Awareness Development Across Perspectives Tool (ADAPT)

Peter Petiet, Peter-Paul van Maanen, Ingrid van Bemmel, Tony van Vliet
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**

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

15th ICCRTS 2010
Workshop 2: Evaluating perspectives

- Results

<table>
<thead>
<tr>
<th>Anthropological “norms and values”</th>
<th>Financial</th>
<th>Judicial</th>
<th>Governmental</th>
<th>Non-military threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Security</td>
<td>Economics</td>
<td>Politics</td>
<td></td>
</tr>
</tbody>
</table>

Workshop 3: Condensing perspectives

- Results

<table>
<thead>
<tr>
<th>Cultural – Religious</th>
<th>Information &amp; Communication</th>
<th>Martial</th>
<th>Political – Governmental</th>
<th>Socio-Economic</th>
</tr>
</thead>
</table>

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

15th ICCRTS 2010
B) Perspective-based knowledge acquisition

- Perspectives
- Behaviors
- Concepts
- Indicators

Effect: Inhibition or stimulation of behavior
B) Perspective-based knowledge acquisition

Results:

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

ADAPT

COOL

Semantic wiki

end users

read

navigate

manage

wiki users

read

15th ICCRTS 2010
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
1 Intimidation
  1.1 Description
  1.2 Acts
  1.3 Reasons for intimidation
  1.4 Consequences of intimidation
  1.5 Dealing with intimidation in an expeditious setting
  1.6 Applying intimidation in an expeditious setting
  1.7 References
  1.8 Further Reading

2 MAP

Intimidation means to frighten into submission (1).

**Description**

Intimidation thus implies inducing fear or a sense of inferiority into another. As a result of this feeling of inferiority, people become less confident which may increase the intimidator's power. Intimidation is thus a way to gain power over another person and thereby a method of influence.

Intimidation is a behavior that threatens to inflict physical threat, gloating countenance, emotional manipulation, verbal abuse, purposeful embarrassment and/or actual physical assault in order to change the behavior of the target audience. (2) For intimidation to be successful, the target audience must perceive the threat as credible, and sometimes this means effectuating the threat.

In its basis, intimidation is a bluff-games. The intimidator directly or indirectly threatens to harm the intended audience. However if the audience does not "believe" the threat, i.e., if the threat is not considered credible, then the attempt at intimidation is unsuccessful. Sometimes it may be necessary to enhance the credibility by actually executing the threat.

Intimidation may be a conscious act, however one may also be unconsciously intimidating. Intimidation may be an unintended side-effect of one's actions, for example one may intimidate others through one's presence, posture and profile, although
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

COConcept toOL

Concept: Corruption  Depth: 3

- Social Economic
- Information & Communication
- Cultural Religious
- Political Governmental
- Martial

Results

Environmental degradation

has negative impact on

Work

influences

Income

Misbehavior

are looted through

Natural resources

influences

Corruption

may indicate

Public expenditures
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?

ADAPT
Contact:
peter-paul.vanmaanen@tno.nl

Social – Economic
Cultural – Religious
Communication & Information
Political – Governmental
Martial

15th ICCRTS 2010
Perspective-based knowledge acquisition

• TEST