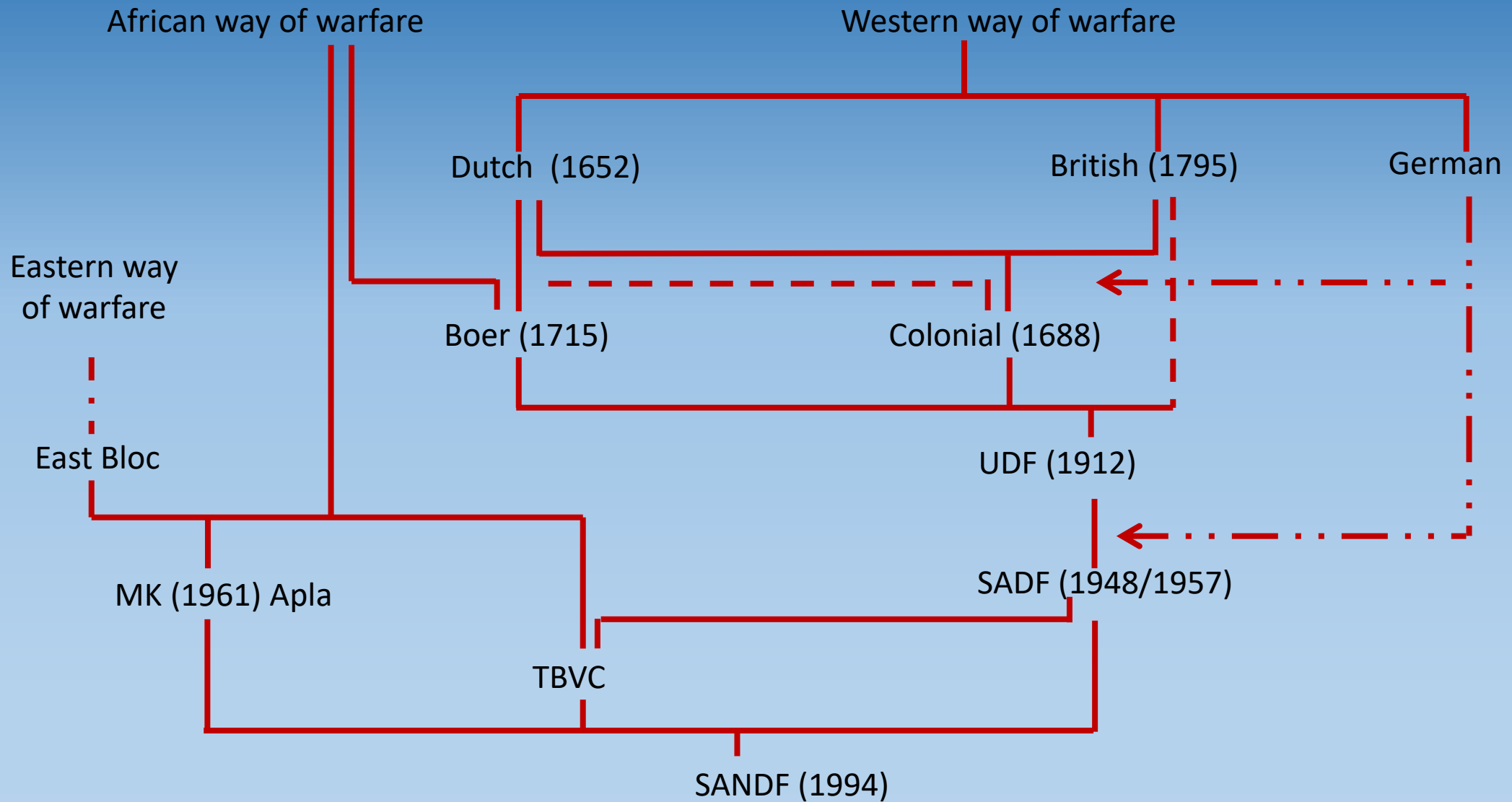# Change and Innovation in the SA armed forces: an historical perspective

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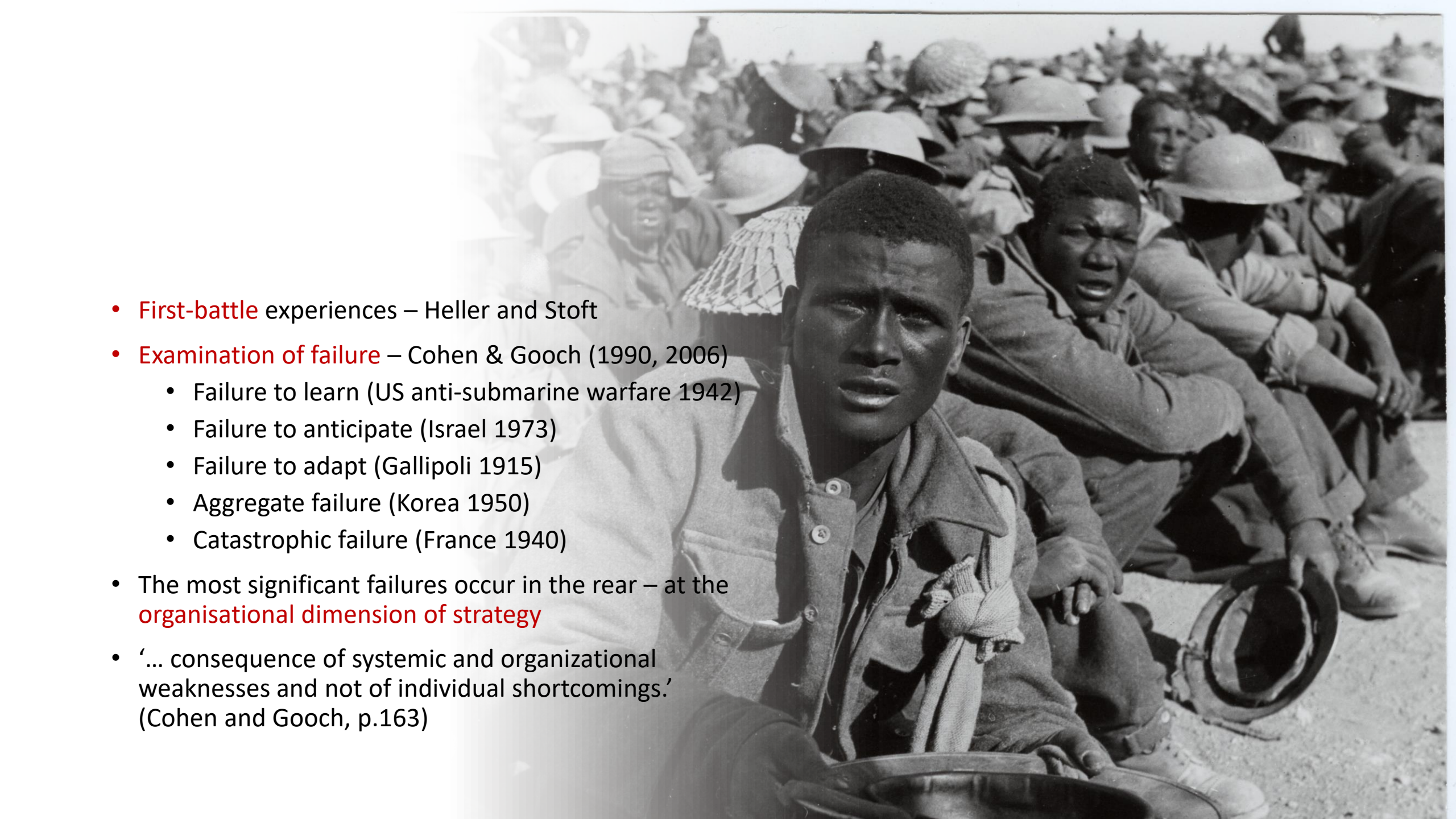
Figure: The complexity of our case; the development of a South African way of war

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Introduction

- Four essential qualities for armed forces (Vuono, pp.58-63)
  - Versatility – meet a wide array of challenges while drawing from a smaller reservoir of forces
  - Deployability – project appropriate combat power rapidly whenever interests are threatened
  - Lethality – fight and win the nation's wars
  - Expansibility – grow to grow rapidly in response to a massive outbreak of hostilities
- Change and Innovation – two very different things
  - Innovation – aims at enhancing these qualities
  - Change – can affect these qualities negatively

- First-battle experiences – Heller and Stoft

- Examination of failure – Cohen & Gooch (1990, 2006)
  - Failure to learn (US anti-submarine warfare 1942)
  - Failure to anticipate (Israel 1973)
  - Failure to adapt (Gallipoli 1915)
  - Aggregate failure (Korea 1950)
  - Catastrophic failure (France 1940)

- The most significant failures occur in the rear – at the organisational dimension of strategy

- '… consequence of systemic and organizational weaknesses and not of individual shortcomings.' (Cohen and Gooch, p.163)

Relationships in Innovation

Relationships in Innovation		
Context	Technological change	Strategy
Procedures	Operational change	Operations
Equipment	Technical change	Tactics

Beyerchen (1996), p.268.

South Africa since 1902

- Within the space of little more than a century:
  - Five wars
  - Five "peacetime" periods
  - Three amalgams involving intensive, post-conflict, organisational change
- Continuous, often rapid and fundamental change
- Occurring as a succession of historical waves
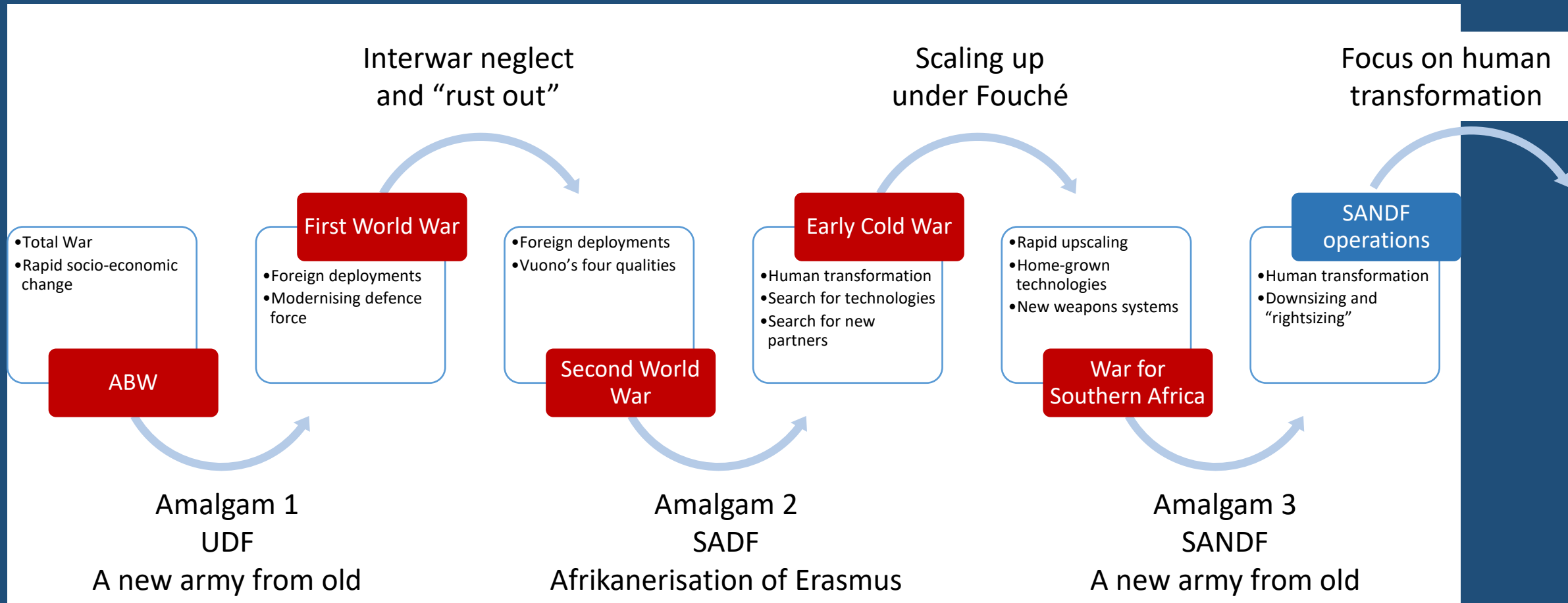
Murray and Millett

The strategic framework

Organisational factors of the institution

Doctrinal framework of the services

The Strategic Framework

- The general strategic framework within which the UDF had to function

- Strategic Culture
    - The impact of the last war on the strategic environment and preparations for future conflict
    - How military and political leaders viewed potential enemies?
    - What the services viewed as their overall strategic mission?
    - How they conceived the next year, five years, ten years?

- The domestic political environment of the services
    - Issues of funding
    - Access to technological resources
    - Congruence between political objectives and force capabilities

Organisational factors of the institution

- National cultural preferences which influenced the services' preparations for war
    - Lack of common vision regarding threat assessment
    - Role of allies
    - Force design and size

- Military Culture
    - The efficacy of the services' internal administration in accepting or discouraging innovations
    - Differences in the patterns of administration between the services
    - The role of professional military education in the capacity to adapt

Doctrinal framework of the services

- Commitment to the "problem" of doctrine and of their rigour in drawing and learning from the experience of past conflicts
  - Force design and size
  - Probability of war
  - Anticipated theatres of operations
  - Immediacy in distance and time
  - Length of the conflict
- The services' evaluation of their doctrine considering their potential opponents
- The seriousness with which they incorporated doctrinal principles into training

Constraints upon military innovation

- External
  - Pacifism and anti-militarism
  - Tight defence budgets
  - Weak strategic culture
- Internal
  - Misuse or abuse of history
  - Rigidity – opposition to change by traditionalists (Beyers after 1912; Andries Brink in the 1930s; Erasmus after 1948)
  - Poor budgeting

Drivers of military innovation

- Specificity

- Strategic and Military Culture

- Rapid pace of technological change

- Vast sums spent on military research

- Robust evaluation of performance – organisational and weapons systems

- 'The fusion of technology and potent management skills that mobilise mass organisations makes military change inevitable' (Murray and Millett, p.1.)

Maj Gen J.J. 'Jack' Collyer –one of only a few South African interwar theorists but he largely missed the point

Conclusion

- We are again in a time of increased political, strategic, and technological uncertainty

- 'The urgency of conflict accelerates the pace of innovation' – James Le Fanu
  - The diversity of the paths of innovation
  - Carried along by a strong undercurrent of ideas and events
  - State funding
  - Central direction of research – but without political straitjacketing

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