Material for the Verb Pattern Recognition task

Task

In a given sentence, recognize the verb usage pattern.

We focus only on two verbs: cry and submit.

Each sentence should be classified either with a pattern number, or with one of two special tags:

'\text{u}' \sim \text{unclassifiable; cannot be assigned to a particular pattern}

'\text{x}' \sim \text{not a verb (the word cry/submit is occurring not as a verb)}

Objects

Sentences containing the word cry, or submit.

Target values

verb patterns

-- possible values for cry: '1', '4', '7', 'u', 'x'

-- possible values for submit: '1', '2', '4', '5', 'u'

\begin{tabular}{|c|c|}
\hline
\textbf{tp} & \textbf{categorical} \\
\hline
\textbf{target pattern} & \\
\hline
\end{tabular}

Feature vector

consists of 363 values, all are binary

All features are divided into four feature families.

<table>
<thead>
<tr>
<th>Feature family and its subgroups</th>
<th>Number and type of features</th>
<th>Description of features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MF.</strong>*</td>
<td>59 binary features</td>
<td>Morphological features</td>
</tr>
<tr>
<td>MF.tense_*</td>
<td>5</td>
<td>related to the verb's tense</td>
</tr>
<tr>
<td>MF.3p_*</td>
<td>9</td>
<td>related to the third word preceding the verb</td>
</tr>
<tr>
<td>MF.2p_*</td>
<td>9</td>
<td>related to the second word preceding the verb</td>
</tr>
<tr>
<td>MF.1p_*</td>
<td>9</td>
<td>related to the first word preceding the verb</td>
</tr>
<tr>
<td>MF.1n_*</td>
<td>9</td>
<td>related to the first word following the verb</td>
</tr>
<tr>
<td>MF.2n_*</td>
<td>9</td>
<td>related to the second word following the verb</td>
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<tr>
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<td>related to the third word following the verb</td>
</tr>
<tr>
<td><strong>STA.</strong>*</td>
<td>90 binary features</td>
<td>Syntactic features based on the Stanford parser</td>
</tr>
<tr>
<td>STA.GEN_*</td>
<td>20</td>
<td>general syntactic features</td>
</tr>
<tr>
<td>STA.LEX_*</td>
<td>70</td>
<td>lexicalized syntactic features</td>
</tr>
<tr>
<td><strong>MST.</strong>*</td>
<td>90 binary features</td>
<td>Syntactic features based on the MST parser</td>
</tr>
<tr>
<td>MST.GEN_*</td>
<td>20</td>
<td>general syntactic features</td>
</tr>
<tr>
<td>MST.LEX_*</td>
<td>70</td>
<td>lexicalized syntactic features</td>
</tr>
<tr>
<td><strong>SEM.</strong>*</td>
<td>124 binary features</td>
<td>Semantic features</td>
</tr>
<tr>
<td>SEM.s.*</td>
<td>62</td>
<td>related to the verb's subject(s)</td>
</tr>
<tr>
<td>SEM.o.*</td>
<td>62</td>
<td>related to the verb's object(s)</td>
</tr>
</tbody>
</table>
CRY – Pattern definitions

Pattern 1  
[Human] cry [no object]

Explanation  
[Human] weeps usually because [Human] is unhappy or in pain

Example  
His advice to stressful women was: `If you cry, don't cry alone.'

Pattern 4  
[Human] cry [THAT-CL|WH-CL|QUOTE] (\{}\{out\}\{\})

Explanation  
[Human] shouts ([QUOTE]) loudly typically, in order to attract attention

Example  
You can hear them screaming and banging their heads, crying that they want to go home.

Pattern 7  
[Entity | State] cry \{}\{out\}\{}\{for\} Action [no object]

Explanation  
[Entity | State] requires [Action] to be taken urgently

Example  
Identifying areas which cry out for improvement or even simply areas of muddle and misunderstanding, is by no means negative -- rather a spur to action.

SUBMIT – Pattern definitions

Pattern 1  
[[Human 1 | Institution 1]] submit [[Plan|Document|Speech Act|Proposition | {complaint|demand|request|claim|application|proposal|report|...}]^ [Artifact|Artwork|Service | {design|tender|bid|entry|dance|...}] ({{{to} Human 2 | Institution 2 = authority} {{for} {approval|discussion| arbitration|inspection|designation|assessment|funding|taxation|...}})

Explanation  
[Human 1 | Institution 1] presents [[Plan | Document]] to [Human 2 | Institution 2] for {approval|discussion|arbitration|inspection|designation|assessment|taxation|...}

Example  
This long list of detailed items was submitted to a finance committee.

Pattern 2  
[Human | Institution] submit [THAT-CL|QUOTE]

Explanation  
[Human | Institution] respectfully expresses {that [CLAUSE]} and invites listeners or readers to accept that {that [CLAUSE]} is true

Example  
He has submitted that the money in court should not be paid out unless the court is satisfied that the interim government are indeed the Government of Somalia.

Pattern 4  
[Human 1 | Institution 1] submit (Self) (\{}\{to\} Human 2 | Institution 2)

Explanation  
[Human 1 | Institution 1] acknowledges the superior force of [Human 2 | Institution 2] and puts [[Self]] in the power of [Human 2 | Institution 2]

Example  
English common law holds that a woman must submit herself totally to her husband.

Pattern 5  
[Human 1] submit (Self) [[[to} Eventuality = Unpleasant]^[[to} Rule]]

Explanation  
[Human 1] accepts [[Rule |Eventuality = Unpleasant]] without complaining

Example  
To submit to unemployment or slums or want, to let children go hungry or sick and old unattended, for fear of increasing the internal national debt, is to lose all sense of proportion.