

Tense and aspect: Practice problems

Complete these two problems using the existential operator theory of tense (handout §3.1):

1. Give a tree and calculate the meaning for *I will not waste chalk*.



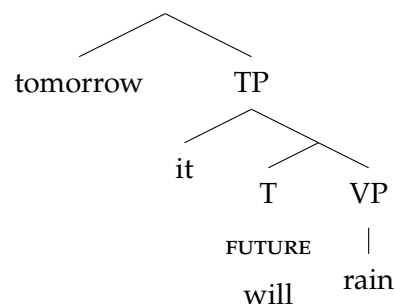
You can simply assume $\llbracket \text{waste chalk} \rrbracket^t = \lambda x . \text{WasteChalk}(x, t)$.

Does your result accurately describe the truth conditions of this sentence? Why not?

2. We did not discuss the interpretation of temporal adjuncts in the existential operator theory of tense. Suppose the interpretation of *tomorrow* uses its own special tense rule to shift the evaluation time one day into the future:

$$(1) \quad \left[\left[\begin{array}{c} \text{tomorrow} \quad \text{XP} \\ \diagup \quad \diagdown \end{array} \right] \right]^t = \exists t' \left[\llbracket \text{XP} \rrbracket^{t'} \wedge t' \text{ is (in) the day after } t \right]$$

Calculate the meaning for *Tomorrow, it will rain* using the following tree:



It is an expletive pronoun, so let's just treat it as an identity function here. *Rain* is type t : $\llbracket \text{rain} \rrbracket^t = \text{Rain}(t)$. Use the FUTURE rule in the handout's (11c).

Does your result accurately describe the truth conditions of this sentence? Why not?