INNOVATION, LEARNING AND RESILIENCE in COVERT ORGANIZATIONS

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1. ABSTRACT

We have become more adept at disrupting terrorist networks; nevertheless, adversaries continue to learn, adapt, posing an enduring threat to the security of America and its allies and partners.

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Organizing principles and mechanisms of learning and innovation in complex adaptive systems are applied to covert organizations to develop a theoretically grounded, system dynamics framework for understanding their capacity for adaptation and resilience, and implications for intervening learning and diffusion of innovations. This framework suggests different learning and innovation mechanisms depending on organizational structure, resulting in different capacities for resilience. Empirical data on terrorist organizations corroborates the predictions of the conceptual framework.

3. HYPOTHESIS

Different innovation mechanisms and adaptive capacities of terrorist organizations, their operative timeframes, and resiliency can be explained by network structures and their influence on complex system dynamics.

4. INNOVATION AND LEARNING IN TERRORIST ORGANIZATIONS

Goals
- Provoke external actors
- Polarize society
- Recruit supporters
- Compel governments

Innovation Mechanisms
- Evolution over generations
- Learning through imitation & information synthesis
- Adaptation through adoption or substitution
- Punctuated Equilibrium

5. Conclusions

Success by covert organizations breeds countermeasures. Resiliency requires innovation in the face of countermeasures. Two countering feedback loops compete with innovation drivers to strongly influence basins of attraction for terrorist organizations: (1) Need for secrecy and (2) Need for recognized successes (failure intolerant). Data trends affirm the conceptual model for structural influence on innovation mechanisms. Effective countermeasures must decrease, not lead to an increase in, network resiliency. Next steps: Process tracing in longitudinal, comparative case studies.