A Garden path sentences

My favourite author wrote this novel was likely to be a bestseller

1 2 3 →

(i) **[My favourite author] [**$_{\text{Pred}}$ **wrote this novel]**

1 2 3 4 5 6 **7! →**

(ii) **[My favourite author]** **[**$_{\textbf{Pred}}$ **[wrote] [this novel was likely to be a bestseller]]**

Object of **wrote**: NP vs. Clause

Backtracking, rebuilding of structure

Sentences:
linear (left-to-right) and *hierarchical*

The train stopped at platform five was ten minutes late

1 2 →

(i) **[Subj? The train] [Pred? stopped at platform 5 was 10 minutes late]**

1 2 3 4 5 6 **7! →**

(ii) **[Subj✓ The train stopped at platform 5] was ten minutes late**

stopped has two analyses:

1. active past tense 2. passive (= past) participle

B Sentence processing

- Sentences* (unlike words) not stored and retrieved from storage but produced/processed online
- syntactic structure is very short-lived

- understanding – segmenting & building syntactic representations –

*most sentences, that is: think of *Good day! How are you?* etc.

Experiments ① and ② below show that linguists' theoretical constructs are *similar* to those in the listeners' heads:

① CLICK STUDY: aimed at SEGMENTATION techniques

The actor who everybody loves is coming to town soon
sentence recorded, one click added, subjects listen (are given written copy)

click locations:
the ++ actor
who ++ everybody
actor ++ who
everybody ++ loves

Subjects *misplace* early/late clicks, i.e.
report that they hear them at the clause boundary (**actor** ++ **who**)
but accurately perceive the objectively placed ones

Common sense gives no explanation: no acoustic gap/pause btw **actor** and **who**

Acoustic *(ie* physical) analysis shows no such gap

The actor [$_{\text{Rel Cl}}$ **who everybody loves] is coming to town soon**

② PROBE RECOGNITION STUDY: aimed at EMPTY CATEGORIES (advanced)

Gaps/traces that we do not see but the syntax does

Was the PM lying? ← The PM was lying

← movement of **was, i.e. an Aux**

Which book did you speak to Bob about? ← Which book did you speak to Bob about _____?

← movement of **which book**,
i.e. complement of prep. **about**

Probe recognition:

read sentences off screen – was the probe word in it?
measure RT (reaction time)

RT shorter for more recent items: the *recency effect* (sentences linear!)

(1) **Bob said that the boss had sold the books** ← comes late

(2) **The books disappeared after a week according to Bob**

(3) **The books were sold by the boss and I bought them**
← pronoun helps RT

(4) **Which books did you speak to Bob about _____?**

Probe word = **books**

For (2), RT is expectably longer than for (1)

For (3), RT is *shorter* significantly than for (2) – have **them** at end

For (4), RT short, similar to (3): syntacticians claim that trace of moved element shows recency effect (*ie* is like pronoun)