What conclusions do you draw about whether we do or do not use context when accessing the meanings of words?

With other subjects, the priming task was repeated a short time after the ambiguous word bug. Here, subjects recognised the target word faster than normal when it was associated with the appropriate sense (here ANT), but not when it was associated with the incorrect sense (SPY). This effect seems to begin about 200 milliseconds (a fifth of a second) after an ambiguous word has been heard.

What conclusions do you think the experimenters reached?

**Top-down lexical processes**

Read the words below. Do you notice anything about them?

- TAE CAT
- RED
- SROT
- FISH
- DEBT

*Figure 6.3: Top-down processing.*

Source: Rumelhart and McClelland (1986: 8)
In the text, a saccade typically lasts from 20–30 milliseconds while a fixation can last from 150 to 500 microseconds and sometimes longer. At the end of a line, the reader makes a return sweep on to the following line.

Experiments have found a great deal about lower level reading processes thanks to equipment which enables us to track the movements of the reader’s eyes across the page. By comparing the eye movements of skilled and less skilled readers, we can get a clearer idea of what makes for efficient reading. We can also get an idea of what aspects of a text cause processing problems.

Figure 38.1 above is based upon eye movement data published (1989) by reading researchers Keith Rayner and Alexander Pollack of the University of Massachusetts. The dots above the text mark the fixation points and the figures show how long in milliseconds each fixation lasted. The saccades move in a left-to-right direction except where an arrowhead indicates a regression (with fixations shown on a higher line).

Study the figure to find out:

1. How many fixations are there on average per line?
2. Where do they fall in relation to the words?
3. How many letters on average does a saccade move across?

<table>
<thead>
<tr>
<th>Fixation Durations (ms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 201 202 203 204 205</td>
</tr>
<tr>
<td>210 211 212 213 214 215</td>
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<tr>
<td>220 221 222 223 224 225</td>
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<tr>
<td>230 231 232 233 234 235</td>
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<td>240 241 242 243 244 245</td>
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<td>250 251 252 253 254 255</td>
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<td>260 261 262 263 264 265</td>
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<td>270 271 272 273 274 275</td>
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<tr>
<td>280 281 282 283 284 285</td>
</tr>
<tr>
<td>290 291 292 293 294 295</td>
</tr>
<tr>
<td>300 301 302 303 304 305</td>
</tr>
</tbody>
</table>

Roadside joggling endures sweat and angry drivers in the name of fitness. A healthy body may seem reward enough for most people. However, for all those who question the payoff, some recent research on physical activity and creativity has provided some surprisingly good news. Regular bouts of aerobic exercise may also help spark a brainstorm of creative thinking.

Figure 38.1 Fixation sequences and fixation durations
Source: Adapted from Rayner and Pollack (1989: 116)
MATERIAL FOR ACTIVITIES

SECTION A8

- CIRCLE
- Rectangle
- SQUARE
- Star
- Triangle
- OVAL
- Arrow
SECTION B11, TASK 1

Read aloud the following text.

How did the body of the murder victim come to be found in a locked room? Hercule
Poirot, the famous detective, was called in to investigate.

He examined the layout of the ground floor where the crime had taken place. The
body had been found in the library. The only door into the library was from the hall,
and it had been locked on the inside. The library was between the dining room and
the sitting room. Several guests had come out of the dining room and gone into the
sitting room, but nobody reported hearing voices from the library.

The body was discovered when a cleaner was sent to get into the library. The door
had to be forced open as nobody had a spare key. There was a large fireplace in the
library and the body was lying to the right of it. It was face downwards, with the legs
towards the door and the left arm outstretched. Blood from the wound to the head
had sooted into a valuable Persian rug. There had clearly been a violent struggle. A
table had been overturned and a vase knocked over to the tiled floor. A lamp had been
smashed.

Poirot pulled back the heavy curtains in front of one of the two windows in the
room, and examined the window closely. His brain was working fast. Outside the win-
dow, a terrace ran alongside the house. It was still wet from the rain, and there were
muddy footprints visible on it.

SECTION B11 TASK 2: TEXT A

You are a burglar. You have 15 seconds to read this text.

Two boys play hooky from school. They go to the home of one of the boys because
his mother is never there on a Thursday. The family is well off. They have a fine old
home which is set back from the road and which has attractive grounds. But since it
is an old house, it has some defects; for example, it has a leaky roof and a damp and
musty cellar. Because the family is wealthy, they have a lot of valuable possessions such
as a ten-speed bike, a colour television and a rare coin collection.

(Anderson and Pichert, 1978)