

Evaluation of the output

100 output sentences were tested in the categories grammaticality, semantic sense, style, topic and creativity. These consist of 1292 tags.

General evaluation

Grammaticality

The sentences were tested by a native speaker of American English using the method of introspection. They could be evaluated either as grammatical or ungrammatical.

Results:

25 sentences were evaluated as grammatical, and 75 as not grammatical. 24 of these grammatical sentences were also evaluated as having a semantic sense, while one was not. The length of the grammatical sentences varies between 2 and 13 tags. Their distribution is shown in Table 1.

Table 1: Number of tags and their distribution (grammatical sentences)

Number of tags	2	3	4	5	6	7	8	13
Sentences with that number of tags	3	2	7	5	5	1	1	1

From the distribution it follows that shorter sentences are more likely to be grammatical than longer ones.

A 25% rate of grammaticality is quite low. Grammaticality also forms a basis for other categories in the evaluation, particularly semantic sense (if a sentence is not grammatical, it might be difficult to try to extract semantic meaning) and style (it is difficult to try and evaluate a text's authorship style when it does not even follow the syntactic rules of English). This can certainly negatively impact other aspects of the evaluation.

Semantic Sense

The sentences were tested by a native speaker of American English in terms of their semantic sense. They could be evaluated either as having a semantic sense or not. For the purposes of this evaluation, a general guideline for "semantic sense" was to imagine asking native speakers to interpret each sentence, and determining whether there would be general agreement in terms of the meaning being presented. For example, most people will agree that "the ball is red" conveys that the quality "red" applies to the object "ball".

Results:

26 sentences were evaluated as having a semantic sense, while 74 were not. 24 of the 26 sentences with semantic sense were also evaluated as grammatical, so there were only 2 ungrammatical sentences which still seemed to carry semantic meaning. The length of the sentences with semantic sense varies between 2 and 8 tags. Their distribution is shown in Table 2.

Table 2: Number of tags and their distribution (sentences with semantic sense)

Number of tags	2	3	4	5	6	7	8
Sentences with that number of tags	3	2	7	7	5	1	1

Once again, we see that shorter sentences are more likely to be considered meaningful with respect to semantic sense.

The 26% rate of semantic sense demonstrates a strong correlation between grammaticality (25%) and semantic sense. If a sentence was ungrammatical, it was extremely likely that it would also lack semantic sense.

Style

The Trump corpus was compared to a more balanced corpus. Words that occur noticeably more often in the Trump corpus were considered “Trump words” in that there was a higher probability they would be used by Trump as compared to their usage in the balanced corpus. These Trump words were then substituted into the generated output (if possible, depending on POS tag and context).¹ The list of Trump words can be found under Appendix II.

Results:

There are 54 sentences with Trump words. The number of inserted Trump words varies between 0 and 5. The distribution is shown in Table 3.

Table 3: Number of Trump words and their distribution

Number of Trump words	0	1	2	3	5
Sentences with that number of Trump words	46	32	16	4	2

The number of inserted words is relatively small, and there is an inverse correlation between the number of inserted Trump words and the number of sentences with that particular number of Trump words added.

The Trump words themselves, as well as their frequency and POS tags are shown in Table 4.

There are 29 different words that were inserted as Trump words. Words with parts of speech with more semantic content (different kinds of nouns, adjectives) are used most. These are the words that are most strongly considered to belong to Trump’s style (for example, *Hillary* or *golf* compared to a DT like *the* which should generally appear equally frequently in a different corpus).

The words *great* and *crooked* are erroneously listed in a wrong category. This is attributable to incorrect tagging.

In conclusion, more than half of the output sentences include Trump words. However, some of them are not really perceptible as such.

¹ In order to count the words independent of the form of their first letter (capital or lower-case), they are all lower-case.

Table 4: Inserted Trump words per tag

Tags of inserted Trump words	Inserted Trump words according to tags
NNP: 29	3x <i>president</i> , 7x <i>trump</i> , 1x <i>hillary</i> , 1x <i>carolina</i> , 8x <i>fake</i> , 2x <i>golf</i> , 1x <i>america</i> , 3x <i>great</i> , 1x <i>crooked</i> , 2x <i>again</i>
NN: 19	3x <i>guy</i> , 2x <i>country</i> , 4x <i>job</i> , 8x <i>night</i> , 2x <i>today</i>
NNS: 1	1x <i>years</i>
JJ: 19	5x <i>big</i> , 13x <i>great</i> , 1x <i>total</i>
RB: 3	2x <i>very</i> , 1x <i>never</i>
VB: 2	2x <i>thank</i>
VCN: 1	1x <i>interviewed</i>
VBG: 2	2x <i>going</i>
MD: 4	1x <i>should</i> , 2x <i>will</i> , 1x <i>wo</i>
PRP\$: 4	4x <i>our</i>
UH: 1	1x <i>wow</i>
WRB: 1	1x <i>why</i>

Topic

After inserting the Trump words, the sentences were scanned for words that are related to Valentine's Day, which was the chosen topic for this evaluation.

Table 5: Lexemes and their number of occurrences

Lexeme	Number of occurrences
<i>Valentine</i>	101 (9x as <i>Valentine</i> , 72x as <i>Valentines</i> , 19x as <i>valentines</i> , 1x as <i>VALENTINES</i>) ²
<i>happy</i>	25 (7x as <i>happy</i> , 18x as <i>Happy</i>)
<i>heart</i>	5 (5x as <i>heart</i>)
<i>couple</i>	5 (1x as <i>couple</i> , 4x as <i>couples</i>)
<i>love</i>	25 (18x as <i>love</i> , 5x as <i>Love</i> , 2x as <i>lovely</i>)
<i>chocolate</i>	4 (3x as <i>chocolate</i> , 1x as <i>Chocolate-Cherry</i>)
<i>rose</i>	1 (1x as <i>roses</i>)
<i>gift</i>	1 (1x as <i>gift</i>)
<i>card</i>	2 (1x as <i>card</i> , 1x as <i>cards</i>)
<i>date</i>	2 (2x as <i>date</i>)

² The difference between capital and lower-case letters, singular and plural forms, etc. is important, as the generator sees them as different words.

Results:

The lexemes considered relevant to the topic are: *Valentine, happy, heart, couple, love, chocolate, rose, gift, card* and *date*. The number of occurrences is shown in Table 5. There are 75 sentences that include at least one of these lexemes.

The lexeme *Valentine* is by far the most used topic word, followed by *happy* and *love*.

The number of topic words varies between 0 and 9, as shown in Table 6.

Table 6: Number of topic words and their distribution

Number of topic words	0	1	2	3	4	5	6	9
Sentences with that number of topic words	25	33	17	11	5	6	2	1

With 75%, a significant percentage of sentences includes at least one topic word. Most sentences include just a few of these words and there is a general, though somewhat rough, inverse correlation between the number of topic words in a sentence and the number of sentences which contain that many topic words.

Creativity

For this aspect of the evaluation the sentences were examined according to two criteria: how the sentences vary in length, and whether any generated sentences were repeated verbatim.

Results:

No sentence occurs more than once. The length of the sentences varies between 2 and 50 tags. Their distribution is shown in Table 7.

Table 7: Sentence length and its distribution

Sentence length (number of tags)	Sentences with that length
2	3
3	3
4	7
5	9
6	8
7	7
8	1
9	7
10	1
11	4
12	3
13	6
14	2
15	7
16	3
17	4
18	6
20	2
21	4
22	3

23	1
28	2
29	1
30	2
31	1
35	1
37	1
50	1

Most sentences consist of between 4 and 18 tags. The average length of an output sentence is 12.92 tags. This average differs significantly from the average lengths of grammatical sentences and sentences with semantic sense.

Detailed evaluation

Sentence number	Grammaticality	Semantic sense	Number of Trump words in sentence, tag of words and Trump words used	Number of topic words in sentence and topic words used
1	not grammatical	no semantic sense	0	2: <i>Valentines, happy</i>
2	not grammatical	no semantic sense	2: NNP <i>president</i> , MD <i>should</i>	5: <i>Valentine</i> (2x), <i>valentines</i> (3x)
3	not grammatical	no semantic sense	0	0
4	not grammatical	no semantic sense	2: JJ <i>great</i> , NN <i>night</i>	2: <i>Valentines</i> (2x)
5	grammatical	semantic sense	0	0
6	not grammatical	no semantic sense	3: VBG <i>going</i> , JJ <i>big</i> , NN <i>guy</i>	1: <i>heart</i>
7	not grammatical	no semantic sense	3: JJ <i>great</i> (2x), PRP\$ <i>our</i>	6: <i>couples, Valentines</i> (4x), <i>love</i>
8	not grammatical	no semantic sense	0	0
9	not grammatical	no semantic sense	1: NNP <i>great</i>	0
10	grammatical	semantic sense	1 NNP <i>trump</i>	0
11	grammatical	semantic sense	0	0
12	not grammatical	no semantic sense	1: JJ <i>great</i>	1: <i>Valentines</i>
13	not grammatical	no semantic sense	1: NNS <i>years</i>	0
14	not grammatical	no semantic sense	1: NNP <i>trump</i>	5: <i>Valentines</i> (3x), <i>happy, Valentine</i>
15	grammatical	semantic sense	0	1: <i>love</i>
16	not grammatical	no semantic sense	0	1: <i>Valentines</i>
17	not grammatical	no semantic sense	2: NNP <i>hillary</i> , NNP <i>carolina</i>	4: <i>Valentines</i> (3x), <i>heart</i>
18	not grammatical	no semantic sense	2: NNP <i>fake</i> , NNP <i>great</i>	0
19	not grammatical	no semantic sense	2: MD <i>will</i> , NN <i>country</i>	1: <i>Happy</i>
20	not grammatical	no semantic sense	1: VBG <i>going</i>	0
21	not grammatical	no semantic sense	0	4: <i>lovely, couple, Valentine, Valentines</i>
22	not grammatical	no semantic sense	0	0
23	not grammatical	no semantic sense	0	2: <i>Love, Valentines</i>
24	grammatical	semantic sense	1: JJ <i>big</i>	0
25	grammatical	semantic sense	1: UH <i>wow</i>	1: <i>Valentines</i>
26	not grammatical	no semantic sense	2: JJ <i>big</i> , NN <i>job</i>	3: <i>Happy, Valentines, love</i>
27	not grammatical	no semantic sense	0	4: <i>Valentines, valentines</i> (2x), <i>couples</i>
28	grammatical	semantic sense	1: RB <i>very</i>	1: <i>Happy</i>

29	not grammatical	no semantic sense	2: JJ <i>great</i> , NNP <i>crooked</i>	4: <i>Valentines</i> (2x), <i>valentines</i> , <i>love</i>
30	not grammatical	no semantic sense	0	3: <i>Love</i> , <i>Valentine</i> , <i>valentines</i>
31	not grammatical	no semantic sense	0	3: <i>Valentines</i> (2x), <i>valentines</i>
32	not grammatical	no semantic sense	0	2: <i>happy</i> , <i>chocolate</i>
33	not grammatical	no semantic sense	0	0
34	not grammatical	no semantic sense	1: VB <i>thank</i>	1: <i>Valentines</i>
35	not grammatical	no semantic sense	0	1: <i>Love</i>
36	grammatical	semantic sense	0	1: <i>Valentines</i>
37	grammatical	semantic sense	1: JJ <i>great</i>	1: <i>love</i>
38	not grammatical	no semantic sense	0	3: <i>Valentines</i> , <i>roses</i> , <i>valentines</i>
39	grammatical	semantic sense	0	0
40	not grammatical	no semantic sense	0	1: <i>Valentines</i>
41	not grammatical	no semantic sense	1: WRB <i>why</i>	1: <i>Valentines</i>
42	not grammatical	no semantic sense	1: NNP <i>fake</i>	1: <i>Valentines</i>
43	not grammatical	no semantic sense	0	3: <i>Happy</i> (2x), <i>Valentines</i>
44	not grammatical	no semantic sense	2: JJ <i>great</i> , NN <i>night</i>	5: <i>Happy</i> , <i>Valentines</i> (4x)
45	not grammatical	no semantic sense	2: JJ <i>great</i> , NN <i>guy</i>	2: <i>Valentines</i> (2x)
46	not grammatical	no semantic sense	0	3: <i>Happy</i> , <i>Valentines</i> (2x)
47	not grammatical	no semantic sense	1: JJ <i>total</i>	5: <i>Valentines</i> (5x)
48	not grammatical	no semantic sense	1: NN <i>job</i>	2: <i>Valentines</i> , <i>gift</i>
49	not grammatical	no semantic sense	0	1: <i>couples</i>
50	not grammatical	no semantic sense	0	1: <i>Valentines</i>
51	grammatical	no semantic sense	1: RB <i>very</i>	3: <i>happy</i> , <i>Valentines</i> , <i>valentines</i>
52	not grammatical	no semantic sense	2: PRP\$ <i>our</i> , JJ <i>great</i>	1: <i>Valentines</i>
53	not grammatical	semantic sense	0	0
54	not grammatical	no semantic sense	0	6: <i>card</i> , <i>Valentines</i> (2x), <i>lovely</i> , <i>Happy</i> , <i>love</i>
55	not grammatical	no semantic sense	0	2: <i>happy</i> , <i>date</i>
56	not grammatical	no semantic sense	5: NN <i>job</i> , NNP <i>trump</i> , Md <i>will</i> , MD <i>wo</i> , RB <i>never</i>	3: <i>Happy</i> , <i>Valentines</i> , <i>valentines</i>
57	grammatical	semantic sense	1: NN <i>night</i>	1: <i>Happy</i>
58	not grammatical	semantic sense	0	2: <i>Happy</i> , <i>Valentines</i>

59	not grammatical	no semantic sense	0	3: <i>Valentines, love, VALENTINES</i>
60	not grammatical	no semantic sense	0	2: <i>chocolate, Valentines</i>
61	not grammatical	no semantic sense	1: NN <i>night</i>	1: <i>valentines</i>
62	not grammatical	no semantic sense	1: NN <i>job</i>	5: <i>love, happy, Valentines (2x), date</i>
63	grammatical	semantic sense	0	1: <i>Love</i>
64	grammatical	semantic sense	0	0
65	grammatical	semantic sense	1: NN <i>today</i>	1: <i>Valentine</i>
66	not grammatical	no semantic sense	2: NN <i>night</i> , NNP <i>trump</i>	2: <i>Happy, Valentines</i>
67	grammatical	semantic sense	0	1: <i>Happy</i>
68	not grammatical	no semantic sense	1: NNP <i>fake</i>	3: <i>love, Valentines, happy</i>
69	grammatical	semantic sense	0	1: <i>love</i>
70	not grammatical	no semantic sense	1: NNP <i>fake</i>	0
71	grammatical	semantic sense	0	2: <i>Love, Valentines</i>
72	not grammatical	no semantic sense	0	0
73	not grammatical	no semantic sense	0	9: <i>valentines (4x), Happy, Valentines (2x), love, Valentine</i>
74	not grammatical	no semantic sense	0	0
75	grammatical	semantic sense	1: NN <i>night</i>	1: <i>Happy</i>
76	grammatical	semantic sense	0	0
77	not grammatical	no semantic sense	0	2: <i>valentines, Valentines</i>
78	not grammatical	no semantic sense	1: JJ <i>great</i>	0
79	not grammatical	no semantic sense	0	1: <i>love</i>
80	not grammatical	no semantic sense	1 NNP <i>trump</i>	1: <i>Valentines</i>
81	not grammatical	no semantic sense	1: JJ <i>great</i>	3: <i>heart, Valentines (2x)</i>
82	not grammatical	no semantic sense	2: JJ <i>big</i> , NN <i>country</i>	1: <i>Valentines</i>
83	not grammatical	no semantic sense	0	1: <i>valentines</i>
84	not grammatical	no semantic sense	1: NNP <i>fake</i>	1: <i>couples</i>
85	not grammatical	no semantic sense	1: JJ <i>great</i>	2: <i>Happy, love</i>
86	not grammatical	no semantic sense	3: PRP\$: <i>our (2x)</i> , JJ <i>great</i>	5: <i>Happy, chocolate, heart (2x), love</i>
87	grammatical	semantic sense	1: VB <i>thank</i>	0

88	not grammatical	no semantic sense	5: NNP <i>fake</i> , NNP <i>golf</i> , NN <i>night</i> , NNP <i>president</i> , NNP <i>again</i>	2: <i>Valentine</i> , <i>Valentines</i>
89	not grammatical	no semantic sense	2: NNP <i>trump</i> , NNP <i>great</i>	1: <i>love</i>
90	not grammatical	no semantic sense	1: NNP <i>trump</i>	1: <i>Valentine</i>
91	not grammatical	no semantic sense	0	2: <i>love</i> , <i>Valentines</i>
92	not grammatical	no semantic sense	2: VBN <i>interviewed</i> , NN <i>today</i>	2: <i>Valentines</i> , <i>love</i>
93	grammatical	semantic sense	2: NNP <i>fake</i> , NNP <i>golf</i>	1: <i>Valentines</i>
94	not grammatical	no semantic sense	0	0
95	grammatical	semantic sense	0	0
96	not grammatical	no semantic sense	2: JJ <i>big</i> , NN <i>guy</i>	0
97	not grammatical	no semantic sense	3: NNP <i>president</i> , NNP <i>america</i> , NNP <i>again</i>	1: <i>love</i>
98	not grammatical	no semantic sense	1: NNP <i>fake</i>	4: <i>Chocolate</i> , <i>valentines</i> , <i>cards</i> , <i>Valentines</i>
99	grammatical	semantic sense	0	2: <i>Valentines</i> , <i>Happy</i>
100	grammatical	semantic sense	1: NN <i>night</i>	0

Appendix I: Output corpus

Structure for every output:

First: Number of output

Second: Tag sequence

Third: Generated output without Trump words

Fourth: Generated output with Trump words added

1

['IN', 'NNP', ':', 'RB', 'JJ', '.']

For Valentines ... n't happy !

For Valentines ... n't happy !

2

['PRP', 'VBP', 'NNP', 'NNP', 'CC', 'CD', 'NNS', 'IN', 'NNP', 'NNP', 'MD', 'VB', 'JJ', 'CC', 'NNP', 'NNP', 'NNS', 'IN', 'CD', 'NN', '.']

We have SOLD Valentine and 1 valentines in Santa Barbara will help valentines and Alumni Valentine valentines of one prep .

We have SOLD Valentine and 1 valentines in president Barbara should help valentines and Alumni Valentine valentines of one prep .

3

['RB', 'NN', '.']

Just day !

Just day !

4

['PRP\$', 'JJ', 'NN', 'IN', 'NNP', 'NNP', 'CC', 'NNP', 'WDT', 'RB', 'VBN', '-RRB-', 'IN', 'NNP', '.']

My valentines day out Valentines Day and Ash that obviously been) of Valentines ?

My great night out Valentines Day and Ash that obviously been) of Valentines ?

5

['PRP\$', 'NN', 'NN', '.']

My wedding day ?

My wedding day ?

6

['WP', 'PRP', 'VBP', 'VBG', 'TO', 'VB', 'DT', 'NN', 'RB', 'DT', 'JJ', 'NN', '.']

What I didnt being to come this heart as a significant Day ?

What I didnt going to come this heart as a big guy ?

7

['VBG', 'IN', 'NNS', 'IN', 'NNP', 'VBZ', 'DT', 'JJ', 'NN', 'NN', 'TO', 'DT', 'NN', ':', 'RB', 'NN', 'IN', 'PRP\$', 'JJ', 'NN', 'VBG', 'CC', 'VB', 'PRP', 'IN', 'NNP', 'WRB', 'DT', 'NNP', 'VBZ', 'IN', 'NNP', 'IN', 'NNPS', '.']

Looking for couples of Valentines is this super fun love to the Cult - then run for my own peril going but have I of Bliss when a Valentines is that Valentines because Valentines ?

Looking for couples of Valentines is this great fun love to the Cult - then run for our great peril going but have I of Bliss when a Valentines is that Valentines because Valentines ?

8

['IN', 'PRP', 'VBP', 'RB', 'TO', 'PRP', '.']

If you need not to me !

If you need not to me !

9

['VBP', 'PRP', 'VBP', 'NNP', 'NNP', 'RB', '.']

Do I do Day Twitter not !

Do I do Day great not !

10

['DT', 'VBZ', 'RB', 'IN', 'NNP', 'NNP', '.']

This 's probably in Orange County .

This 's probably in trump County .

11

['RB', '.']

Honestly !

Honestly !

12

['RB', 'VBD', 'IN', 'DT', 'JJ', 'NNS', 'VBN', '""', '.']

Just had for the whole Valentines been " .

Just had for the great Valentines been " .

13

['IN', 'PRP', 'VBP', 'RB', 'VB', 'RB', 'CC', 'VB', 'JJ', 'NN', 'TO', 'NN', 'IN', 'DT', 'JJ', 'CD', 'NNS', '.']

So you dont n't mean n't & be terrible day na Day than a significant one valentines ?

So you dont n't mean n't & be terrible day na Day than a significant one years ?

14

['JJ', 'WRB', 'NNP', 'VBD', 'TO', 'VB', 'VBN', 'IN', 'NN', 'CC', 'JJ', 'NNS', 'IN', 'NNP', 'NNP', 'NNPS', 'NNP', 'NNP', 'POS', 'NN', '.']

crazy when Valentines was to help been in downtown and happy Valentines of Bliss
Valentine Valentines Sa mga 's Day .

crazy when Valentines was to help been in downtown and happy Valentines of trump
Valentine Valentines Sa mga 's Day .

15

['VBD', 'DT', 'JJ', 'NN', '.']

Had a significant love !

Had a significant love !

16

['VB', 'PRP', 'NNP', 'NNP', ',', 'VBG', 'NNS', ',', 'PRP', 'VBZ', 'DT', 'NNP', 'NN', 'PRP\$', 'NNS', 'VBD', '.']

Thank I DID NOT , wearing Valentines , you is that Florida school your gals was .

thank I DID NOT , wearing Valentines , you is that Florida school your gals was .

17

['VB', 'POS', 'NNP', 'NNP', 'IN', 'DT', 'NNP', 'NNS', 'VBP', 'VBG', 'RP', 'NN', ',', 'CC', 'IN', 'DT', 'NN', 'IN', 'NNP', 'NNP', 'NNP', 'VBZ', 'NNP', 'NNP', ',', 'WP', 'VBZ', 'IN', 'NNP', 'NNP', '.']

let 's Valentines Day with the National people are being out tomorrow , and down this heart of
Valentines Day Buffy is Valentines Day , who is that Lando Day !

let 's Valentines Day with the National people are being out tomorrow , and down this heart of
Valentines hillary Buffy is Valentines Day , who is that Lando carolina !

18

['IN', 'DT', 'IN', 'DT', 'NN', 'IN', 'NNP', ',', 'DT', 'JJ', 'JJ', 'NN', 'NN', ':', 'CC', 'MD', 'VB', 'TO', 'RB', 'DT', 'NNP', 'NNP', 'RB', ':', 'RB', 'VBP', 'PRP', '.']

For the of this radio in Winnipeg , a significant other typa day but can go to thus the
National Wear just ... n't have I !

For the of this radio in Winnipeg , a significant other typa day but can go to thus the fake
great just ... n't have I !

19

['VBG', 'RP', 'RB', 'JJ', ',', 'PRP', 'MD', 'VB', 'IN', 'DT', 'NN', 'CC', 'PRP', 'VBP', 'PRP\$', 'NNS', 'WDT', 'VBP', 'PRP\$', 'NN', '.']

Looking up properly Happy , it can help in all day and I see your daughters that have my love ?

Looking up properly Happy , it will help in all day and I see your daughters that have my country ?

20

['VB', 'WP', 'VBZ', 'WRB', 'PRP', 'VBZ', 'RB', 'VB', 'WP', 'PRP', 'VBP', 'VBG', 'TO', 'JJ', ',', 'CC', 'VBP', 'RB', 'VBG', 'RB', 'JJR', '.']

Be What 's how you 's not have who you dont being to super , and have not going very more !

Be What 's how you 's not have who you dont going to super , and have not going very more !

21

['VB', 'VB', 'PRP', ',', 'VBG', 'TO', 'JJ', ',', 'CC', 'JJ', 'NN', 'NN', 'CC', 'VB', 'TO', 'NNP', 'NNP', 'IN', 'CD', ':', 'NNP', 'NNP', '.']

please be you , wearing to super , and lovely couple Day and please to End Valentine in two ... Valentines Day ?

please be you , wearing to super , and lovely couple Day and please to End Valentine in two ... Valentines Day ?

22

['RB', 'RB', ':', 'CD', 'NN', '.']

Not not ... 2 year !

Not not ... 2 year !

23

['NN', 'VBZ', 'JJ', 'NNS', 'IN', 'RB', 'CD', 'RB', '.']

Love is low Valentines of not one not ?

Love is low Valentines of not one not ?

24

['DT', 'VBZ', 'DT', 'JJ', 'NN', '.']

This 's a significant day !

This 's a big day !

25

['UH', ',', '^', 'NNP', '""', '.']

Yes , " Valentines " .

wow , " Valentines " .

26

['JJ', 'NNS', 'VBP', '-RRB-', ',', 'PRP', 'VBP', 'NNP', 'VBZ', 'VBN', 'DT', 'JJ', 'NN', 'IN', 'NN', '.']

Happy Valentines have) , it love u is been a significant day out tomorrow !

Happy Valentines have) , it love u is been a big job out tomorrow !

27

['VBN', 'PRP', 'IN', 'NNP', 'CC', 'NNP', 'NNS', 'WP', 'MD', 'VB', 'NNS', 'IN', 'NNS', '.']

Join you on Valentines and Ash valentines who can help valentines for couples .

Join you on Valentines and Ash valentines who can help valentines for couples .

28

['RB', 'JJ', '.']

So Happy .

very Happy .

29

['VBZ', 'RB', 'PRP', 'VB', 'IN', 'PRP', 'VBZ', 'DT', 'JJ', 'NN', 'IN', 'NNP', 'NNP', 'NNP', 'IN', 'NNP', 'CC', 'JJ', 'NNS', 'TO', 'NNP', 'NNP', 'IN', 'NNP', 'CC', 'NNP', 'VBP', 'IN', 'PRP', '.']

Is just I get in it takes a significant day out Day 10AM Day with Valentines and other valentines to Touch Your for Valentines and Ash love in I .

Is just I get in it takes a great day out crooked 10AM Day with Valentines and other valentines to Touch Your for Valentines and Ash love in I .

30

['NN', 'VBZ', 'DT', 'JJ', 'NNP', 'NNP', ',', 'WRB', 'PRP', 'VBP', 'VBG', 'IN', 'DT', 'IN', 'DT', 'NNS', '.']

Love 's the next Valentine Decor , when I do being of a in all valentines !

Love 's the next Valentine Decor , when I do being of a in all valentines !

31

['PRP\$', 'NN', 'NNP', 'VBZ', 'IN', 'RB', 'VBN', 'NNS', 'IN', 'NNP', '.']

My wedding Valentines 's because not been valentines of Valentines !

My wedding Valentines 's because not been valentines of Valentines !

32

['RB', 'JJ', 'TO', 'VB', 'IN', 'NN', '.']

So happy to go of chocolate ?

So happy to go of chocolate ?

33

['PRP', 'VBD', 'RB', 'VB', 'DT', 'NNS', 'CC', 'NNS', 'IN', 'PRP\$', 'NN', '.']

I wanted n't mean a people and mothers for my door .

I wanted n't mean a people and mothers for my door .

34

['VB', 'PRP', 'NNP', 'IN', 'DT', 'NNP', 'VBZ', 'IN', 'NN', '.']

Thank I HOPE in all Valentines is that benefit .

thank I HOPE in all Valentines is that benefit .

35

['NN', 'VBZ', 'DT', 'RBS', 'JJ', 'NN', 'RB', 'RBR', 'IN', 'PRP', '.']

Love is that most beautiful demo n't more for her .

Love is that most beautiful demo n't more for her .

36

['NN', 'TO', 'NNP', 'IN', 'NNP', '.']

Note to Touch for Valentines !

Note to Touch for Valentines !

37

['VB', 'DT', 'JJ', 'NN', '.']

Need a significant love !

Need a great love !

38

['WRB', 'MD', 'DT', 'NNP', 'NN', 'NN', 'VBZ', 'JJ', ',', 'PRP', 'VBZ', 'JJ', '.']

When would the Valentines Day roses 's valentines , you is ur !

When would the Valentines Day roses 's valentines , you is ur !

39

['UH', '.']

Yes .

Yes .

40

['DT', 'NNPS', 'VBP', 'TO', 'VB', 'PRP\$', 'NN', 'RP', 'IN', 'DT', 'JJ', 'NNS', '.']

The Valentines are to go our sub up with the perfect people !

The Valentines are to go our sub up with the perfect people !

41

['WRB', 'VBZ', 'RB', 'NNP', ':', 'VBP', '.']

Why has not Valentines : are .

why has not Valentines : are .

42

['PRP', 'VBZ', 'VBN', 'NN', 'VBG', 'PRP', 'IN', 'VB', 'DT', 'NNP', 'NNP']

It is been day making him in get a Bear Valentines

It is been day making him in get a fake Valentines

43

['IN', 'IN', 'DT', 'RB', 'JJ', 'NNS', ',', 'NN', 'NN', 'VBZ', 'JJ', 'CC', 'VBG', 'TO', 'VB', 'DT', 'NN', '.']

So in all just Happy Valentines , I day 's Happy & going to go a mi .

So in all just Happy Valentines , I day 's Happy & going to go a mi .

44

['JJ', 'NNS', ',', 'NNP', ',', 'NNP', ',', 'NNP', 'NNP', ',', 'DT', 'JJ', 'NN', 'NN', 'RB', ':', 'DT', 'JJ', 'NN', '.']

Happy Valentines , Valentines , Valentines , Valentines Day , the next train nalang not ... a significant day !

Happy Valentines , Valentines , Valentines , Valentines Day , the great train nalang not ... a significant night !

45

['JJ', 'NN', 'NN', 'IN', 'NNPS', 'CC', 'NNP', 'IN', 'NNP', 'CC', 'VB', 'DT', 'JJ', 'NN', '.']

Happy Republic day out Valentines and Hugh for Valentines and tag the whole life !

great Republic day out Valentines and Hugh for Valentines and tag the whole guy !

46

['JJ', 'NN', 'NN', 'VBN', 'NNP', 'NNP', 'TO', 'VB', ':']

Happy Valentines haram been Valentines Day to go :

Happy Valentines haram been Valentines Day to go :

47

['IN', 'CD', 'PRP', 'VBD', 'IN', 'NNP', 'IN', 'NN', 'IN', 'NNP', ':', 'VBD', 'DT', 'JJ', 'NN', 'CC', 'DT', 'NNP', 'NN', 'VBG', 'NN', 'NNS', 'IN', 'DT', 'NNP', 'POS', 'NNP', 'CC', 'NNS', '.']

After 2 I wanted of Valentines because self for Valentines : had the next beach but the Valentines day going day Valentines of the Valentines 's Day and others .

After 2 I wanted of Valentines because self for Valentines : had the total beach but the Valentines day going day Valentines of the Valentines 's Day and others .

48

['PRP', 'VBP', 'DT', 'JJ', 'RBS', 'JJ', 'NN', 'IN', 'DT', 'NNP', 'NN', 'NN', '.']

We love this super most authentic day out the Valentines gift ko !

We love this super most authentic job out the Valentines gift ko !

49

['PRP', 'VBD', 'RP', 'PRP', 'VBZ', 'IN', 'IN', 'NNS', '``', 'NN', 'TO', 'VB', 'CC', 'VB', 'VBN', 'IN', 'PRP', '.']

I wanted out I is that for couples ' ry to get and tag been of it ?

I wanted out I is that for couples ' ry to get and tag been of it ?

50

['DT', 'NN', 'NN', 'IN', 'NNP', 'CC', 'PRP\$', 'NNS', '.']

This day sa for Valentines & my siblings .

This day sa for Valentines & my siblings .

51

['DT', 'VBZ', 'RB', 'JJ', 'NNP', 'NNP', 'IN', 'DT', 'JJS', 'NNS', 'IN', 'NN', '.']

That 's never happy Valentines Day with the best valentines for tomorrow !

That 's very happy Valentines Day with the best valentines for tomorrow !

52

['VBZ', 'NNP', 'NNP', 'VBN', 'IN', 'PRP\$', 'JJ', 'NN', 'VBD', 'IN', 'NN', '.']

MADAMI Valentines Day got for my own peril was in downtown !

MADAMI Valentines Day got for our great peril was in downtown !

53

['VB', 'PRP', ',', 'NNP', '.']

Let I , Dr. !

Let I , Dr. !

54

['DT', 'NN', 'IN', 'NNP', 'NNP', ',', 'DT', 'NNPS', 'CC', 'JJ', 'JJ', 'NN', 'VBZ', 'VBG', 'NN', '.']

The card from Lauro Day , a Valentines and lovely Happy Valentines 's being love .

The card from Lauro Day , a Valentines and lovely Happy Valentines 's being love .

55

['PRP', 'VBZ', 'JJ', 'TO', 'VB', 'DT', 'NN', 'TO', 'VB', 'WP', 'VBD', 'RB', 'IN', 'NN', '.']

It 's happy to come a date to go what was surely for tomorrow !

It 's happy to come a date to go what was surely for tomorrow !

56

['PRP', 'MD', 'VB', 'JJ', 'CC', 'JJ', 'NN', 'IN', 'NNP', 'NNP', 'NN', ':', 'CC', 'NN', 'MD', 'VB', 'DT', 'NNS', 'IN', 'CD', 'NNS', ',', 'RB', 'PRP', 'MD', 'RB', 'VB', 'VBN', '.']

You can help Happy and other half for Valentines Day code - and match can help this Valentines of one valentines , not I will n't mean got ?

You will help Happy and other job for trump Day code - and match will help this Valentines of one valentines , not I wo never mean got ?

57

['DT', 'JJ', 'NN', '.']

A Happy Republic .

A Happy night .

58

['VBG', 'JJ', 'IN', 'DT', 'NNP']

Getting Happy for a Valentines

Getting Happy for a Valentines

59

['IN', 'NNP', 'VBZ', 'VBN', 'NN', 'VBG', 'VB', ',', 'NNPS', 'VBD', 'CD', 'RP', 'IN', 'CD', 'IN', 'NNP', '.']

For Valentines is been love going be - VALENTINES was two out of one out Day .

For Valentines is been love going be - VALENTINES was two out of one out Day .

60

['DT', 'JJ', 'JJ', 'NN', ',', 'NNP', 'VBZ', 'IN', 'VBG', 'DT', 'NN', 'NN', 'VBN', 'NN', '.']

The new favorite chocolate , Valentines 's because going the Cult day been Day ?

The new favorite chocolate , Valentines 's because going the Cult day been Day ?

61

['PRP', 'VBP', 'RB', 'JJ', 'TO', 'VB', 'VBN', 'RBR', 'JJ', 'NN', 'IN', 'JJS', 'IN', 'PRP\$', 'JJ', 'VBP', '.']

We are all valentines to go been more true love over best of my first are .

We are all valentines to go been more true night over best of our first are .

62

['RB', ',', 'PRP', 'VBZ', 'RB', 'DT', 'NN', 'CC', 'JJ', 'NN', 'IN', 'NNP', '-RRB-', 'IN', 'DT', 'NN', 'VBD', 'IN', 'NNP', '.']

So , it takes not the love and happy birthday of Valentines) for a date had for Valentines .

So , it takes not the love and happy job of Valentines) for a date had for Valentines .

63

['VB', 'TO', 'NNP', '.']

Listen to Love !

Listen to Love !

64

['VB', '.']

Hey .

Hey .

65

['DT', 'JJ', 'NNP', 'NNP', 'NN', '.']

The new Miami Valentine day ?

The new Miami Valentine today ?

66

['NN', 'NN', 'RB', 'IN', 'NNP', ':', 'RB', 'JJ', 'NN', 'IN', 'NNP', ':', 'CD', 'IN', 'NNP', 'NNP', ':', 'CD', 'NNP', ',', '.']

ang mga n't of Bliss : Not Happy Anniversary of Valentines : * of Valentines Day : Day Day , .

ang mga n't of Bliss : Not Happy night of Valentines : * of trump Day : Day Day , .

67

['PRP', 'VBZ', 'JJ', '.']

He 's Happy .

He 's Happy .

68

['WDT', 'DT', 'NN', 'IN', 'JJ', 'NN', 'POS', 'NN', 'IN', 'DT', 'NNP', 'NNP', 'IN', 'VBG', 'DT', 'IN', 'DT', 'JJS', 'NNS', 'IN', 'DT', 'JJ', 'CC', 'JJ', ',', 'IN', 'PRP', 'RB', 'VBD', ':', 'PRP', 'VBD', 'VBN', 'IN', 'DT', 'NN', '.']

What the love with long distance 's day out the Valentines Day with being a for this best Valentines for a significant and happy , out you so got , it was been for the Cult .

What the love with long distance 's day out the fake Day with being a for this best Valentines for a significant and happy , out you so got , it was been for the Cult .

69

['WP', 'VBZ', 'DT', 'JJ', 'NN', '.']

Who is this super love .

Who is this super love .

70

['IN', 'DT', 'NNS', 'IN', 'DT', 'NNP', 'NNP', 'IN', 'NNP', ':', 'PRP', 'VBP', 'RB', 'VBN', '.']

On the ups for a Valentines Day with Rewire ... I think not been .

On the ups for a fake Day with Rewire ... I think not been .

71

['NN', 'VBZ', 'IN', 'NNP', '.']

Love is that Valentines .

Love is that Valentines .

72

['EX', 'VBZ', 'RB', 'RB', 'JJ', '.']

There 's just too sad .

There 's just too sad .

73

['DT', 'VBG', 'NNS', 'VBZ', 'VBN', 'PRP\$', 'NN', 'VBD', 'RB', 'JJ', 'TO', 'NNS', ',', 'NNS', ',', 'VBZ', 'PRP', 'RB', 'VBG', 'TO', 'VB', 'IN', 'NNP', 'NN', ',', 'IN', 'JJS', 'NNS', 'VBP', 'JJ', ',', 'NN', 'NNS', 'CC', 'NN', 'RB', 'VBD', ',', 'VBG', 'PRP\$', 'NN', 'CC', 'PRP\$', 'NNP', 'NNP', ',', 'PRP', 'VBP', 'NNP', '.']

that being valentines has been our living was surely Happy to valentines , Wednesdays , is it as going to get for Valentines Day , out most valentines are such , I valentines and home very got , wearing my love and your Harry Valentine , you dont Valentines ?

that being valentines has been our living was surely Happy to valentines , Wednesdays , is it as going to get for Valentines Day , out most valentines are such , I valentines and home very got , wearing my love and your Harry Valentine , you dont Valentines ?

74

['PRP', 'VBP', 'RB', 'VB', 'NNP', 'VBZ', 'IN', 'NN', '.']

I didnt just have Growler 's because self !

I didnt just have Growler 's because self !

75

['JJ', 'NN', ',', '.']

Happy valentines !!

Happy night !!

76

['PRP', 'VBP', 'RB', '.']

I think not .

I think not .

77

['VB', 'JJ', 'TO', 'VB', ':', 'NNP', '.']

Be valentines to come : Valentines .

Be valentines to come : Valentines .

78

['DT', 'JJ', 'NN', 'CD', ':', 'CD', '.']

The new marketing two : Day .

The great marketing two : Day .

79

['PRP', 'MD', 'VB', 'CD', 'CD', 'NNS', 'DT', 'NN', 'VBZ', 'VBN', '.']

I will help two one people a love is got .

I will help two one people a love is got .

80

['JJ', 'IN', 'NNP', 'NNP', ',', 'RB', 'VBN', ',', 'VBN', 'IN', 'DT', 'NNS', 'IN', 'NNP', '.']

Special of Bliss Day , not got , been in all Valentines in KidZania !

Special of trump Day , not got , been in all Valentines in KidZania !

81

['DT', 'JJ', 'NN', ':', 'NNS', 'NNS', ':', 'MD', 'VB', 'VBN', 'RP', 'NNP', ':', 'NN', 'IN', 'DT', 'NNP', '.']

A happy heart : Valentines Valentines ... can go got up Butt ... day out a Mary .

A great heart : Valentines Valentines ... can go got up Butt ... day out a Mary .

82

['JJ', 'NN', 'TO', 'PRP\$', 'NN', 'VBZ', 'VBG', 'JJR', 'CC', 'JJR', 'NNS', 'IN', 'CD', '.']

Good day na my heart is experiencing more and More Valentines in two !

big day na my country is experiencing more and More Valentines in two !

83

['VBG', 'RB', 'JJ', 'NNS', '.']

Looking not gonna valentines .

Looking not gonna valentines .

84

['PRP', 'VBD', 'DT', 'NNP', 'IN', 'DT', 'NNP', 'IN', 'NNP', 'VBD', 'DT', 'NNP', 'NNP', 'CC', 'NNP', 'VBZ', 'VBN', '\$', 'CD', 'CD', ',', 'NNS', 'IN', 'NNS', 'IN', 'CD', '.']

I wanted the Homecoming of this Saturday in Orange got the Valentines Day but LIKE 's been 2 2 , Wednesdays for couples of 2 !

I wanted the Homecoming of this Saturday in Orange got the fake Day but LIKE 's been 2 2 , Wednesdays for couples of 2 !

85

['IN', 'JJ', 'NNP', 'VBD', 'RB', 'DT', 'JJ', 'NN', ',', 'JJ', 'IN', 'NNP', 'TO', 'VB', 'VBP', 'RB', 'JJR', '.']

In Happy Ash was so a significant love , okay of Bliss to get are n't More !

In Happy Ash was so a great love , okay of Bliss to get are n't More !

86

['PRP', 'VBZ', 'RB', 'JJ', 'IN', 'PRP\$', 'JJ', 'NN', 'TO', 'PRP\$', 'NN', 'IN', 'PRP\$', 'NN', 'IN', 'DT', 'NN', ',', 'DT', 'JJ', 'NN', ':']

It is almost Happy of my first chocolate to your heart in your heart of a love , the whole life :

It is almost Happy of our first chocolate to your heart in our heart of a love , the great life :

87

['VB', 'PRP', ':', 'NNP', '.']

Thank it : RT ?

thank it : RT ?

88

['DT', 'NNP', 'NNP', 'NNP', 'DT', 'NN', 'PRP', 'VBD', 'IN', 'JJ', 'NN', 'IN', 'NNP', 'NNP', ':', 'NNP', 'NNP', '.']

This Day Buffy Valentine the grocery you did of true love with Rewire Me ... Valentines Day !

This fake golf Valentine the grocery you did of true night with president Me ... Valentines again !

89

['TO', 'DT', 'NN', 'IN', 'DT', 'NN', 'TO', 'VB', 'NN', 'POS', 'NN', 'IN', 'NNP', 'NNP', 'NNP', 'VBD', 'WRB', 'PRP', 'VBZ', 'DT', 'NN', '.']

To the school in all day na have dinner 's Day than chocolate Day 10AM got when I has a love !

To the school in all day na have dinner 's Day than trump great 10AM got when I has a love !

90

['PRP', 'VBP', 'VBG', 'DT', 'NN', 'IN', 'NNP', 'NNP', 'IN', 'NNP', 'VBD', 'PRP\$', 'JJS', 'VBN', 'RB', '.']

I see going the school of Bliss Valentine of Bliss had your least been so .

I see going the school of trump Valentine of Bliss had your least been so .

91

['PRP', 'VBD', 'DT', 'JJ', 'JJ', 'NN', 'TO', 'VB', 'DT', 'NN', 'IN', 'NNS', '.']

I wanted this super cute ass to go a love over Valentines ?

I wanted this super cute ass to go a love over Valentines ?

92

['NN', ':', 'VB', 'VBN', 'IN', 'NNP', 'IN', 'DT', 'NN', 'VBG', 'RBR', 'IN', 'NNP', 'NN', '.']

Papa : Please got for Valentines because a love making more in Santa day !

Papa : Please interviewed for Valentines because a love making more in Santa today !

93

['IN', 'NNP', 'VBD', 'DT', 'NNP', 'NNP', 'NNP', '.']

For Valentines had a Valentines Day 10AM .

For Valentines had a fake golf 10AM .

94

['IN', 'CD', 'IN', 'NNP', '.']

At one out Day !

At one out Day !

95

['RB', 'IN', 'NNP', '.']

Even of Bliss .

Even of Bliss .

96

['CD', 'NN', 'RB', ',', 'IN', 'DT', 'JJ', 'NN', '.']

one prep just , along the whole love .

one prep just , along the big guy .

97

['IN', 'VBG', 'PRP\$', 'NN', 'IN', 'NNP', 'NNP', 'NNP', '.']

From being your love over Hannah Rose Valentines !

From being your love over president america again !

98

['VBG', 'DT', 'NNP', 'NNP', ':', 'NNP', 'JJ', 'NNS', 'RB', 'RB', 'IN', 'NNP']

Wishing the White Chocolate-Cherry : RT valentines cards n't that for Valentines

Wishing the fake Chocolate-Cherry : RT valentines cards n't that for Valentines

99

[''', 'NNP', 'VBZ', 'JJ', '.']

" Valentines 's Happy .

" Valentines 's Happy .

100

['JJ', 'NN', '.']

Good day ?

Good night ?

Appendix II: List of Trump words

['will', 'great', 'our', 'thank', 'obama', 'very', 'should', 'big', 'america', 'trump', 'again', 'hillary', 'many', 'country', 'president', 'today', 'one', 'never', 'going', 'why', 'been', 'bad', 'must', 'tonight', 'us', 'news', 'being', 'doing', 'night', 'said', 'clinton', 'had', 'job', 'jobs', 'win', 'years', 'amazing', 'crooked', 'media', 'made', 'let', 'china', 'national', 'deal', 'vote', 'enjoy', 'tomorrow', 'poll', 'money', 'hard', 'better', 'best', 'total', 'against', 'record', 'entrepreneurs', 'keep', 'always', 'got', 'ever', 'tax', 'looking', 'wow', 'love', 'join', 'election', 'forward', 'stop', 'fake', 'totally', 'believe', 'remember', 'nice', 'congratulations', 'wonderful', 'nothing', 'soon', 'debate', 'everyone', 'done', 'watch', 'republicans', 'republican', 'campaign', 'states', 'morning', 'terrible', 'getting', 'united', 'ratings', 'iowa', 'crowd', 'cruz', 'massive', 'speech', 'won', 'golf', 'two', 'guy', 'thanks', 'sad', 'honor', 'fantastic', 'smart', 'working', 'support', 'business', 'yesterday', 'happy', 'bill', 'far', 'failing', 'border', 'lost', 'democrats', 'success', 'interviewed', 'florida', 'making', 'strong', 'russia', 'north', 'military', 'together', 'hope', 'polls', 'isis', 'things', 'party', 'iran', 'major', 'tough', 'numbers', 'wants', 'disaster', 'ted', 'carolina', 'security', 'john', 'attack', 'watching', 'focus', 'yourself', 'others', 'washington', 'million', 'south', 'hampshire', 'fast', 'proud', 'friends', 'leaders', 'beautiful', 'dishonest', 'special', 'apprentice', 'history', 'trade', 'scotland', 'jeb', 'illegal', 'bush', 're', 'mexico', 'dollars', 'dems', 'coming', 'women', 'ohio', 'healthcare', 'hit', 'saying', 'failed', 'meeting', 'having', 'americans', 'wall', 'interview', 'wrong', 'times', 'fox', 'season', 'truly', 'weak', 'talking', 'miss', 'told', 'global', 'korea', 'millions', 'iraq', 'press', 'immigration', 'leadership', 'senate', 'fight', 'economy', 'stupid', 'top', 'cuts', 'warming', 'donald', 'taxes', 'worst', 'bernie', 'used', 'gave', 'called', 'badly', 'rubio', 'worse', 'winning', 'senator', 'ready', 'political', 'tremendous', 'lightweight', 'rally', 'nation', 'words', 'celebrity', 'safe', 'doral', 'left', 'governor', 'spent', 'anyone', 'stay', 'wo', 'leaving', 'wonder', 'trying', 'low', 'wind', 'victory', 'looks', 'zero', 'deals', 'congress', 'respect', 'energy', 'problems', 'dumb', 'phony', 'club', 'went', 'beat', 'interesting', 'tower', 'killing', 'virginia', 'syria', 'presidential', 'heading', 'fun', 'days', 'allowed', 'incredible', 'released', 'u.s.', 'obamacare', '@BarackObama', '@FoxNews', '@foxandfriends', '@CNN', '@MittRomney', '@nytimes', 'w/', '@ApprenticeNBC', 'congrats']