

### Contents

- Introduction
- Method and results
  - Perspective identification and selection
  - Perspective-based knowledge acquisition
  - Implementation and representation
    - Semantic WIKI
    - COncept toOL (COOL)
- Conclusions and discussion
- Future research
- Demonstration (possibly during the break)





## Introduction

- Problem statement:
  - Military missions not solely restricted to kinetic activities
    - Inhibiting opium production
    - Stimulating girl school attendance

Preventing police corruption







### Introduction

- Problem statement (continued):
  - Other perspectives play a role, such as:
    - Social-cultural
    - Social-economic
    - Governmental and political
    - ...
  - Military personnel often unaware of perspectives →
    - during information acquisition
    - during military decision making and action
    - during evaluation
    - → decrease probability of mission success
- Proposed solution:
  - Improve integration of perspectives in mission through use of dedicated software tool:
    - Awareness Development Across Perspectives Tool (ADAPT)





### Method and results

# Development ADAPT required the following methodological steps:

- A) Identification and selection of relevant perspectives
- B) Knowledge-acquisition of perspectives
- C) Implementation and representation of perspectives





# A) Perspective identification and selection

Workshop 1: Generating perspectives

Workshop 2: Evaluating perspectives

Workshop 3: Condensing perspectives





# Workshop 1: Generating perspectives

#### Results

Culture	Education	International framework	Politics	Juridical
History	Demography	Basic social services	Economics	Sociology
Military	Geography	Opposing forces resilience	Safety	Rules of the game
Loyalty	Infrastructure	Governmental	Medical aspects	Technology
Religion	Social economics	Media/ communication	Humanitarian	Financial
Geopolitics	Agriculture	Morality/ ethics		





# Workshop 2: Evaluating perspectives

#### Results

Anthropological "norms and values"	Financial	Judicial	Governmental	Non-military threats
Communication	Security	Economics	Politics	

# Workshop 3: Condensing perspectives

#### Results

Cultural – Religious	Information & Communication	Martial	Political – Governmental	Socio-Economic
-------------------------	--------------------------------	---------	-----------------------------	----------------

- 5 teams of subject matters experts
- 1 team for integrating these perspectives

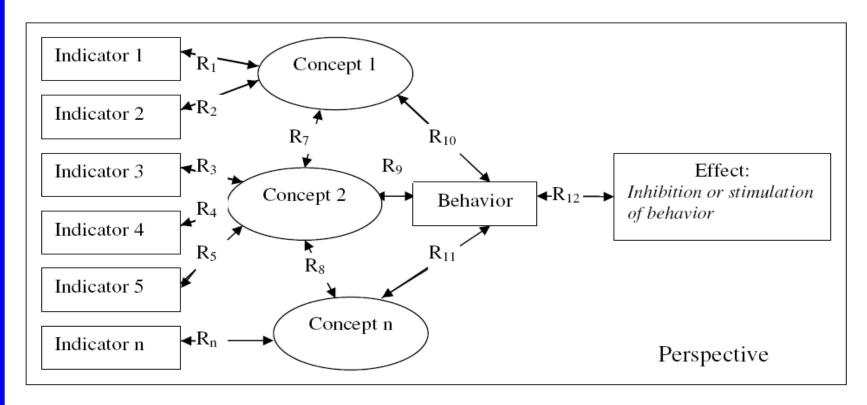




# B) Perspective-based knowledge acquisition

- Perspectives
- Behaviors

- Concepts
- Indicators







# B) Perspective-based knowledge acquisition

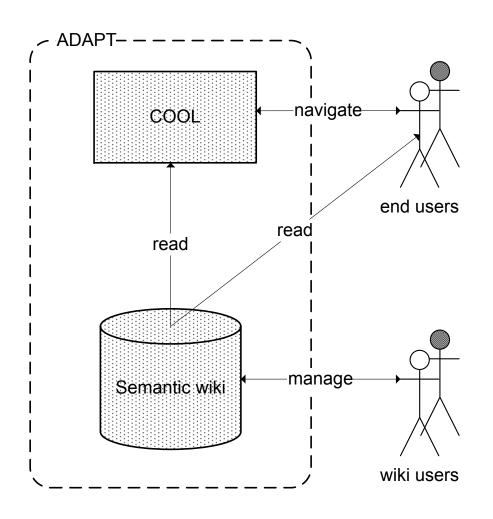
#### Results:

Header name	Description
Name	The name of the concept (either an indicator, regular concept or a to be influenced behavior)
Definition	What is this concept?
Description	Context (where), typologies (what), manifestations and examples (how)
Actors (who)	Who are involved?
Causes/reasons (why)	Why is it happening?
Perspective pointers	Relevant questions to ask oneself, possibly for each perspective, tips and tricks, do's and don'ts, etc.
References	Further reading, mostly external sources





# C) Implementation and representation







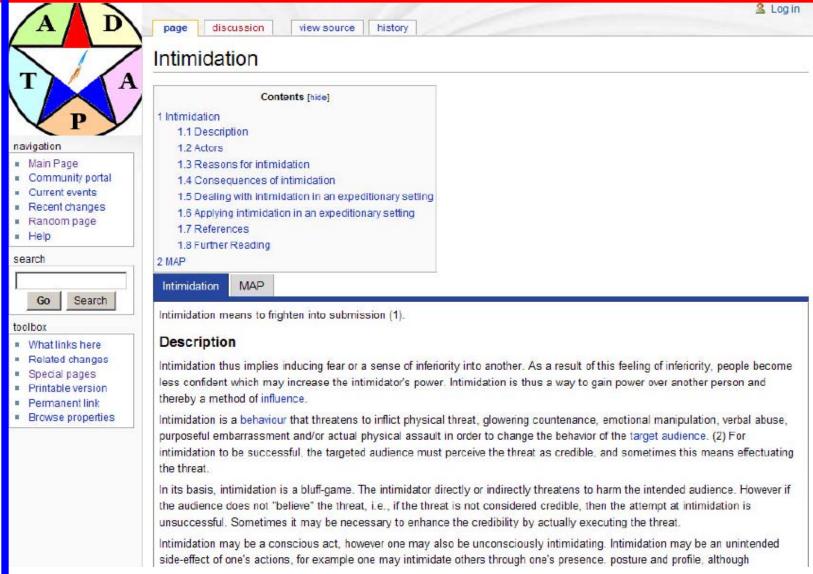
# C) Implementation and representation

- Conventional (syntactic) WIKIs:
  - web applications
  - content is collaboratively added, updated, and organized by its users
  - ADAPT: content initially added by expert groups
- Semantic WIKIs:
  - Also stores semantic information of content
  - Using specific data structure
  - Complex queries and visualisations are possible
  - ADAPT: Semantic information about perspectives, behaviors, typed links are stored





### Semantic WIKI





### COOL

- COncept toOL (COOL)
  - Has the following roles:
    - Interface
    - Portal
    - Filter
    - Automation
    - Overview generator
    - Problem-based searcher
    - Addition

- Has the following items:
  - Concept
  - Depth
  - Behaviors
  - Perspectives
  - Search
  - Results





### COOL



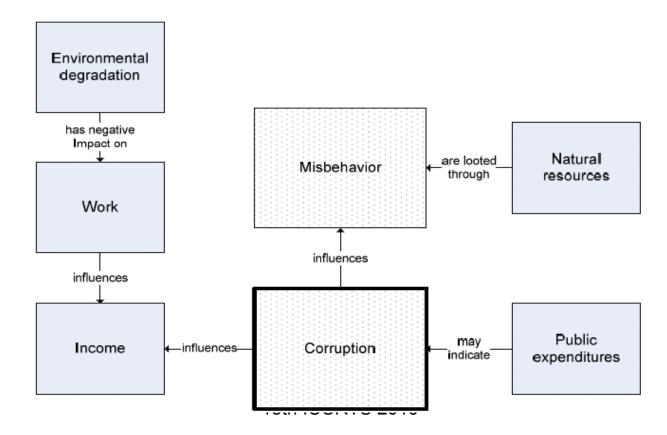
Concept: Comuption Depth: 3

Behavior

Social Economic Information & Communication Cultural Religious Political Governmental Martial

Search

Results







### Conclusions and discussion

- Methodology for developing a software tool (ADAPT) for assisting TFC and his/her staff in non-kinetic aspects of modern missions (affecting behaviors)
- Provides dedicated information based on different perspectives of the situation at hand indicated by the user
- ADAPT is currently rather generic "(contains currently rather generic information)"





### Future research

- Content of ADAPT will be extended in close cooperation with military officers
- ADAPT will be evaluated after first tailoring it to concrete scenarios and then using it during military training (first October 2010)
- Future versions of ADAPT may also provide value insights for civil organizations (such as NGOs)





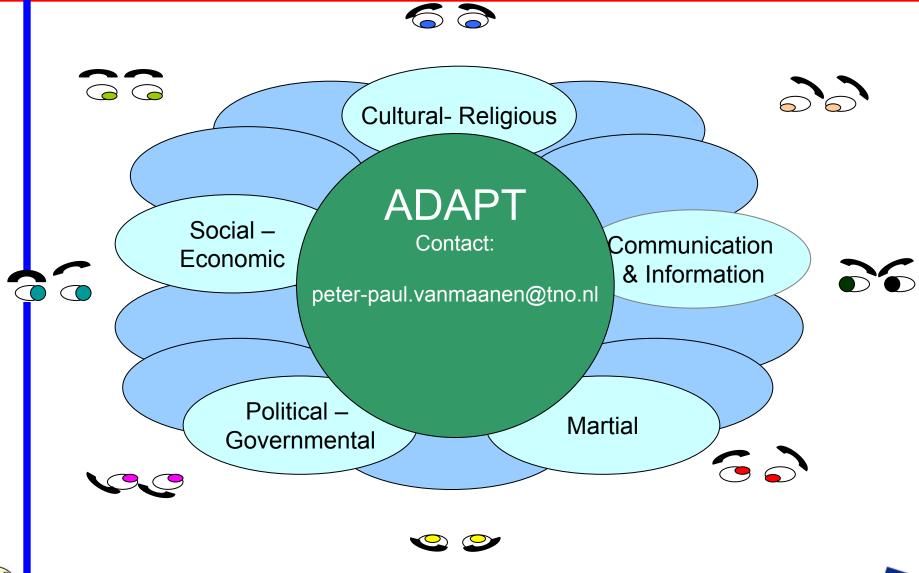
### **Demonstration**

http://adapt.openorbit.nl/cool/





# Questions?







# Perspective-based knowledge acquisition

### **TEST**

