

# Complex Unbounded Problems and Emerging Threats in the 21<sup>st</sup> Century

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My research focuses on the history, present shape and future possibilities of ‘Complex Unbounded Problems’ or major disruptive events of natural, political, economic, technological or military provenance.

This is a nascent but rapidly advancing area of activity in both research and policy, but is scattered across disciplines, profession domains, and jurisdictions. Considerable interest in my studies has been shown by major research and international policy groups around the world, and this interest is intensifying in light of recent, major disaster events.

As new element of the over arching theory of Disaster Science the CUP inquiry draws together a number of hazard management analogues. CUP research likewise takes into account the core narratives of a number of risk and threat management schools of thought;

- 1). High reliability organisations, (NASA, Homeland Security Agencies, National Civil Defence Units, National and State Policing, Fire and Emergency Services, Intelligence analysis centres),
- 2). Disaster management agencies, (Australian Federal and State EMA’s),
- 3). International Disaster Science research centres and institutes,
- 4). United Nations Agencies and Clusters (Multidimensional Peacekeeping and Complex Humanitarian Emergencies)

CUPs research takes into account the emergent characteristics of threat elements which exceed routine PRRR capabilities. Ink stain progression of CUP effects can be considered a rudimentary analogue in visualising the border exceedance characteristics CUP events possess either as a sole event or as a coalesced set of events.

CUPs are presented as occurring in three broad categories – natural, technological and coalesced.

It is the exceedance characteristics that are of significant interest to this particular research effort.

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