d] with innovative operational concepts and organizational adaptation in a way that fundamentally alters the character and conduct of conflict."

"Military revolutions comprise four elements: technological change, systems development, operational innovation, and organizational adaptation." (1)

1. Infantry Revolution	Lessons:
2. Artillery Revolution	1.Technologies create possibilities only
3. Revolution of Sail and Shot	2.Competitive advantages short-lived
4. Fortress Revolution	3.Countries can specialize
5. Gunpowder Revolution	4.War and RMA are separate
6. Napoleonic Revolution	5.Advantages may not be recognized
7. Land Warfare Revolution	6.Technologies often imported into military
8. Naval Revolution	7.Cost may not increase
9. Interwar Revolutions	
10. Nuclear Revolution	

## Eyre and Suchman 1992

## Acquisition

Rational	Constructivist
1.Systemic (BOP) 2.Factional (Org) 3.Geopolitical (Client- Patron)	4.Institutional (Prestige)