

A Harmonization Marketplace: C2 goes social

Erik Bjurström, Mälardalen University, Sweden; erik.bjurstrom@mdh.se

Tommy Enkvist, Swedish Defence Research Agency (FOI)

Git Roxström, Swedish Defence Research Agency (FOI)

An outcome of the Multinational Experiment Series **MNE6** Objective 1.3 "Harmonization of efforts", presented at:
15th ICCRTS, June 22-24, 2010, Santa Monica, CA "The Evolution of C2: Where have we been? Where are we going?"

The evolution of C2

Where have we been?

- Assuming states, enemies, targets, external measurement
- CoG, internal coherence, C2 as information & decision-making, C2 as information systems
- Expecting common situational picture/awareness
- Cognitive or technical analytical focus

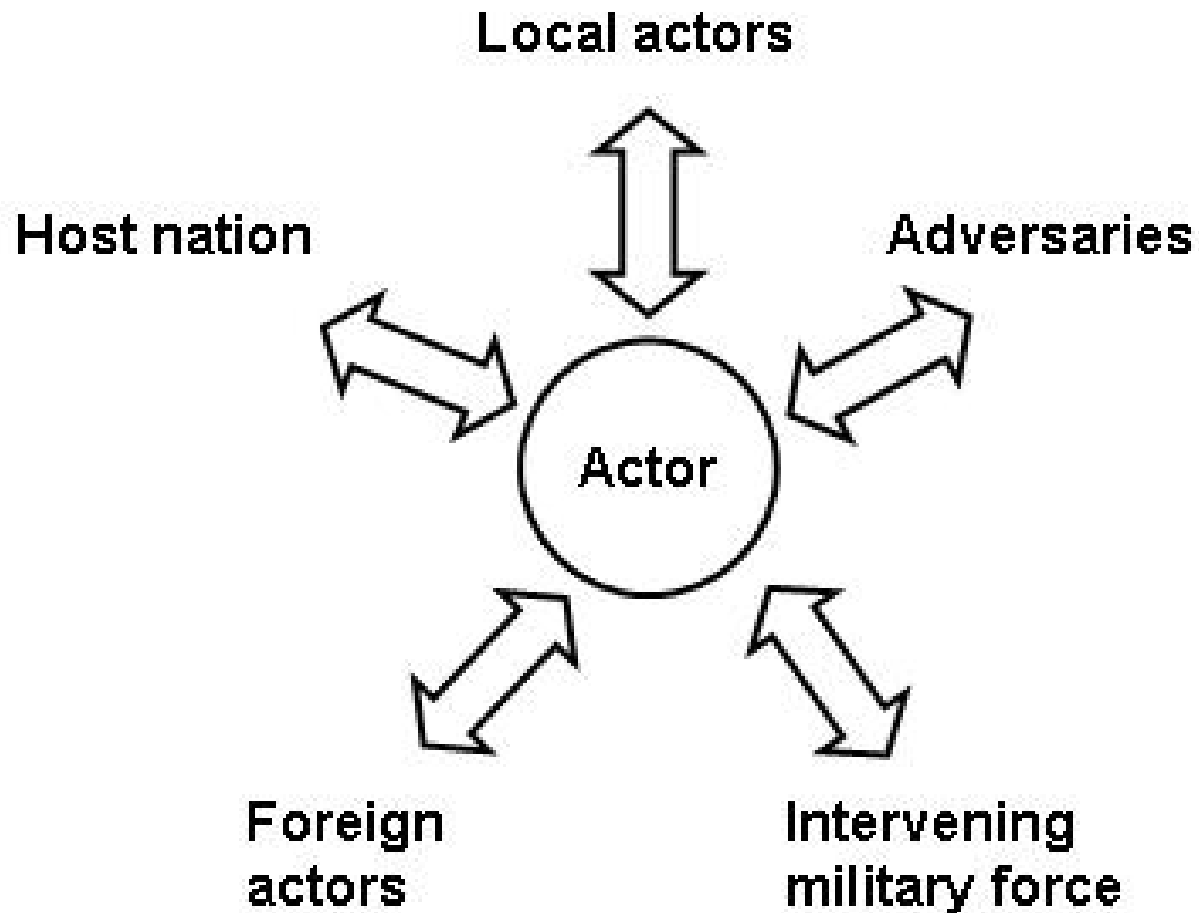
Where are we going?

- Diversity of actors, emergent order, distributed interpretation
- Dispersed phenomena, loose internal coupling, C2 as social interaction, C2 as disintegrated command echelons, no unity of command
- Exploiting distributed selectivity of attention
- Increasingly social & interactive focus

A Harmonization Marketplace

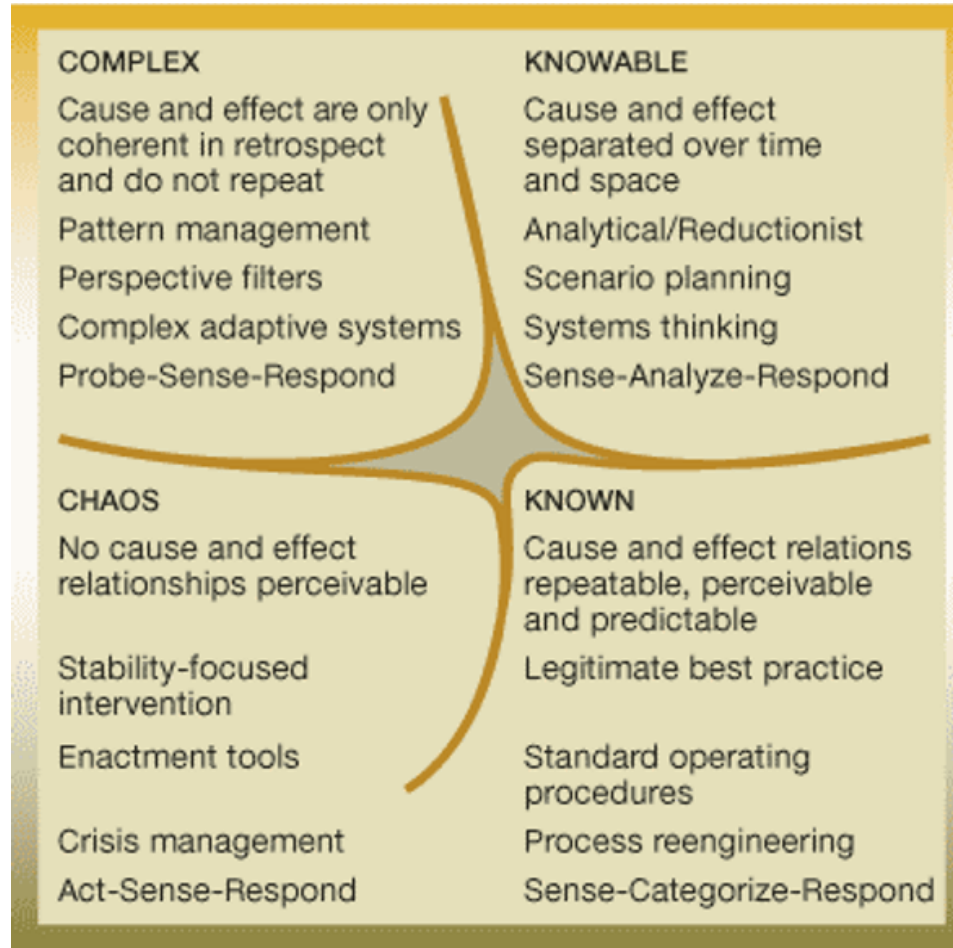
- We're getting in there **without possibility to know**
- Our observation & action will **influence** the development
- **Actors are active** in their own value creation, interpretation and reflection
- Society isn't stable, culture will help understand, but **not predict** behavior
- Actors will **pursue goals** that are rational from their point of view, possibly having different and changing roles in the development
- Actors in the value constellation will often obtain legitimacy through **autonomy**, i.e. neither unity of command, nor informal leadership will hardly bring uniformity
- The reach and depth of **C2 systems will be socially defined** through the reach of trust, i.e. the social dimension defines the technical one
- Abstract notions of time & space will focus on analysis of CoG of highly integrated systems. **Concrete** notions of meaningful timing and face-to-face meeting is congruent with a **hearts & minds** doctrine

Value constellation & the role of agency



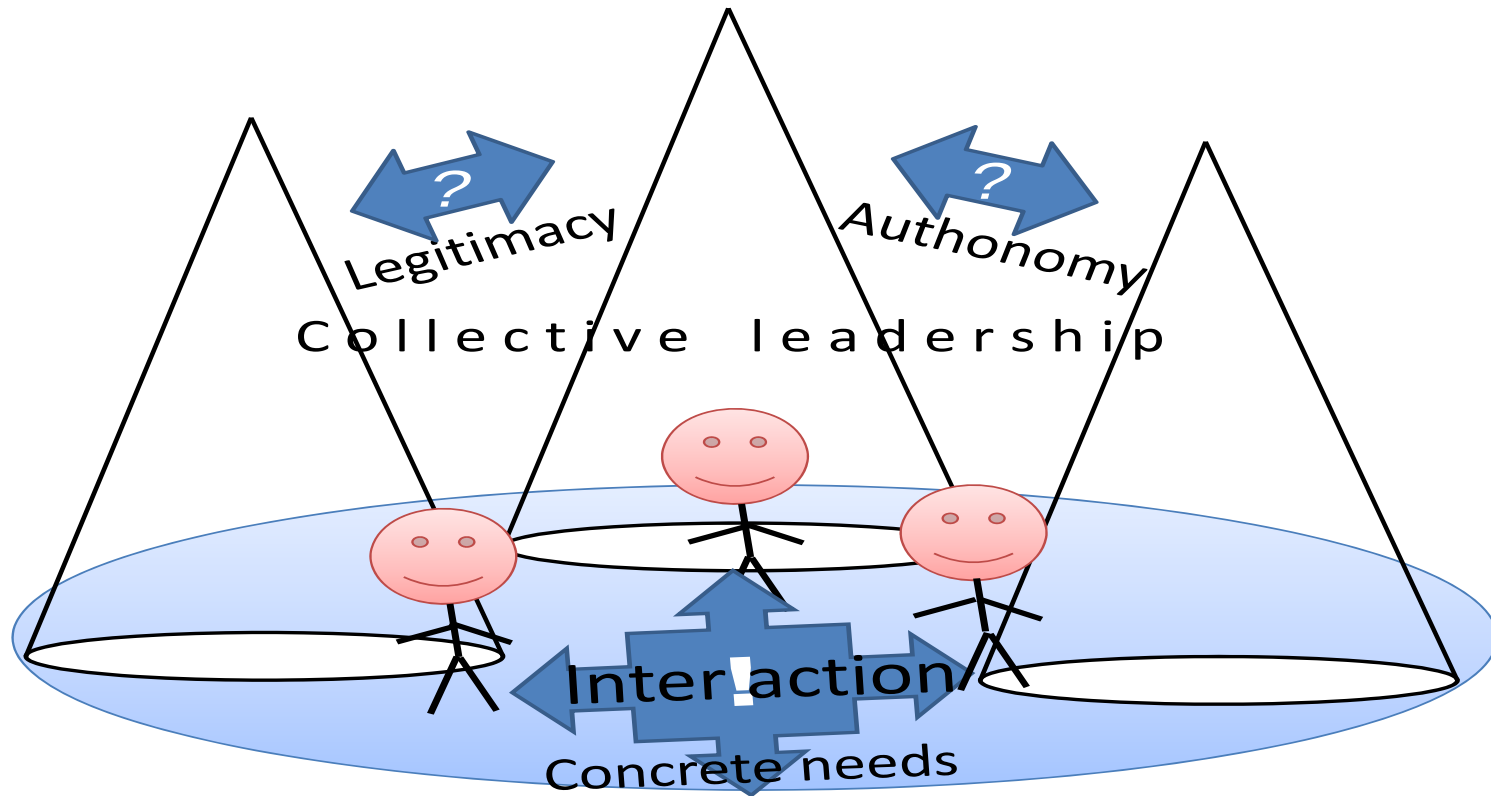
after: Normann & Ramirez (1993)

Emergent order: the challenge of orientation



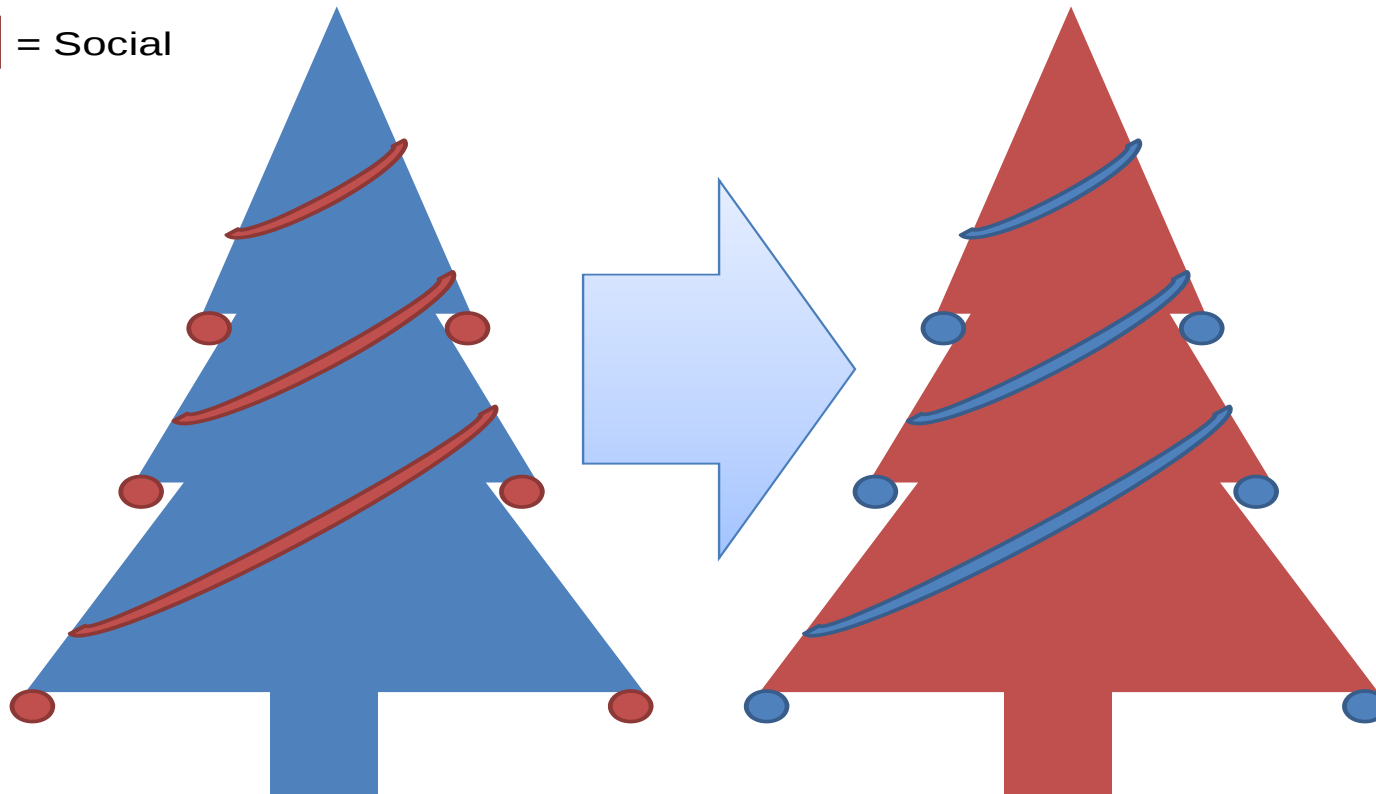
Kurtz & Snowden (2003)

Harmonization-through-interaction



The social logic of C2

 = Information & decision-making
 = Social



Notions of Time & Space

	Abstract space	Concrete Space
Abstract Time (clock time)	Chronochoric (episteme) e.g. mathematics, logic, economics	Chronotopic (techne) e.g. business management, logistics
Concrete Time	Kairochoric (techne) e.g. visual media	Kairotopic (phronesis/mantike) e.g. ethic holism, environmentalism, humanitarian values

Implications

- **Social theory** is needed to address current C2 challenges in S&R operations within a CA
- Structure emerges through **interaction**
- **Attitudes** that open up for constructive interaction are needed
- A better **metaphor** than hierarchical, mechanical notions of control
- The "**marketplace**" - autonomy, heterarchy
 - Transactions/deals one-by-one (don't push it!)
 - "What's in it for me?" (understand interests)
 - The power of inclusion/exclusion (learn identities)
- **Challenge C2 theory** (technical/cognitive/positivist)
- **Methodological** implications
- **Diversity** as a resource for knowledge-creation