The Secret Life of Twitter

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In "The Secret Life of Pronouns", James Pennebaker argues that pronoun usage may reflect social status. Specifically, he points out that higher-status people tend to use more collective pronouns, such as 'we', while lower-status people tend to use more self-referential pronouns, such as 'I'. By examining word frequencies on Twitter, we find similar (but subdued) patterns in relation to follower count, the number of Twitter users who subscribe to another Twitter user's feed. In particular, we collect word frequencies for 10 consecutive days of tweets (updates of up to 140 characters posted by users), comprising over 3 billion word instances. Then, for each pronoun we measure the correlation between relative frequency of word usage and follower count of word users by computing the Spearman (rank-based) correlation coefficient. The results indicate that first person plural pronouns, such as 'we' and 'our', have higher average Spearman coefficients than other classes of pronouns, while possessive pronouns have higher median Spearman coefficients. However, no class of pronouns has an average or median Spearman coefficient greater than 0.2, suggesting that the usage of particular classes of pronouns itself has little relation to follower count.