Semantic bootstrapping of N/V

Pinker’s (1984) proposal:

There is outside language a cognitive difference between *things* and *events*.

\[
\begin{align*}
X_{\text{thing}} & \rightarrow N \\
X_{\text{event}} & \rightarrow V
\end{align*}
\]

The cognitive categories are a priori (inborn)
Suppose all grammar of English were ‘inborn’ due to the beautiful genetics of the English race.

One would still need to learn how to apply these distinctions to the actual form. It is like knowing all names and addressees in the telephone book, but not knowing the numbers.

If you buy this argument, you will not expect much from a priori schemata. UG, even if ‘inborn’ for the human race, would still need an acquisition procedure.
Difficulties with Pinker’s way

\[ X_{\text{thing}} \rightarrow N \]
\[ X_{\text{event}} \rightarrow V \]

I. Many words in English can appear as a

<table>
<thead>
<tr>
<th>N</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>walk</td>
<td>walk</td>
</tr>
<tr>
<td>drink</td>
<td>drink</td>
</tr>
<tr>
<td>sleep</td>
<td>sleep</td>
</tr>
<tr>
<td>run</td>
<td>run</td>
</tr>
</tbody>
</table>

II. There are nouns for events *a walk, a drink*, etc..
and verbs for states *to know, to sit, to stand, to live*, etc..

Hence there has to be a moment when N and V are assigned for reasons of grammar rather then for reason of cognition.
The grammatical way for N/V

sleep → N / \[\begin{array}{c}
\text{the} \\
\text{this} \\
\text{that} \\
\text{his} \\
\text{any} \\
D^o
\end{array}\] — (sleep) —
sleep → V / \[\begin{array}{c}
to \\
\text{ing} \\
s \\
may \\
I^o
\end{array}\] — (sleep) —

In general: \[\begin{array}{c}
X \rightarrow N / D — \\
X \rightarrow V / I —
\end{array}\]
Van Kampen (1997, 2001)  
Alternative approach to the N/V category distinction

The first syntactic constructions in child language consist of two word utterances

<table>
<thead>
<tr>
<th>operator</th>
<th>content sign (characterizing X)</th>
<th>topic (naming X)</th>
<th>comment (characteriz. X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>wish</td>
<td>wanna</td>
<td>bunny</td>
<td>dance(-ing)</td>
</tr>
<tr>
<td>command</td>
<td>more</td>
<td>girl</td>
<td>bad</td>
</tr>
<tr>
<td>constative</td>
<td>that/is</td>
<td>shoes</td>
<td>off</td>
</tr>
<tr>
<td>denial</td>
<td>no</td>
<td>nice</td>
<td>girl</td>
</tr>
</tbody>
</table>
Content signs X can be used in two functions

a.  <naming>
    X (bear !)
    (quasi-proper name)

b.  <characterizing>
    X (bear !)
    (is a bear)

The switch is a matter of pragmatic intention. There is no grammatical context that would force category assignment N, V, A
Grammatical marking

<Characterizing> is a kind of proto-predication (Lyons 1976)

The adult input marks the characterizing function by $I^o$

```
IP
 <+pred>
    
I^o X
 is bear climbing away bad
```

The whole is labeled IP, because
- the topic may be left out
- the $I^o$ indicates the function of the full phrase
Grammatical marking

The grammatical marking by
- Io for characterizing
- Do for naming

establishes the subject-predicate construction

```
IP
   /   \
  /     \
/       \\
DP       IP
  the/a/my  is  dancing
   X
    bear
```

The Lexicon Week I- Thursday 8
The Lexicon Week I- Thursday 9

The grammatical way for N/V

I-marking for characterizing phrases
D-marking for naming phrases

⇒ are the first major steps in acquisition
I₀ = some copula; an auxiliary or verbal inflection
D₀ = some article; a demonstrative or nominal inflection

⇒ are accomplished before the 3rd year

⇒ are easily followed by the distinction V/N
X ⇒ N / D —
X ⇒ V / I —
Generalization

The cues for - stress assignment
- category assignment

⇒ operated in a local, binary context

⇒ their frequency can be established quantitatively

⇒ each cue forces an immediate well-formedness constraint (stress left; add D₀ or I₀)

The cause/cue, the order and the speed of the learning steps can be established by a longitudinal method