L2 acquisition of regular and irregular morphology

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We have already seen decline in language learning ability.
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Does this decline affect all areas of language equally?

- Pronunciation?
- Morphology?
- Syntax?
If the dual-mechanism model is right, regular-irregular verbs are an intriguing test case

- Regular verbs
  Produced by rule

- Irregular verbs
  Retrieved from memory
Does our ability with regulars and irregulars decline at the same rate?

- Can look at verbs
  - walk walked
  - run ran

- And nouns
  - book books
  - child children
Subjects

• 30 Spanish native speakers (SNS)
• 30 Korean native speakers (KNS)
• All “at asymptote”
## Subjects

<table>
<thead>
<tr>
<th></th>
<th>Age at Testing (Years)</th>
<th>Age of Arrival in U.S. (Years)</th>
<th>Length of Residence (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 KNS</td>
<td>16-26</td>
<td>6-10</td>
<td>10-16</td>
</tr>
<tr>
<td>10 SNS</td>
<td>21-31</td>
<td>11-15</td>
<td>10-16</td>
</tr>
<tr>
<td>10 KNS</td>
<td>26-36</td>
<td>16-20</td>
<td>10-16</td>
</tr>
</tbody>
</table>
Task

There are five a. knuckli on each hand.
b. knuckle
c. knuckles
d. knackle
e. knucklesses
Yesterday the little girl __________ for the first time.

a. swim
b. swam
c. swammed
d. swims
e. swammed
## Results

<table>
<thead>
<tr>
<th></th>
<th>SNS</th>
<th>KNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Reg</td>
<td>.94</td>
<td>.98</td>
</tr>
<tr>
<td>Child Irreg</td>
<td>.71</td>
<td>.87</td>
</tr>
<tr>
<td>Adol Reg</td>
<td>.89</td>
<td>.95</td>
</tr>
<tr>
<td>Adol Irreg</td>
<td>.68</td>
<td>.74</td>
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<tr>
<td>P-Adol Reg</td>
<td>.92</td>
<td>.93</td>
</tr>
<tr>
<td>P-Adol Irreg</td>
<td>.51</td>
<td>.69</td>
</tr>
</tbody>
</table>
So how are regulars and irregulars affected by age?
Why this difference?

Regulars: result of rules

Procedural memory system: Learning and control of “skills”

Less affected by aging

Irregulars retrieved from memory

Declarative memory system: Learning and processing of facts

More affected by aging
This is speculative at this point

• Many details still need to be worked out.

• But the overall picture is plausible and an example of what we should expect to find.
Summary

• Regulars and irregulars are differentially affected by aging.

• This may be related to how regulars and irregulars are processed (dual-mechanism model)

• And how these mechanisms are affected by aging