Figure legends:

**Figure 1:** Examples of black-and-white line drawings (from the Boston Naming test) and the responses of the patients to these pictures.

**Figure 2:** Structural scan from SM showing the localization of the lesion to the right inferior temporal lobe.

**Figure 3:** Display of a beach scene with the (a) original and copies by (b) SM and (c) RN, both of whom took an extraordinary amount of time to complete this.

**Figure 4:** Examples of (a) overlapping and individual letters and (b) line drawings for object decision and (c) silhouettes for object identification.

**Figure 5:** Hierarchical stimuli, made of two letters, H and S, which are composed of Hs or Ss used in Experiment 2.

**Figure 6:** Mean millisecond responses times for (a) control subjects, (b) SM and (c) RN to indicate letter identity as a function of consistency between the local and global levels. Note the difference in the y-axis across the three graphs.

**Figure 7:** Examples of displays of (a) 1 and (b) 30 cycles per inch used for establishing spatial frequency thresholds.

**Figure 8:** Spatial frequency thresholds, reflected as log contrast threshold, as a function of cycles per image, including the mean for normal participants (and 1 and 2 standard deviations) and for SM and RN.

**Figure 9:** Primed match paradigm: probes, consisting of few and many elements, are followed after varying SOAs by test pairs which require ‘same’ or ‘different’ responses and which are similar to the prime in elements or configuration.

**Figure 10:** (A) Mean of median correct ‘same’ RTs for (A) the normal participants for few and many elements displays as a function of prime duration for the two prime-similarity conditions (element similarity, ES, and configuration similarity, CS) and mean responses for (B) SM and (C) RN under the same conditions.

**Figure 11:** The priming stimuli and the same- and different- response pairs used in the (A) no gap condition, (B) small gap condition and (C) large gap condition. When the prime is a diamond made of four oblique lines and the test pair is two outline diamonds, prime-test similarity is configuration similarity; when the test-pair is two Xs, prime-test similarity is component similarity. When the prime is a cross made of two vertical and two horizontal lines, and the test pair is two outline crosses, prime test similarity is configuration similarity and when the test-pair is two outline squares, prime-test similarity is component similarity.

**Figure 12:** (A) Mean of median correct same RTs for the component similarity and configuration similarity as a function of prime duration for each gap condition for control subjects, and mean responses diamond and cross primes for (B) SM and (C) RN. For SM and RN, the difference in msecs between the component similarity (SC) and line similarity (SL) conditions are also provided.

**Figure 13:** Examples of displays from Kovacs et al. (2000) of contours made of local Gabor units. (a) easy (b) difficult

**Figure 14:** Arrangement of dots into (a) columns and (b) rows for grouping by similarity and by proximity
Figure 1

(A) Target picture and error responses by RN.

"snake"  "stereo or computer"

"bug"  "lamp"

(B) Target picture and error responses by SM.

"coconut"  "case register"

"spider"  "don’t know"
Figure 2
Figure 3

(a)

(b)

(c)
Figure 4

(a) IM TMJ

(b)

(c)

(b)
Figure 5

CONSISTENT

S S S S H H
S       H H
S S S S H H H H
S       H H
S S S S H H

INCONSISTENT

H H H H S S
H       S S
H H H H S S S S
H       S S
H H H H S S
Figure 6

(a)

(b) (c)

Consistency

SM

RN

Consistency
Figure 8

The graph illustrates the relationship between threshold and cycles per degree, with different data sets represented by various symbols and lines.

- **SM**: Solid square symbols.
- **RN**: Solid circle symbols.
- **Mean controls**: Solid diamond symbols.
- **Av + 1sd**: Dotted square symbols.
- **Av - 1sd**: Dotted circle symbols.
- **Av + 2sds**: Dashed square symbols.
- **Av - 2sds**: Dashed circle symbols.

The x-axis represents cycles per degree, ranging from 0 to 40, while the y-axis represents threshold, ranging from -3 to 1.
Figure 9

<table>
<thead>
<tr>
<th>Prime</th>
<th>Similar Configuration</th>
<th>Same</th>
<th>Different</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANY</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Similar Elements</th>
<th>Same</th>
<th>Different</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 10

(A) FewElements

(B) ManyElements

(C) Prime Duration

- Same Configuration
- Same Elements
Figure 11

<table>
<thead>
<tr>
<th>Prime</th>
<th>Test pairs</th>
<th>Same</th>
<th>Different</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 12A
Figure 13
(a) (b)