A Supplemental Material

A.1 Details in Data Collection

We used the following cue phrases to retrieved potential counterfactual tweets (before tokenizing or POS tagging): *should, shulda, shuda, shudda, shudve, would, wuda, wulda, wudda, wudve, wlda, could, cudda, culda, cudve, must, might, ought, may, i'd, id, i d, wed, we d, youd, you'd, you d, wish, condition, provided, providing, so long as, unless, whether, suppose, supposing, imagine, rather, envision, envisioning, conceptualize, conceptualizing, conjure, conjuring, visualize,* and *visualizing*. Still, many random tweets are included in the dataset which do not have any counterfactual-related signs. For instance a tweet contains 'Wednesday' was collected because it had a counterfactual cue phrase 'wed' in its text. In this way, we successfully acquired the dataset which contains a reasonable base rate (10%) for this first evaluation of counterfactual classification, while also not being too far from the actual rate of counterfactuals in random tweets (1%) than an artificially balanced data set.

Forms	Regular Expression Pattern
Wish Verb	\.*(B_{wish}|$B_{wishing}$)((VB.*/)|(JJ/))
Conjunctive Normal	\.*/CCJ/.*((/VBD/)|(/VBN)|(/MD/(\w)*/VB.*/)).*/MD/
Conjunctive Converse	\.*/MD/.*/CCJ/.*((/VBN/)|(/VBD)|(/MD/(\w)*/VB.*/))
Modal Normal	\.*/MD/(\w)*((/VBN)|(/VBD)).*/MD/(\w)*((/VBN/)|(/VBD/)|(/VB)|(VBZ))
Verb Inversion	\.*(/(B_{had})/(\w)*/(\w)*((/NN/)|(/NNP/)|(/NNPS/)|(/NNS/)|(/PRP/)).*((/VBN/)|(/VBD/)).*/MD)|((B_{were})/(\w)*/(\w)*((/NN)|((/NN/)|(/NNP/)|(/NNPS/)|(/NNS)|(/PRP/)).*/MD/|(/MD/.*/VB.*/(B_{had})/(\w)*/(\w)((/NN/)|(/NNP/)|(/NNPS/)|(/NNS/)|(/PRP/)).*((/VBN)|(/VBD/)))
Should Have	\.(($B_{should've}$)/MD/)|((B_{should}|$B_{shouldn't}$|shouldn't|should`nt)/MD/(ofB_{have})(/IN/|/VB/))(\w)*((/VBN/)|(/VBD/))
Would Have / Could Have	\.(($B_{would've}$)/MD/)|((B_{would}|$B_{wouldn't}$|wouldn't|would`nt)/MD/(of$B_{have}$)(/IN/|/VB/))(\w)*((/VBN/)|(/VBD/)) \.(($B_{could've}$)/MD/)|(($B_{could}$|$B_{couldn't}$|couldn't|could`nt)/MD/(ofB_{have})(/IN/|/VB/))(\w)*((/VBN/)|(/VBD/))

Table 1: Regular Expressions used for each of the seven forms of counterfactuals. (B: Empirical Synonyms from Brown Clusters, /XX/: part-of-speech tag adjoining token.)