

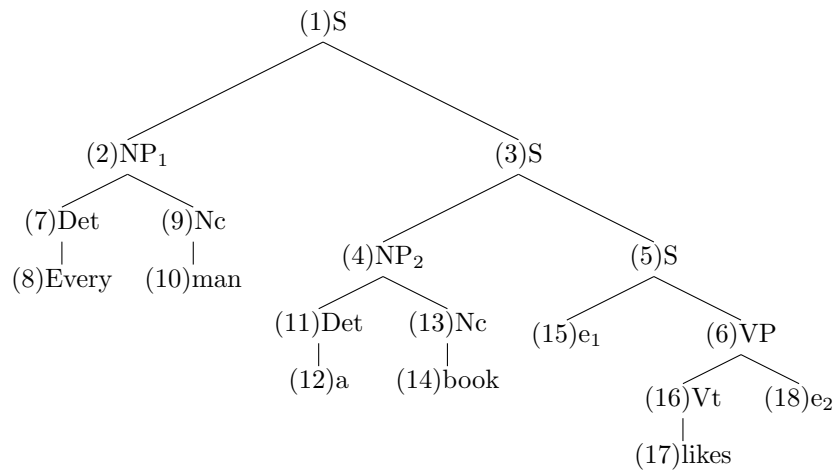
Problem set #3 comments

PHIL 43916

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Below I perform one of the derivations you were asked to perform. If you understand this one, then you should understand the other as well, as the only difference between them is in the scope of the quantifier phrases.

One of your two trees should look like this:



You were asked to calculate $\llbracket 1 \rrbracket^{M3, g^3}$. One way to do it is as follows:

$\llbracket 1 \rrbracket^{M3, g^3} = 1$ iff for all $u \in U_3$, if $u \in \llbracket \text{man} \rrbracket^{M3, g^3}$ then $\llbracket 3 \rrbracket^{M3, g^3[u/e1]} = 1$ 60(i), pass up

$\llbracket 1 \rrbracket^{M3, g^3} = 1$ iff for all $u \in U_3$, if $u \in \llbracket \text{man} \rrbracket^{M3, g^3}$ then for some $u^* \in U_3$, $u^* \in \llbracket \text{book} \rrbracket^{M3, g^3}$ and $\llbracket 5 \rrbracket^{M3, g^3[u/e1][u^*/e2]} = 1$ 60(j), pass up

$\llbracket 1 \rrbracket^{M3, g^3} = 1$ iff for all $u \in U_3$, if $u \in \llbracket \text{man} \rrbracket^{M3, g^3}$ then for some $u^* \in U_3$, $u^* \in \llbracket \text{book} \rrbracket^{M3, g^3}$ and $\llbracket 15 \rrbracket^{M3, g^3[u/e1][u^*/e2]} \in \llbracket 6 \rrbracket^{M3, g^3[u/e1][u^*/e2]}$ 60(d)

$\llbracket 1 \rrbracket^{M3, g^3} = 1$ iff for all $u \in U_3$, if $u \in \llbracket \text{man} \rrbracket^{M3, g^3}$ then for some $u^* \in U_3$, $u^* \in \llbracket \text{book} \rrbracket^{M3, g^3}$ and $\llbracket 15 \rrbracket^{M3, g^3[u/e1][u^*/e2]} \in \{x: \langle x, \llbracket e2 \rrbracket^{M3, g^3[u/e1][u^*/e2]} \rangle \in \llbracket \text{likes} \rrbracket^{M3, g^3[u/e1][u^*/e2]}\}$ 60(g)

$\llbracket 1 \rrbracket^{M3, g^3} = 1$ iff for all $u \in U_3$, if $u \in \llbracket \text{man} \rrbracket^{M3, g^3}$ then for some $u^* \in U_3$, $u^* \in \llbracket \text{book} \rrbracket^{M3, g^3}$ and $u \in \{x: \langle x, u^* \rangle \in \llbracket \text{likes} \rrbracket^{M3, g^3[u/e1][u^*/e2]}\}$ 60(a)

$\llbracket 1 \rrbracket^{M_3, g^3} = 1$ iff for all $u \in U_3$, if $u \in \{\text{Bond, Pavarotti}\}$ then for some $u^* \in U_3$, $u^* \in \{\text{War and Peace, Aspects}\}$ and $u \in \{x: \langle x, u^* \rangle \in \{\langle \text{Bond, Loren} \rangle, \langle \text{Pavarotti, Loren} \rangle, \text{Loren, Aspects} \rangle, \langle \text{Pavarotti, Pavarotti} \rangle\}\}$ lexicon

$\llbracket 1 \rrbracket^{M_3, g^3} = 1$ iff for all $u \in \{\text{Bond, Pavarotti, Loren, War and Peace, Aspects}\}$, if $u \in \{\text{Bond, Pavarotti}\}$ then for some $u^* \in \{\text{Bond, Pavarotti, Loren, War and Peace, Aspects}\}$, $u^* \in \{\text{War and Peace, Aspects}\}$ and $u \in \{x: \langle x, u^* \rangle \in \{\langle \text{Bond, Loren} \rangle, \langle \text{Pavarotti, Loren} \rangle, \text{Loren, Aspects} \rangle, \langle \text{Pavarotti, Pavarotti} \rangle\}\}$ definition of U_3

$\llbracket 1 \rrbracket^{M_3, g^3} = 0$