VPE, NPE, and ISLANDS

PART A

You are probably familiar with a phenomenon called Verb Phrase Ellipsis, exemplified below:

(1) I can't swim 100 yards underwater, but Harvey can.
(2) I haven't done my homework, but I'm pretty sure everyone else has.
[Don't pay any attention to pronoun reference and such niceties, that's interesting but not our focus here.]
(3) If you can figure out how to, I'll pay you $50 to fix my computer.

In examples like these, a constituent is missing (or silent) in a place that looks like it should have a Verb Phrase there. Let's call this phenomenon "Verb Phrase Ellipsis". That's its common name, but I'm putting it in scare quotes because what's missing is not always a VP:

(4) Harvey is a big stupid jerk, even though he tries not to be.

That's not the focus of our attention here either.

Our focus is on the fact that there's something missing (or silent) in a particular place (let's call it the "gap") that gets its interpretation by virtue of a link of some kind to an overt element somewhere else in the structure. This situation is superficially reminiscent of the gaps in the constructions we have been studying (WH-questions and relative clauses) where there is also a gap that is interpreted with reference to some other constituent.

I don't expect you to figure out everything about VPE, but you should be able to do enough investigation to answer the following questions:

1. Is VPE unbounded?

In other words, is there a limit on how far away the gap can be from its antecedent? (Take note that we are not at all interested in linear distance here, but rather levels of embedding.)

2. Is there any required command relationship between the antecedent and the elided VP?

3. Can VPE go backward? (I.e. can the gap precede the antecedent in linear order?)
4. Can VPE go backward in coordinate structures? (Be careful about Right Node Raising.)

That was all warmup. Now the real question:

5. Is VPE sensitive to islands?

To answer this, you need to construct examples where

(a) The VPE gap is inside an island, and the antecedent is outside it
(b) The antecedent is in an island, and the gap is outside it
(c) The antecedent and gap are in different islands

And see what happens.

PART B

There's another ellipsis phenomenon, called "NP Ellipsis":

(1) If you think Harvey's solution to the puzzle is elegant, Sue's should impress you even more.

Answer questions (A)1-5 about NP Ellipsis.

PART C

Can you venture any conjecture about what the essential difference is between the phenomena we see in this problem and the ones we were looking at before?