



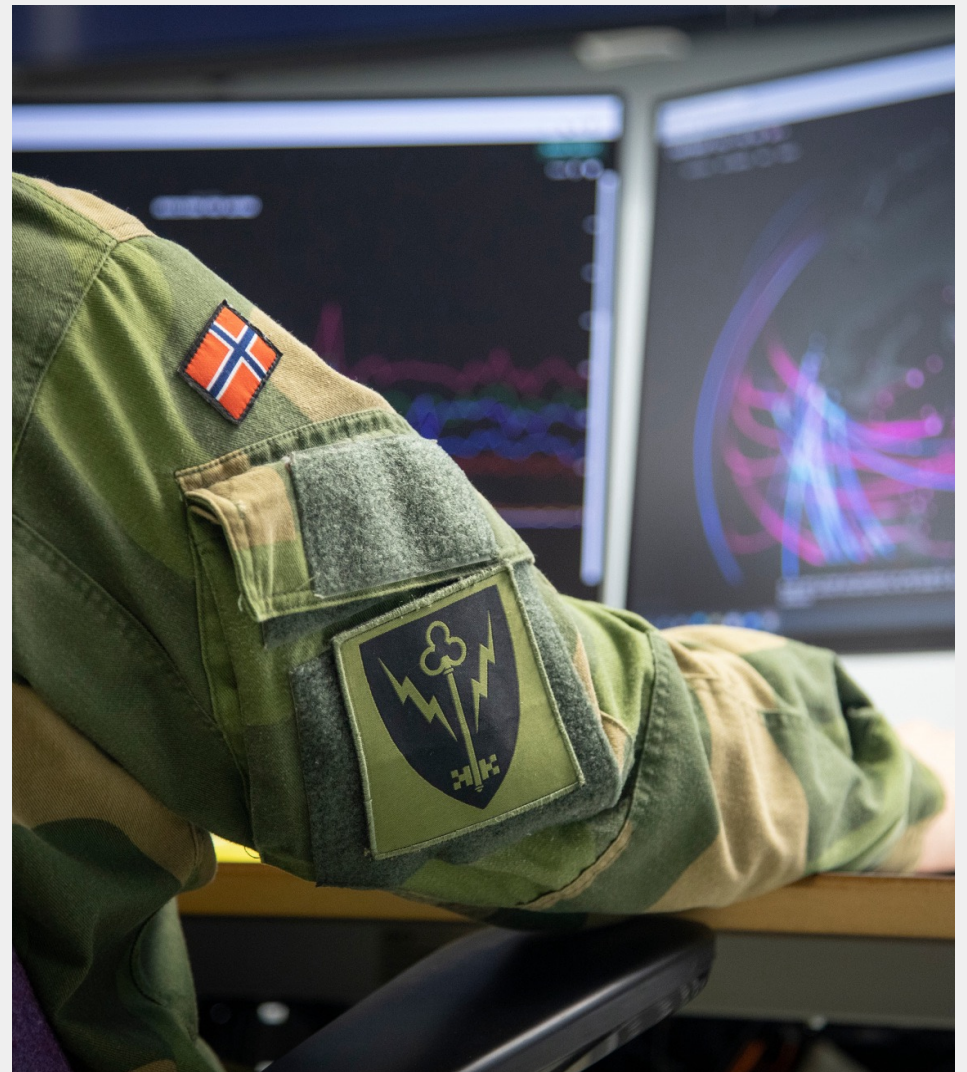
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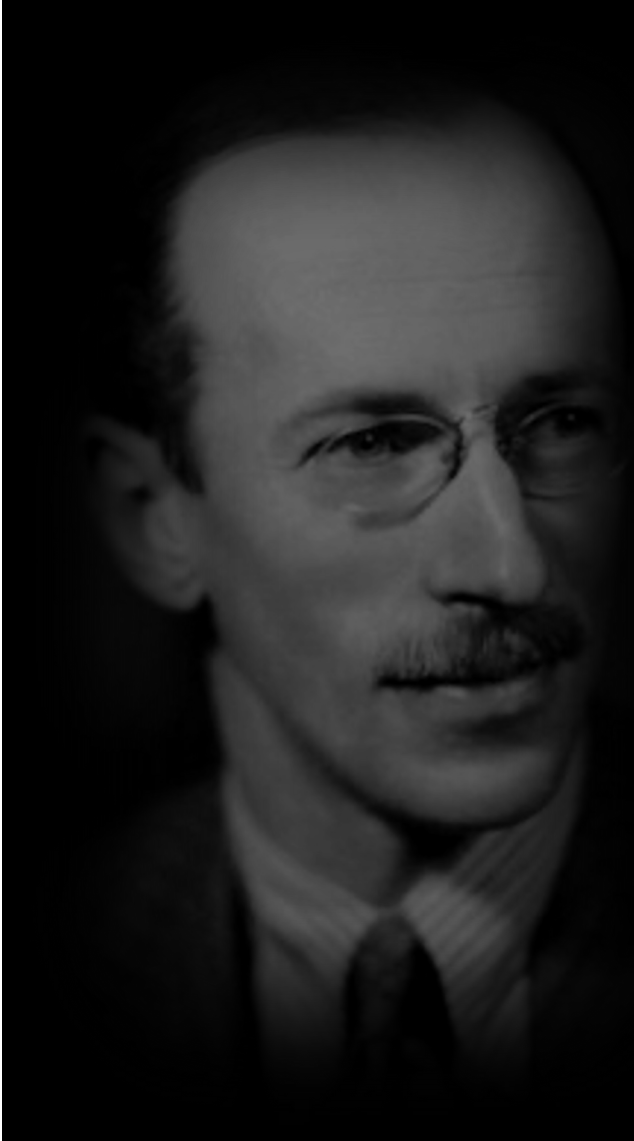
*Norway's Defence Transformation:  
Network-based defence - Lessons for  
future Defence Innovation*

*Lt. Col. Stig T. Aannø  
Norwegian Defence University College*

**FORSVARET**

Ugradert – kan deles eksternt med godkjenning fra informasjonseier. Skal ikke publiseres åpent.



A black and white portrait of B. H. Liddell Hart, a man with glasses and a mustache, wearing a suit and tie. The portrait is positioned on the left side of the image, partially overlapping the text.

*"The only thing harder than getting  
a new idea into the military mind is  
to get an old one out."*

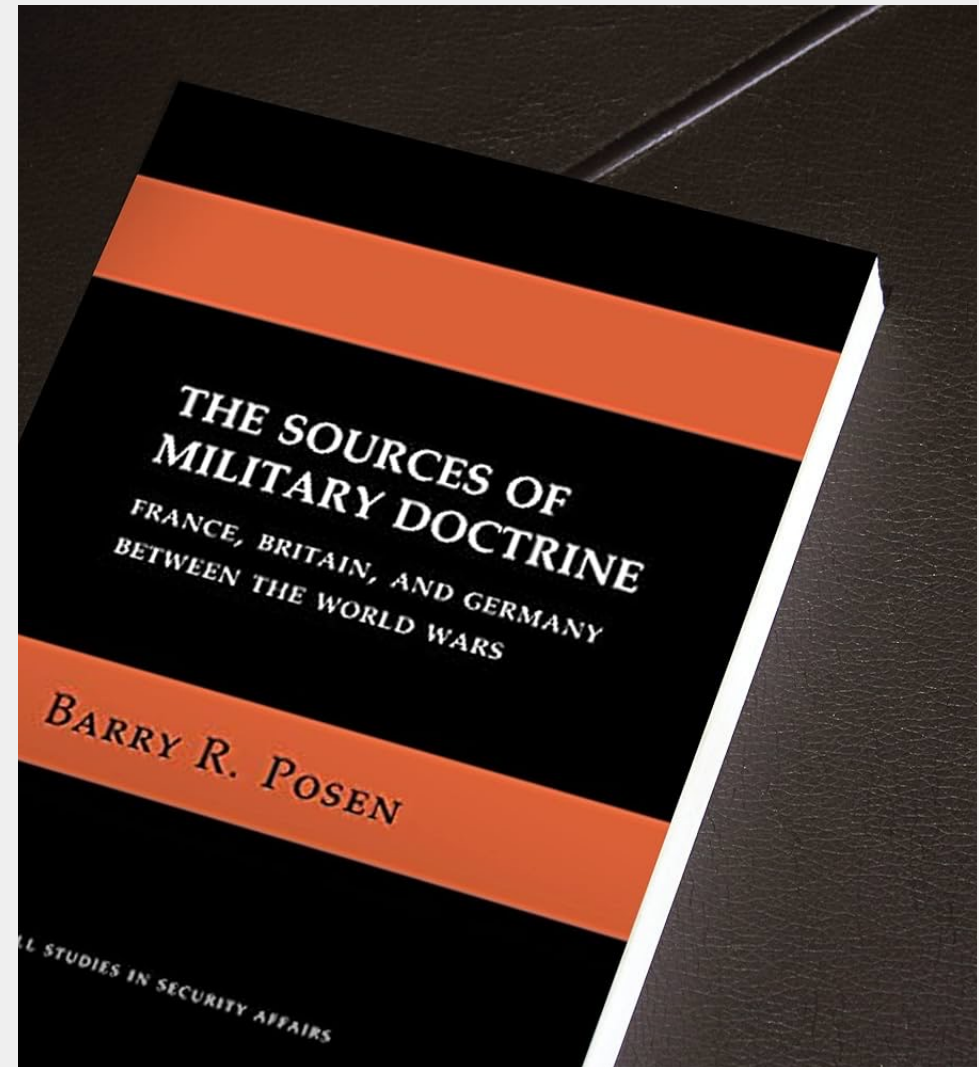
B. H. Liddell Hart

## *Military Innovation Studies*

- Origin: Barry R. Posen (1984)
- Military Innovation Definition:

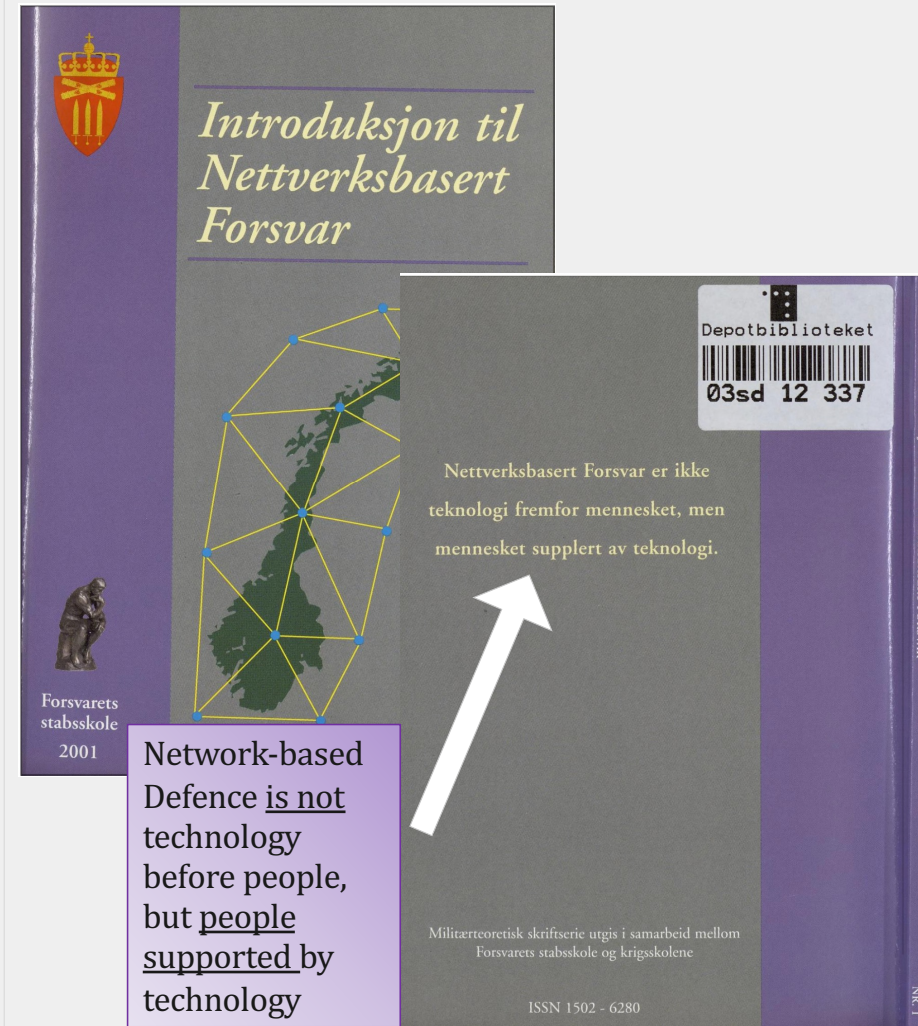
*“ [...] a major change that is institutionalized in new doctrine, a new organizational structure and/or a new technology”*

T. Farrel



## Case study: Network-based Defence 2001 - 2018

- Most comprehensive transformation after WWII
- Idea: A networked force can function like a network-organisation
- Key words: decentralisation and self-synchronization, C2-Agility

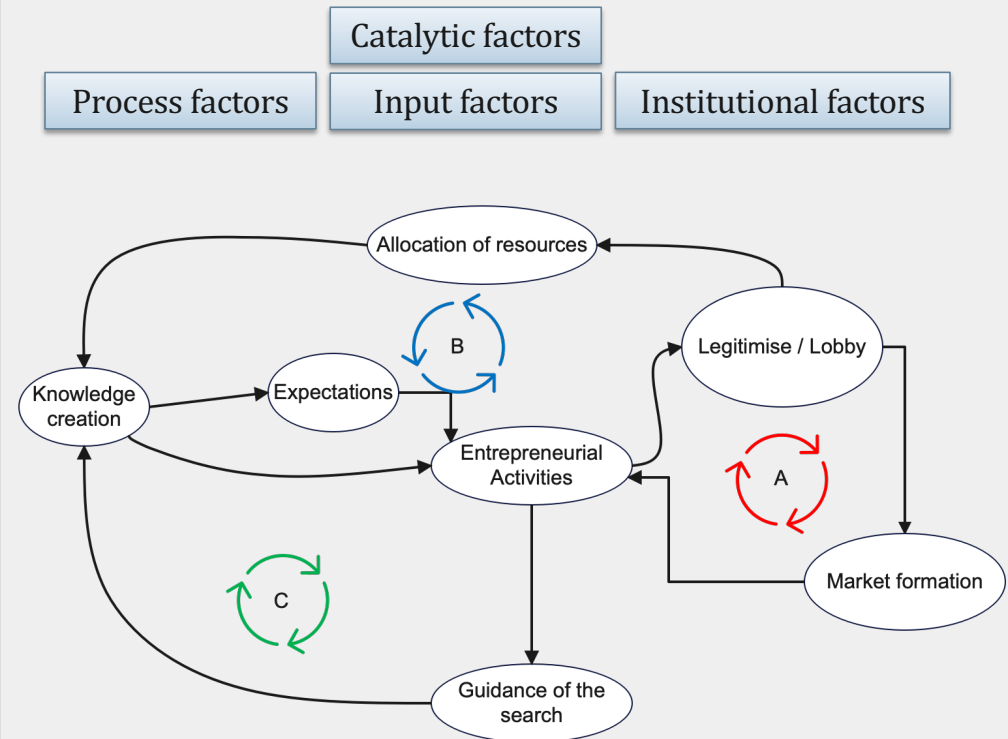


Network-based Defence is not technology before people, but people supported by technology

## *Analytical framework: Systems Innovation*

- Focus on “the machine that builds the machine”
- Small states lends itself to studying the dynamics
- Need to reflect the special context military organizations find themselves within
- Empirical evidence of the usefulness of the framework

Cheung. (2021)



Hekkert et al. (2007)

## *Methodology*

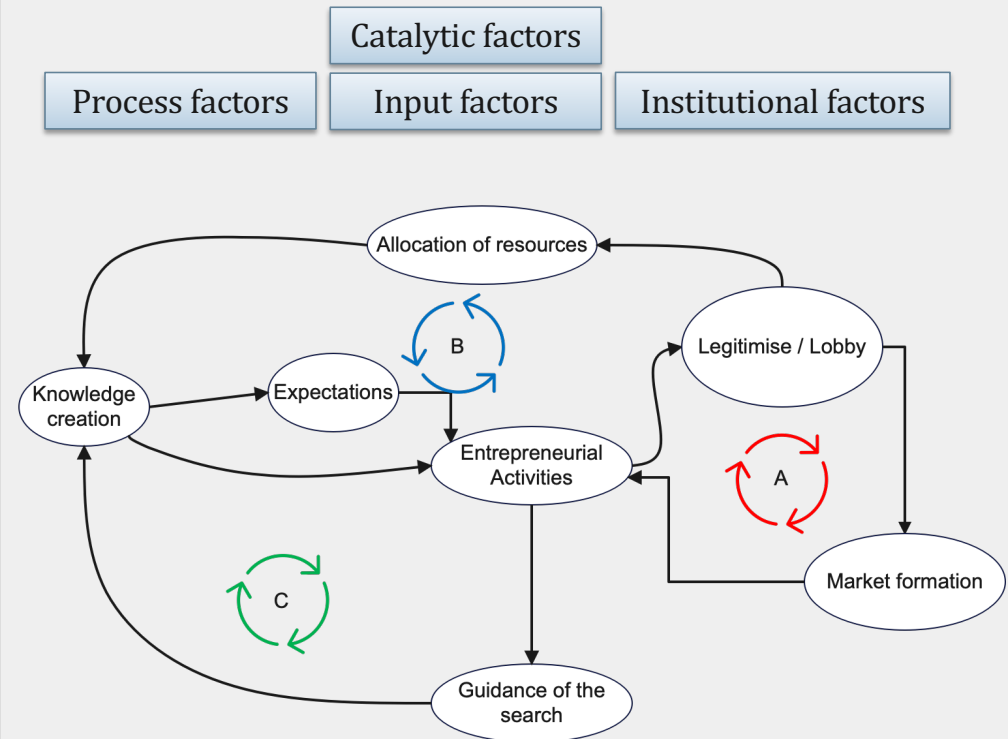
- Qualitative study
- Case study research
- Data:
  - Interviews
  - Archives
  - Doctrines
- Coding of data - guided by the analytical framework
- Identification and synthesis of patterns



## Preliminary findings

- *Knowledge creation and - diffusion - dysfunctional (C)*
- *Legitimation / Lobby provides Allocation of resources, but only to a limited degree Market formation (A).*
- *Contributes to a fundamental lack of Entrepreneurial activities within the military organization.*
- *Positive outcomes can be observed in isolated areas where *Entrepreneurial Activities* can be observed over time.*

Cheung. (2021)



Hekkert et al. (2007)

Thank you for your  
attention!

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