

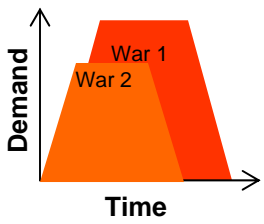
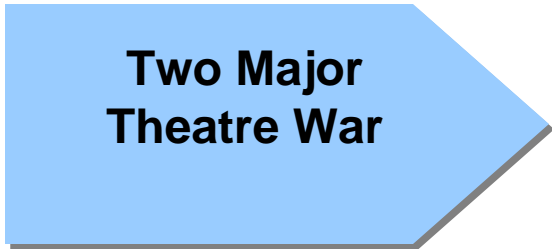
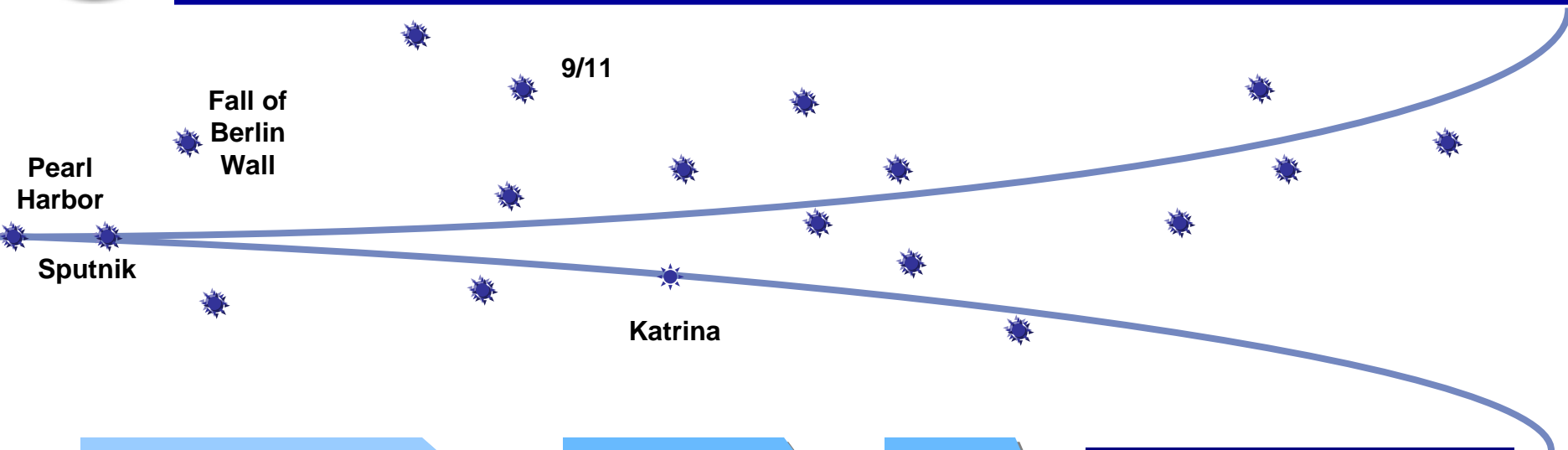
Trends and Shocks



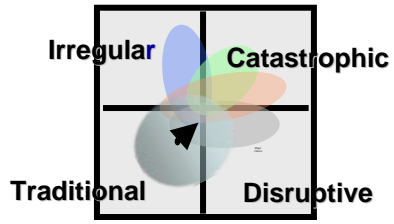
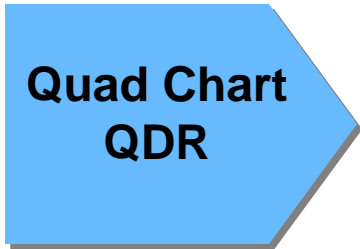
A Conceptual Basis for Strategic Planning in a Dynamic National Security Environment



Strategic Constructs: Widening Aperture



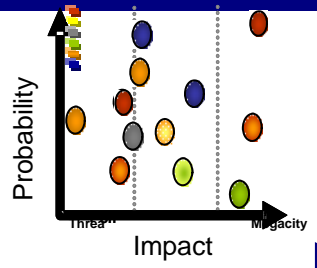
1990s



2006



2007



2008



Trends & Shocks: The Construct

- ❑ **Trends & Shocks is an effort to assess the defense implications of long-term “trends” and their potential to produce “strategic shocks” to:**
 - **recognize** emerging or plausible areas of strategic risk and potential shock;
 - **hedge** against a range of plausible alternative futures;
 - **shape** to reduce future risk and the impact of strategic shocks; and
 - **generate** strategies to respond should risks mature.

- ❑ **Trends & Shocks is about possibilities, not prediction, precision, or certainty.**
 - Caution about false confidence for decision makers
 - Emphasis on identifying risks AND opportunities



Trends

❑ What is a “trend”?

- An extrapolated future path of a given subject based on our understanding of it today and the factors likely to influence it in the future
 - Defense policies can influence the direction of some trends
 - Trends help us understand how the strategic landscape may unfold and the range of future risks against which we should plan

❑ Where are we looking for trends?

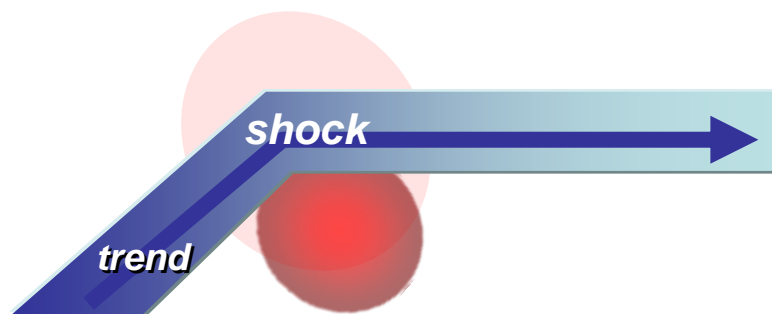
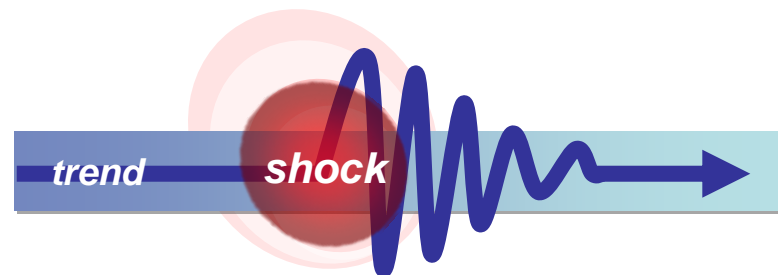
- Conflict
- Demographics
- Economics
- Environment / Energy / Climate
- Culture / Identity / Governance
- Science and Technology



Potential Strategic Shocks

□ What is a “strategic shock”?

- An event that reshapes the future evolution of trends and, in so doing, undermines the assumptions on which our current policies are based
 - May have positive or negative impacts
 - Some “strategic shocks” may not surprise us - we plan for them
 - Other “strategic shocks” may catch us unaware and unprepared
- The aftermath of a shock is a changed strategic environment





Trends & Shocks: The Hypothesis

- ❑ With hindsight, it is clear that most shocks DoD responds to are the result of long-term trends**
- ❑ Shocks are less disruptive when we have anticipated and responded to the underlying trends**
- ❑ The challenge is identifying key trends and anticipating the strategic shocks before they occur**
 - Not suggesting we will necessarily get it right, but approach requires thinking about a wider problem set and available options**

Widening the lens of strategic analysis and assessment



Historical Examples of Shocks (1 of 2)

□ We have been most successful in responding to shocks when adapting for broader trends:

- Pearl Harbor

- U.S. prepared for expansionist Japan with inter-war development of amphibious and carrier operations and mobilization capability
- As a result, U.S. was well-positioned to enter the Pacific war quickly after the Pearl Harbor attack

- Sputnik

- U.S. had adjusted to bipolar world and was actively engaged in developing missile technology
- As a result, U.S. had a foundation on which to challenge the Soviets to be the first to the moon and gain an edge in space exploration





Historical Examples of Shocks (2 of 2)

❑ We have been less successful in responding to shocks when we have failed to fully account for related trends:

- Fall of Berlin Wall

- U.S. did not prepare for the end of a bipolar world in response to failing Soviet policies (e.g., Afghanistan, glasnost, technology competitiveness)
- As a result, the U.S. was taken by surprise by the onset of a unipolar world



- 9/11 Attacks

- U.S. considered terrorism a tertiary, law enforcement challenge to national security and therefore did not adequately account for the asymmetric capability of violent, extremist groups
- As a result, six years after 9/11 we are still adapting our strategies and capabilities to contend with non-state challengers



Strategic Trends (1 of 2)

- ❑ **The strategic environment is going to be shaped by the interaction of:**
 - Powerful and unavoidable physical trends
 - Demographics: massive population increases in poorest parts of the world; aging populations in much of the West, migration within and between states
 - Environmental pressures exacerbated by climate change
 - Increasing resource consumption & pressure – energy, mineral and basic needs – food & water
 - Globalization and economic interdependence
 - Rapid movement of peoples and ideas
 - Proliferation of technologies
 - Rapid transmission of shocks across the system
 - The realignment of the international system to reflect changing geopolitical reality
 - Rise of China and India
 - Power of resource providers
 - Alternatives to the West and the Western narrative



Strategic Trends (2 of 2)

- ❑ **These trends will drive, and subsequently be shaped, by developments in:**
 - Science & Technology
 - Interaction of five revolutions: nanotechnology, biotechnology, robotics, power, and information technologies
 - Growing S&T capacity and capability worldwide
 - Culture, Identity & Governance
 - Globalization is transforming peoples lives, opportunities, fears and expectations fast
 - Changing perspectives between elites and peoples, haves and have-nots, states and regions
 - Renewed importance of societal anchors – e.g., religion – in times of rapid change & uncertainty
 - Conflict
 - WMD proliferation, technology proliferation to states, terrorists & criminals
 - Complex interstate conflict across domains and with new means
 - Continued asymmetric opportunity for states, terrorists & criminals

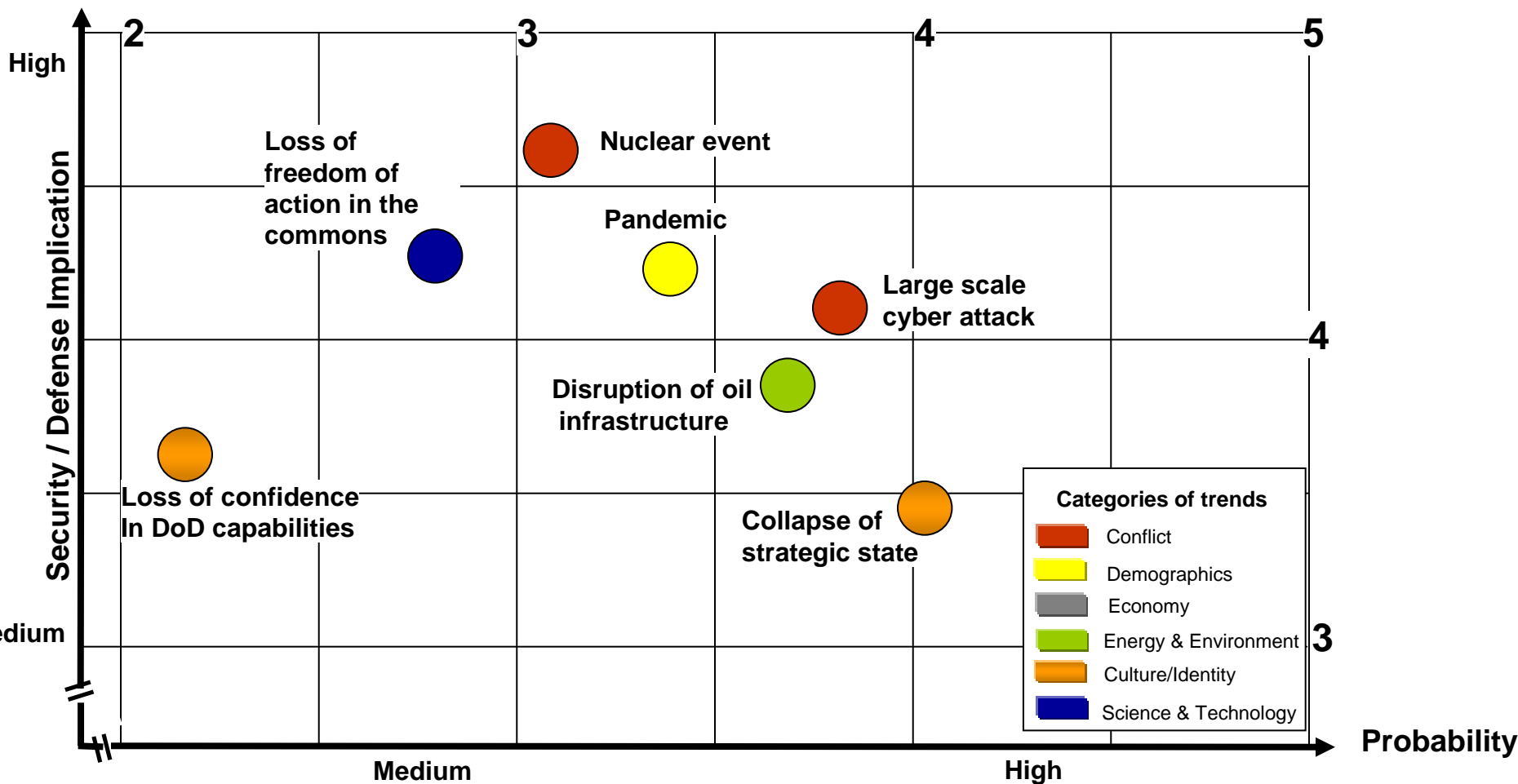


Trends in Action: Food Crisis Example

- ❑ Climate / Environment: Extended droughts in Australia and parts of Asia are limiting crop yields.
- ❑ Energy: Shortage exacerbated by diversion of crops for biofuels. Fertilizer costs forcing cutback in acreage under cultivation.
- ❑ Economics Trend: Growing economies in China and India are increasing their buys of imported food that drives up prices and demand elsewhere. Cash-strapped governments must invest more in food subsidies to cover increase in costs.
- ❑ Governance: Increasing number of riots, public demonstrations, and hoarding as prices of staples continue to climb.
 - Haitian rioters forced PM to resign. Governments in Thailand, China, Vietnam, Argentina, Kazakhstan have imposed restrictions on food exports.



Potential Strategic Shocks



• Relative impact and likelihood out to 15 years



Key Strategic Risks & Opportunities

RISKS:

- A complex interstate war**
- State or regional collapse in areas of strategic importance**
- Major terrorist or criminal attacks**
 - WMD or new technologies
- Disruptive or unforeseen impacts of technologies**
- Pandemic**
- Catastrophic climate change**
- The speed and scale of the challenges**

OPPORTUNITIES:

- Shared interests and common risks facilitate co-operation**
 - Improved understanding of risk and risk management
 - Shared awareness, strategic planning and leadership
- Building partners' capacity and capability**
- Improved decision-making**
 - Supported by fusion of traditional intelligence, "hard" and "soft" sciences
 - Leverage organizational and operational flexibility, information management
- Strategic communications for a complex 21st century**



Way Ahead

- ❑ **Work with intelligence & futures community**
 - Generate trends evidence base
 - Focus on areas of uncertainty and risk
- ❑ **Continued outreach to develop shared vision of future security environment**
 - DoD, USG, bilateral and multilateral engagement
- ❑ **Improve and refine T&S methodology**
 - Risk management framework that bridges short- and long-term priorities
- ❑ **Develop approach to strategic shocks**
 - Refine understanding of specific shocks and their short- and long-term implications
 - Identify options for sensible activity now
 - Contingency policies and planning, shaping activities

Questions and Comments?

