One theory regarding memory is that verbal material is remembered as a function of the degree
to which is was processed when it was initially presented. Eysenck (1974) randomly assigned 50
younger subjects and 50 older (between 55 and 65 years old) to one of five learning groups. The
Counting group was asked to read through a list of words and count the number of letters in each
word (low level processing). The Rhyming group was asked to read each word and think of a word
that rhymed with it. The Adjective group was asked to give an adjective that could reasonably
be used to modify each word in the list. The Imagery group was instructed to form vivid images
of each word (deepest level of processing). None of these four groups was told they would later
be asked to recall the items. Finally, the Intentional group was asked to memorize the words for
later recall. After the subjects had gone through the list of 27 items three times they were asked
to write down all the words they could remember.

> memory <- read.table("memory.txt", header=T, sep="\t")
> attach(memory)

> memory.aov<-aov(Words~age*process)
> anova(memory.aov)

<table>
<thead>
<tr>
<th>Df</th>
<th>Sum Sq</th>
<th>Mean Sq</th>
<th>F value</th>
<th>Pr(&gt;F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>age</td>
<td>1</td>
<td>240.25</td>
<td>240.25</td>
<td>29.9356</td>
</tr>
<tr>
<td>process</td>
<td>4</td>
<td>1514.94</td>
<td>378.74</td>
<td>47.1911</td>
</tr>
<tr>
<td>age:process</td>
<td>4</td>
<td>190.30</td>
<td>47.58</td>
<td>5.9279</td>
</tr>
<tr>
<td>Residuals</td>
<td>90</td>
<td>722.30</td>
<td>8.03</td>
<td></td>
</tr>
</tbody>
</table>

> boxplot(Words ~ age*process)
> interaction.plot(process,age, Words)