

## Chapter 2:

Q4: The count for men fluctuates generally decreasing, the count for women fluctuates generally increasing, and the count for people fluctuates greatly generally increasing then sharply decreasing

Q5:

Part Meronyms: [Synset('burl.n.02'), Synset('crown.n.07'), Synset('limb.n.02'), Synset('stump.n.01'), Synset('trunk.n.01')]

Substance Meronyms: [Synset('heartwood.n.01'), Synset('sapwood.n.01')]

Member Holonyms: [Synset('forest.n.01')]

Q7: conceited , silly father . She had , however , one very intimate friend , a sens  
early custom . But these measures , however good in themselves , were insuffici  
ellynch Hall was to be let . This , however , was a profound secret , not to be  
t immediate neighbourhood , which , however , had not suited him ; that acciden  
e dues of a tenant . It succeeded , however ; and though Sir Walter must ever l  
h , the former curate of Monkford , however suspicious appearances may be , but  
good character and appearance ; and however Lady Russell might have asked yet f  
siness no evil . She was assisted , however , by that perfect indifference and  
h the others . Something occurred , however , to give her a different duty . Ma  
, but can never alter plain ones . However , at any rate , as I have a great d  
l what is due to you as my sister . However , we may as well go and sit with th . . .

Q9:

Religion Vocab: 849

Romance Vocab: 8452

Religion richness: 0.368010403121

Romance Richness: 0.12070492131044529

Q12:

Distinct Words: 123455

More than one pronunciation: 7.49%

Q17:

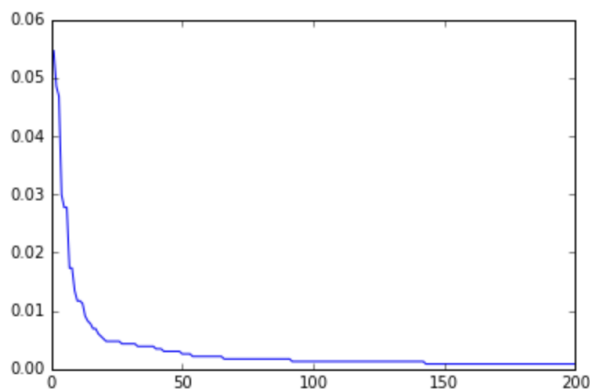
[ 'jack', 'sparrow', 'elizabeth', 'turner', 'gibbs', 'swann', 'jones', 'norrington',  
'pintel', 'ragetti', 'back', 'davy', 'one', 'beckett', 'ship', 'chest', 'black', 'ha', 'pearl',  
'crew', 'deck', 'tia', 'cannibal', 'flying', 'man', 'scene', 'lord', 'key', 'dutchman',  
'captain', 'know', 'cutler', 'come', 'us', 'men', 'want', 'dalma', 'find', 'sword', 'oh',  
'hand', 'behind', 'compass', 'beach', 'see', 'bottle', 'look', 'kraken', 'cage', 'head']

Q18:

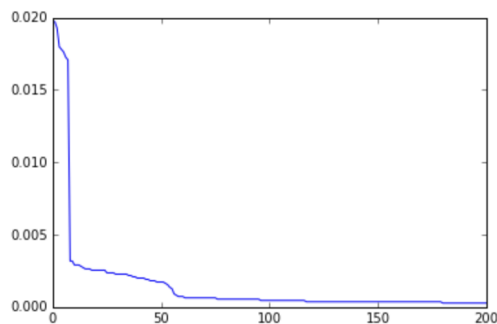
[( 'JACK', 'SPARROW'), ( 'WILL', 'TURNER'), ( 'ELIZABETH', 'SWANN'), ( 'DAVY', 'JONES'), ( 'CUTLER', 'BECKETT'), ( 'LORD', 'CUTLER'), ( 'Black', 'Pearl'), ( 'Flying', 'Dutchman'), ( 'Jack', 'Sparrow'), ( 'TIA', 'DALMA'), ( 'CANNIBAL',

'ISLAND'), ('Davy', 'Jones'), ('FLYING', 'DUTCHMAN'), ('bamboo', 'pole'), ('I', 'want'), ('Jack', 'grabs'), ('Mister', 'Turner'), ('I', 'think'), ('left', 'hand'), ('Jack', 'looks'), ('CANNIBAL', 'CROWD'), ('Edinburgh', 'Trader'), ('Ha', 'ha'), ('Yo', 'know'), ('And', 'I'), ('Port', 'Royal'), ('S', 'PARROT'), ('East', 'India'), ('slow', 'motion'), ('black', 'spot'), ('Jack', 'picks'), ('Jack', 'walks'), ('turns', 'around'), ('PORT', 'ROYAL'), ('aerial', 'view'), ('BLACK', 'PEARL'), ('scuttled', 'ship'), ('I', 'know'), ('motion', 'scene'), ('music', 'stops'), ('I', 'would'), ('India', 'Trading'), ('Trading', 'Company'), ('small', 'chest'), ('Will', 'sees'), ('I', 'thought'), ('hermit', 'crab'), ('William', 'Turner'), ('WOUNDED', 'SAILOR'), ('looks', 'back')]

Q23:



Zipf's Law applies because of the visible inverse relationship



Zipf's law doesn't quite apply, for example, the second most frequent word should appear  $\frac{1}{2}$  the time which is not what happens. Zipf's law must then be for real language.

Q27:

Nouns: 1.5455227238638067  
 Verbs: 2.1866273523545225  
 Adjectives: 1.4336283185840708  
 Adverbs: 1.2532916759651864

Chapter 3:

Q20: 74

Q22: `r'[\s\(\[\{]([a-z]+)'` - regex to use after excluding all the script and style tags and the text inside of them

Chapter 6:

Q4: [doubts, sans, hugo, effortlessly, dismissed, mediocrity, overwhelmed, fabric, wires, wits, topping, ugh, uplifting, bruckheimer, bounce, lang, understands, matheson, controversy, quicker, maxwell, locks, tsui, admired, cronenberg, derivative, attorney, existential, bandits, restoring]

Most of them seem informative as they are emotionally tied words. Like overwhelmed is a feeling that you can get so using it as a classifier is helpful. Some of them were names which was surprising.