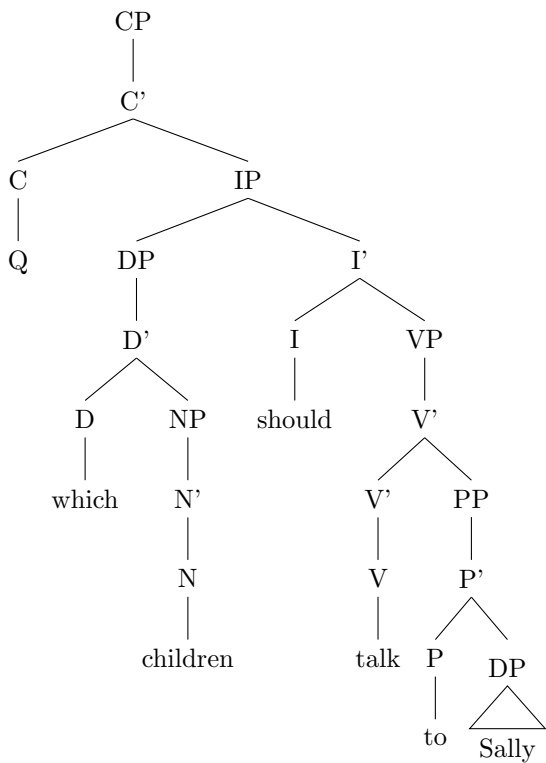


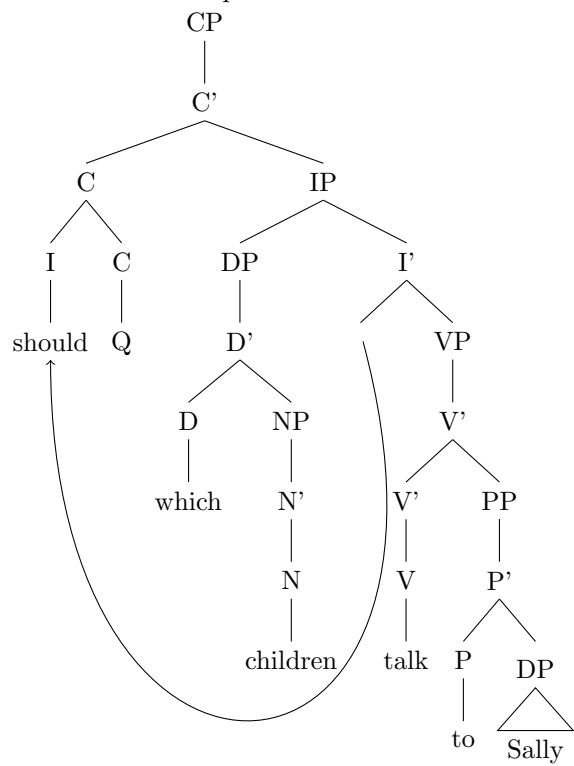
1 Provide derivations for the following sentences

1.1 Which children should talk to Sally?

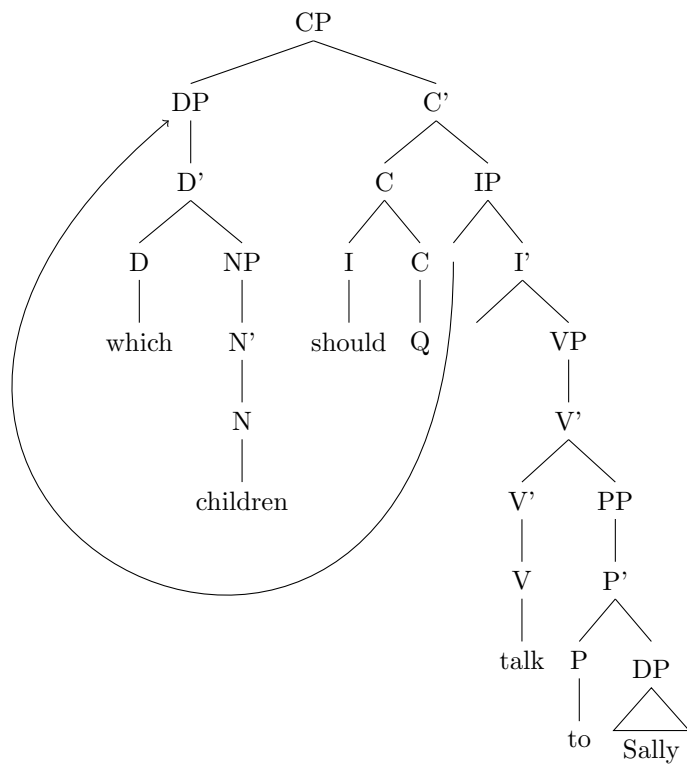
D-Structure:



S-Structure Step 1: I-Movement

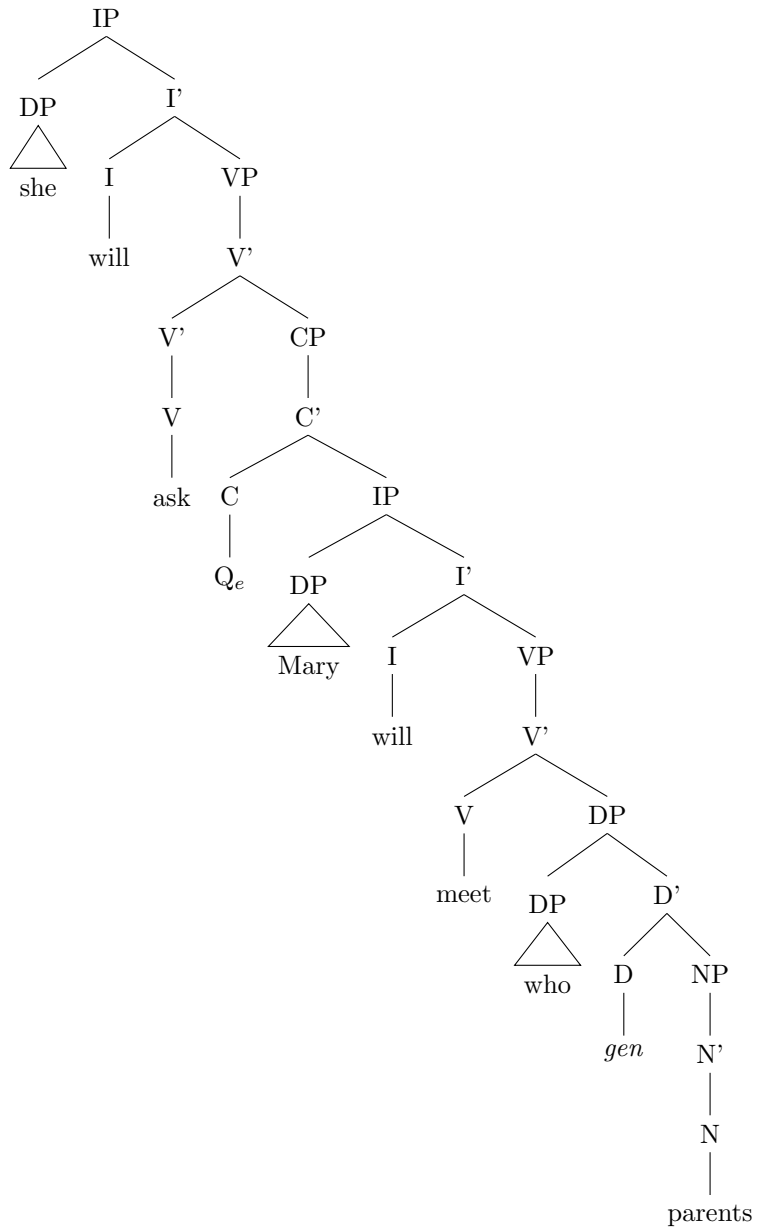


S-Structure Step 2: Wh-Movement

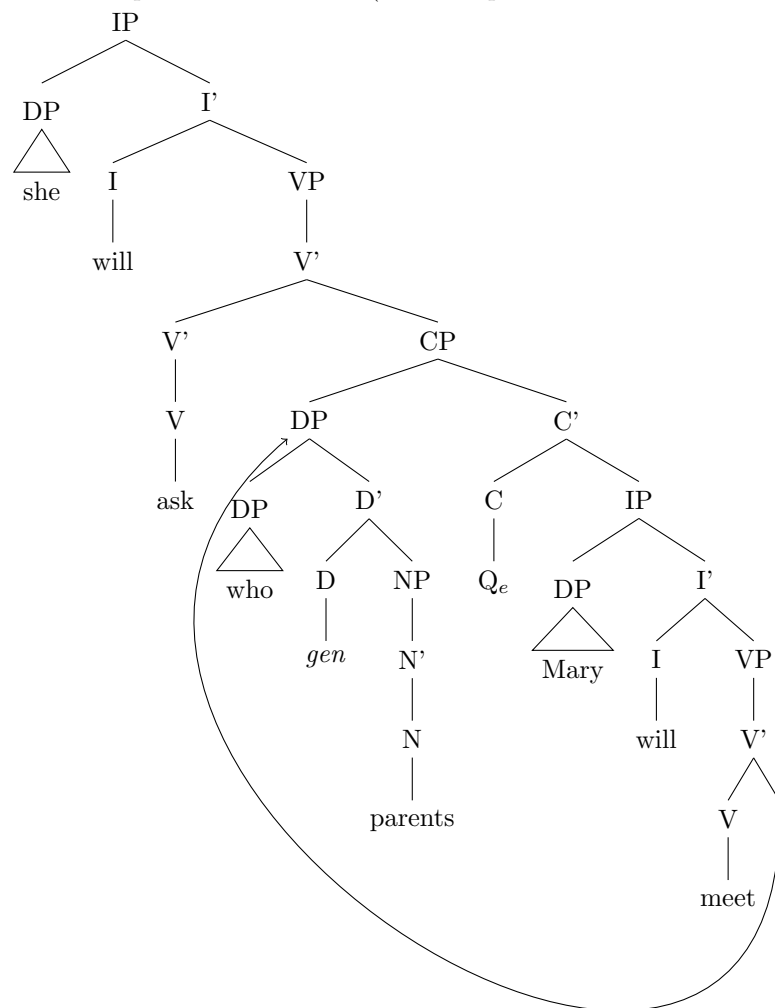


1.2 She will ask whose parents Mary will meet.

D-Structure:

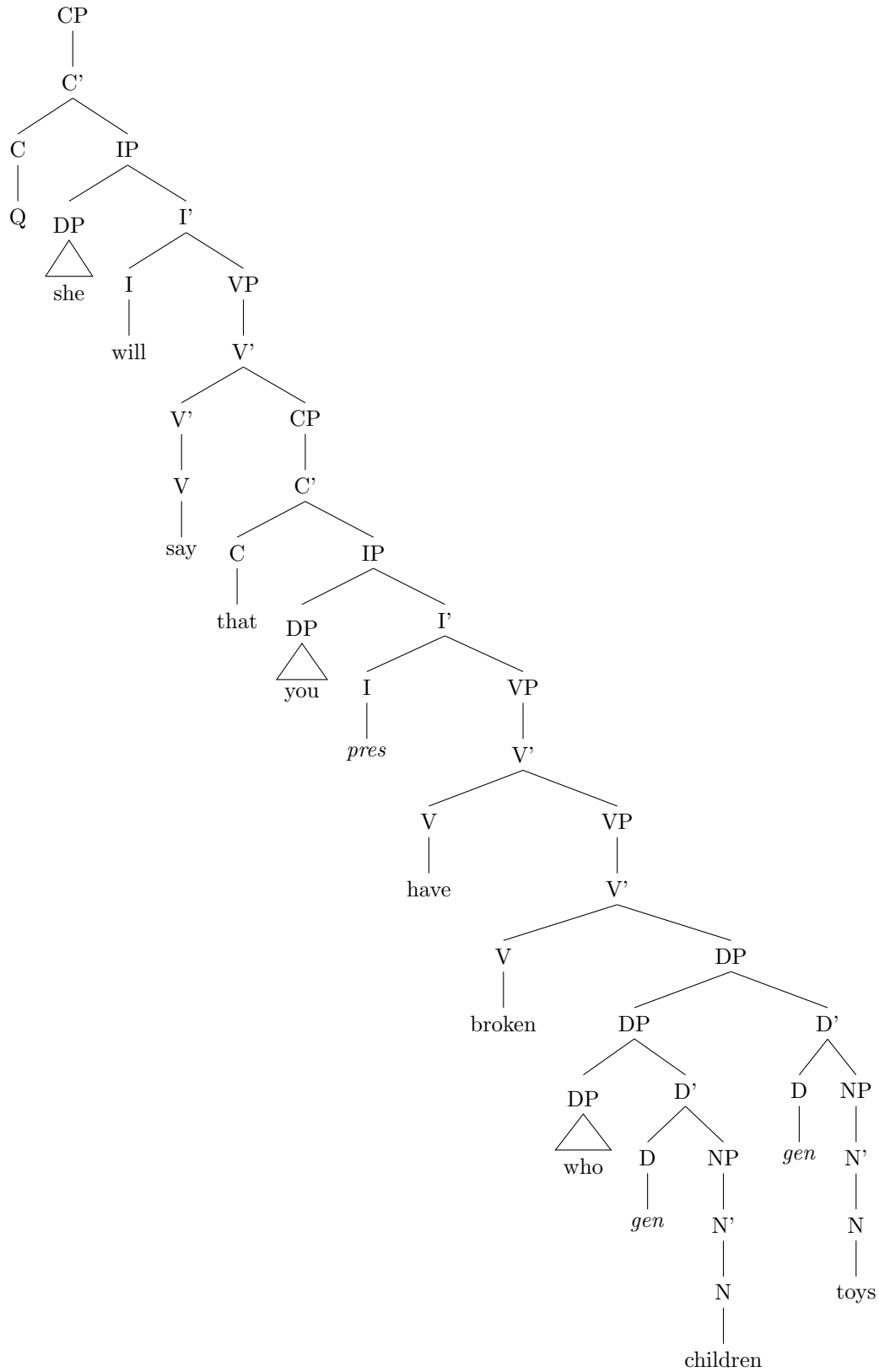


S-Structure Step 1: Wh-Movement (we don't perform I-Movement because this is an embedded CP)

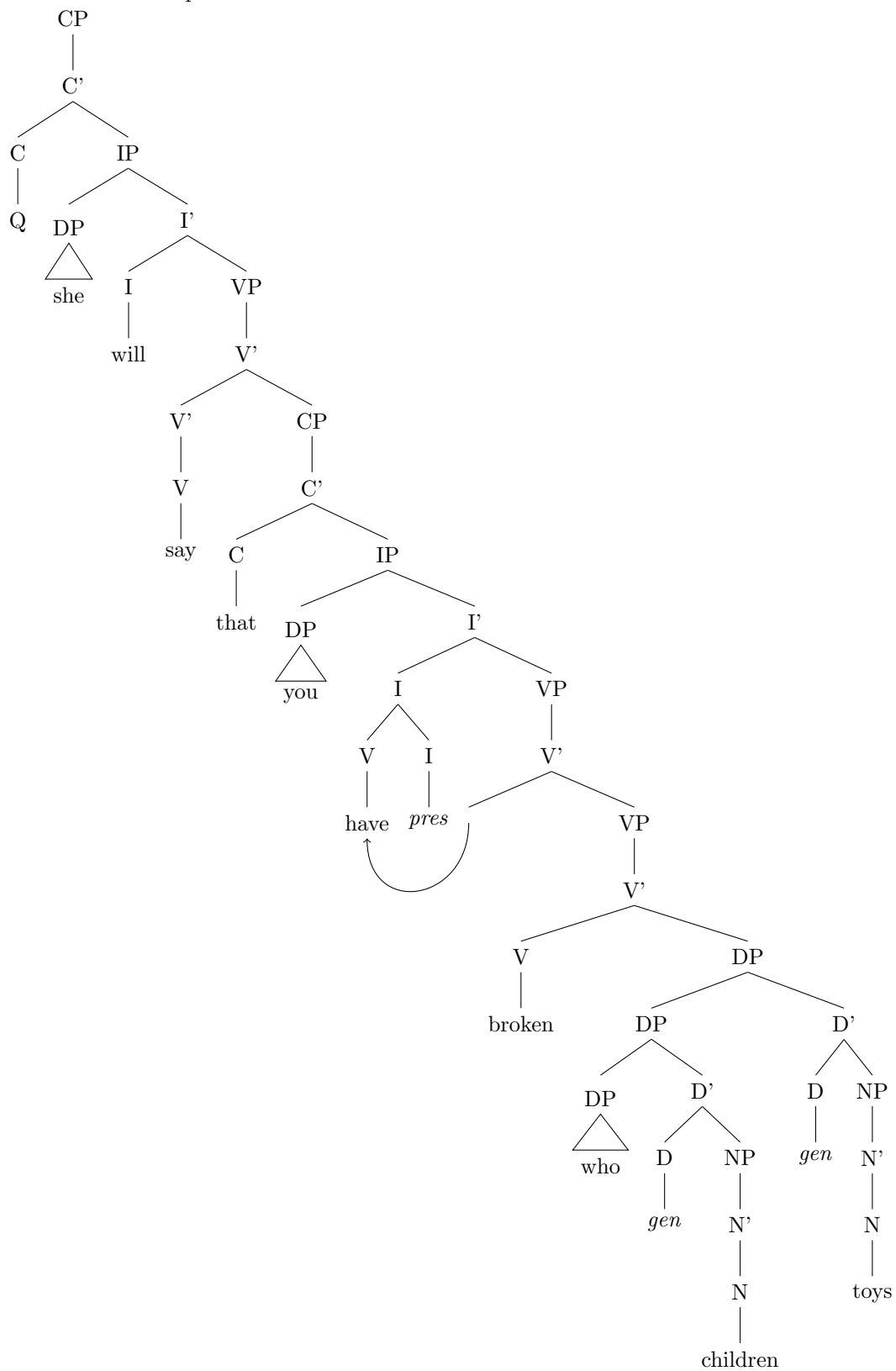


1.3 Whose children's toys will she say that you have broken?

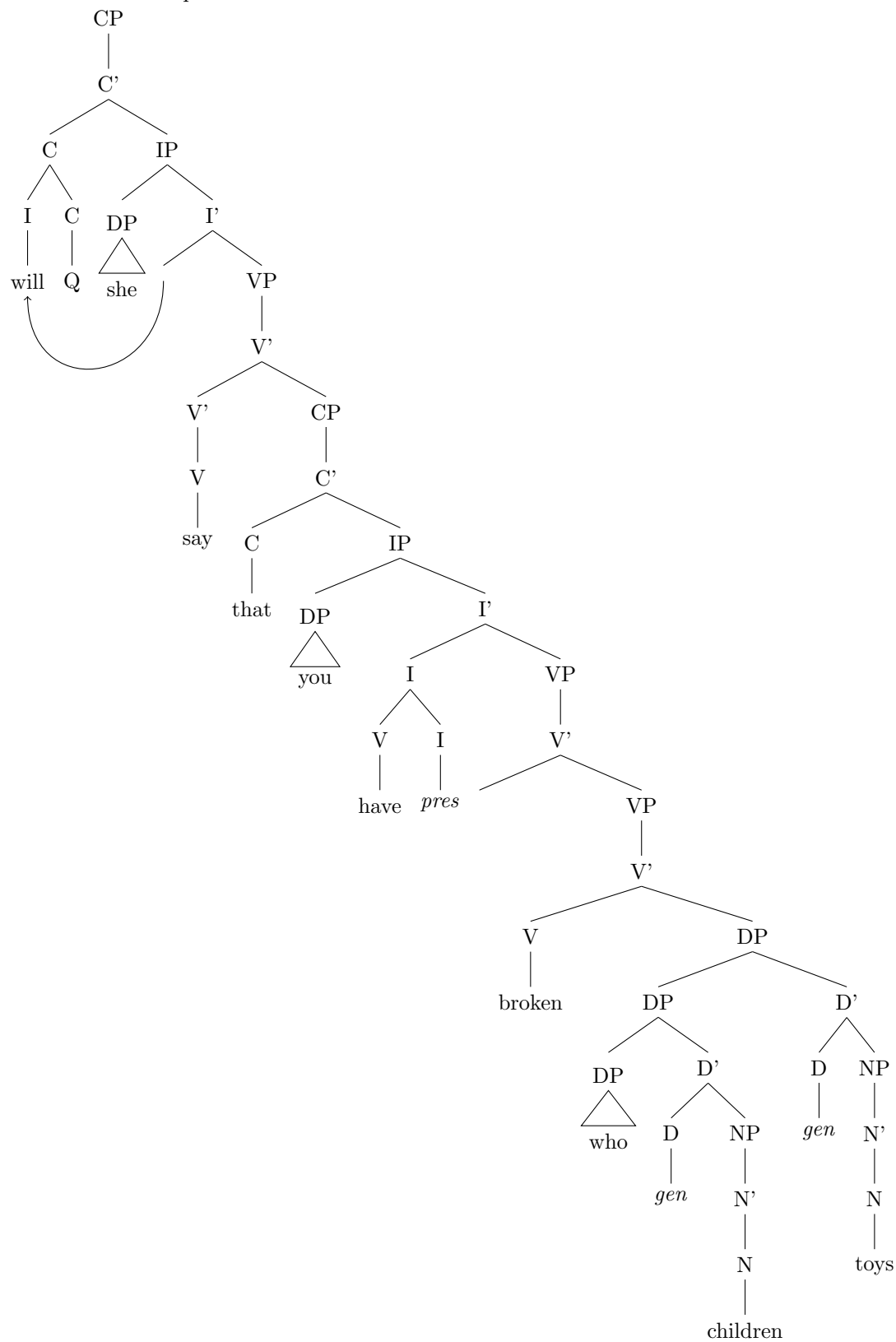
D-Structure:



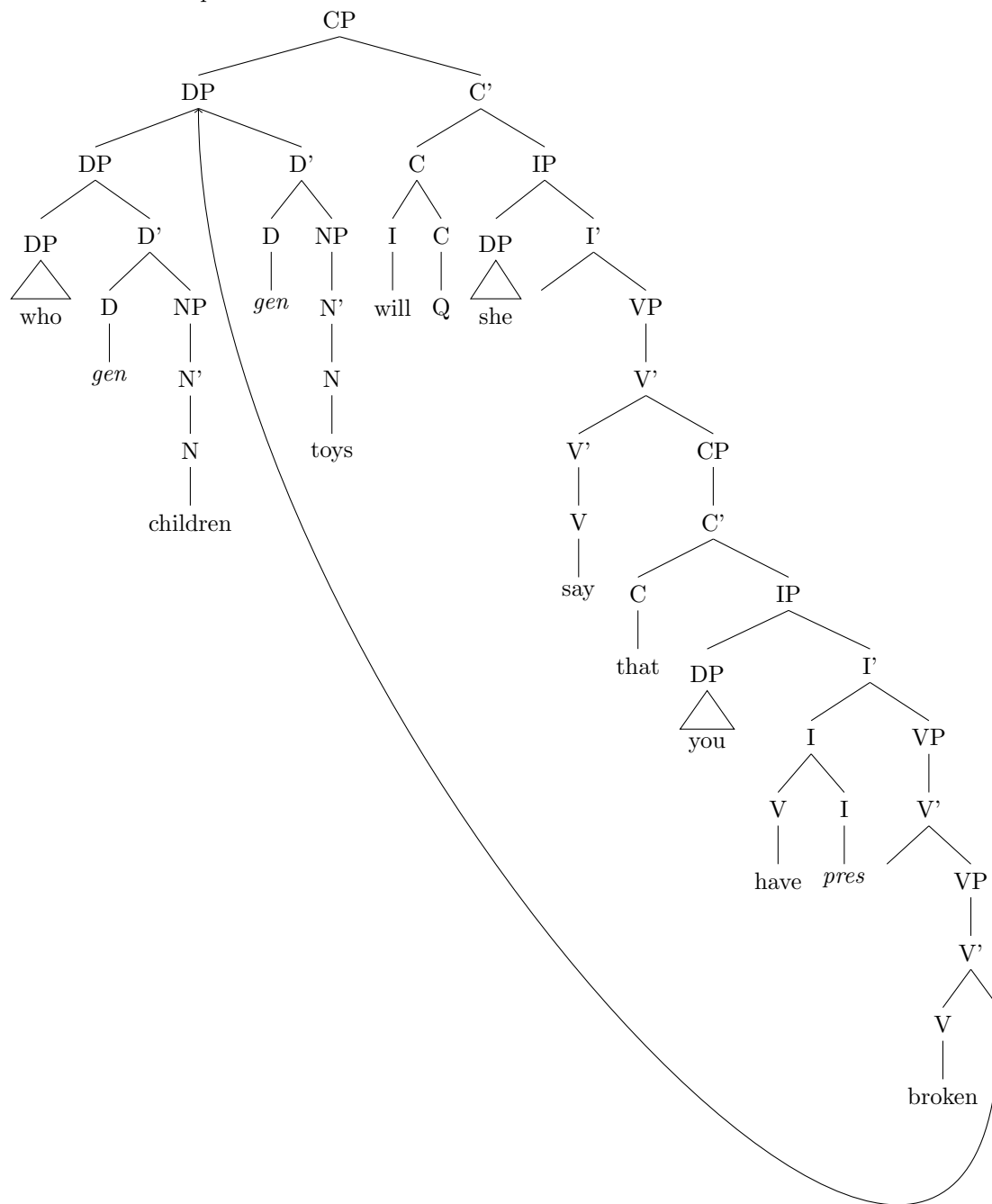
S-Structure Step 1: V-Movement



S-Structure Step 2: I-Movement

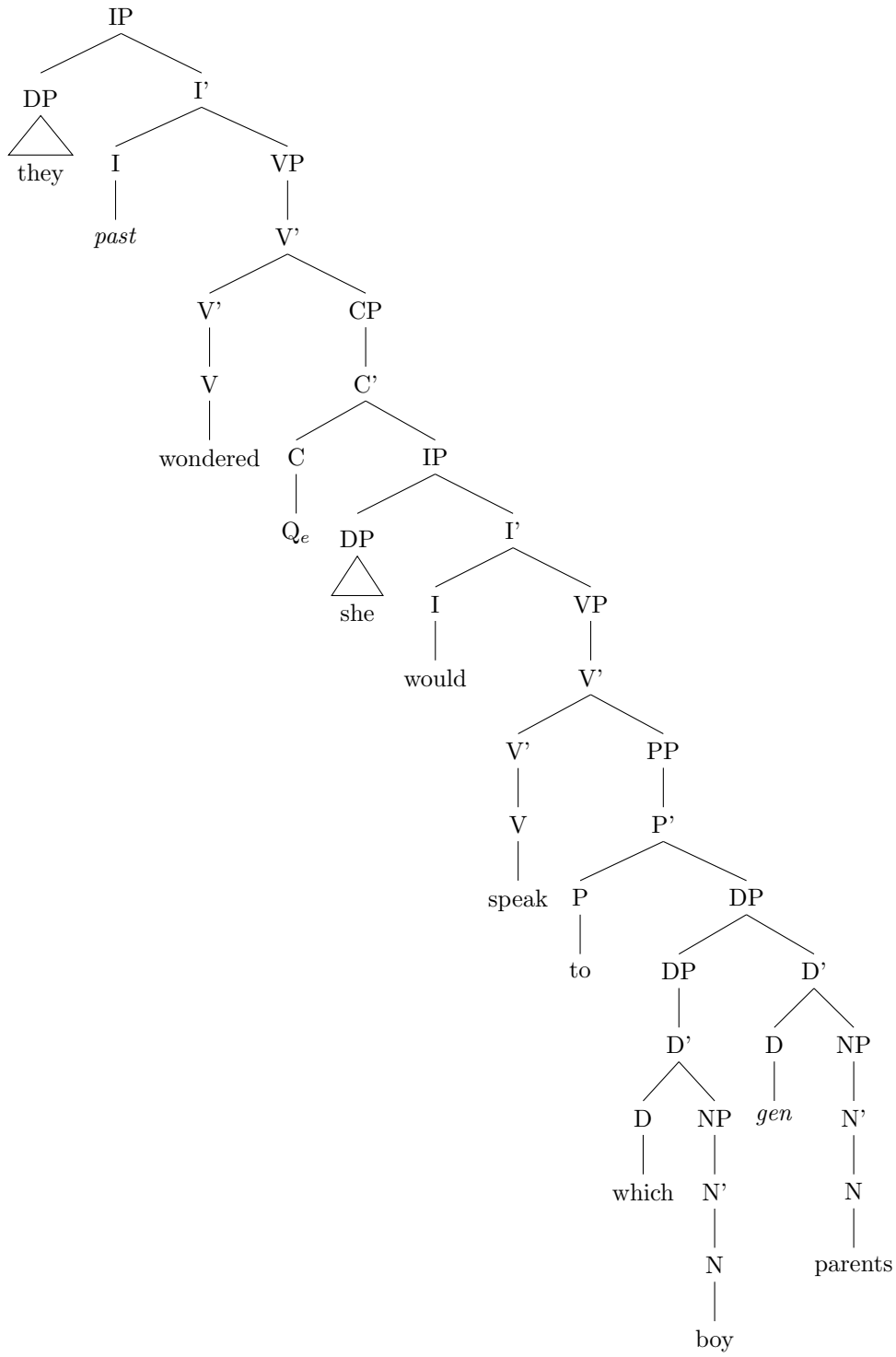


S-Structure Step 3: Wh-Movement

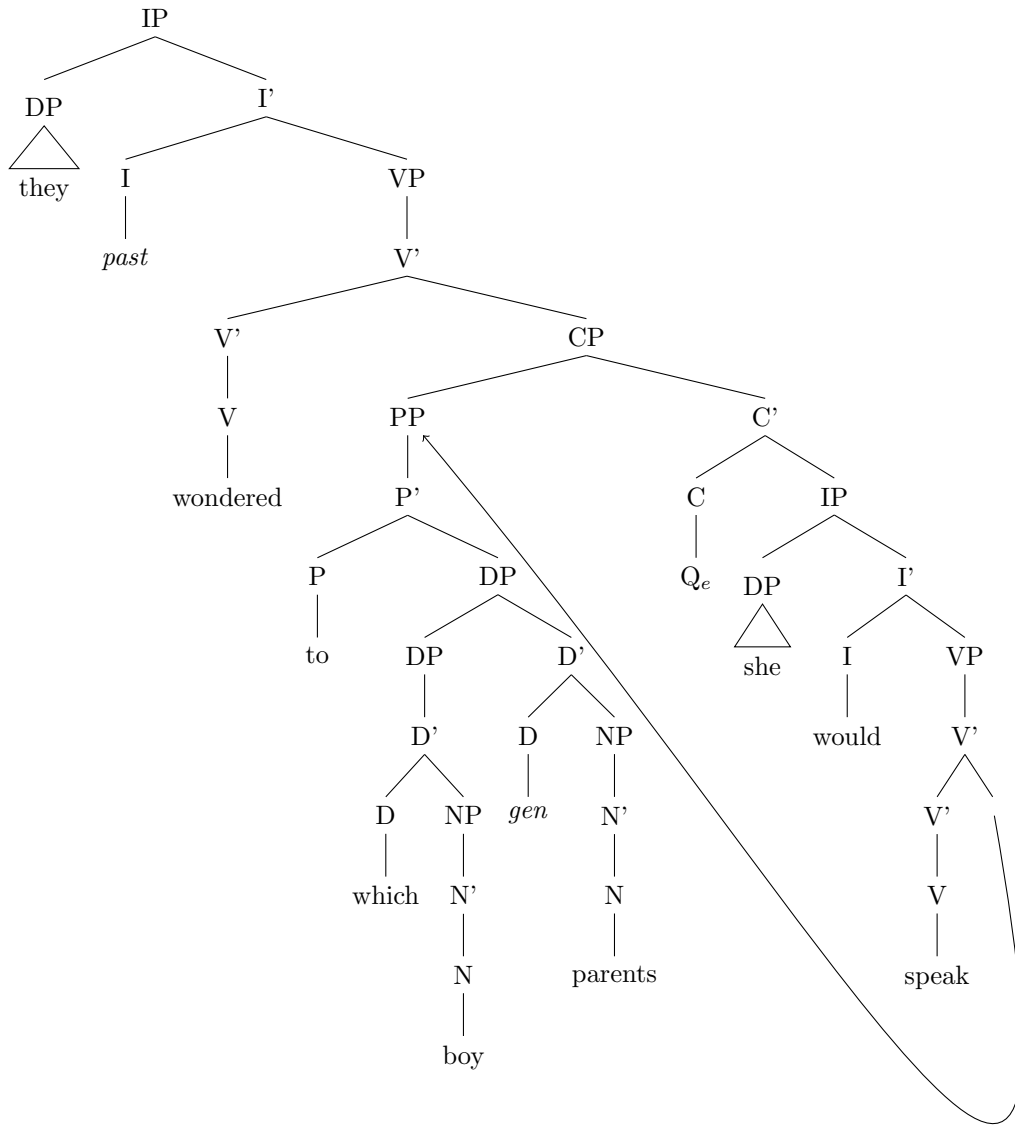


1.4 They wondered to which boy's parents she would speak.

D-Structure:



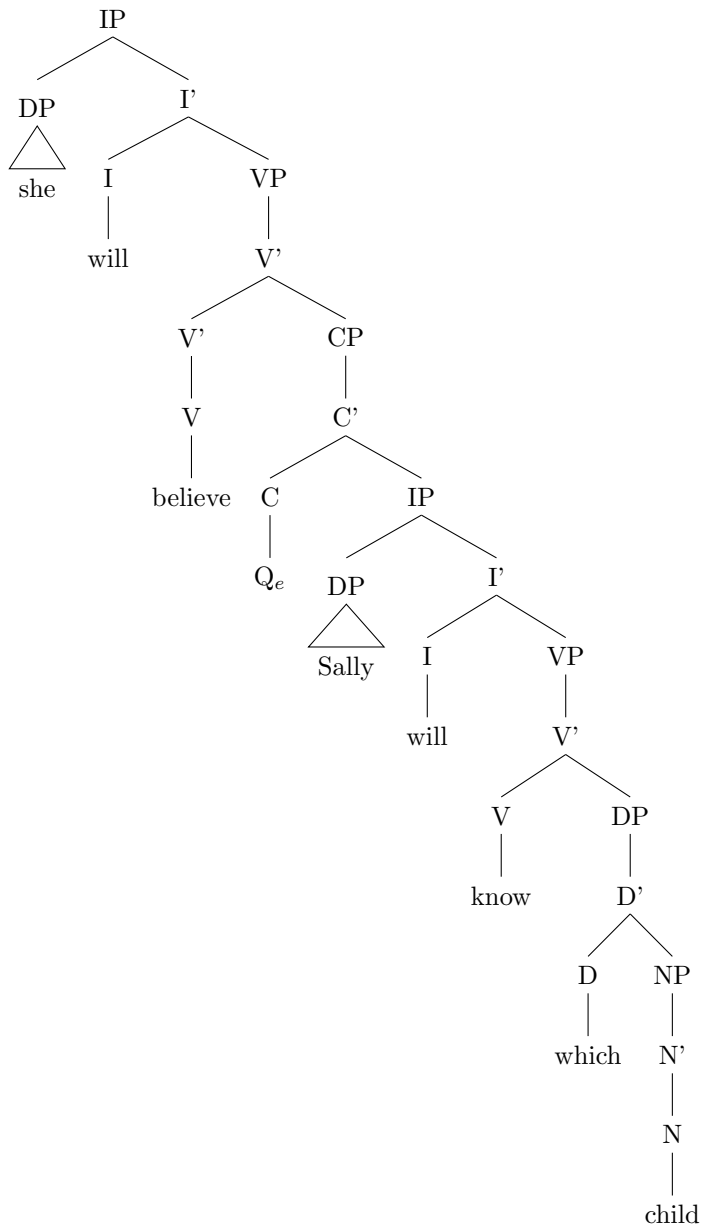
S-Structure Step 1: Wh-Movement

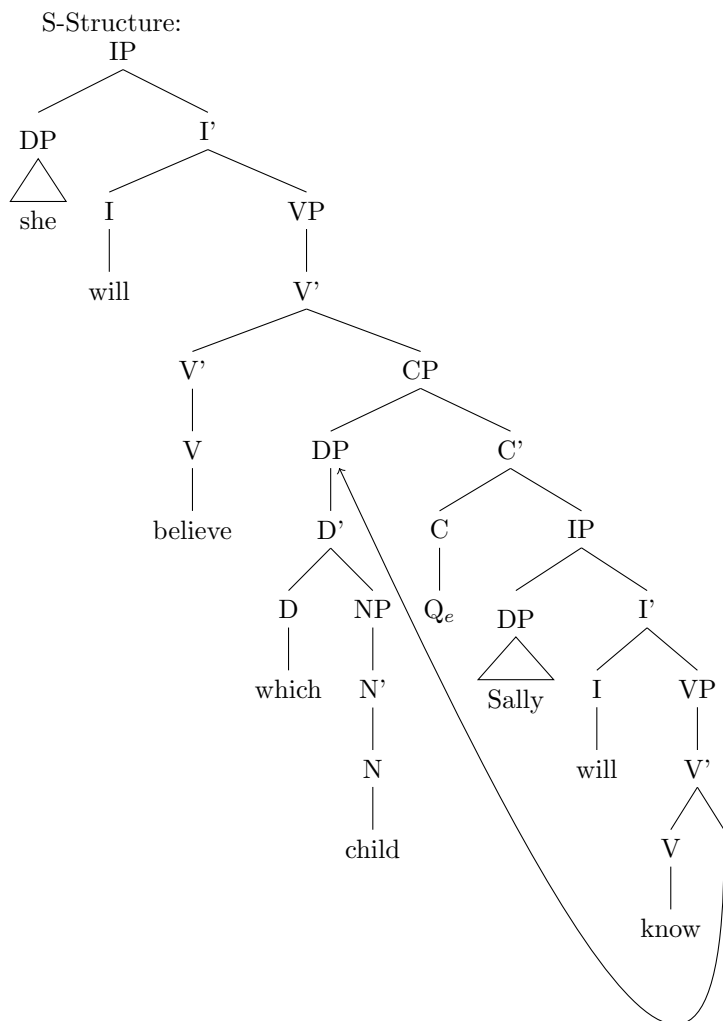


2 Ungrammatical D and S Structures

2.1 She will believe Sally will know which child.

D-Structure:

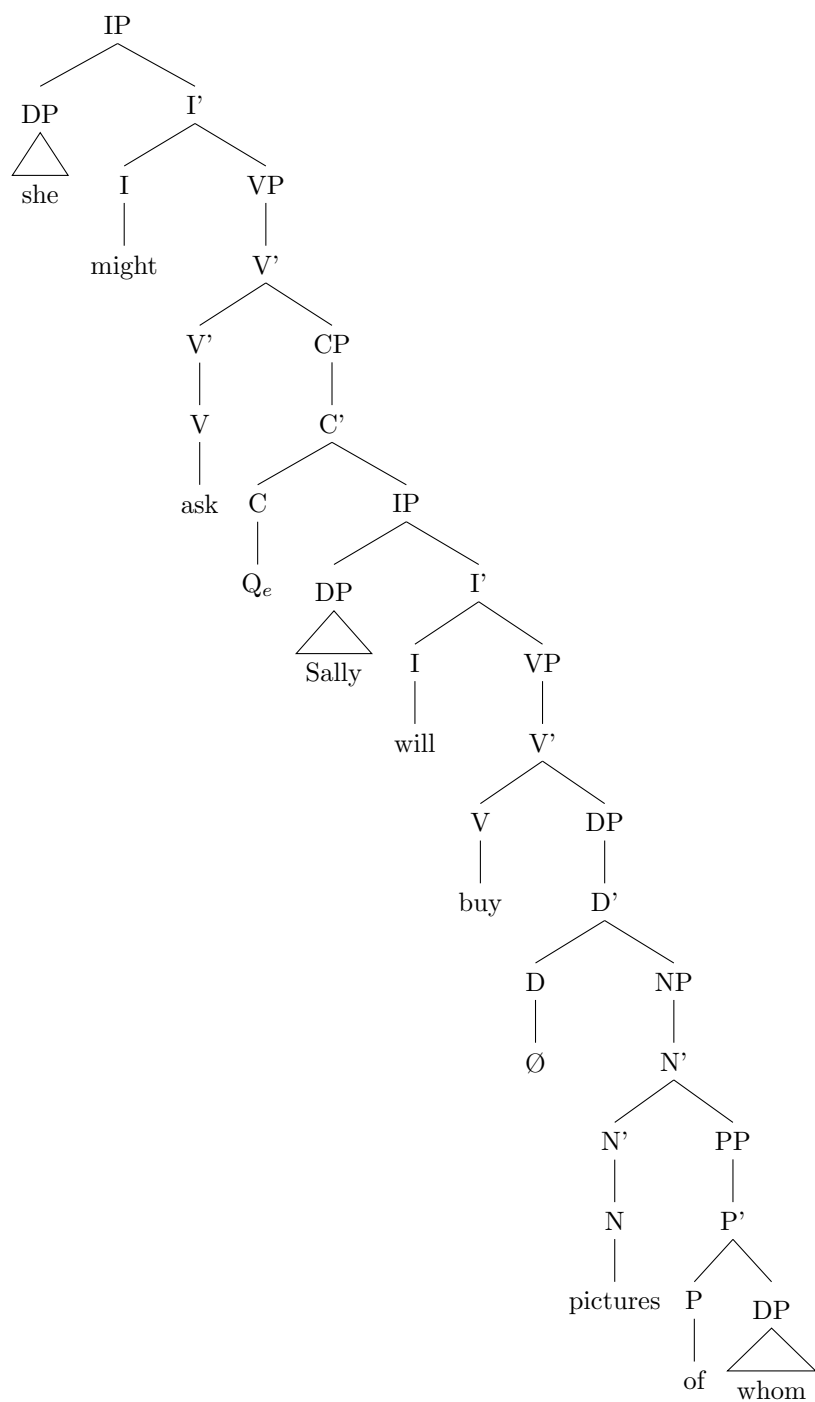


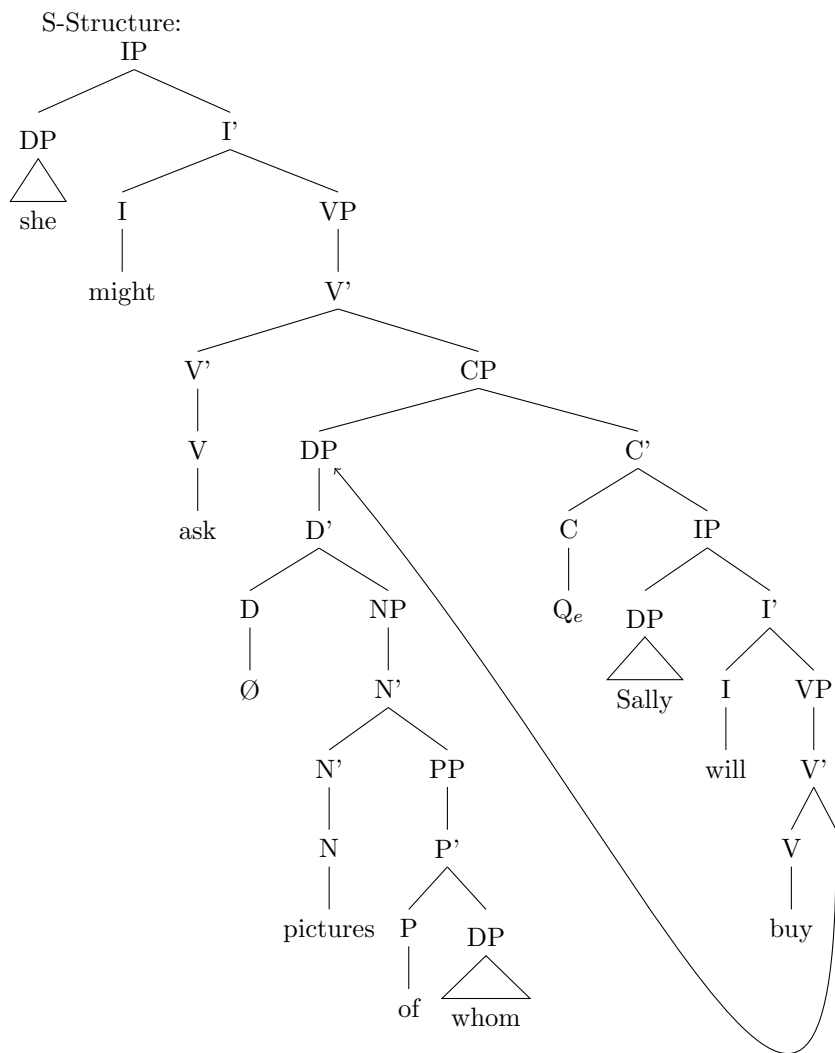


This derivation is ungrammatical because ‘believe’ cannot semantically compose with a constituent question (or a yes/no question, for that matter) in its CP. If we change the verb, the sentence can become grammatical: ‘She will wonder which child Sally will know.’

Another way to describe the ungrammaticality is to imagine that, knowing that we can’t use an embedded question, we had our D-Structure use a different structure. For example, we might make the whole sentence a CP with a Q complementizer, and have the embedded CP’s complementizer be a deleted ‘that’. Then the derivation would be ungrammatical because the ‘child’ DP would not be moving into the specifier of the Q CP. If we used this D-Structure, we *could* have a grammatical derivation with S-Structure: ‘Which child will she believe Sally will know?’, this S-Structure resulting from the movements of the ‘child’ and ‘she’ DPs.

2.2 She might ask Sally will buy pictures of whom





This derivation is ungrammatical because ‘pictures of whom’ is *not* a wh-phrase. ‘Of whom’ is a wh-phrase, because it is a PP with a daughter which is a wh-phrase (the DP ‘whom’). But the entire DP ‘pictures of whom’ cannot be a wh-phrase, because there is a NP in between that DP and the PP ‘of whom’. The NP prevents the DP from “directly dominating” the PP, and therefore prevents it from being wh-phrase. If we were to move only the PP, which is the *actual* wh-phrase here, we would get a grammatical S-Structure: ‘She might ask of whom Sally will buy pictures’. We could also *just* move the DP ‘whom’ to get ‘She might ask whom Sally will buy pictures of’.