

It was a dark and stormy night...

...

Identifying genre patterns in novels via NLP

Anne Nguyen  
5/31/2016

# The Big Sleep (1939/1946)

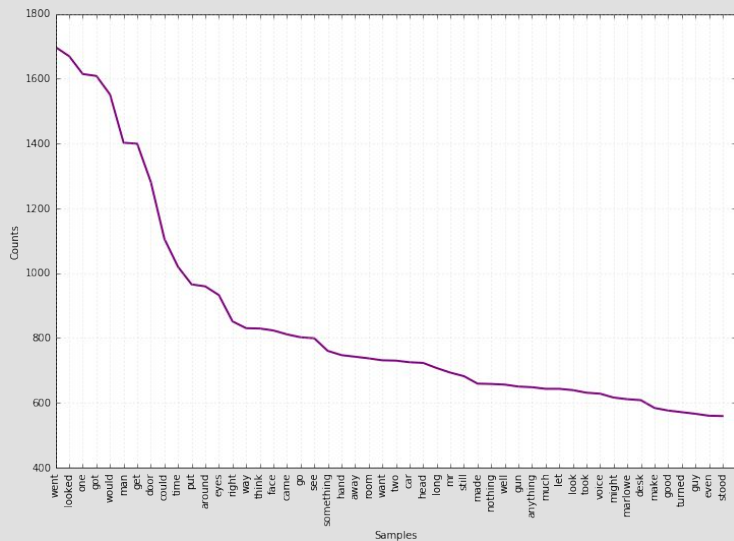
Corpus: 7 Raymond  
Chandler novels

Hardboiled/noir genre



# Textual patterns

- 7 books: 560,000 words; 300,000 content; 15,500 unique
- girl: 454; gun: 698; cigarette: 480
- *The Big Sleep*: 12.3 words per sentence

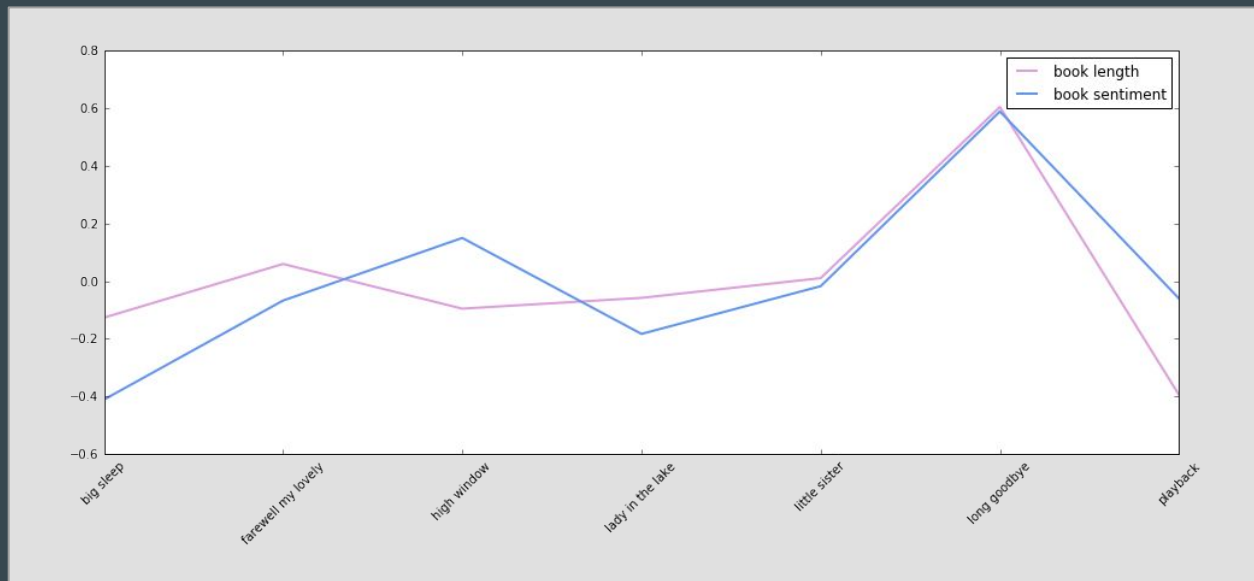


## Similes

platinumed hair shone like silver fruit bowl  
fingers made movements like dying butterflies gun  
85-cent dinner tasted like discarded mail bag  
silvery tinkle sounded like putting away saucepans  
snapped blackjack coiled like wounded snake went

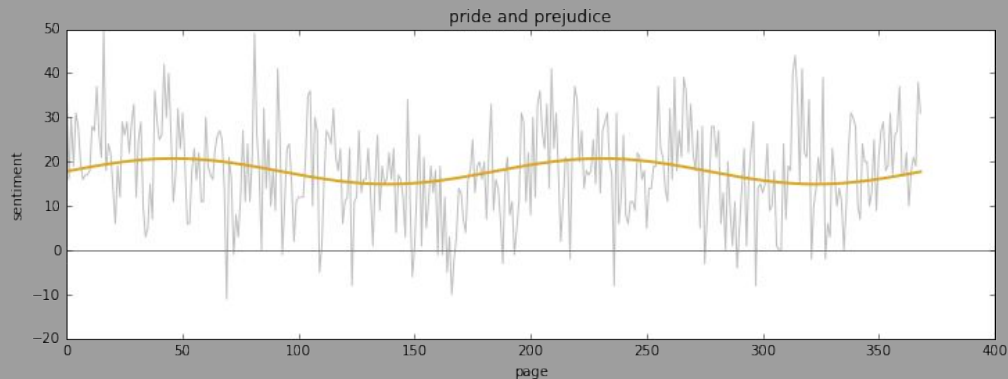
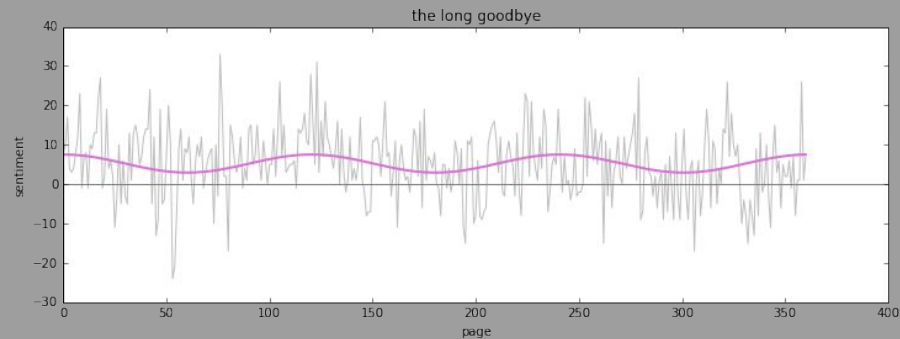
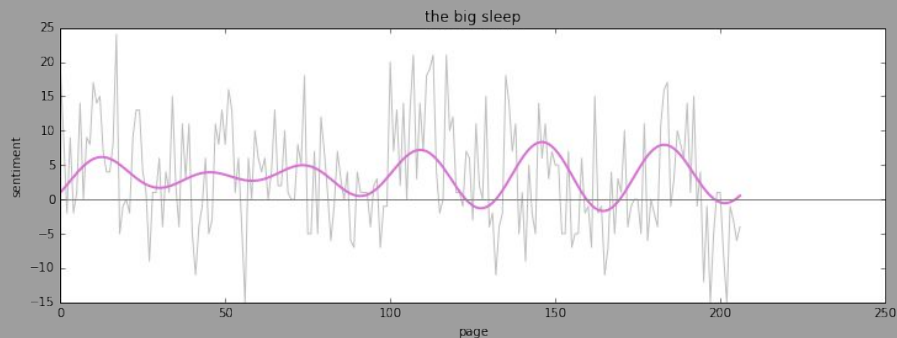
# Sentiment analysis

- Multiple lexicons compiled by Brian Foo (mainly NRC): 11k words, 40/60 pos/neg
- 6k out of 15k Chandler words tagged



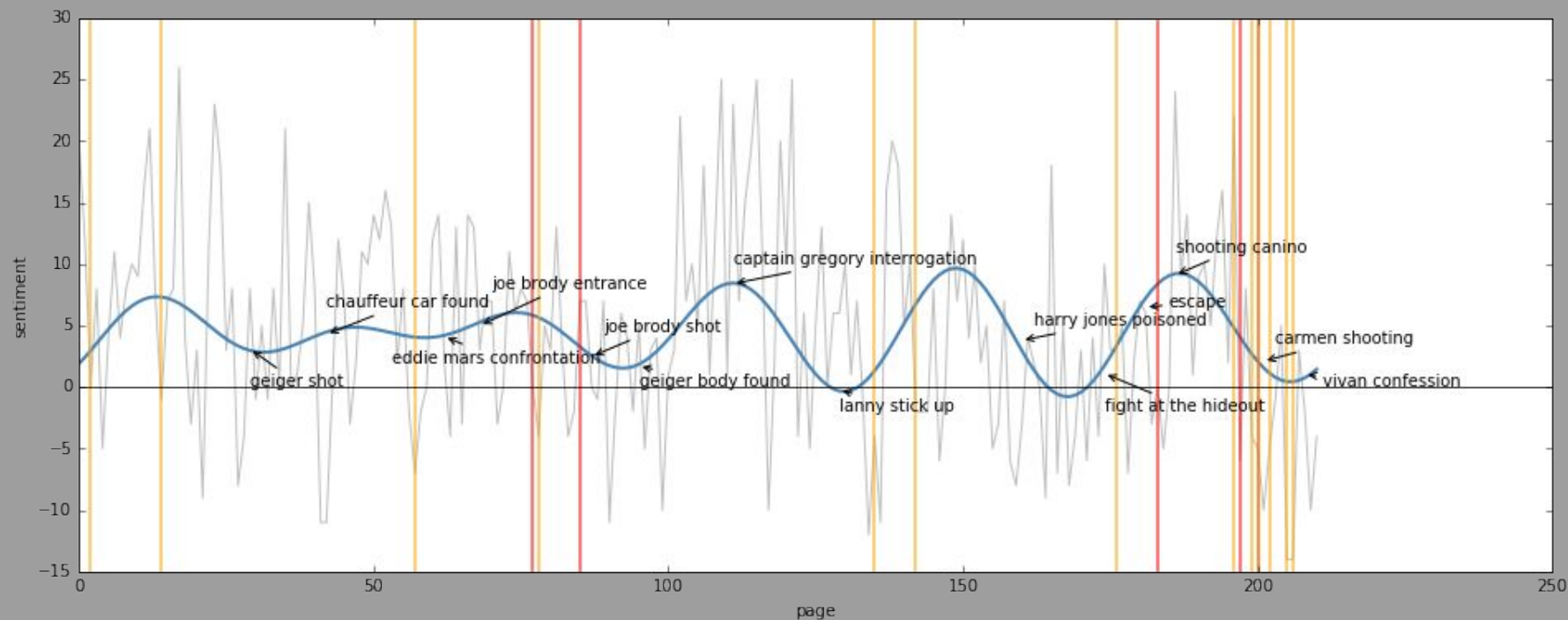
Positive: ~14%  
Negative: ~12%

# Sentiment as plot structure



Words in lexicon: 15%  
Positive: 9%  
Negative: 4.5%  
Words per sentence: 29

# Sentiment in the Big Sleep



# Topic analysis

By book: TFIDF/LDA, LSI, POS

degarmo + geiger + mitchell + kingsley + almor  
geiger + degarmo + kingsley + lennox + regan

By sentence: TFIDF/LDA, LSI, NMF

door + eyes + came + still + stood + open + looking + mouth + light + house  
see + anything + say + away + much + gun + french + turned + told + take + money  
right + door + desk + hand + thought + stood + sat + open + chair + mouth + leaned + phone  
reached + killed + softly + cigarette + smile + yeah + hands + glass

door eyes came face way open opened hand still head room car gun look away turned stood

Text generator

[bit.ly/noirtext](https://bit.ly/noirtext)