

RecalcFleschForSurvey

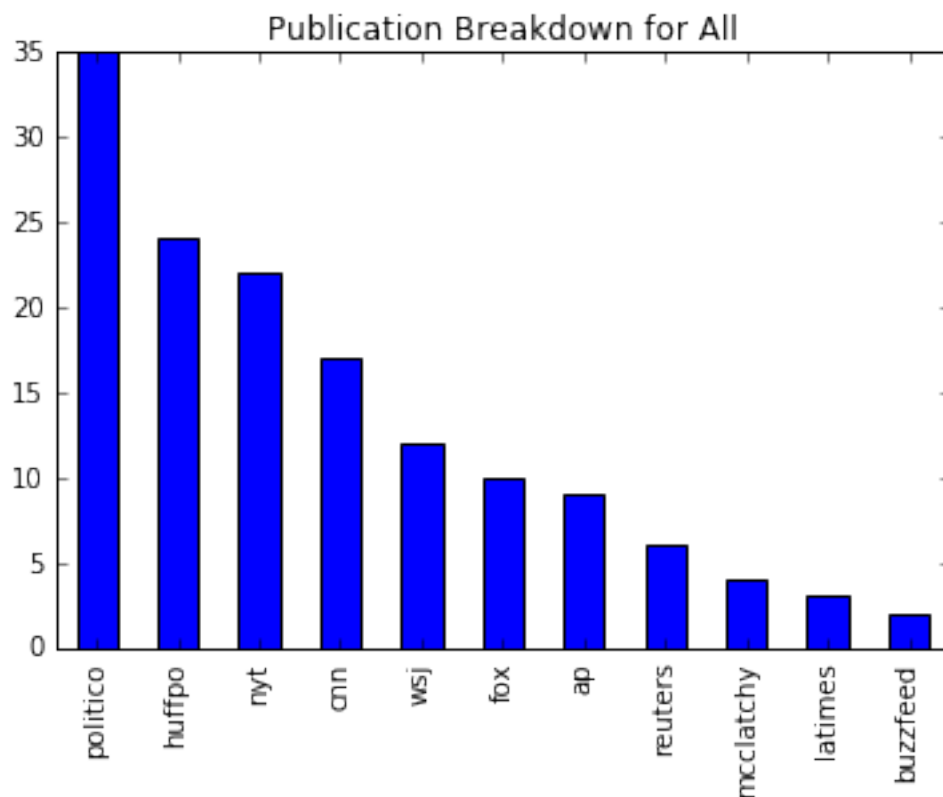
March 24, 2016

```
In [22]: from textstat.textstat import textstat
import csv
import pandas
import matplotlib
#matplotlib.style.use('ggplot')
%matplotlib inline
import ast
pandas.options.display.max_colwidth = 10000

In [15]: df = pandas.read_csv('data/SurveyReady/for_survey_cleaned_redacted_edited.csv')
print len(df)
df['org'].value_counts().plot(kind="bar", title="Publication Breakdown for All")
df.columns
```

144

```
Out[15]: Index([u'Unnamed: 0', u'title', u'url', u'org', u'candidate', u'top_topic',
               u'flesch', u'body'],
              dtype='object')
```

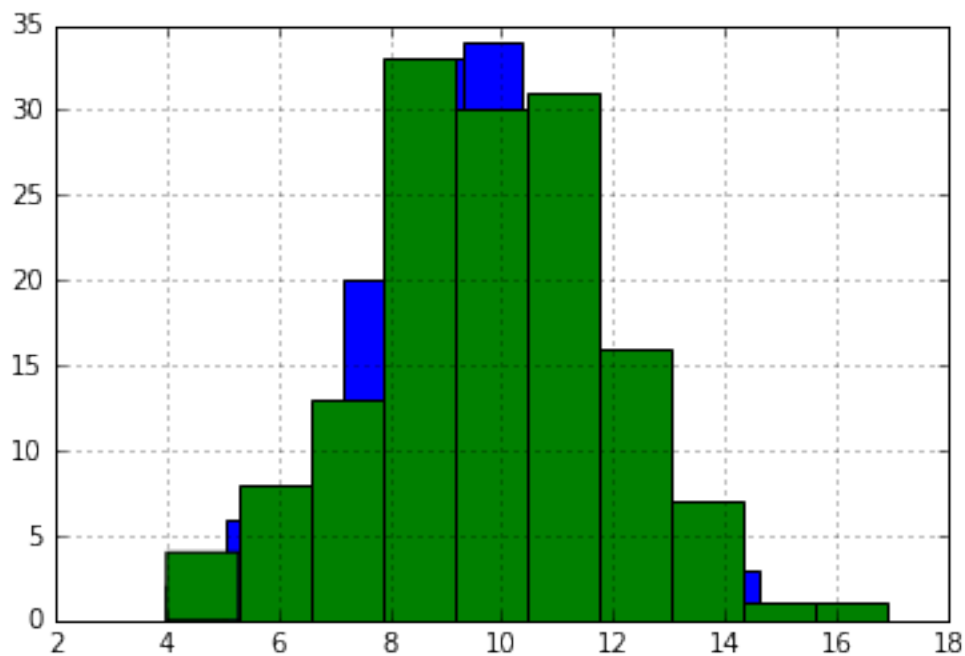


```
In [16]: # recalculate Reading scores
df['gunning_fog'] = df['body'].apply(lambda x: textstat.gunning_fog(x) if type(x) == str else 1)
df['flesch_new'] = df['body'].apply(lambda x: textstat.flesch_kincaid_grade(x) if type(x) == str else 1)
df['readability'] = df['body'].apply(lambda x: textstat.flesch_reading_ease(x) if type(x) == str else 1)

In [29]: print "GREEN COLOR IS NEW"
df['flesch'].hist()
df['flesch_new'].hist()
```

GREEN COLOR IS NEW

Out[29]: <matplotlib.axes._subplots.AxesSubplot at 0x10a641490>



```
In [30]: #df.to_csv('data/SurveyReady/for_survey_w_new_flesch.csv')
```

0.1 DATA CHECKS

1 Candidate & Topic Count

```
In [34]: CANDIDATES = ['clinton', 'trump', 'cruz', 'sanders']
for c in CANDIDATES:
    print c, len(df[df['candidate'] == c])

print
TOPICS = ['Immigration', 'Campaign Finance', 'Foreign Policy/National Security', 'Abortion']
for t in TOPICS:
    print t, len(df[df['top_topic'] == t])
```

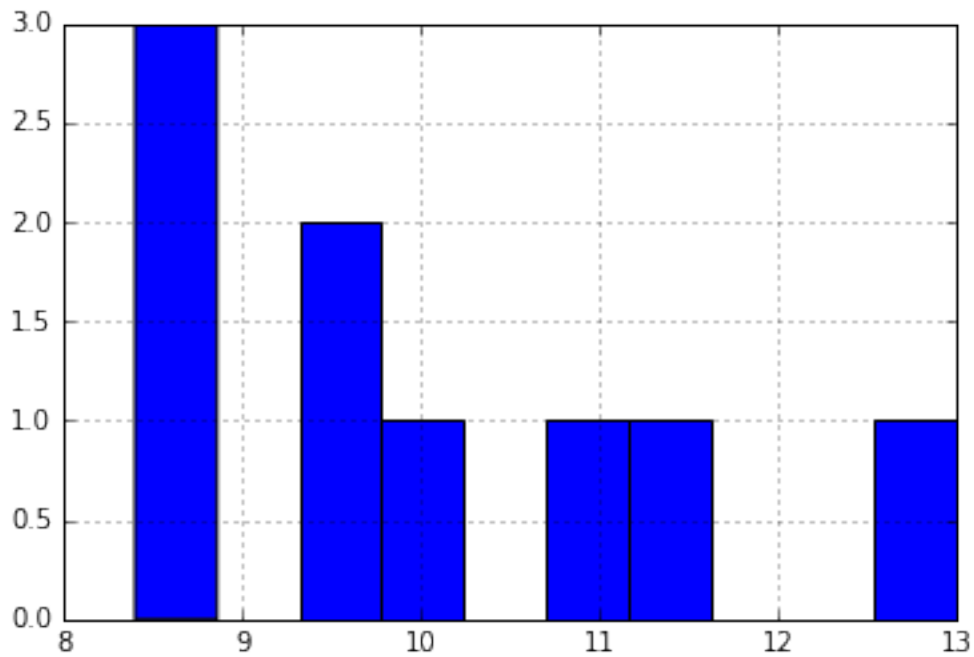
clinton 36
trump 36
cruz 36
sanders 36

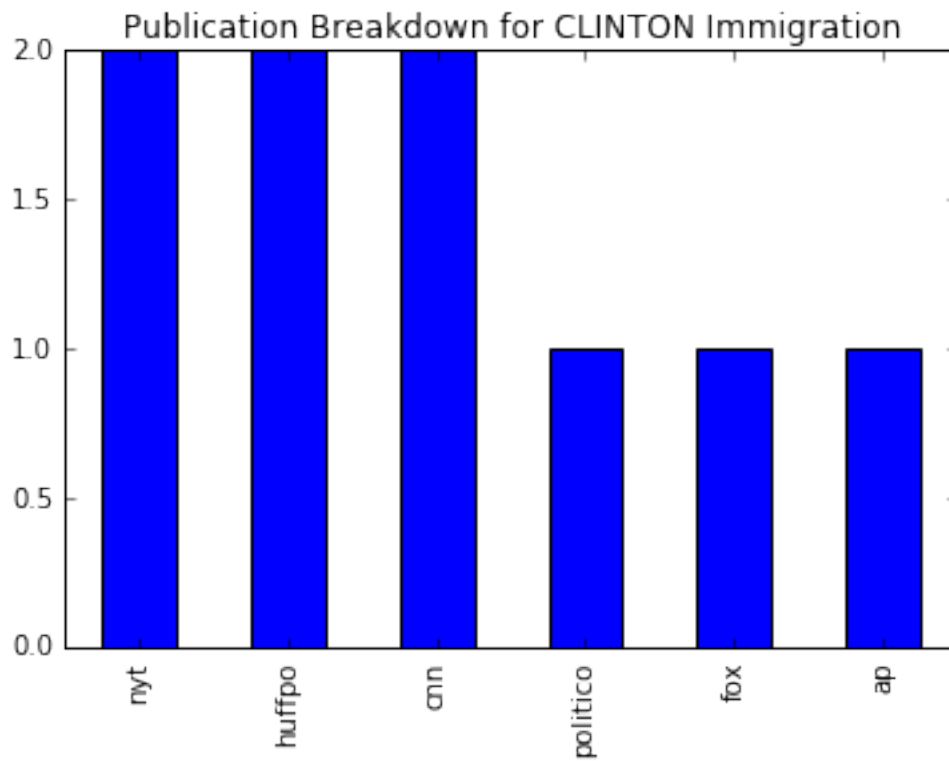
Immigration 36
Campaign Finance 36
Foreign Policy/National Security 36
Abortion 36

1.1 Check Distributions

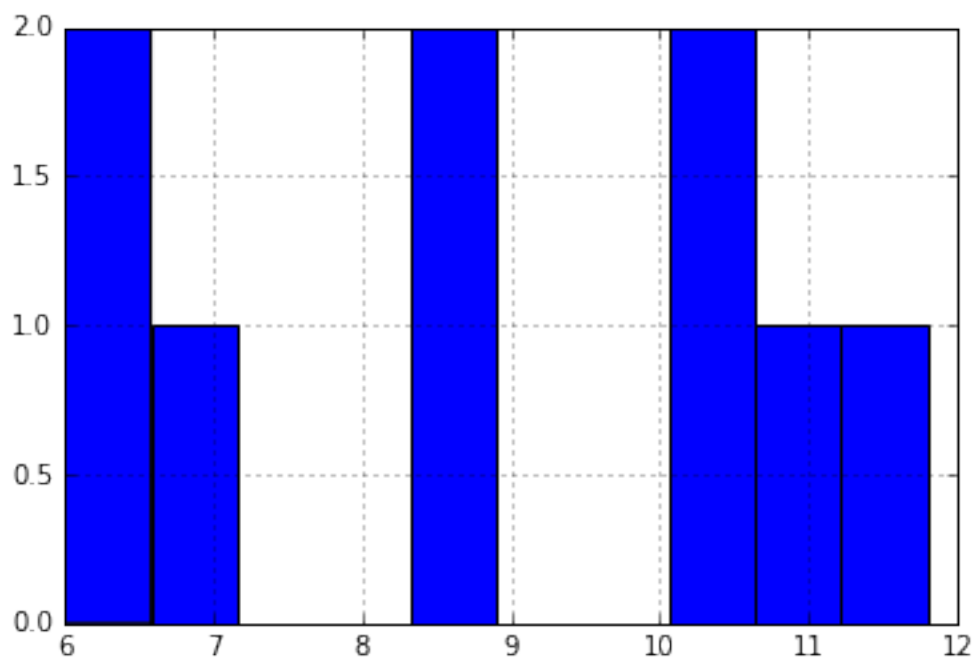
```
In [40]: for c in CANDIDATES:
         for t in TOPICS:
             print "FLESCH FOR", c, t
             df[(df['candidate'] == c) & (df['top_topic'] == t)]['flesch'].hist()
             matplotlib.pyplot.show()
             df[(df['candidate'] == c) & (df['top_topic'] == t)]['org'].value_counts().plot(kind="bar")
             matplotlib.pyplot.show()
```

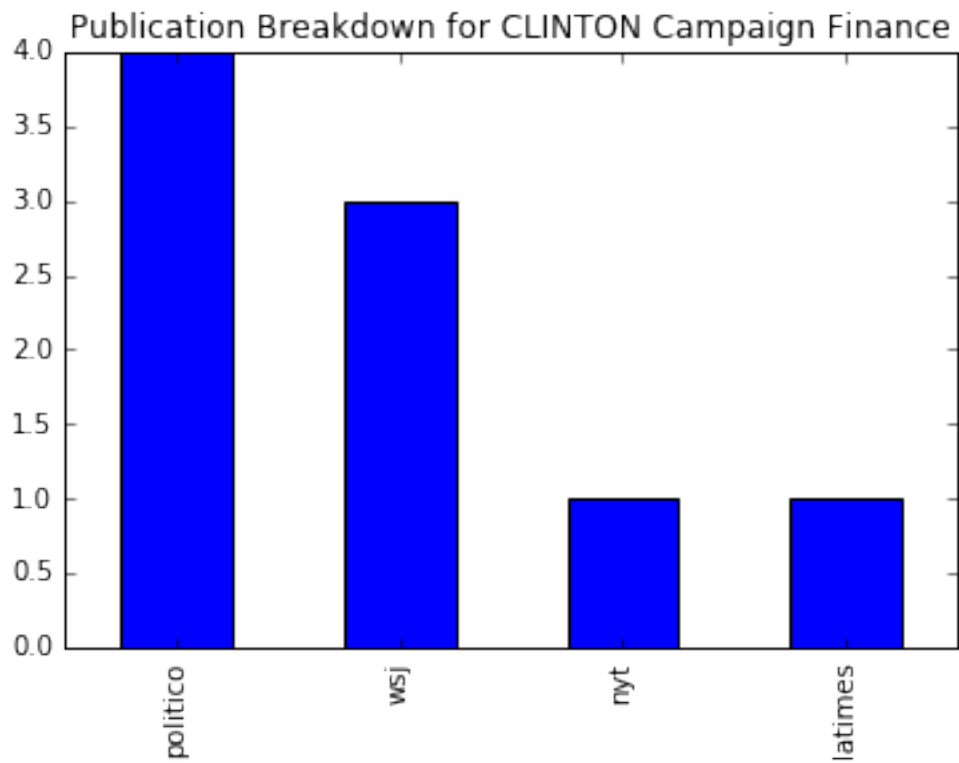
FLESCH FOR clinton Immigration



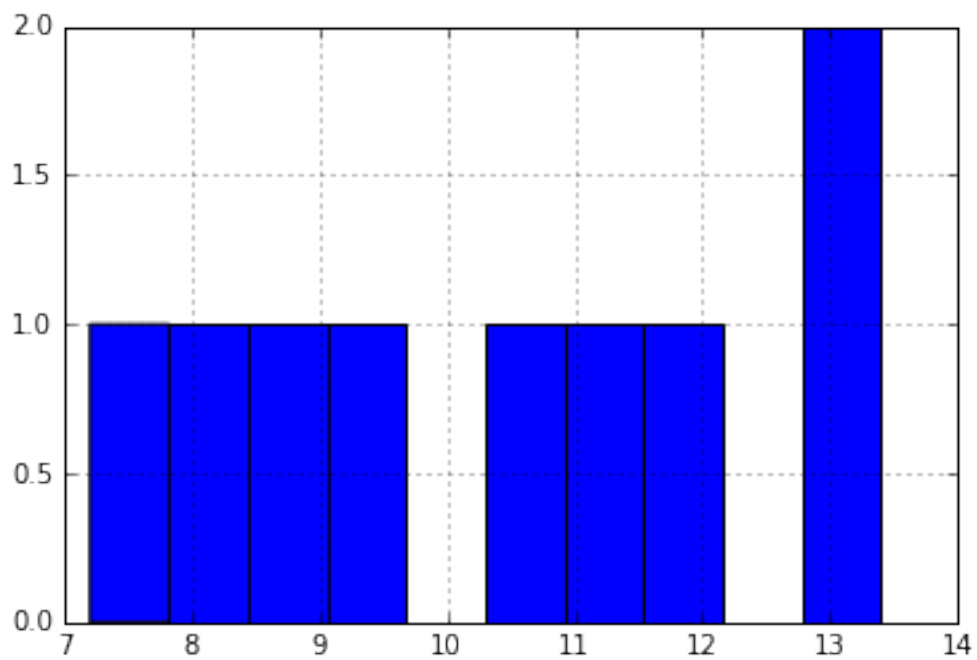


FLESCH FOR clinton Campaign Finance

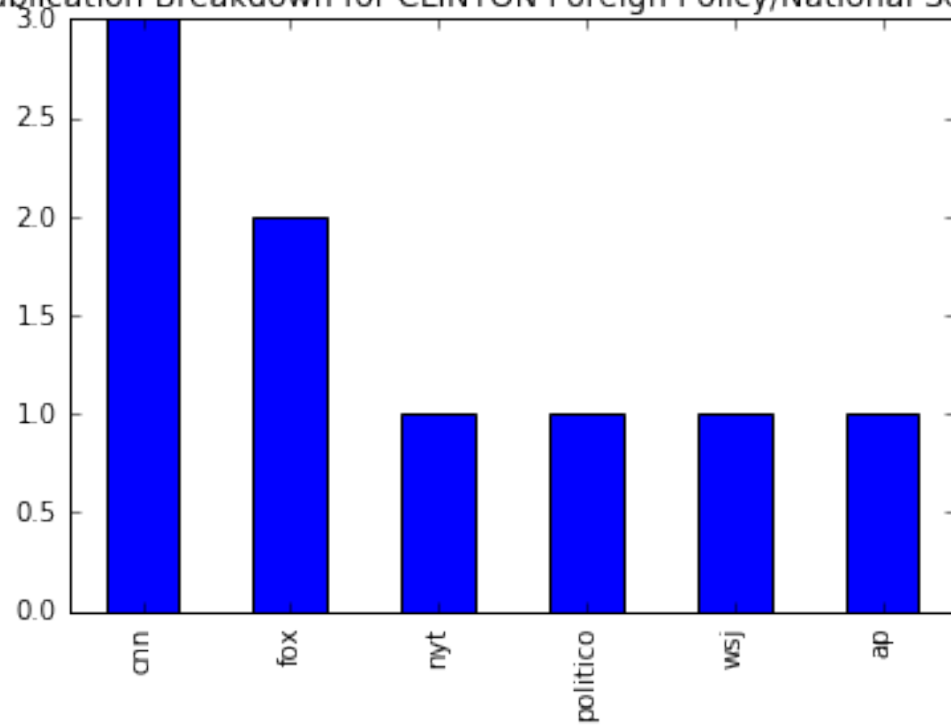




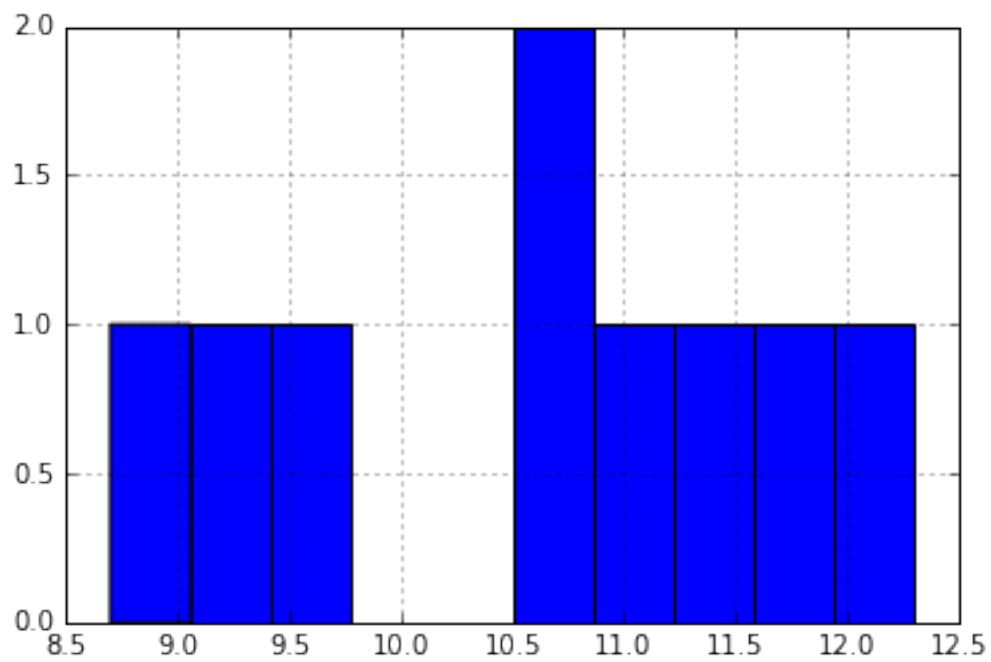
FLESCH FOR clinton Foreign Policy/National Security

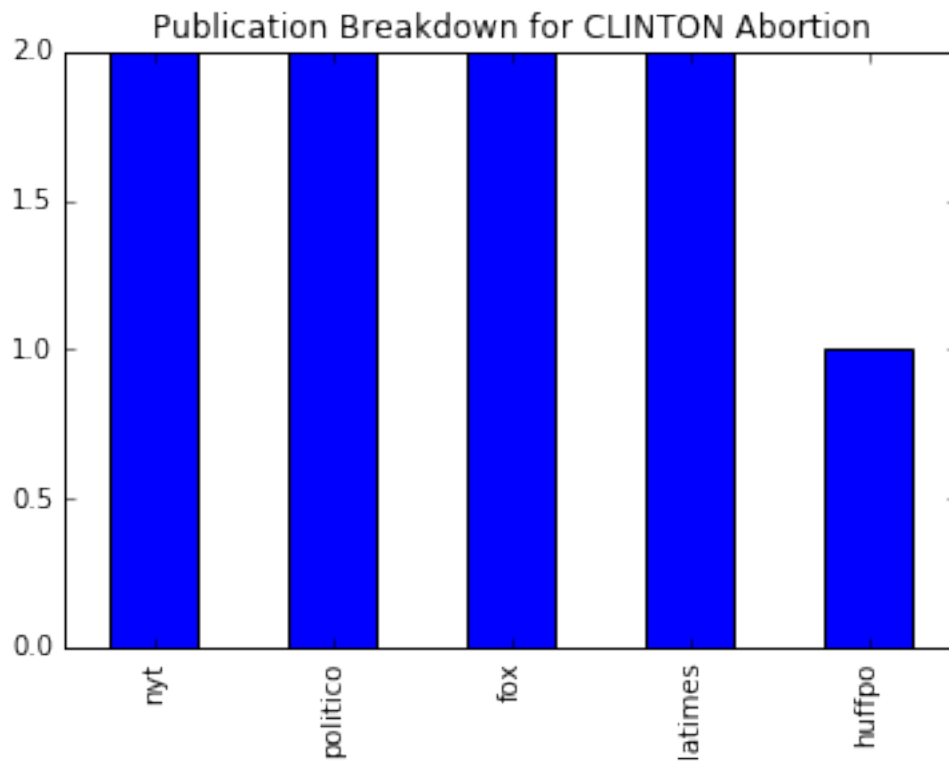


Publication Breakdown for CLINTON Foreign Policy/National Security

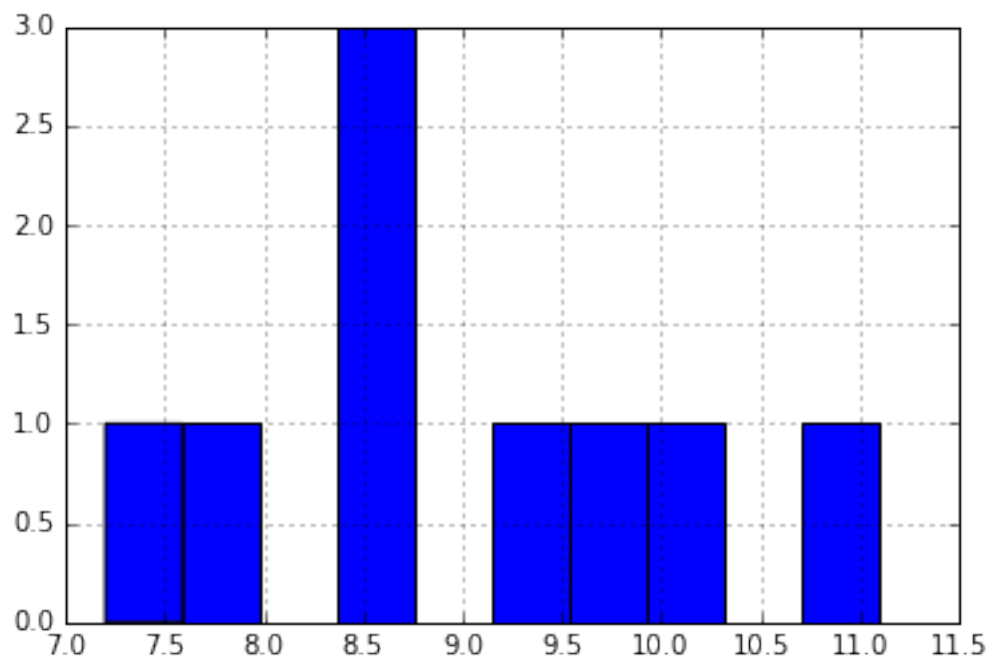


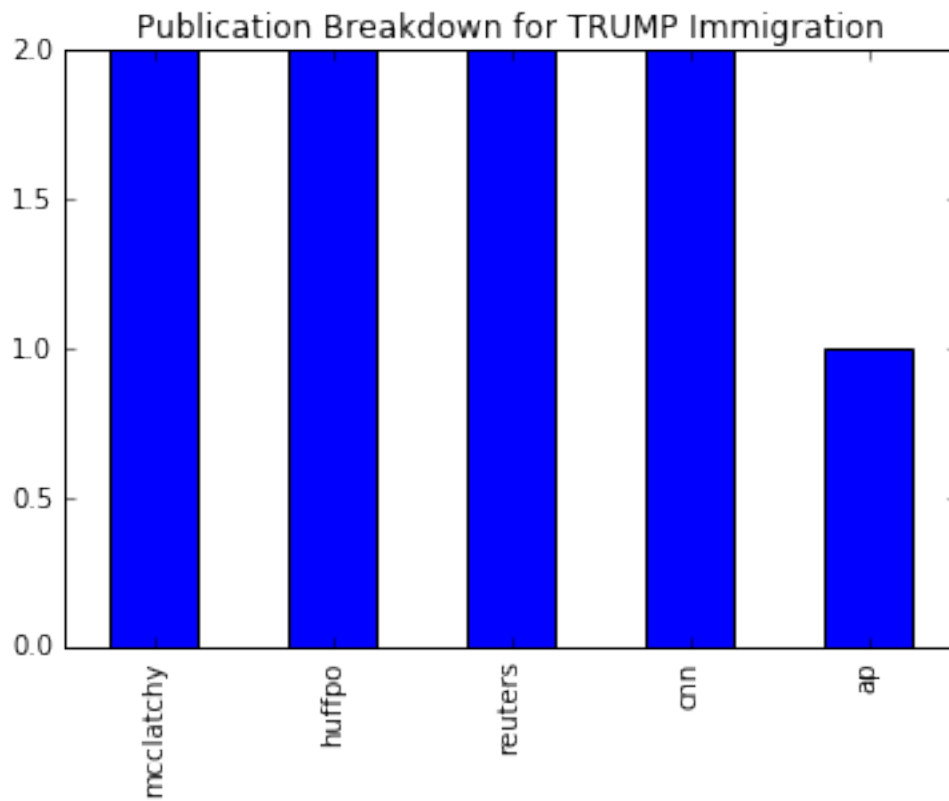
FLESCH FOR clinton Abortion



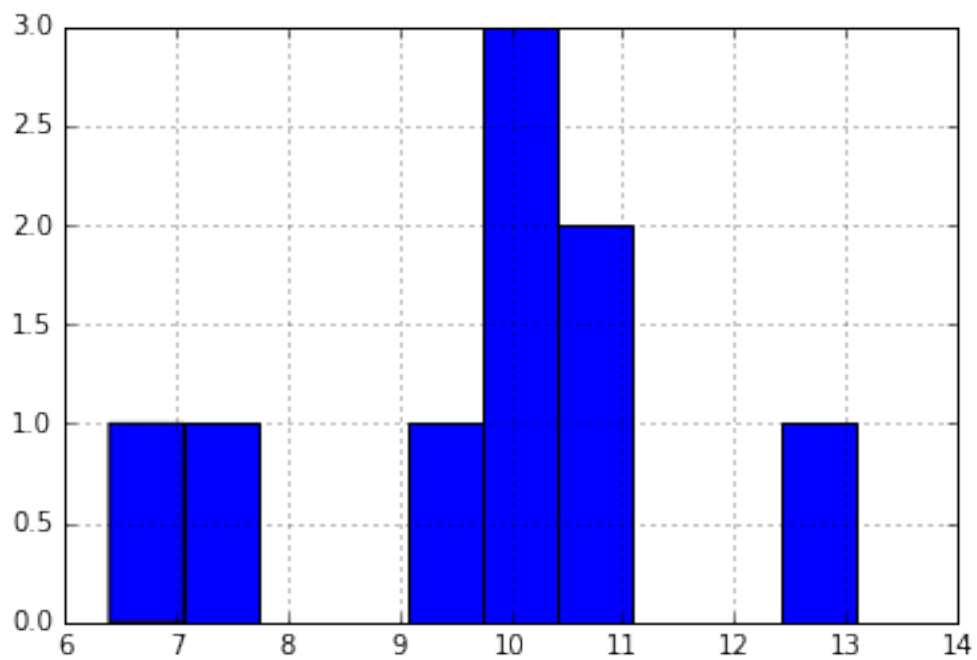


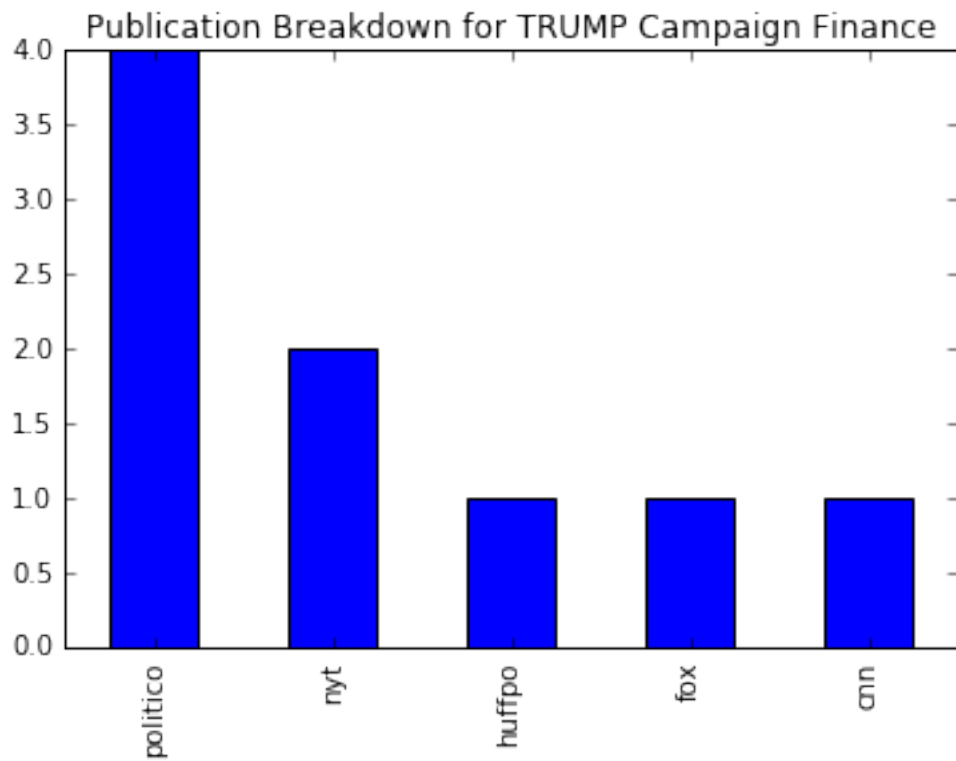
FLESCH FOR trump Immigration



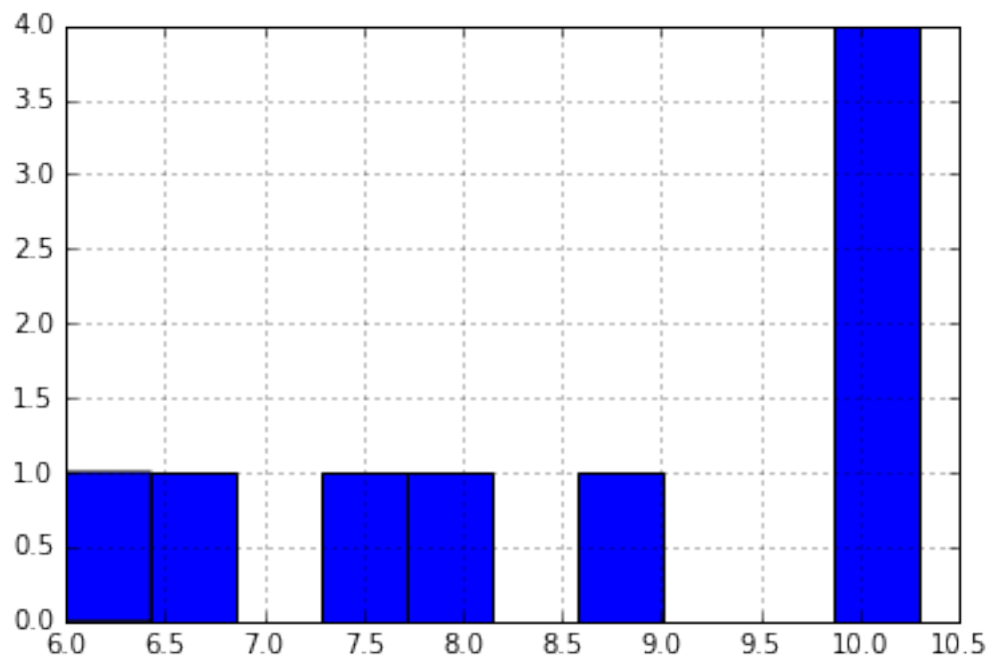


FLESCH FOR trump Campaign Finance

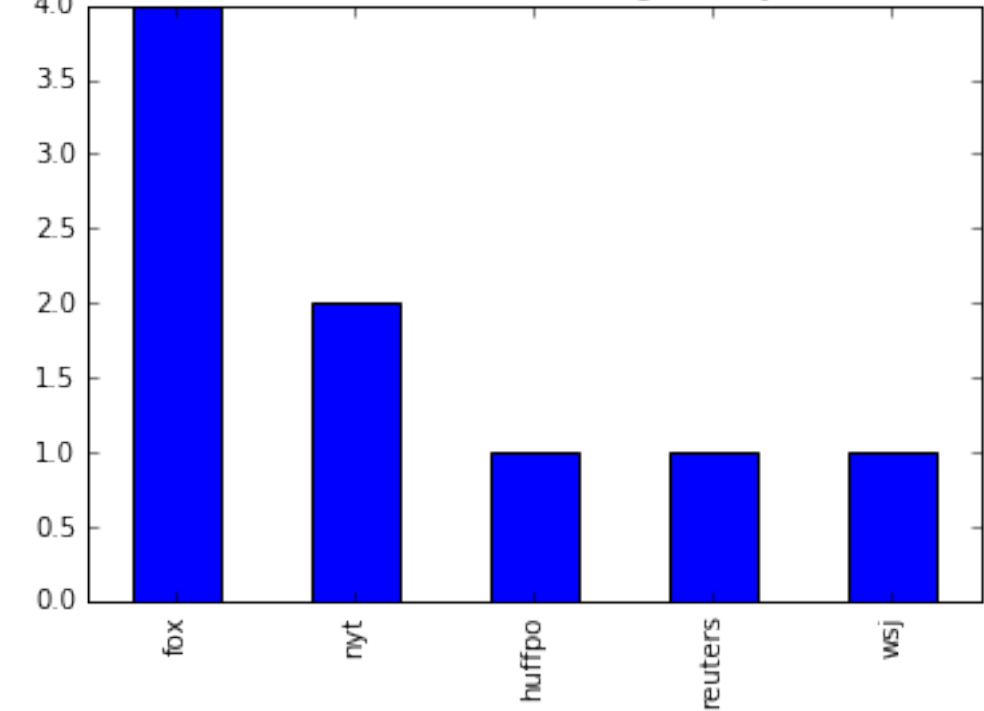




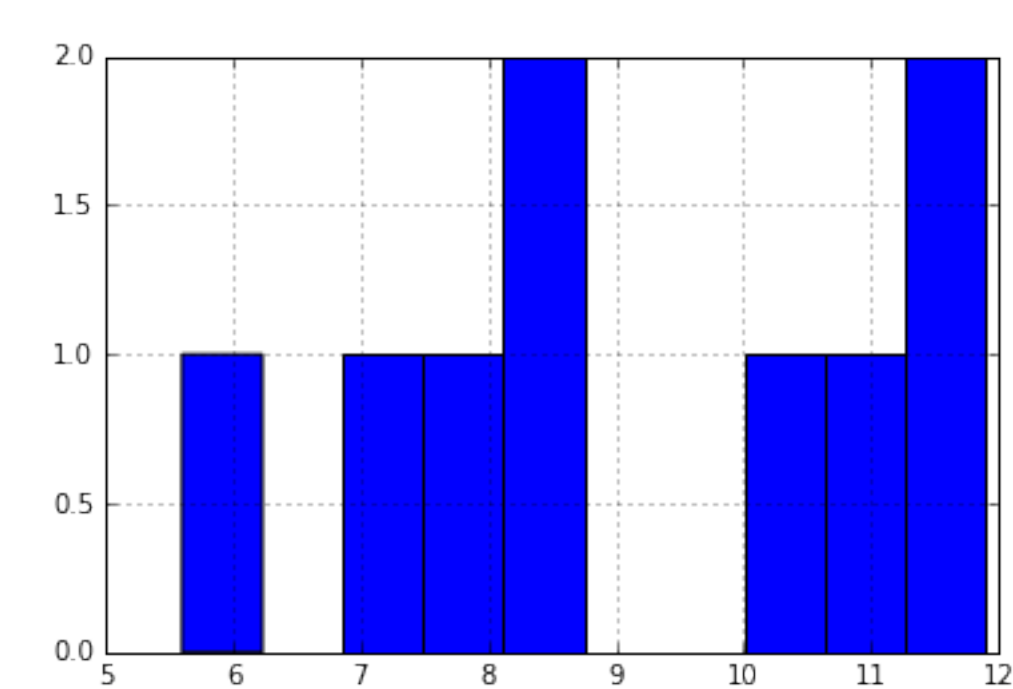
FLESCH FOR trump Foreign Policy/National Security

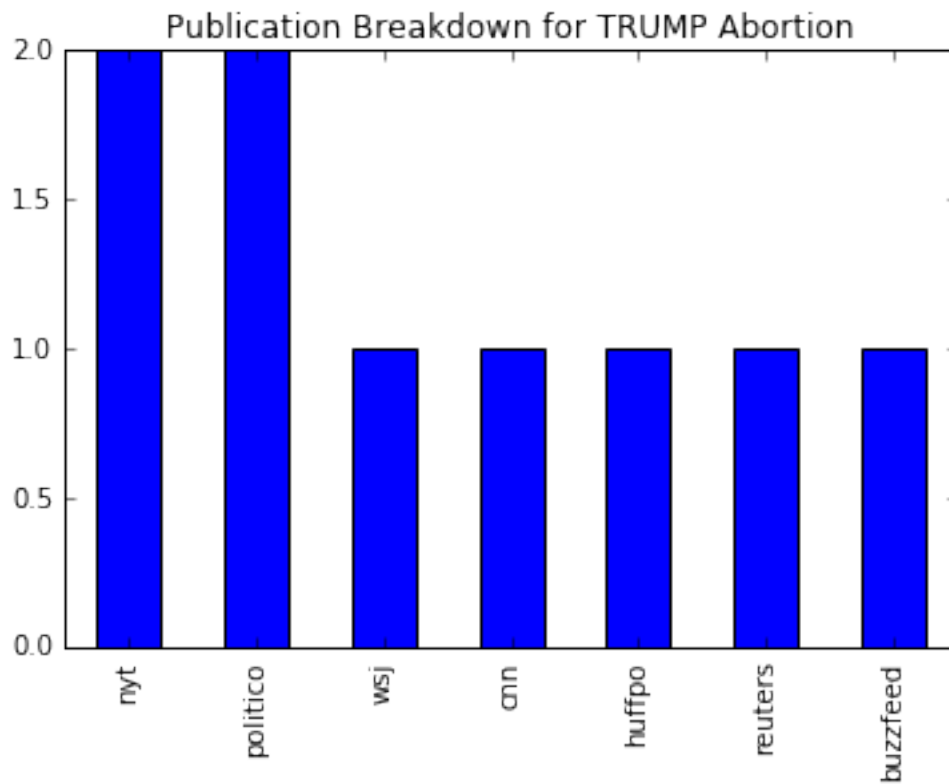


Publication Breakdown for TRUMP Foreign Policy/National Security

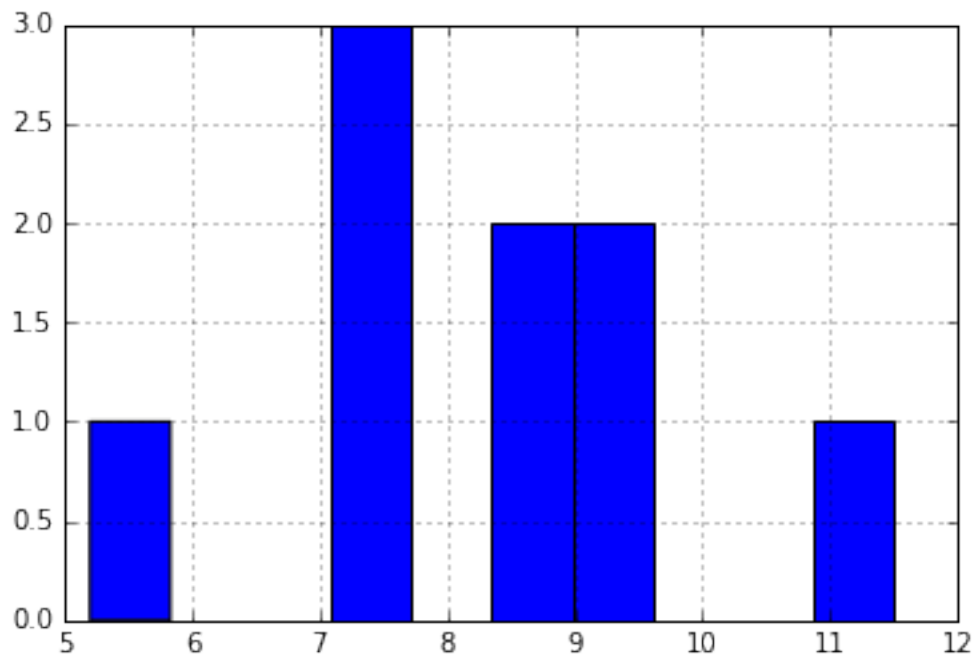


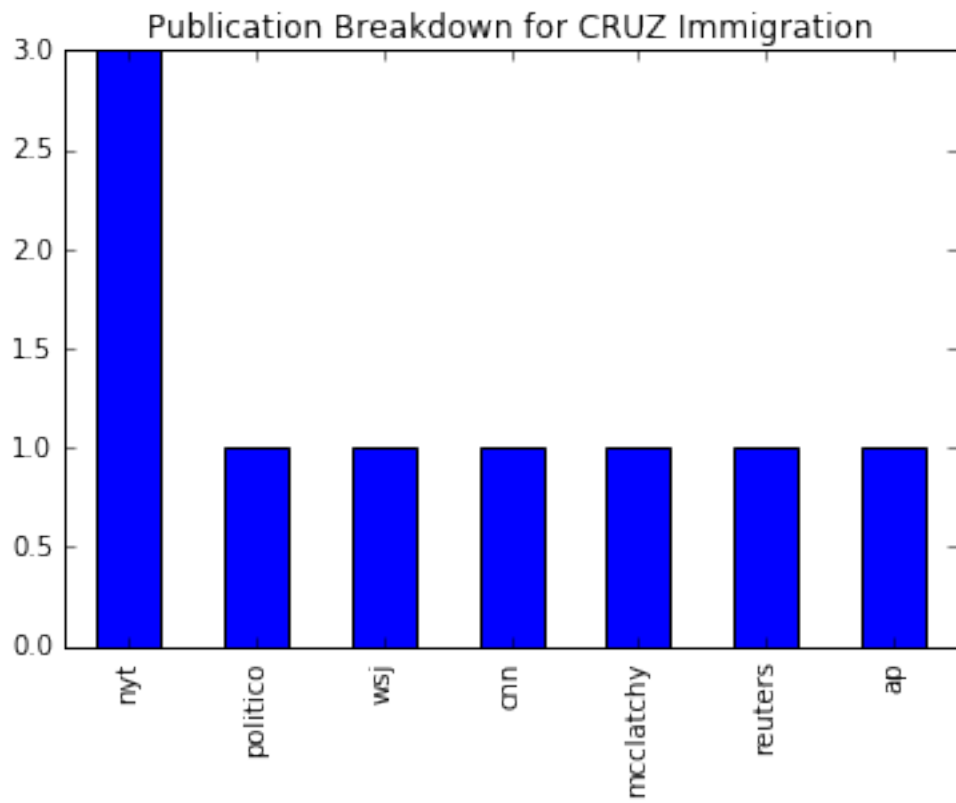
FLESCH FOR trump Abortion



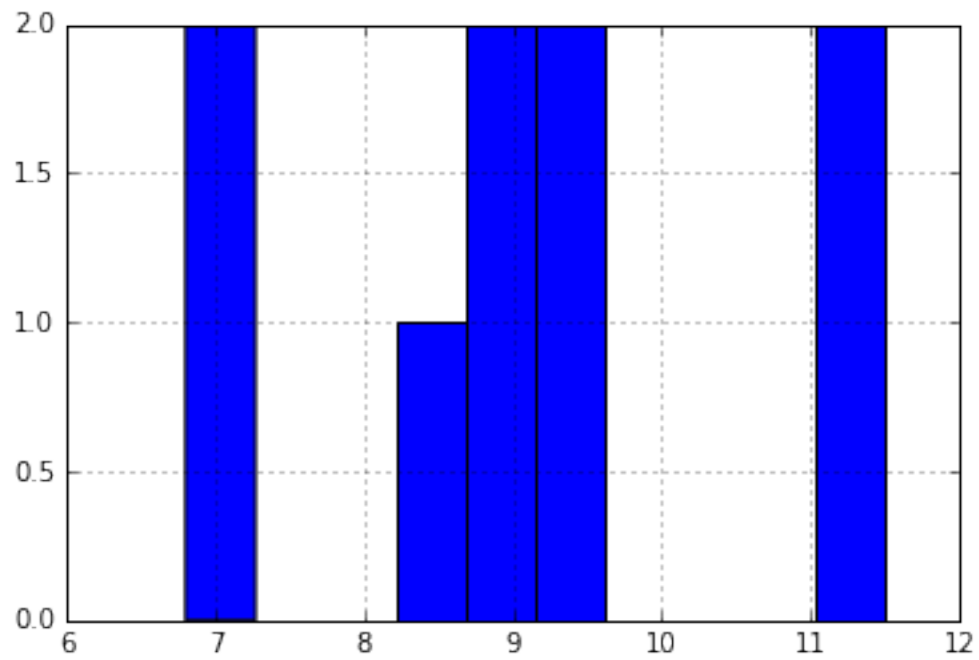


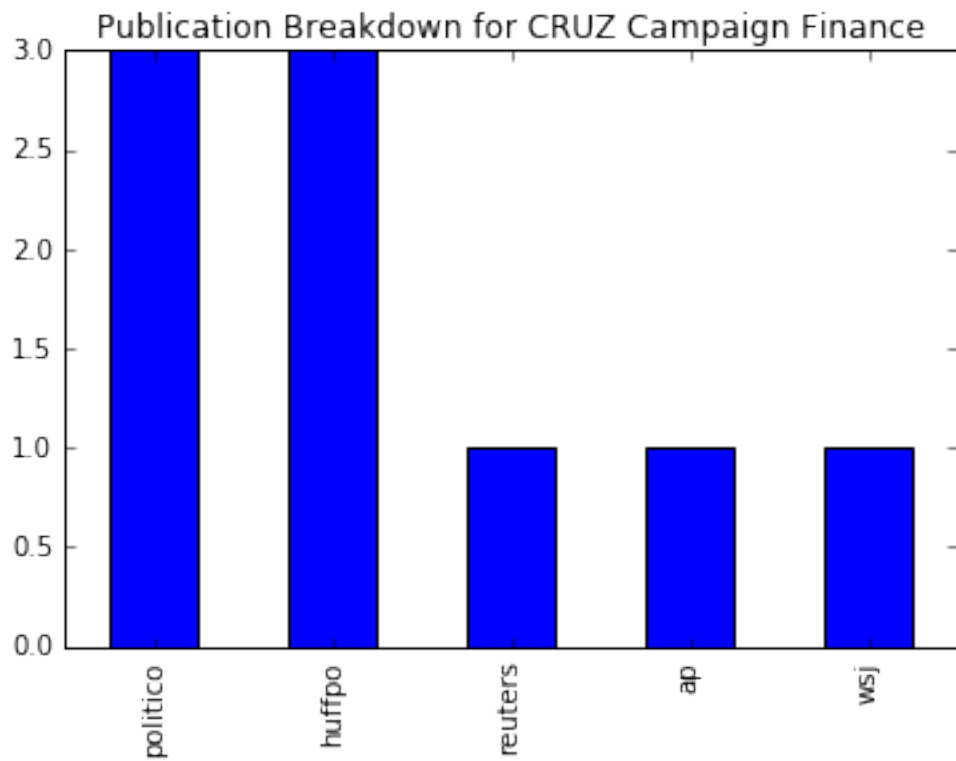
FLESCH FOR cruz Immigration



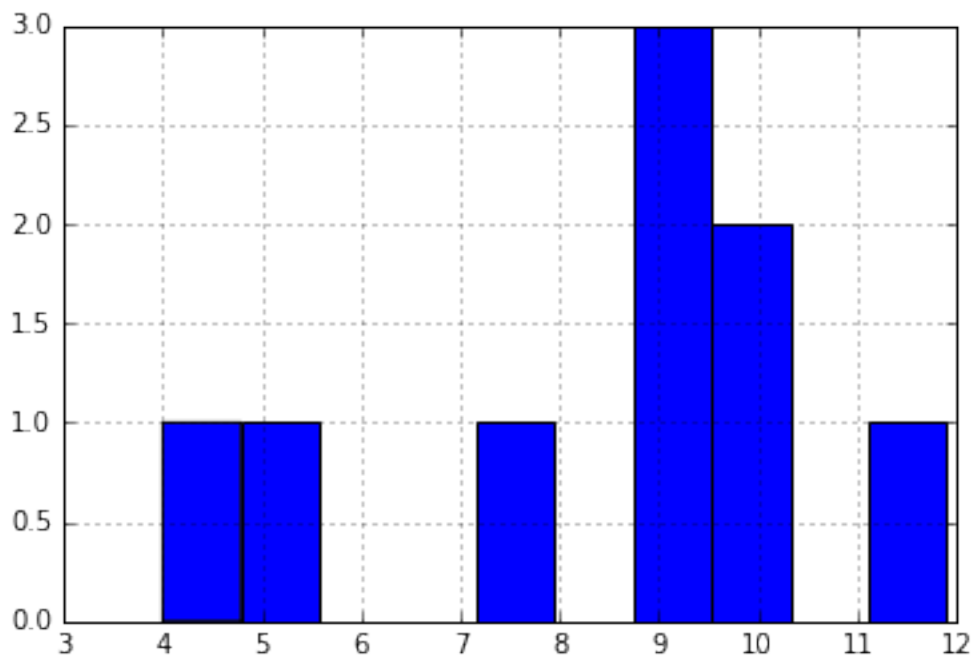


FLESCH FOR cruz Campaign Finance

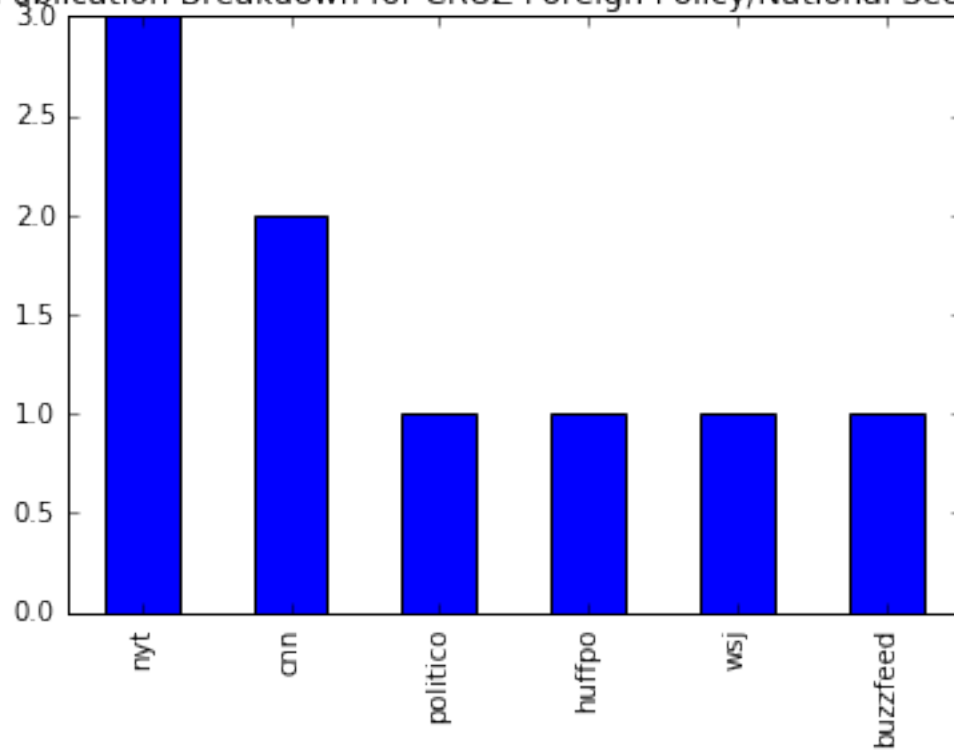




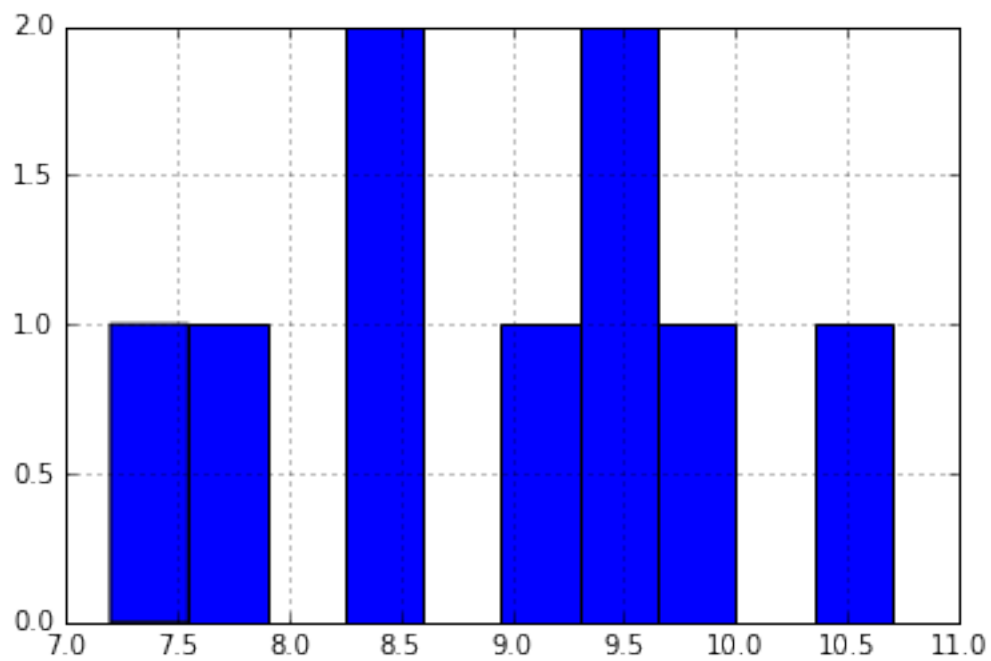
FLESCH FOR cruz Foreign Policy/National Security

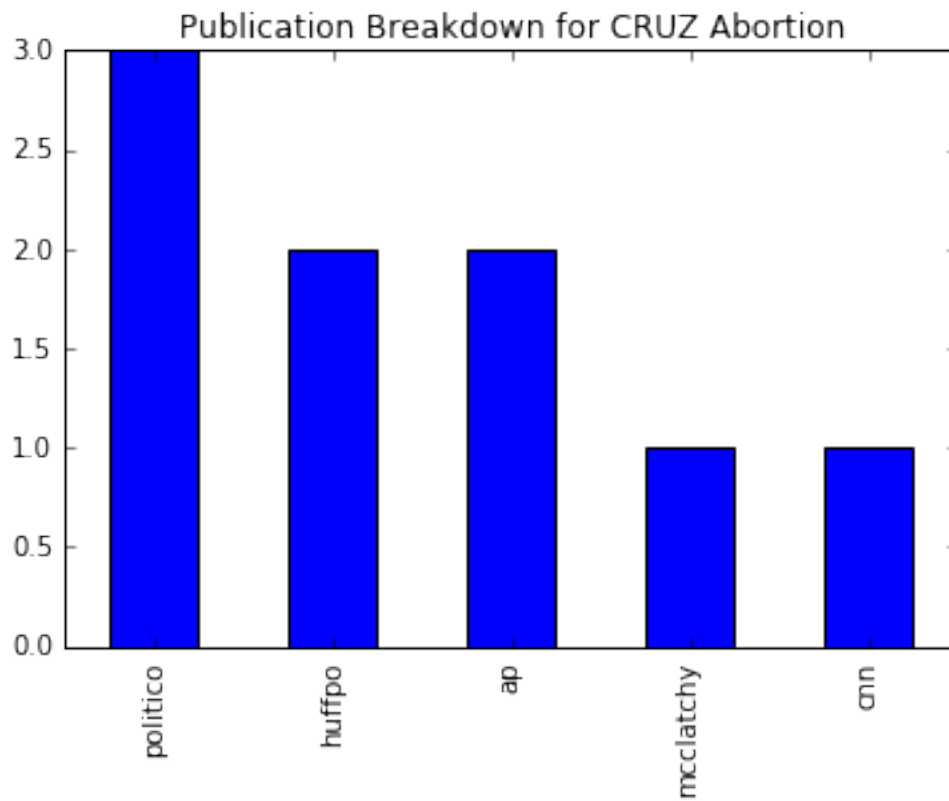


Publication Breakdown for CRUZ Foreign Policy/National Security

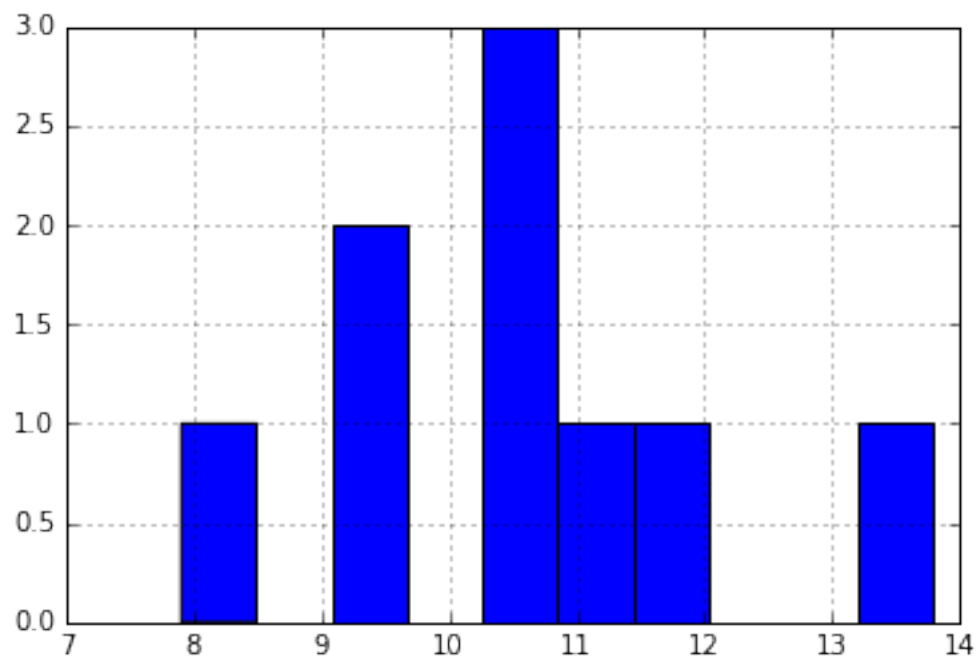


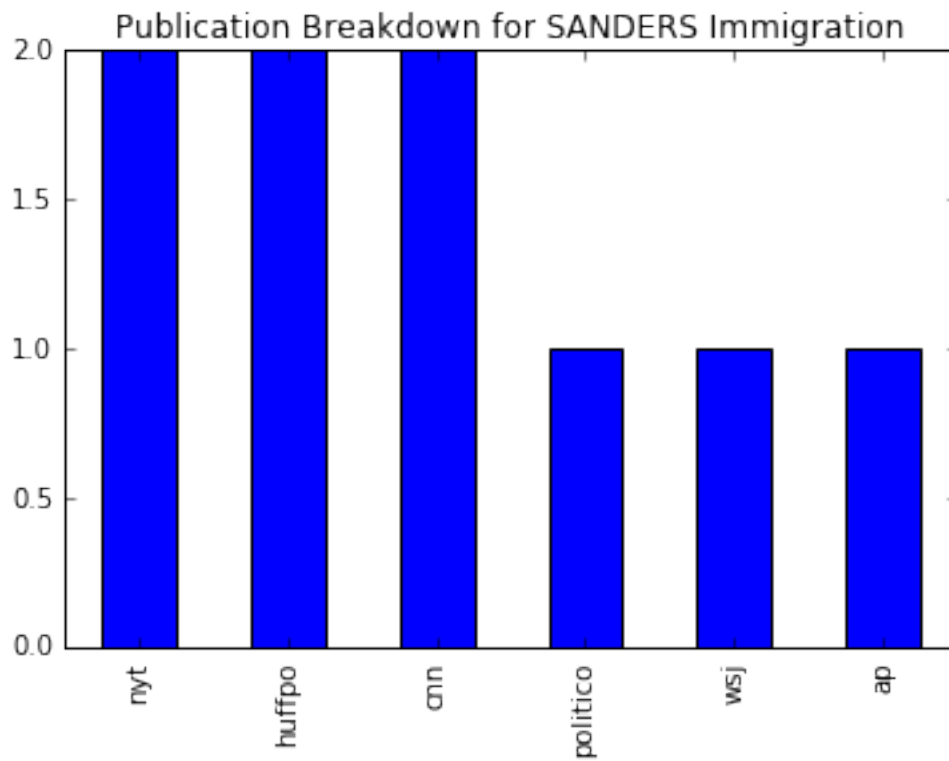
FLESCH FOR cruz Abortion



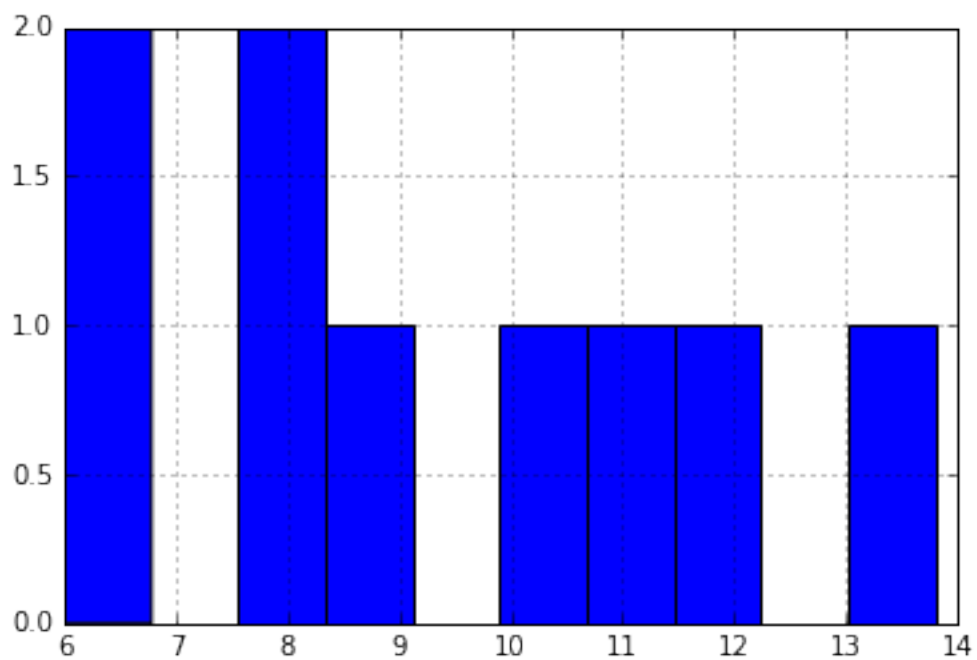


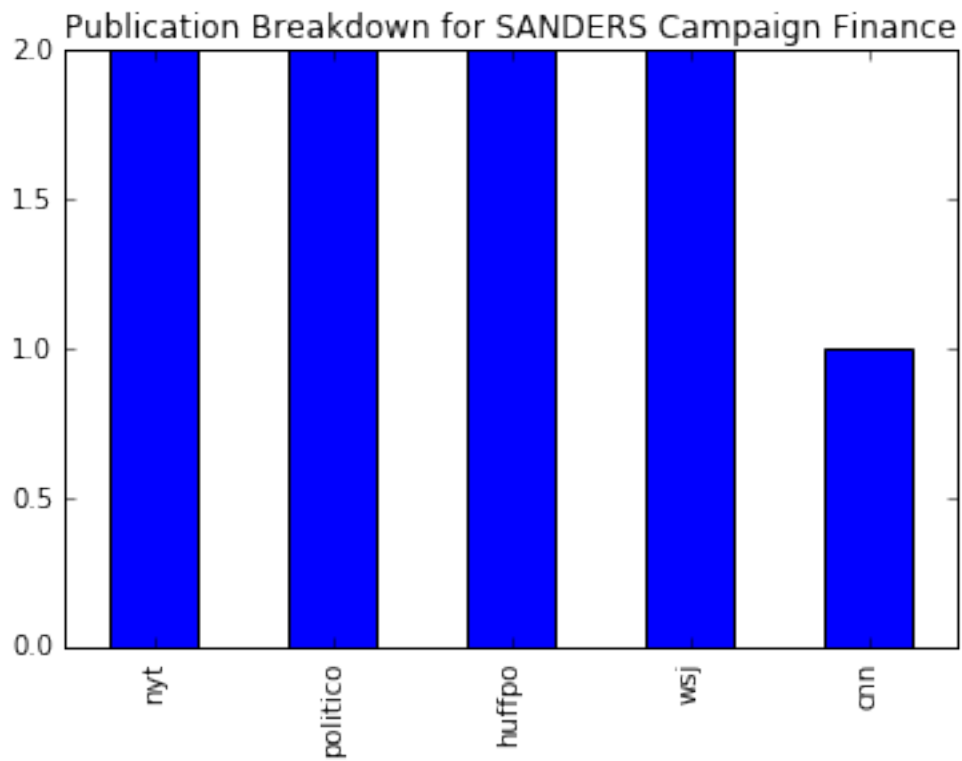
FLESH FOR sanders Immigration



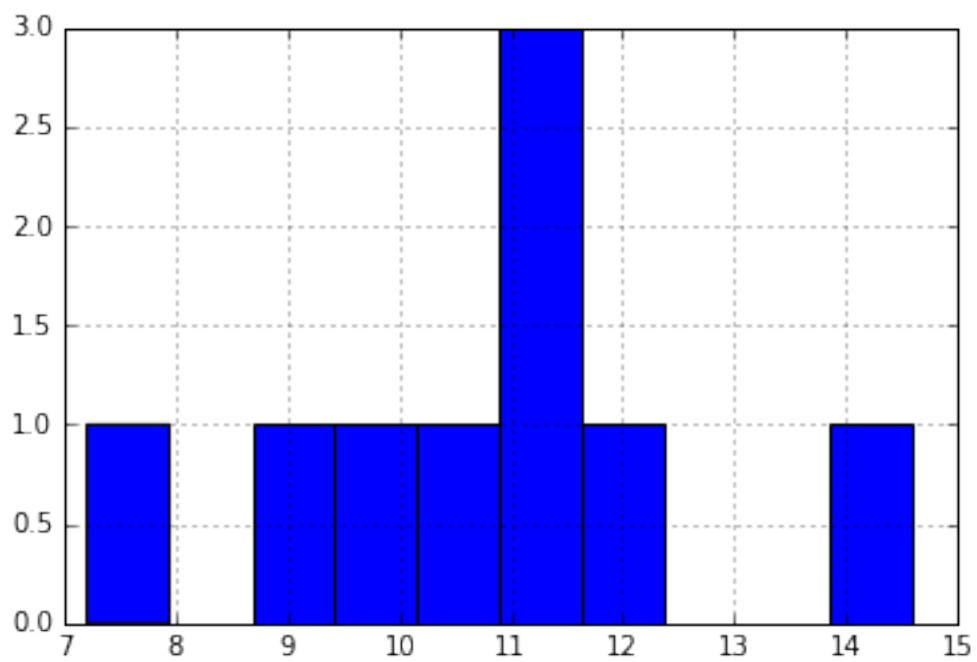


FLESCH FOR sanders Campaign Finance

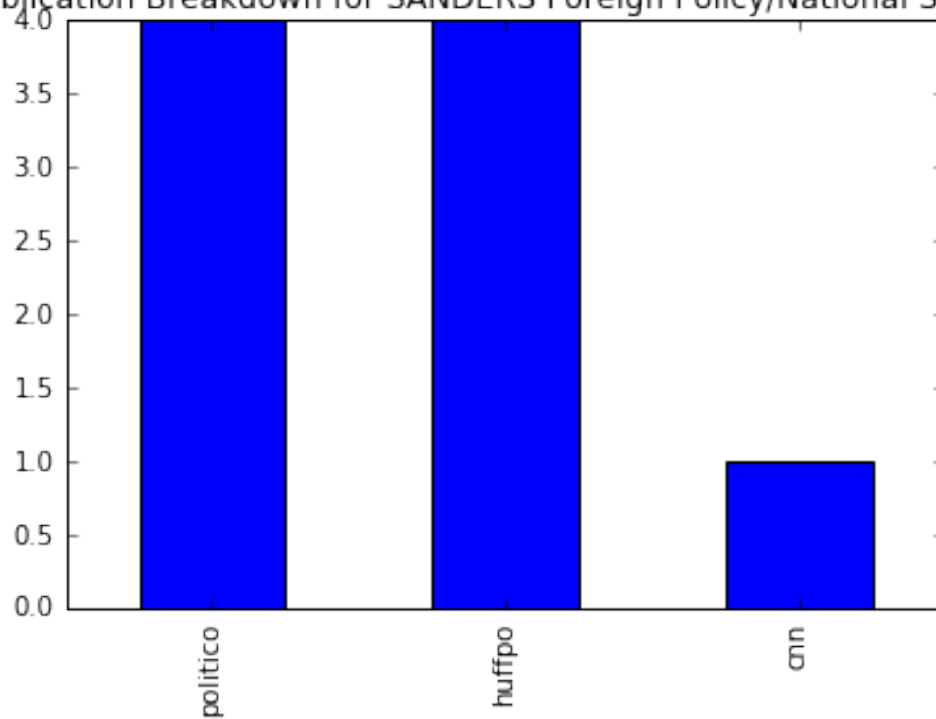




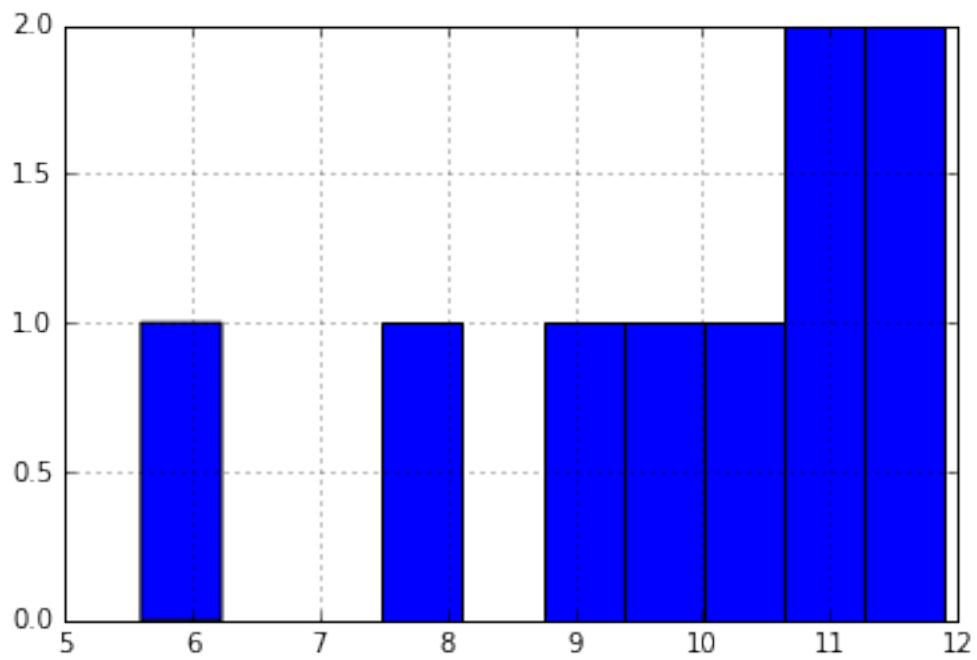
FLESCH FOR sanders Foreign Policy/National Security

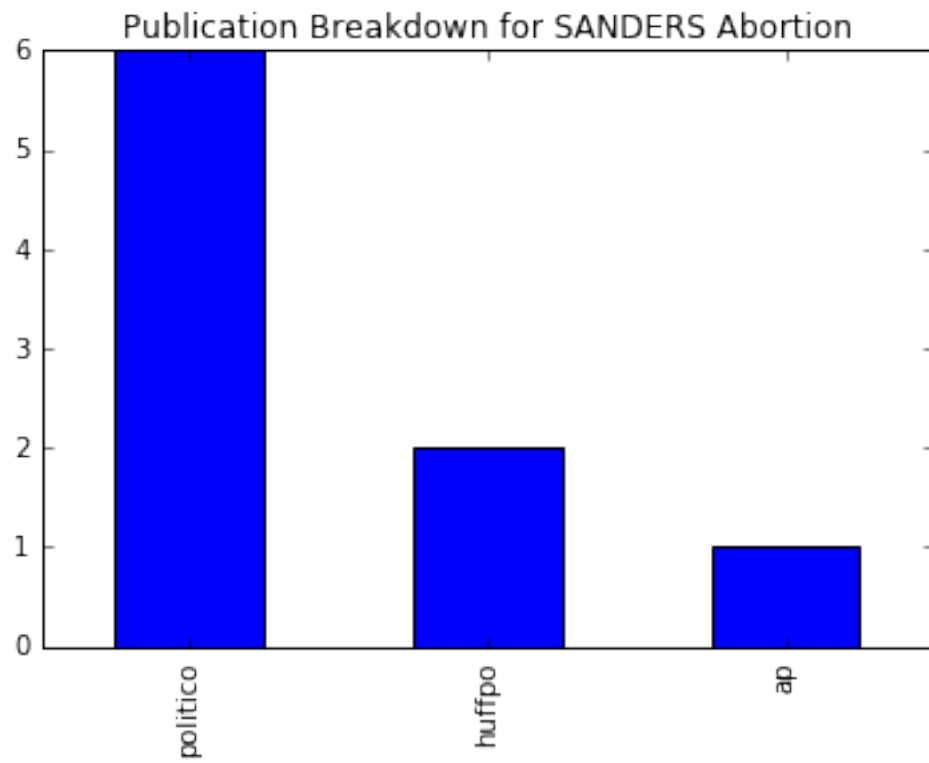


Publication Breakdown for SANDERS Foreign Policy/National Security



FLESC FOR sanders Abortion





In []: