Finishing up from last week…

• Last week, we covered *wh*-movement in questions like:
  – What did Bill *buy* ti?
  • and
  – What did Mary think Bill bought ti?
• And we looked at conditions on *wh*-movement, including Subjacency (you can’t move out of two bounding nodes in a single step) and the ECP (the trace of *wh*-movement must be licensed).

Relative clauses

• Another place where we see *wh*-movement, besides in explicit questions (either in the main clause or embedded) is in *relative clauses*.
• The book which I read
• The woman who(m) I met
• These consist of a *head noun* (*book, woman*) and then what appears to be a *wh*-question that further specifies the referent of the head noun.

Relative clauses

• The structure of a relative clause is like this.
• A [+Q, +WH] CP is adjoined inside the NP.

Op

• In addition to being able to say
  – The book which Mary read
• We can also say
  – The book that Mary read
  • and
  – The book Mary read
• And they all mean the same thing. So we expect that they would all have basically the same structure—so where is the *wh*-word?

Op

• The secret to these last two kinds of relative clauses is *Op*, the silent *wh*-word.
• That is, *the book which Mary read* and *the book Mary read* are really exactly the same except that in one case you pronounce the *wh*-word, and in the other, you don’t.
• the book \{CP which Mary read ti \}
• the book \{CP Op, Mary read ti \}
Op

• It is also possible to pronounce *that* with *Op*, giving us:
  • the book [{CP *Op*, that [{TP Mary read t_i}]]

• Why can’t we pronounce *that* with *which*?
• *the book [{CP *which*, that [{TP Mary read t_i}]]

Op

• The Doubly-Filled COMP filter applies here too—you can’t pronounce both a *wh*-word and C at the same time. Thus:
  • the book [{CP *Op*, that [{TP Mary read t_i}]]
  • the book [{CP *Op*, that [{TP Mary read t_i}]]
  • the book [{CP *which*, that [{TP Mary read t_i}]]
  • *the book [{CP *which*, that [{TP Mary read t_i}]]

Op

• Skeptical of *Op*? Is there really *wh*-movement of *Op*, a silent *wh*-phrase?
• I read the book [{CP *which*, [{TP Mary said [{CP that [{TP Bill bought t_i}]]}]]].
• *I read the book [{CP *which*, [{TP Mary wonders [{CP who [{TP bought t_i}]]}]]].

• I read the book [{CP *Op*, (that) [{TP Mary said [{CP that [{TP Bill bought t_i}]]}]].
• *I read the book [{CP *Op*, (that) [{TP Mary wonders [{CP who [{TP bought t_i}]]}]].

Op

• So if we have a silent *wh*-phrase, why can’t we ask questions with it?
  – Where did Mary buy that book t_i ?
  – When did Mary buy that book t_i ?
  – Why did Mary buy that book t_i ?
  – How did Mary buy that book t_i ?
  – *Op*, did Mary buy that book t_i ?
• See why?

Op

• Recoverability condition: The content of a null category must be recoverable.
  – the place [{OP (that) Mary bought that book t_i}]
  – the day [{OP (that) Mary bought that book t_i}]
  – the reason [{OP (that) Mary bought that book t_i}]
  – the way [{OP (that) Mary bought that book t_i}]
• In each case, we can tell what the *wh*-phrase is by looking at the head noun.