Combat decision making - What contributes to decisionmaking quality?

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Purpose with our research

• Contribute to the scientific debate on “how to win battles?”

• Swedish National Defence College’s War Studies Department in a multi-year research project have begun to study how can “tactical ability” be understood and trained in military officers?
Outline...

• “Tactics” and “tactical ability”?
• How can tactical ability be studied?
• What characterizes combat command?
• What is the “dimensioning process” in combat command?
• How can quality be measured in combat command?
• Conclusion: How can combat command be studied and trained – is our approach valid?
Definitions of “Tactics”

• From Greek: *taktikē*, the art of deploying a military force in battle

• Clausewitz: “*tactics teaches the use of armed forces in the engagement*”; *strategy the use of engagements for the objective of the war*”.

• Swedish Doctrine: “*the ability to use military forces in conducting battle or in support of battle*”.

• Common language: Tactics as an (intended) course of action
Tactics and tactical ability

Our definition:

• Tactics are action patterns in combat and confrontation, used by a military commander in order to accomplish a mission

• Tactical ability: the ability of a military officer to use military forces in combat

• Involves both thinking and acting
How can tactical ability be studied in military commanders?

- Knowledge, experience and skills...
- Literature: **Tactical ability** requires rapidity of thought, willingness to take risks, dare to act and take initiative, logical and analytical skills, understanding patterns combined with intuition and creativity, not to mention courage.
- **Tactical ability** can be studied through combat command decision-making
The nature of combat command

• Sun Tzu and many others: Combat command is above all characterized by the duel, or in other words, by the fact that two (or more) forces are trying to win over the other(s).

• Time-pressure, uncertainty, complexity etc...
The nature of combat command

Fuller (1926) and Storr (2009):

• “There are three essentials in fighting – namely, how to guard, how to hit, and how to move.”

• “…All other activities support those functions.”

Army regulations:

• The Basic elements of combat: Strike – Move – Protect

• Basically one could argue that combat command is about how to combine these three basic elements in time and place (e.g. Leonhard, 1994).
Our definition of combat command

• *Combat command* is about how to combine the basic elements move, strike and protect, in space and time, in order to accomplish the mission.

• Tactics are *action patterns in combat* and confrontation, used by a military commander in order to accomplish a mission.

• Action patterns consist of: *moving, striking and protecting*
The combat command & control process

- In military doctrines, tactical command and control is often divided in four main processes:
  - planning – execution – assessment – evaluation

- Dimensioning process?

- US Army (2003) is very clear about this - a bad plan can be saved by skillful execution but it does not work the other way around.

- Handling the duel is the most essential part and should be the base for studies
How to measure quality in combat command?

- According to outcome/result?
- According to process?
- According to application of principles/laws?
How to measure quality in combat command!

• It is not possible in advance to specify a sequence of actions that will result in victory.
• The result depends on timing. → Outcome quality
• Combat is inherently antagonistic and undetermined!
• Still some general *principles* seem to have at least probabilistic impact on the outcome of battle.
Quality and principles

Are there “principles” on how to win in combat?
• Biddle (2004): The Modern System
• Brehmer & Thunholm (2011): Dynamic Decision-making
• Collins (2010): A comprehensive dynamic model of battle victory and defeat
• Leonhard (1994): The relationship of time to warfare
• Palmgren (in press): Six levels of tactical abilities
• Storr (2009): Four probabilistic success factors for winning campaigns
Biddle: The modern system

• “The key elements of a modern-system offensive tactics are cover, concealment, dispersion, small-unit independent maneuver, suppression, and combined arms integration.”

• For the offender: combine these key-elements in order to successfully break through enemy lines and move the attack deep into enemy rear areas without risking premature culmination, and in the same time prevent the defender from successful counter-attacks.

• For the defender: preserve force and be able to commence successful counter-attack with strong reserves against the attackers break-through.
Storr: Four factors.

- Storr studied factors related to victory and defeat in land campaigns.
- Four factors dominated the probability of success at campaign level:
  - Surprise
  - Air superiority
  - Aggressive ground reconnaissance
  - Shock.
- “... the impact of shock and surprise can be seen to be a consequence of rapid, almost chaotic changes of the situation...”
Brehmer: Dynamic Decision-making

- The importance of making decisions in “real time”
How to study and train tactical ability in officers?

Our approach:

• Focus on execution (based on initial planning)

• Develop a valid two-sided combat scenario (Bn-Bde), a computer-based wargame

• Use the scenario in courses in tactics – single cdr or command teams

• Use an outcome based quality criteria: Win/lose

• Adapt general quality criteria to the specific scenario.

• Correlations outcome – application of q-criteria?

• Develop and correlate individual ability measurements related to tactical ability – who is a winner?

• (Recruit winners)
Questions?

• To get our draft paper: peter.thunholm@fhs.se