Example Minimalist Derivation

The following derivations illustrate the operations that apply to derive the final syntactic object we’re after.

**TASK**

Show the derivation for the sentence “John divorced Mary.”

**NUMERATION**

Every derivation begins with a numeration of items from the lexicon. The numeration here contains labels, which are short for the actual feature bundles that are stored in the lexicon.

\{John, divorce, Mary, v, \textit{PAST}\}^1

**LEXICAL ENTRIES**

<table>
<thead>
<tr>
<th>Label</th>
<th>Category</th>
<th>Inflectional$^2$</th>
<th>Selectional</th>
</tr>
</thead>
<tbody>
<tr>
<td>John</td>
<td>[N]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>divorce</td>
<td>[V]</td>
<td>[uN]</td>
<td>&lt;TH&gt;</td>
</tr>
<tr>
<td>Mary</td>
<td>[N]</td>
<td>[V*, uInfl:_]</td>
<td>[uN, uV]</td>
</tr>
<tr>
<td>v</td>
<td>[v]</td>
<td></td>
<td>&lt;AG&gt;</td>
</tr>
<tr>
<td>\textit{PAST}</td>
<td>[T]</td>
<td>[Infl:PAST]</td>
<td>[uv, N*]</td>
</tr>
</tbody>
</table>

**DERIVATION**

(1) \textsc{Merge}(divorce, Mary) \quad label \quad \textsc{VP}

```
   VP
      [V]$_3$
    divorce
      [V; uN]
    Mary
      [N]
```

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$^1$ Notice that we have to add \textit{v} and \textit{PAST} to account for various movements and agreement facts we discussed in class. The label for “divorce” is also without “-ed” because it is technically not tensed until agree.

$^2$ For nouns like John and Mary, we won’t specify their $\phi$-features, since we haven’t used them in any operation yet.

$^3$ The convention on features is the following: Feature types are separated by semicolons – features within a type are separated by commas.
This merger
Percolates: the V category feature of *divorce*
Checks: the uninterpretable selectional N feature on *divorce*  

(2) \[
\text{MERGE}(v, \text{VP}) \quad \text{label} \quad v
\]

This merger
Percolates: the \(v\) category feature of \(v\) and the uninterpretable selectional N feature of \(v\).
Checks: the uninterpretable selectional V feature on \(v\)

(3) \[
\text{MOVE}(\text{divorce}, v) \quad \text{and} \quad \text{adjoin to little} \quad v
\]

This movement is triggered by the strong inflectional V feature of \(v\). After movement, this strong feature is checked.
This merger
Percolates: the \( v \) category feature \( \bar{v} \).
Checks: uninterpretable selectional N feature of \( \bar{v} \).

The merger
Percolates: the T category feature of \( PAST \).
Checks: the uninterpretable \( v \) selectional feature of \( PAST \).
This movement checks the strong selectional N feature of *PAST*.

At this point in the derivation, all the items in the numeration are used up, and all uninterpretable features have been checked and all unvalued features valued. A convergence has been reached.

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* We haven’t done this in class yet, so don’t worry about the details.