

# Harry Potter Text Mining & Sentimental Analysis

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## Background Information

Harry Potter is a series of fantasy novels written by British author J. K. Rowling. The world was introduced to Harry Potter on June 26, 1997. Twenty years later, Harry Potter and the Philosopher's Stone, the first book in the series, is one of the bestselling books of all time. According to Scholastic, more than 400 million copies of Harry Potter titles have been sold worldwide, and they've been translated into 68 languages. For more information: Wiki.

Harry Potter being one of the most popular novel, we thought we should try do some basic yet informative frequency & sentimental analysis

## The Data

The text data used in this analysis was obtained from R package (harrypotter) on GitHub containing the text for all 7 books in the Harry Potter series, by JK Rowling. <https://github.com/bradleyboehmke/harrypotter>

We had to extract other metadata like publisher, ranking, sales, author e.t.c from <https://www.theguardian.com/us>

We got our hands dirty by doing some basic web scraping on <https://en.wikipedia.org> to extract character details.

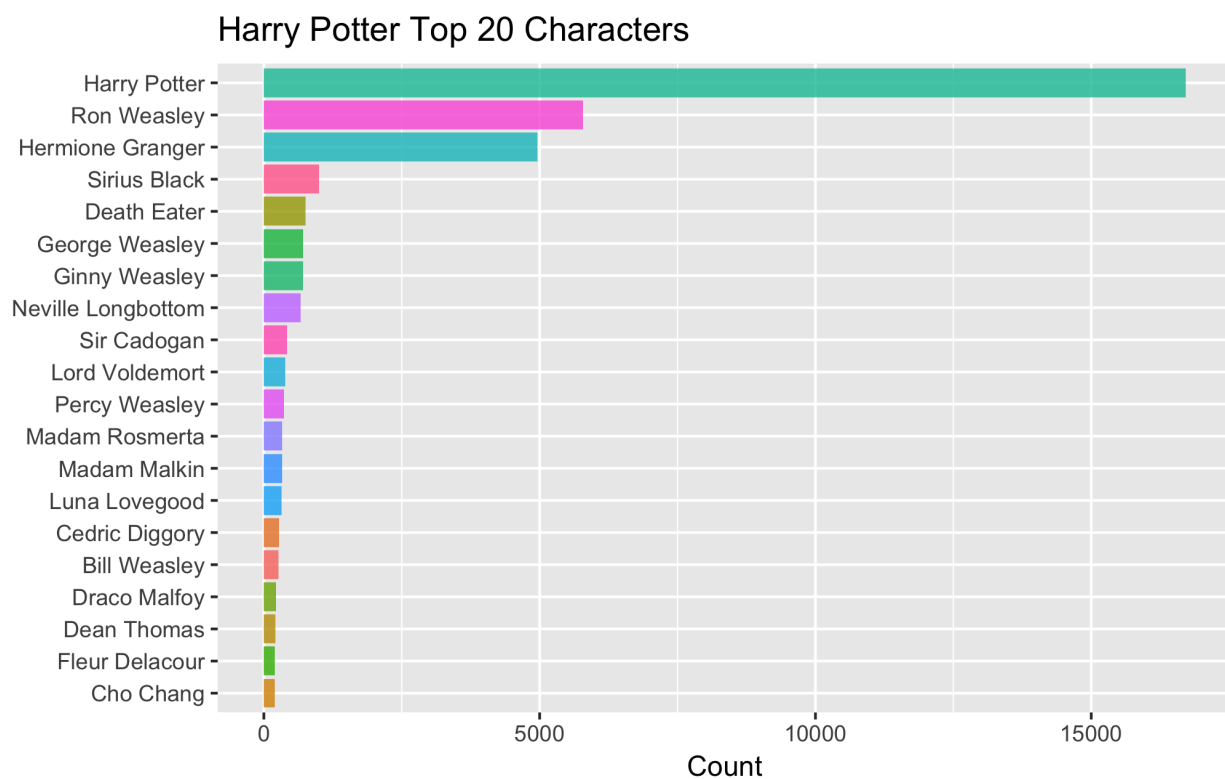
Now let's do some analysis!



Figure 1:

## Quantitative and Sentimental Analysis

Q1. Who is the most important charecter based on how much he/she was mentioned



Harry being the main character in the entire series,<sup>2</sup> it's clear that his name is mentioned with highest

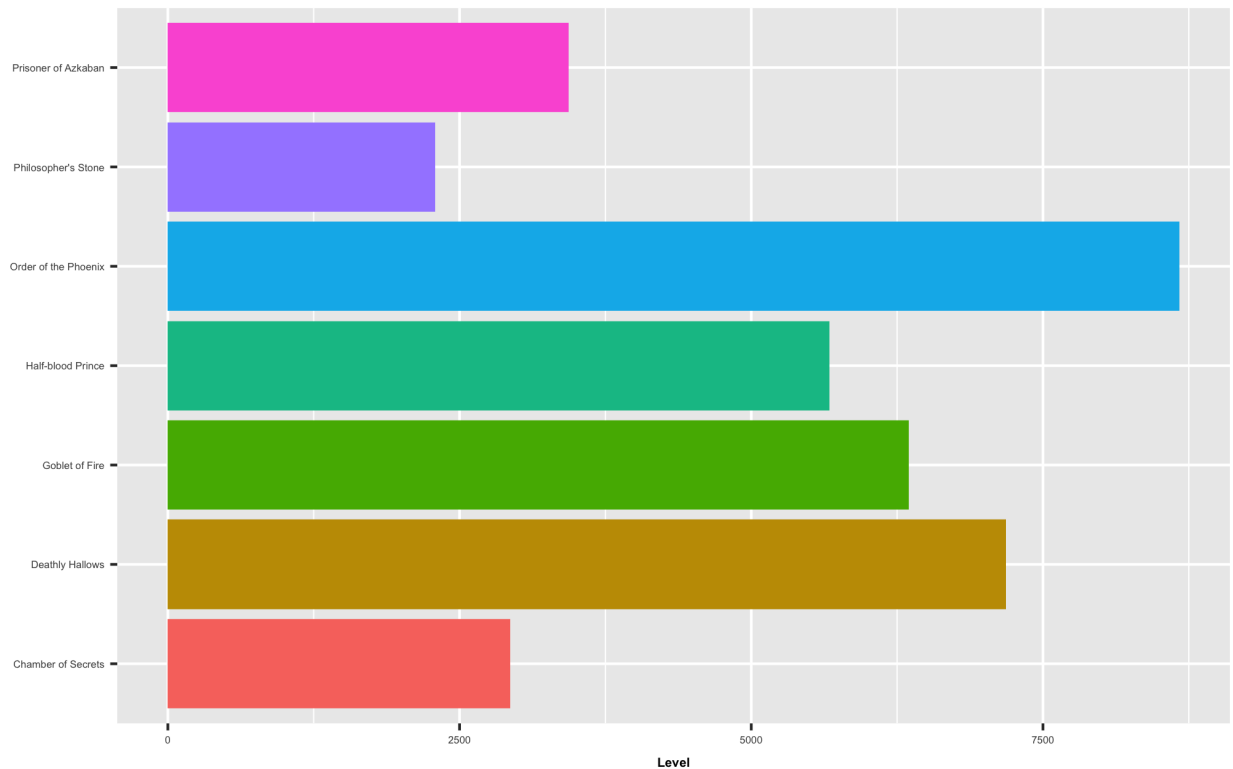


Figure 2: *Fig. 2* HP

frequency. The author did a pretty nice job

## Q2. Which is the most scariest book based on sentiment analysis ?

Using Bing lexicon, Harry Potter and the Order of the Phoenix is the scariest with about 8k negative sentiments

## Q3. What the top ten used words in exception to stop words ?

word	n
harry	16717
ron	5784
hermione	4960
dumbledore	2882
looked	2344
professor	2008
hagrid	1735
time	1716
wand	1641
eyes	1610

## Q4. sentiments by books

Order of the Phoenix, Deathly Hallows, Half-blood Prince and Deathly Hallows use more negative sentiments while the rest use more positive sentiments

## Q5. sentiment by popularity based on www.theguardian.com

Each book has a sentiment score ranging from -1 (most negative) to 1 (most positive). Books with high negative sentiment scores are considered more negative than books with high positive sentiment scores.

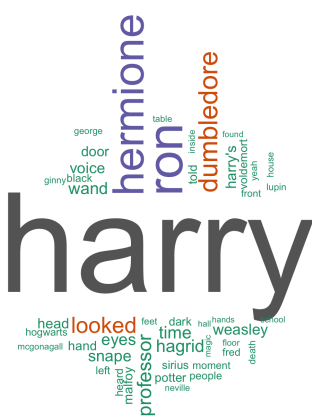
Figure 3: *Fig. 3* HP



Figure 4: *Fig. 4* HP

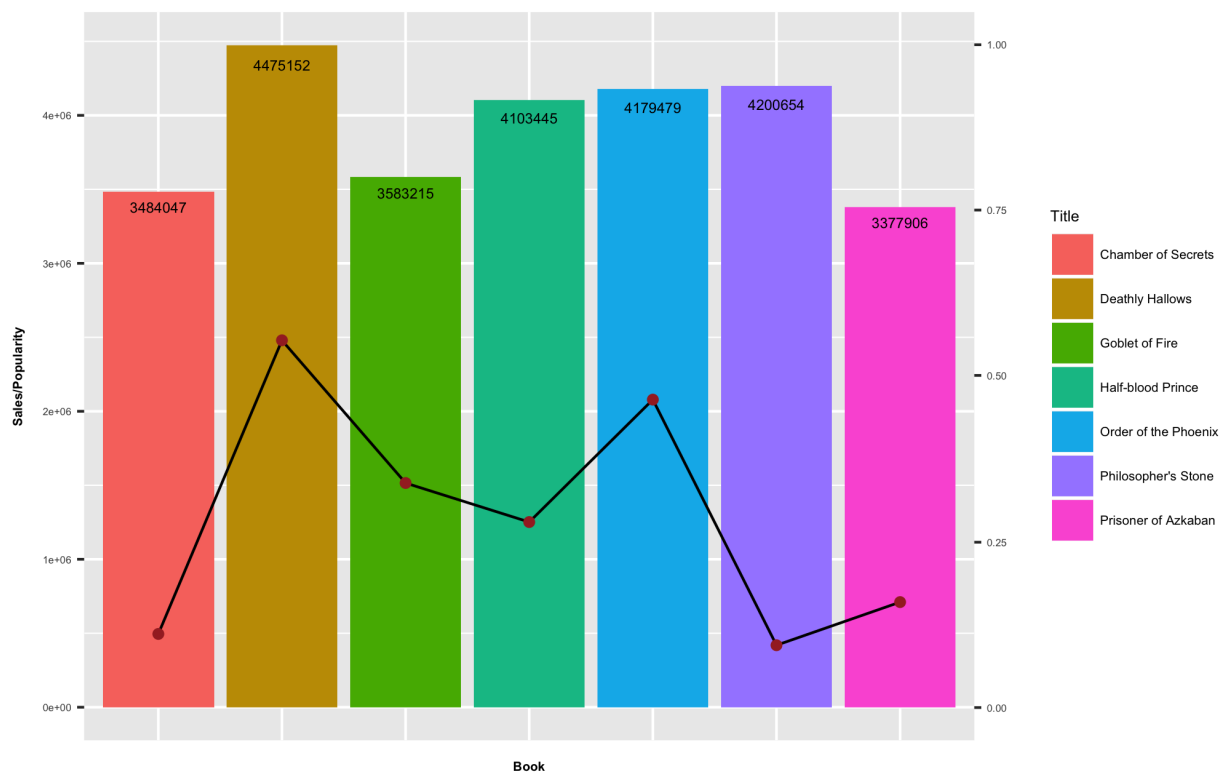


Figure 5: *Fig.5* HP

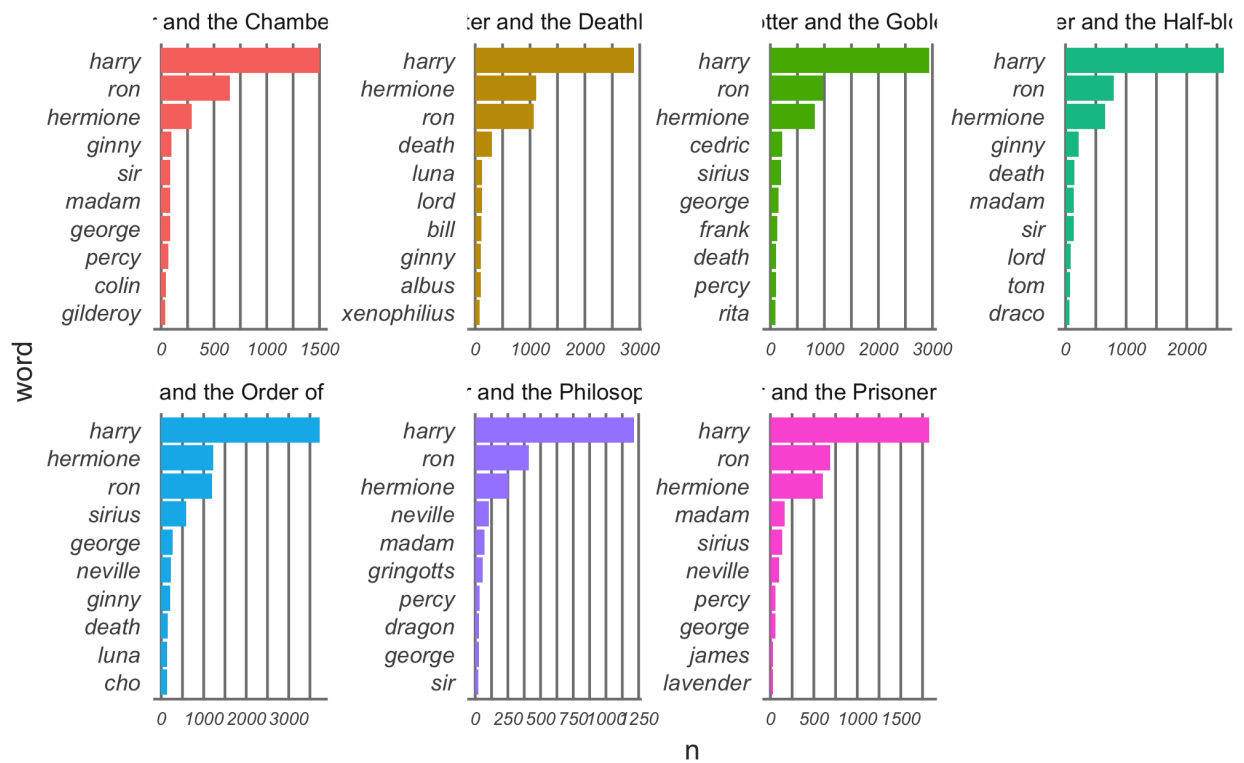


Figure 6: *Fig.5* HP