



A scientist lentend a cat a donut *

det: 1
pp: 2
was: 3
by: 4
to: 5
that: 6
common_noun: 7
proper_noun: 8
v_trans_omissible: 9
v_trans_omissible_pp: 10
v_trans_not_omissible: 11
v_trans_not_omissible_pp: 12
v_cp_taking: 13
v_inf_taking: 14
v_unacc: 15
v_unerg: 16
v_inf: 17
v_dat: 18
v_dat_pp: 19
v_unacc_pp: 20

np_det_seq = [0, 1, 0, 0, 1, 0, 1]
np_prop_seq = [0, 0, 0, 0, 0, 0, 0]
v_dat_seq = [0, 0, 1, 0, 0, 0, 0]
np_det_left_seq = [1, 0, 0, 1, 0, 1, 0]
np_two_before_seq = [0, 1, 0, 1, 0, 0, 0]
np_before_seq = [0, 0, 1, 0, 1, 0, 0]
np_after_seq = [0, 0, 1, 0, 0, 1, 0]

In bidirectional Encoder of Encoder-Decoder Transformer equivalent model

(A) = (np_det_left_seq & np_two_before_seq) = [0, 0, 0, 1, 0, 0, 0]
(B) = (np_prop_seq & np_before_seq) = [0, 0, 0, 0, 0, 0, 0]
np_np_seq = (A or B) = [0, 0, 0, 1, 0, 0, 0]
np_np_any_before_seq = [1, 1, 1, 0, 0, 0, 0]
np_v_dat_p_np_np = np_after_seq & v_dat_seq
& np_before_seq & np_np_any_before_seq
= [0, 0, 1, 0, 0, 0, 0]

*COGS official training data uses "lentend", instead of "lent"