Theta grids

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2011 Nov 28

1 Parts of a theta grid

Lexical entries

<table>
<thead>
<tr>
<th>think</th>
<th>Experiencer</th>
<th>Proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DP</td>
<td>CP</td>
</tr>
</tbody>
</table>

be cool

<table>
<thead>
<tr>
<th>theme</th>
<th>Experiencer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DP</td>
</tr>
</tbody>
</table>
Theta grids: Indices in second row represent syntactically supplied arguments. First row represents lexically supplied roles.

\[ \text{[dp the boy]}_i \text{thinks [cp that [dp Mary]}_k \text{is cool}]_j \]

think

\[
\begin{array}{|c|c|}
\hline
\text{Experiencer} & \text{Proposition} \\
\hline
\text{dp} & \text{cp} \\
\hline
i & j \\
\hline
\end{array}
\]

be cool

\[
\begin{array}{|c|c|}
\hline
\text{theme} & \text{dp} \\
\hline
\text{dp} & k \\
\hline
\end{array}
\]

Worth noting

- The predicates in theta-grids have no tense. Predicates come out of the lexicon. Verbs don’t have tense in the lexicon. As we now see, they get combine with tense in the syntax, either by V→T movement, or by affix-lowering.

2 Right Answers

1. [Adam]_i \text{asked [cp if [Hyacinth]}_j \text{likes [pineapples]}_k \text{]}_l.

ask

\[
\begin{array}{|c|c|}
\hline
\text{Experiencer} & \text{Proposition} \\
\hline
\text{dp} & \text{cp/dp} \\
\hline
i & l \\
\hline
\end{array}
\]

like

\[
\begin{array}{|c|c|}
\hline
\text{Experiencer} & \text{Theme} \\
\hline
\text{dp} & \text{dp} \\
\hline
j & k \\
\hline
\end{array}
\]

Worth noting
• You must recognize the embedded clause to get it right; two clauses means two predicates
2. [ Michael ], asked [dp a question]

<table>
<thead>
<tr>
<th>Experiencer</th>
<th>Proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP i</td>
<td>CP/DP j</td>
</tr>
</tbody>
</table>

Worth noting

- Using the same roles for this as for the previous. Seems plausible that there is one meaning of ask with two different realizations. Consider also Michael asked the time.

- Alternative idea: a question is a theme, and if Hyacinth likes apples is theme and a proposition. It’s hard to notate but the idea is, internal theta role for ask is always a DP and, if it’s a CP, then it’s also a proposition. This is consistent with the idea that theta-roles are bundles of thematic relations.

3. [ I ], feel [cp that [ it ] is unfortunate [cp that [ TV ], is so vulgar these days ]k ]l.

<table>
<thead>
<tr>
<th>Experiencer</th>
<th>Proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP i</td>
<td>CP l</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP k</td>
</tr>
</tbody>
</table>

be vulgar

<table>
<thead>
<tr>
<th>theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP j</td>
</tr>
</tbody>
</table>

Worth noting

- these days, an adjunct, is left out of the theta-grid of be vulgar.
• *it* is an expletive. By definition, an expletive gets no theta-role. And no theta-index.

• *Be* is never treated as a predicate.

• Three predicates means three theta-grids. Three clauses means three predicates.

4. \([cp\ that\ [\ Angus_i\ hates\ [\ sushi_j]\ ]_k\ ]\ is\ mysterious\)

   be mysterious
   
   \[
   \begin{array}{c|c}
   \hline
   \text{Proposition} & \text{be mysterious} \\
   \hline
   \text{cp} & k \\
   \hline
   \end{array}
   \]

   hate
   
   \[
   \begin{array}{c|c}
   \hline
   \text{Experiencer} & \text{Theme} \\
   \hline
   \text{dp} & \text{dp} \\
   \text{i} & \text{j} \\
   \hline
   \end{array}
   \]

Worth noting

• You must recognize the embedded clause to get it right; two clauses means two predicates

• *Be* is never treated as a predicate.

• You must the right arguments with the right predicates. Treating *sushi* as an argument of *be mysterious* won’t cut it.
5. [ it ] is sunny [ in the living room ],

be sunny

<table>
<thead>
<tr>
<th>location</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP</td>
</tr>
<tr>
<td>i</td>
</tr>
</tbody>
</table>

Worth noting

- It is treated as an expletive here. By definition, an expletive gets no theta role.

6. [ it ] is sunny [ in the living room ] (alternative)

be sunny

Worth noting

- In the living room is treated as an adjunct.

3 Wrong Answers

1. [ Susan], ate [ yesterday ], [ at the restaurant ]

<table>
<thead>
<tr>
<th>eat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent</td>
</tr>
<tr>
<td>DP</td>
</tr>
<tr>
<td>i</td>
</tr>
<tr>
<td>theme</td>
</tr>
<tr>
<td>DP</td>
</tr>
<tr>
<td>j</td>
</tr>
</tbody>
</table>

What’s wrong:

- yesterday is treated as an argument. It’s not. It’s an adjunct expressing the time of the event. Temporals and locatives are (almost) always adjuncts. This actually expresses a grammatically possible reading on which yesterday was devoured, parallel to the much more probable I loved yesterday! (It was the best day of my week!)
4 Theta criterion

1. * [ Susan ]i loved.

\[
\begin{array}{c}
\text{Agent} \\
\text{DP} \\
i \\
\text{Theme} \\
\text{DP} \\
\end{array}
\]

What’s wrong:
• Too few arguments

2. * [ Susan ]i fell [dp the toy ]i.

\[
\begin{array}{c}
\text{Agent} \\
\text{DP} \\
i \\
\end{array}
\]

What’s wrong:
• Too many arguments

3. * [ Susan]i put [dp the toy ]i [dp the table ]k

\[
\begin{array}{ccc}
\text{Agent} & \text{Theme} & \text{Location} \\
\text{DP} & \text{DP} & \text{PP} \\
i & j & k \\
\end{array}
\]

What’s wrong:
• Argument is wrong syntactic category.

4. * [ Susan]i put [dp the dirt ]i [pp with the shovel]k

\[
\begin{array}{ccc}
\text{Agent} & \text{Theme} & \text{Location} \\
\text{DP} & \text{DP} & \text{PP} \\
i & j & k \\
\end{array}
\]

What’s wrong:
• Argument not appropriate for this theta role.
5 Expletives

1. [ It ]\textsubscript{i} is disturbing [that [ John ]\textsubscript{j} knew [ his assailant. ]\textsubscript{k} ]\textsubscript{l}.

\[
\begin{array}{ccc}
\text{know} & \text{Exp} & \text{Theme} \\
\text{DP} & \text{i} & \text{DP} \\
\text{disturbing} & \text{Theme} & \\
\text{DP} & \text{l} & \\
\end{array}
\]

* Mary is disturbing that John knew his assailant.

2. [ It ]\textsubscript{i} is angry [that [ John ]\textsubscript{j}, left ]\textsubscript{k}.

\[
\begin{array}{ccc}
\text{leave} & \text{Agent} & \\
\text{DP} & \text{j} & \\
\text{angry} & \text{Exp} & \text{Proposition} \\
\text{DP} & \text{i} & \text{CP} \\
\text{Proposition} & \text{CP} & \text{k} \\
\end{array}
\]

* Mary is angry that John knew his assailant.