Comparing perplexities. The naïve case.

Is Othello a good model for Quijote? YES

If you train on Othello and test on Don Quijote, what is the value of perplexity

there? 0.65

What is the perplexity if you train on Othello and test on the Interviews from the 1970s? Lastly, If you train on

Othello, what is the perplexity of The Two Gentlemen of Verona? Why do you think you get the perplexities you get?

Comparing perplexities with Smoothing.

What is the value of the perplexity when trained on Othello and tested on the same files as above, but without smoothing.

Why do you think this happens? Because there is unseen probability event.

What could improve this? Somewhat decrease the probability of the probability of the previously seen events so that there is little bit of probability mass left over for previously unseen events.