Stages of Language Development

What is a Stage?
Plateaus, e.g. “one word stage” 1;0 to 1;6
Transitions, e.g. “two word stage” 1;6
Accelerations, e.g. “word spurt” 1;6
Co-occurrences, e.g. “telegraphic stage” 2;0
Rules, e.g. “overregularization stage” ‘foots’ instead of ‘feet’
Conclusion: Researchers have used the term ‘stage’ in many different ways

Ways to Define Stages
Age; Milestones; Mean length of utterances (MLU)

Stage Models
Diary Studies: William Stern (1924)
Large Sample Studies: Margaret Nice (1925)
Longitudinal Studies: Roger Brown (1973)

1. Prelinguistic Stage 0;0 to 1;0
Onset of speech perception
Cooing in first months
Onset of Babbling around 0;6
Prepares the child to understand and acquire words

2. Single Word Stage 1;0-1;6
Onset of words around 1;0
Mostly object-like words initially
Holophrases: single words with meaning of a sentence
Slow acquisition of approximately 50 words

3. Early Sentence Stage 1;6 to 2;0
Word Spurt: sudden increase in word acquisition
Onset of multiwords utterances, e.g. “mommy sock”
Telegraphic stage
Stages of vocabulary: substance > action > relation-attribute

4. Short Sentence Stage 2;0-2;6
Onset of grammatical development
Onset of inflections, e.g. plural, past tense
Onset of grammatical structure, e.g. pronouns, prepositions, auxiliaries
Stable ratio (Nice)

5. Complete Sentence Stage 2;6-6;0
Advanced grammatical development
Onset of subordinate clauses, e.g. relative clauses, complement clauses, adverbial clauses
Completion of basic grammar by 6;0
6. School Age 6;0 -
Infrequent complex aspects of grammar
Reading & writing
Expansion of constructions through reformulations
Reformulation: repeating meaning with a change in structure

Brown's Stages
Brown, Roger (1973) *A first language.*
Study of Adam, Eve, Sarah
Longitudinal visits every two weeks for one hour
Data on CHILDES database
Based on MLU in morphemes
  e.g. 'dogs coming in' = 'dog/s come/ing in' 3 words vs 5 morphemes
Each stage has: 1. Range of MLU values; 2. Midpoint; 3. Upper Bound

<table>
<thead>
<tr>
<th>Stage</th>
<th>Range</th>
<th>Midpoint</th>
<th>UB</th>
</tr>
</thead>
<tbody>
<tr>
<td>I early</td>
<td>1.0 to 1.49</td>
<td>1.75</td>
<td>5</td>
</tr>
<tr>
<td>I late</td>
<td>1.5 to 1.99</td>
<td>2.25</td>
<td>7</td>
</tr>
<tr>
<td>II</td>
<td>2.0 to 2.49</td>
<td>2.75</td>
<td>9</td>
</tr>
<tr>
<td>III</td>
<td>2.5 to 2.99</td>
<td>3.50</td>
<td>11</td>
</tr>
<tr>
<td>IV</td>
<td>3.0 to 3.99</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>V</td>
<td>4.0 and up</td>
<td>4</td>
<td>13</td>
</tr>
</tbody>
</table>

I: Semantic roles, e.g. “actor + action”
II: Modulation of meaning: 14 grammatical morphemes
III: Modalities of the simple sentence: auxiliary acquisition
IV: Embedding sentences
V: Coordination and propositional relations

Purpose of Stages
Description: identify something that is changing, e.g. word spurt
Explanation: give and defend a reason for the change
Example: “word spurt” at 1;6
Descriptive stage: measure rate of word learning
Explanatory stage: reason for change
  1. Cognitive advance with symbols
  2. Phonological advance with sounds

Summary
Traditional stages
Brown's stages based on MLU
Mostly descriptive stages
Goal is to expand knowledge of explanatory stages