

*How to include the mental component?*

# Scenario development for Crisis Response Operations

TNO Defence Research



Bob Barbier and Marian Voskuilen



# Contents

- Why scenario development for Crisis Response Operations?
- Why description of the mental component?
- How to describe the mental component?
- Results
- The way ahead



# Aims of scenarios

- **Common view of future operations and tasks**
  - Reference for building an Royal Netherlands Army (RNLA) equipped and trained for tasks
- **Basis for analysis/research within**
  - Procurement process
  - Doctrine development process
- **Facilitation interdisciplinary co-operation**
  - OR-researchers
  - Policy makers
  - Military experts



# Scenario requirements

- Results supported by the RNLA
- Generic
- Realistic
- Accessible for users

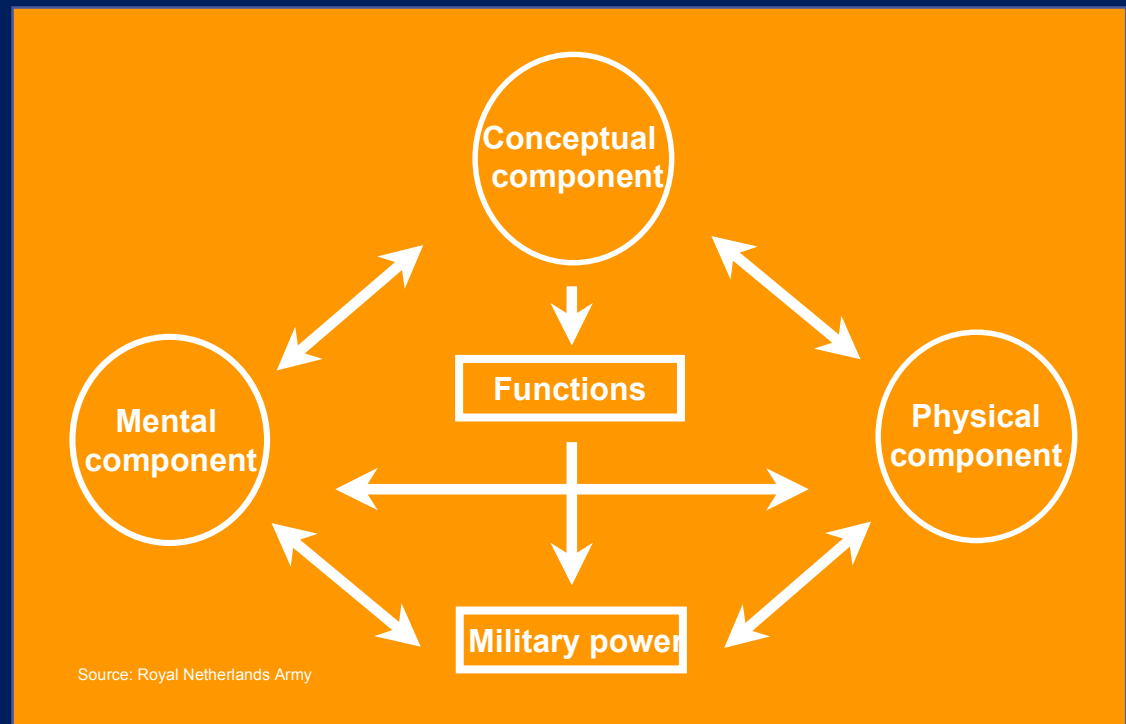
**Thus: RNLA scenario development in co-operation with TNO**



# Why description of the mental component? (1)

## Development of military power: components

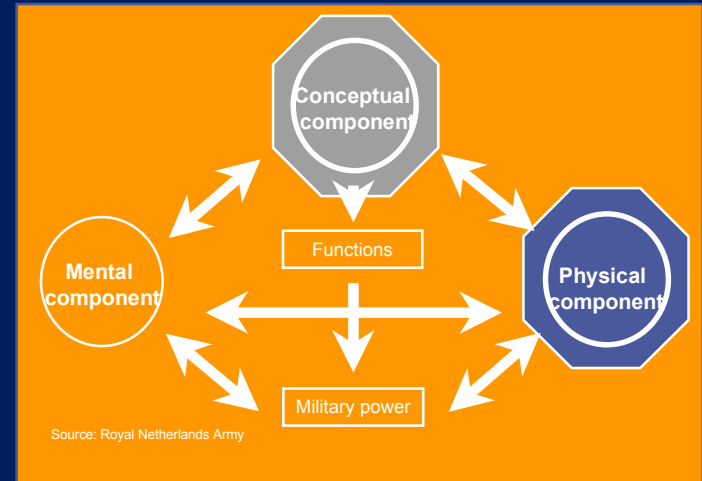
- Conceptual
- Physical
- Mental



# Why description of the mental component? (2)

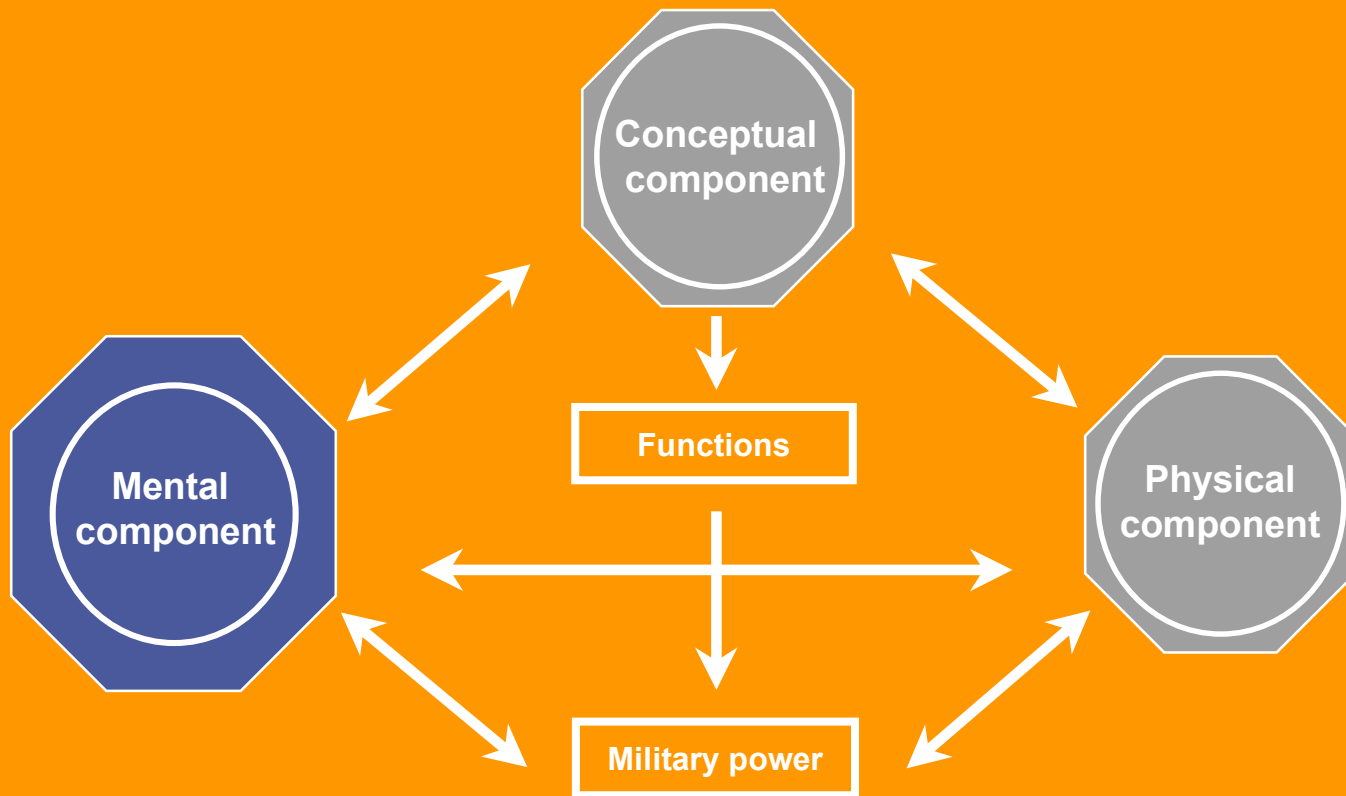
## Regular operations

- Physical component adversary
- Materiel and unit driven
- Description by war-gaming



## Irregular operations

# How to include adversary's mental component in a scenario?



Source: Royal Netherlands Army



# Case study: Peace Enforcing

## Starting points

- Irregular, asymmetric conflict
- Peace Enforcing

## How to include the mental component?

- Preparation for scenario characteristics
- Confrontation and collaboration analysis (CCA)





# Case study: Preparation

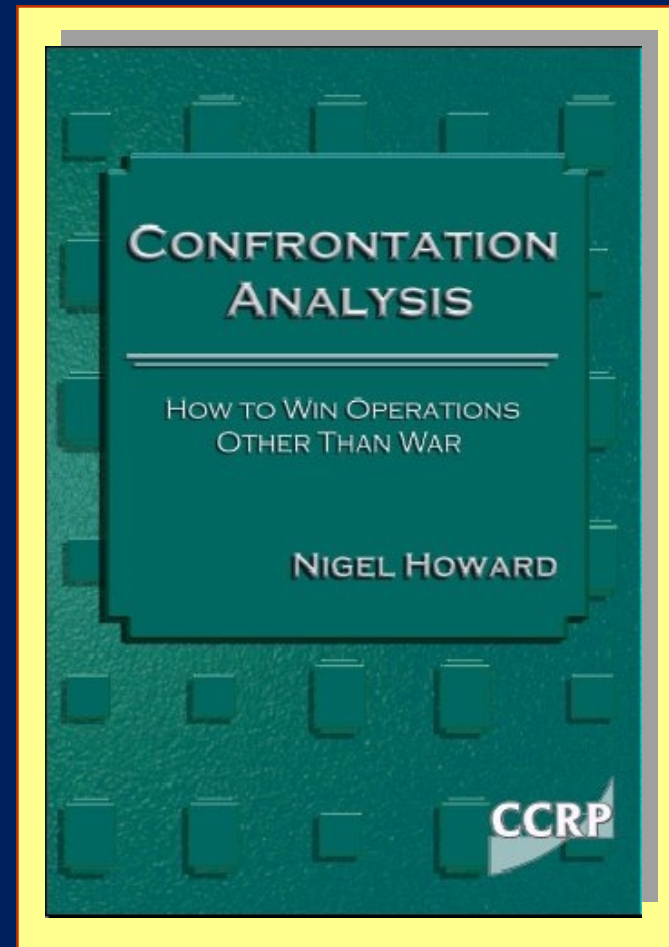
- **Brainstorm scenario characteristics**
- **Grouping characteristics in sub-classes**
- **Sub-classes used to fill in scenario**

**Including the mental component...**

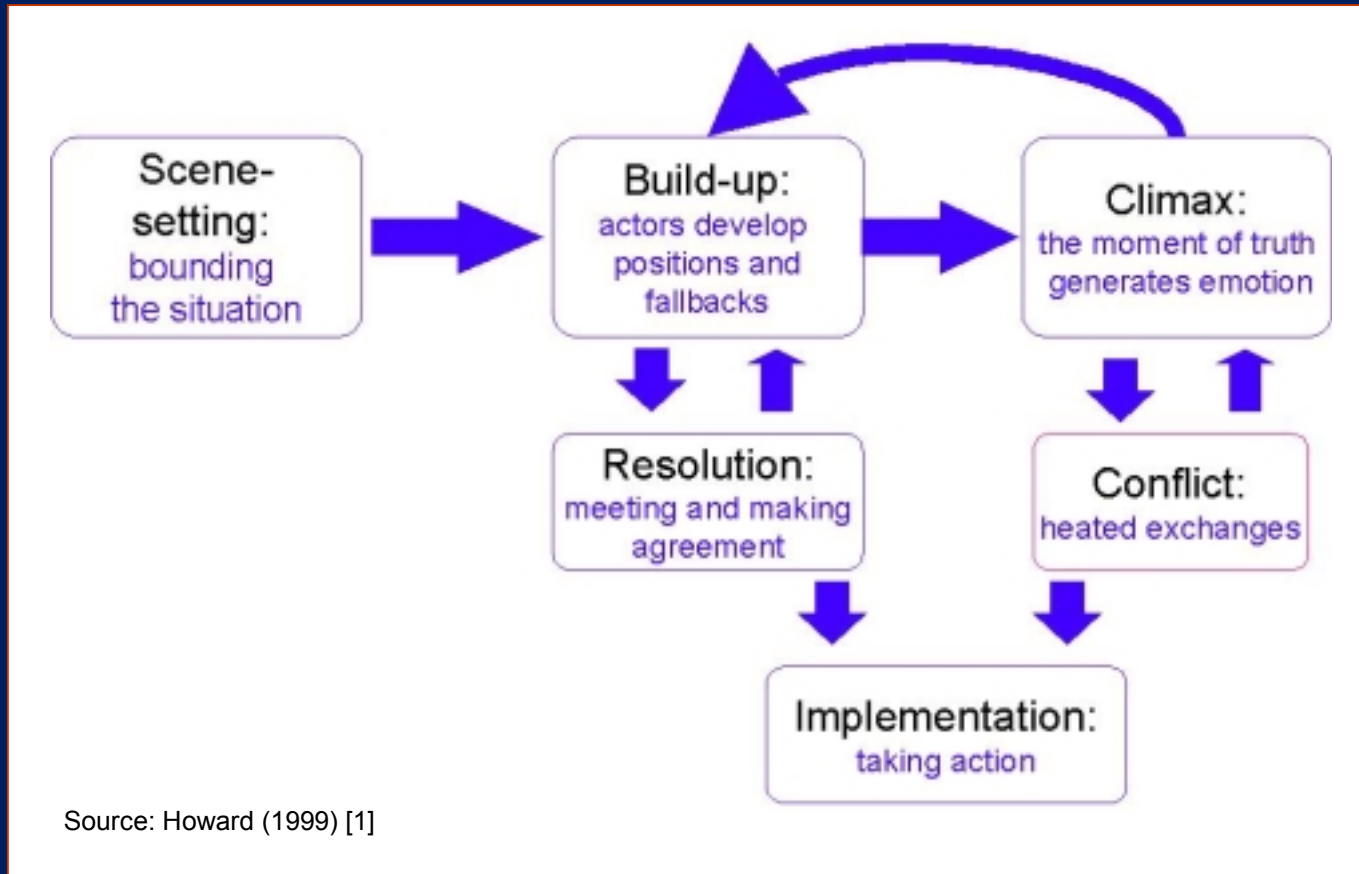


# Confrontation and Collaboration Analysis (CCA)

- Methodology based on 'Confrontation Analysis', Nigel Howard, CCRP (1999)
- Confrontation and Collaboration Analysis (CCA)
  - Role play with confrontations
  - Actions as a means of coercion
  - Actions with or without units or materiel



# CCA (2): six phases of conflict resolution



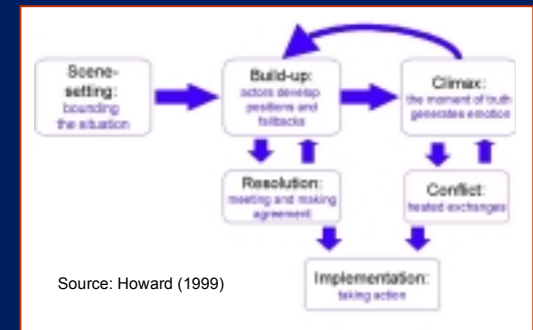
# CCA (3): strategic relationships and intentions

- Military experts play roles of key figures
- Strategic relationships and intentions:
  - Each key figure answers the following questions:
    - What do I think another key figure expects of me?
    - Which means of coercion could he use to persuade me?
    - What do I expect of other key figures?
    - Which means of coercion could I use to persuade them?
- Choice of event



# CCA (4): steps for conflict resolution

- Step 1: Analysis of present situation
- Step 2: Scheduling confrontations
- Step 3: **Confrontations**
  - Testing one's impressions
  - If necessary threaten with means of coercion or making a promise
- Step 4: **Ending the conversation**
  - Key figure decides whether or not
    - to execute a threat
    - to redeem one's promise



# CCA (5): description

- Description preparation and execution steps in an outline
- Advantage:
  - Steps are reproducible
  - All developments can be traced back



# Results

For scenarios of irregular operations in CRO:

- **Set of descriptions of:**
  - scenario characteristics
  - characters of key figures
  - events
- **Especially are valuable:**
  - starting positions
  - desired end-states
- **Scenario set enables further research for specific purposes**



# Evaluation CCA

- **CCA is:**
  - Useful
  - Supplementary to war-gaming
- **Refinement is needed**
  
- **Is evolution within scenarios realistic and generic enough if CCA is used?**
  
- **Difficult to predict behaviour of persons of other cultures.**





# The way ahead?

- **TNO and RNLA: Further familiarisation with CRO needed**
- **Experimentation**
- **Validation**
- **Modelling**



**Suggestion for  
further reading on  
your home journey...**



# Suggestion for further reading on your home journey...

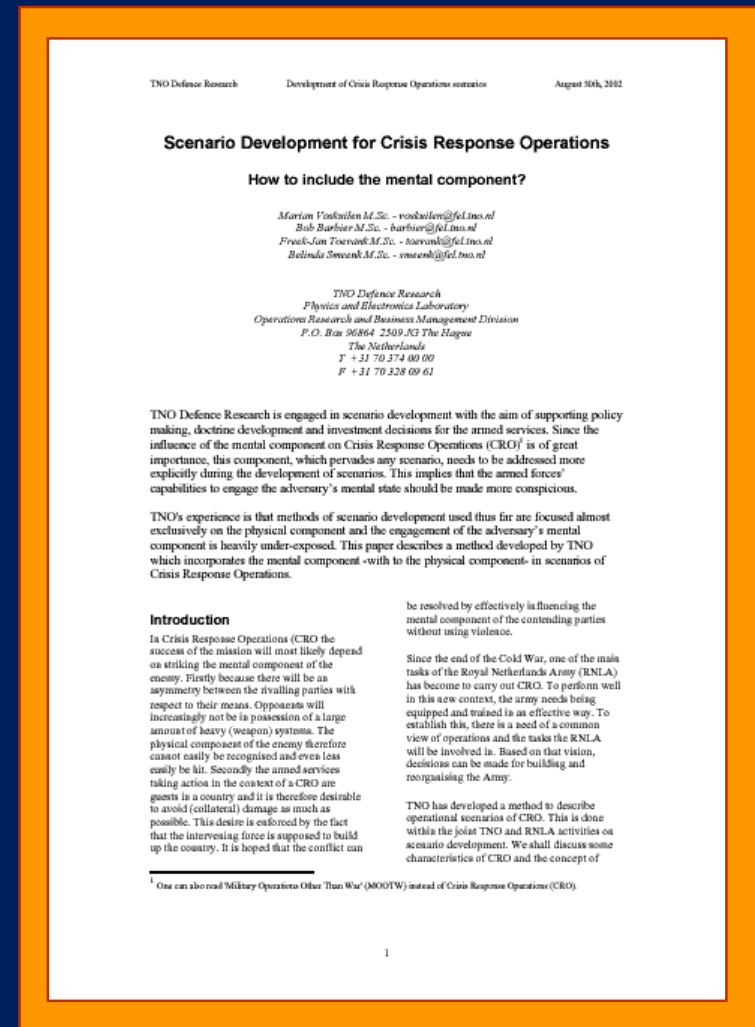
TNO-FEL, The Netherlands

Bob Barbier [barbier@fel.tno.nl](mailto:barbier@fel.tno.nl)

Freek-Jan Toevank [toevank@fel.tno.nl](mailto:toevank@fel.tno.nl)

Belinda Smeenk [smeenk@fel.tno.nl](mailto:smeenk@fel.tno.nl)

Marian Voskuilen [voskuilen@fel.tno.nl](mailto:voskuilen@fel.tno.nl)



# Questions? Suggestions?



Marian Voskuilen [voskuilen@fel.tno.nl](mailto:voskuilen@fel.tno.nl)



# If you want to receive these slides?

## Please e-mail one of us:

TNO-FEL, The Netherlands

Bob Barbier [barbier@fel.tno.nl](mailto:barbier@fel.tno.nl)

Freek-Jan Toevank [toevank@fel.tno.nl](mailto:toevank@fel.tno.nl)

Belinda Smeenk [smeenk@fel.tno.nl](mailto:smeenk@fel.tno.nl)

Marian Voskuilen [voskuilen@fel.tno.nl](mailto:voskuilen@fel.tno.nl)

