Managing Terminological Interference in Goal Models with Repertory Grid

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# Concepts and Terminology

## Terminology

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Terminology</th>
<th>Different</th>
<th>Correspondence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consensus</td>
<td></td>
<td>Stakeholders use different terminology for the same concepts</td>
</tr>
<tr>
<td>Same</td>
<td>Stakeholders use terminology and concepts in the same way</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Different</td>
<td>Conflict</td>
<td></td>
<td>Stakeholders differ in terminology and concepts</td>
</tr>
<tr>
<td></td>
<td>Stakeholders use same terminology for different concepts</td>
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</tr>
</tbody>
</table>

**Terminological Interference**
Repertory Grid Technique (RGT)

George Kelly (1955), psychotherapy

verbalize how people construe certain factors within the area of interest
  verbalizations: constructs (bipolar in nature)
  factors: elements
RGT Example

⇒ Information sources
   ⇧ TV, Newspaper, Radio, NewsGroup, Web, etc.
   ⇧ elements in RGT

⇒ Triad: (A) TV (B) Newspaper (C) NewsGroup
   ⇧ construct: many focuses (A,B) vs. single focus (C)
   ⇧ as a rating scale (1-5), and each element is assigned a rating on that construct
Sample Repertory Grid

Many focuses
Multimedia
Entertaining
Two-way
Any time

1 Single focus
2 Text
3 Not entertaining
4 One-way
5 Fixed time

1  2  3  4  5  6

1  2  2  5  3  1
1  2  4  5  4  1
1  1  3  3  2  2
5  5  4  3  1  1
4  5  1  3  1  1

1  2  3  4  5  6

Web
E-mail
NewsGroup
Newspaper
Radio
TV
Requirements Goal Models

✧ Softgoals - Constructs - Unique to personal views
✧ Tasks - Elements - Shared among stakeholders

✧ Assume: people focusing on similar topics would agree on the definition of a common set of concrete tasks within the area of interest

✧ Idea: compare stakeholder’s constructs by how they relate to a shared set of concrete entities, rather than by any terms the stakeholders use to describe them
FOCUS Grid Projection, Domain: KHP
Context: Counseling, 5 tasks, 6 softgoals

1 – break (strong negative)
2 – hurt (weak negative)
3 – neutral (unknown or don’t care)
4 – help (weak positive)
5 – make (strong positive)

B – Bob
C – Charlie

-Confidential[Service] (B)
-Anonymous[Service] (B)
-Interaction (B)
-Interaction (C)
-Anonymous[Service] (C)
+Avoid[Burnout] (B)
+Confidential[Service] (B)
+Anonymous[Service] (B)
+Interaction (B)
+Interaction (C)
+Anonymous[Service] (C)
-Avoid[Burnout] (B)

Training
Real-time Web Service
Phone Counseling
Web Service
E-mail Counseling
Concluding Remarks

- Never assume stakeholders use terminologies consistently

- RGT as an interference management method