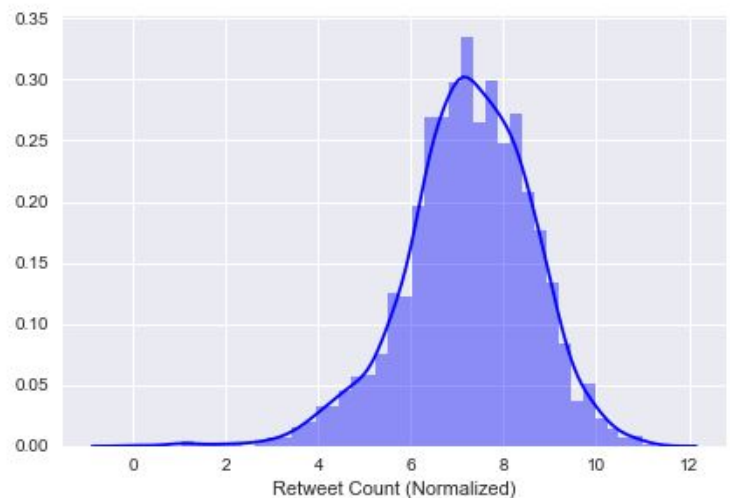
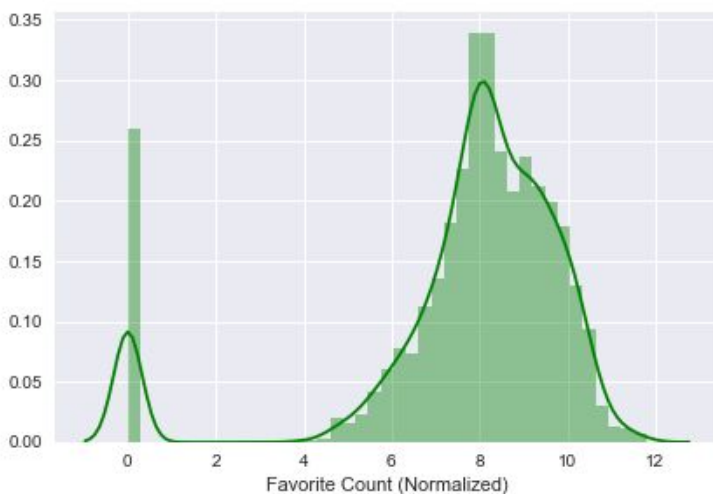
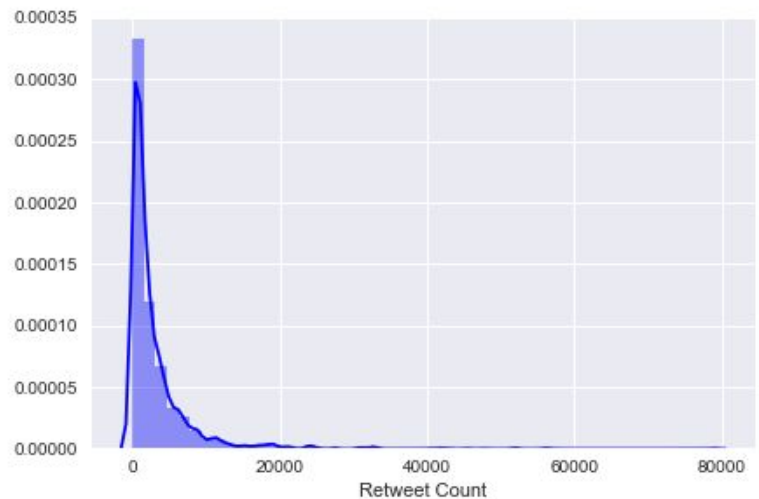
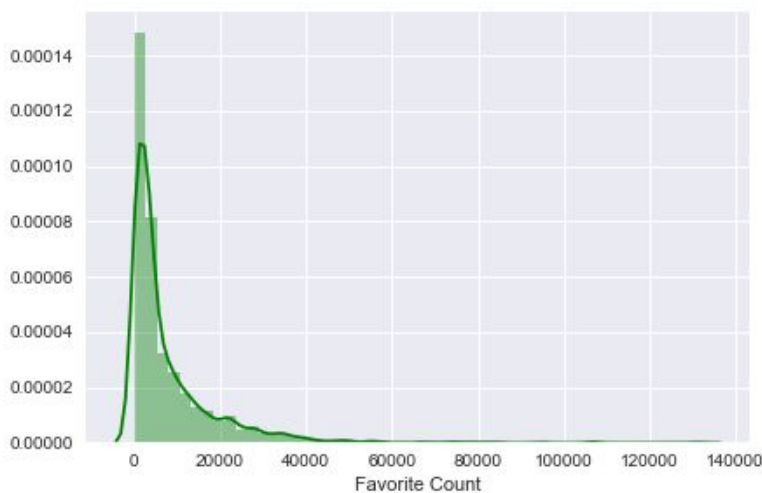


What's the Difference Between A Favorite and a Retweet?

Nathaniel Booth

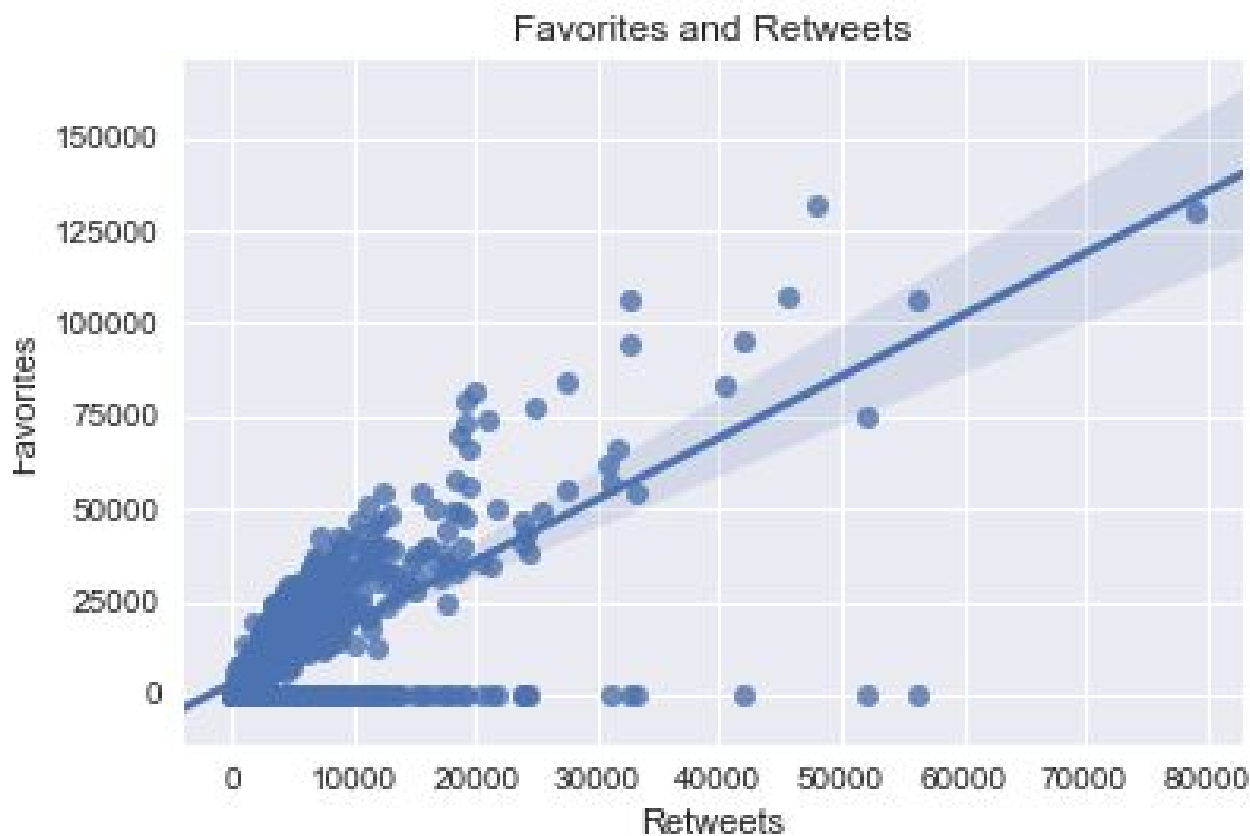
I grabbed the Twitter data for the WeRateDogs account from inception up to and excluding August 2017, about 2,400 tweets. In particular, I looked at the number of favorites and number of retweets for each tweet.

WeRateDogs is already a popular account, the median number of favorites and retweets for each tweet is about 4,000 and 1,500, respectively. But popularity is relative and as our high school experiences and American celebrity culture confirm, popularity is a long tail state. The top two graphs below show, WeRateDogs' most popular tweets (measured by retweets and favorites), are ridiculous outliers and rare. On the rarity spectrum they're somewhere between black swans and unicorns.



The bottom two graphs are the same data normalized (that is, lognormed). This reduces the affect of the outliers on the distribution of the data and these looks roughly similar and normal. Differences include that the favorite's center is a little higher than the retweets and the favorites have a weird spike at 1. That spike may be an artifact from my transformation of the data. I had to turn zeros into ones, so those are likely

overrepresented. Former observation implies that favorites occur more often than retweets and that for any given tweet, it probably has more favorites than retweets. These graphs suggest that retweets and favorites move together, let's take a visual look.



That is a strong positive correlation ($r = 0.72$). As a tweet gains favorites, one can expect retweets to increase and vice versa.

So, what's the difference between the two? I only have untested hypotheses at this point but I think it's reasonable. Favorites are for the user and retweets are for the user's network. People are slightly more likely to save something for themselves than to share it with others for a variety of reasons. But that is the essence, one is used for reference, the other is to share with like-minded people.