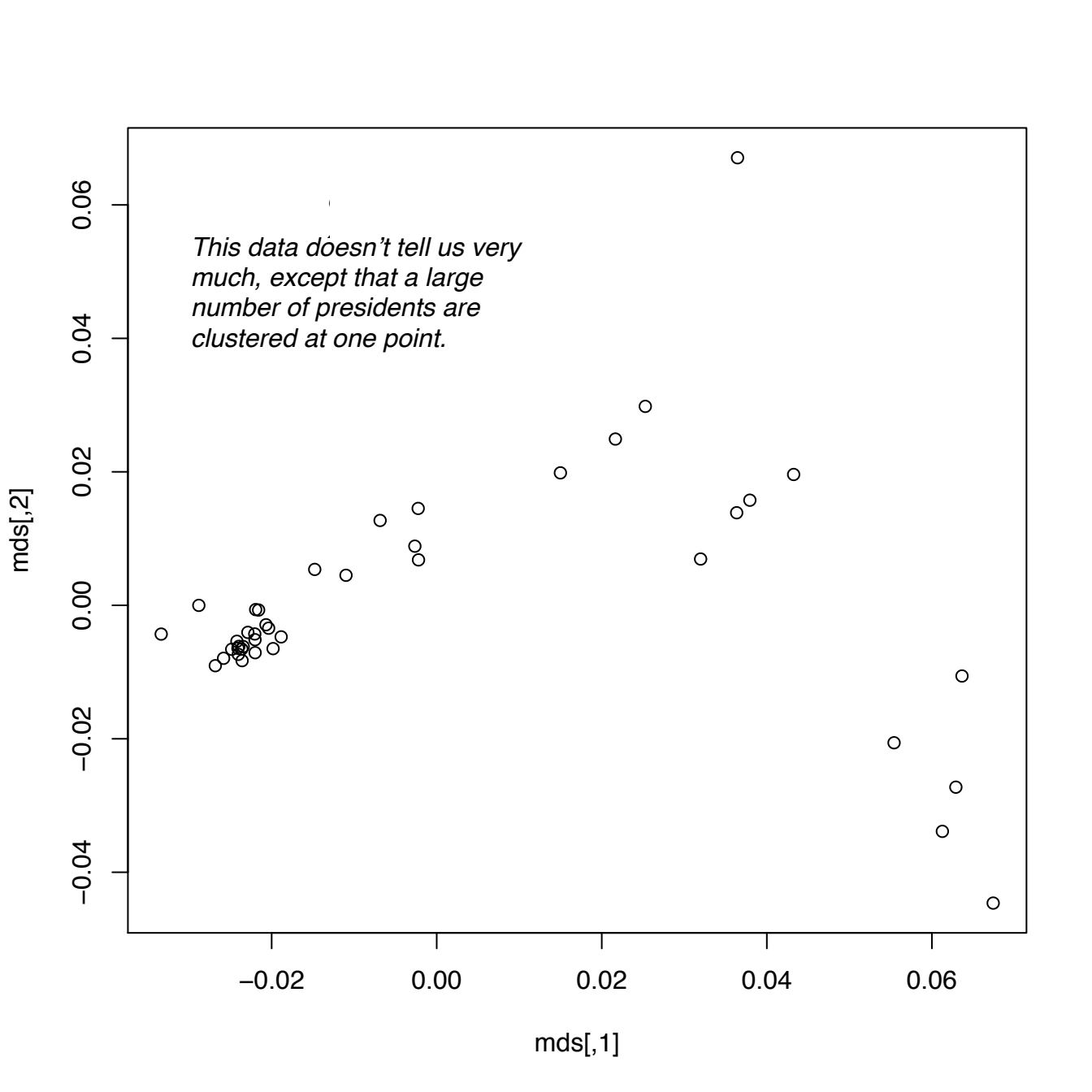
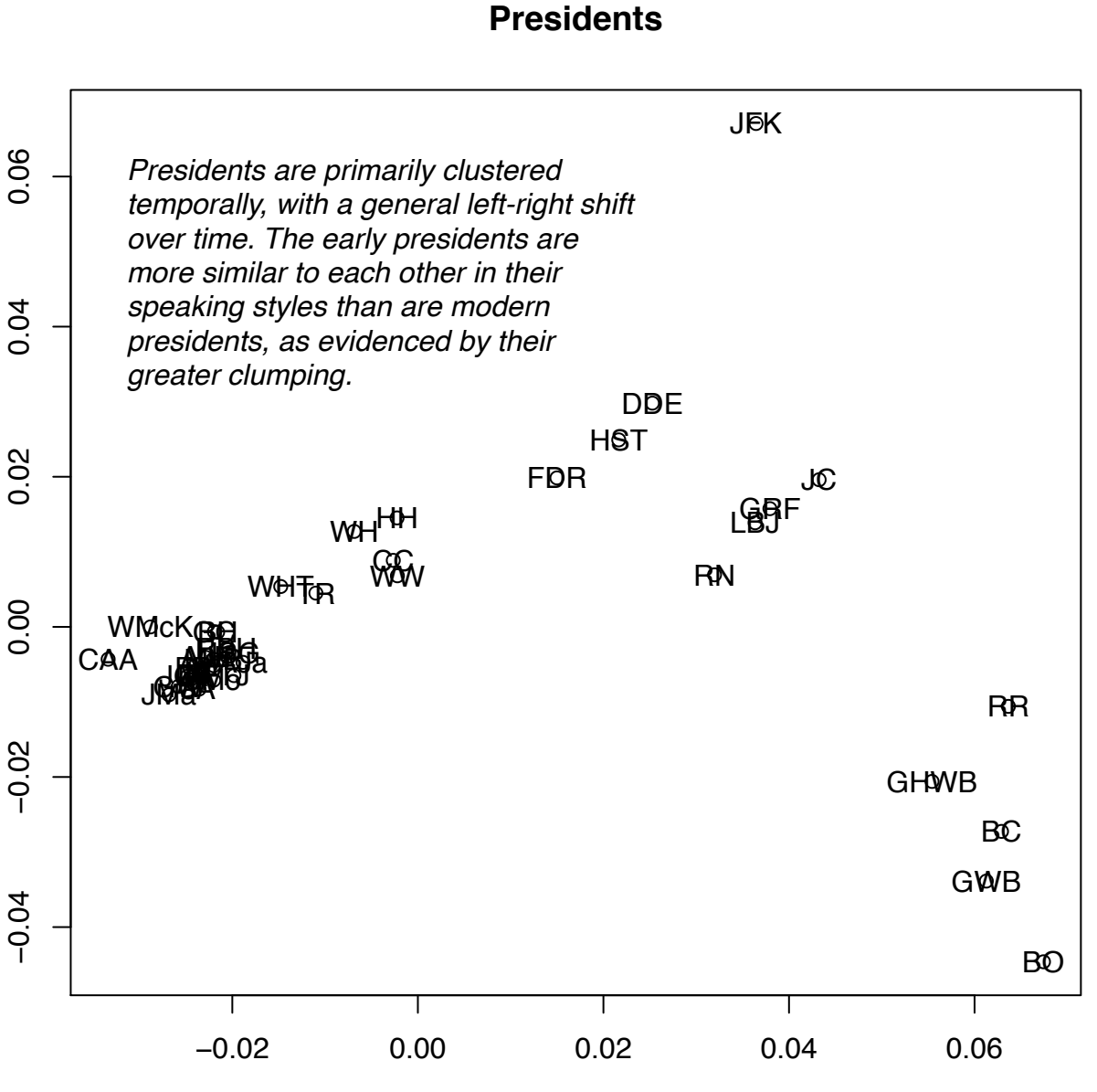
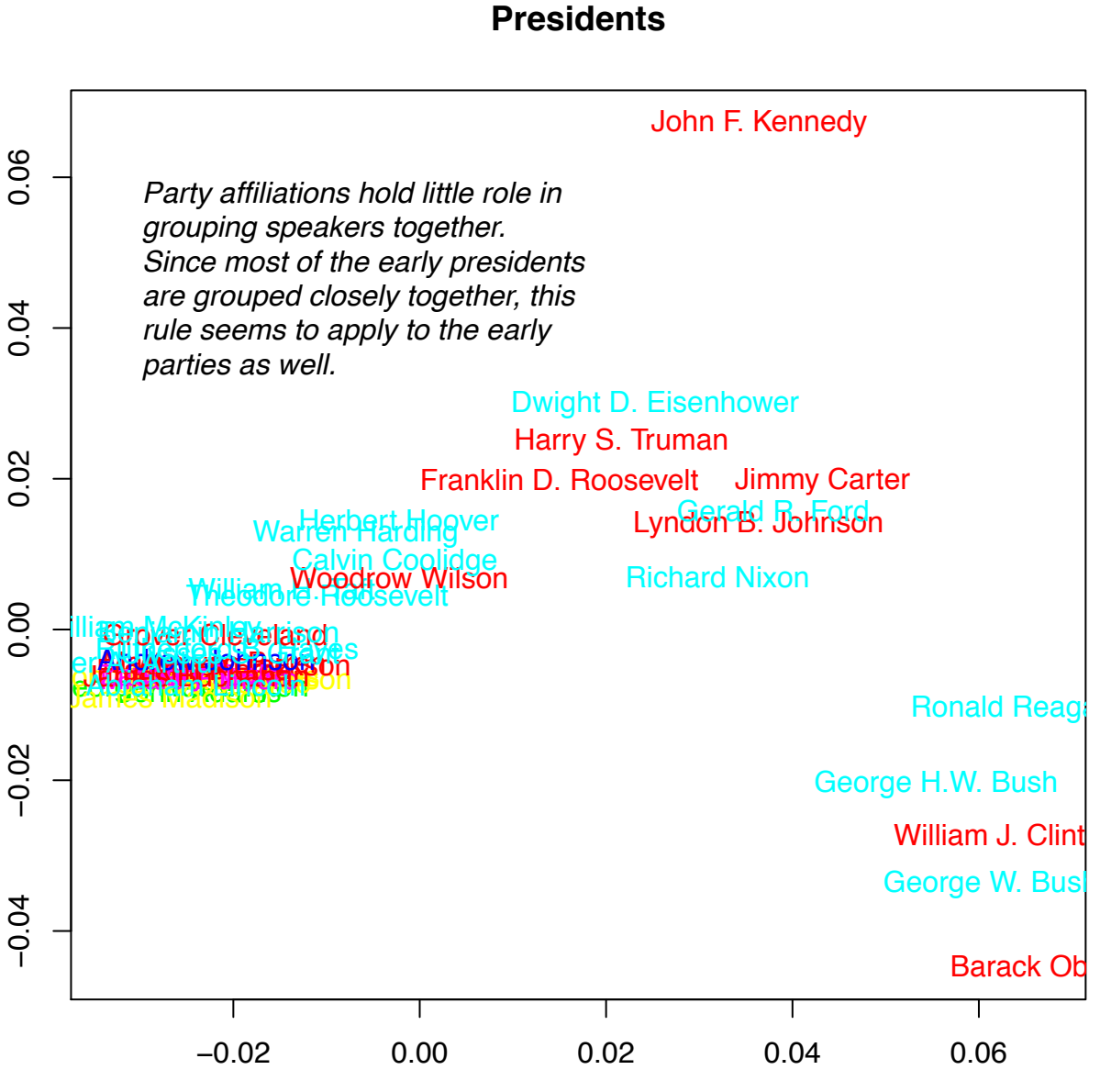
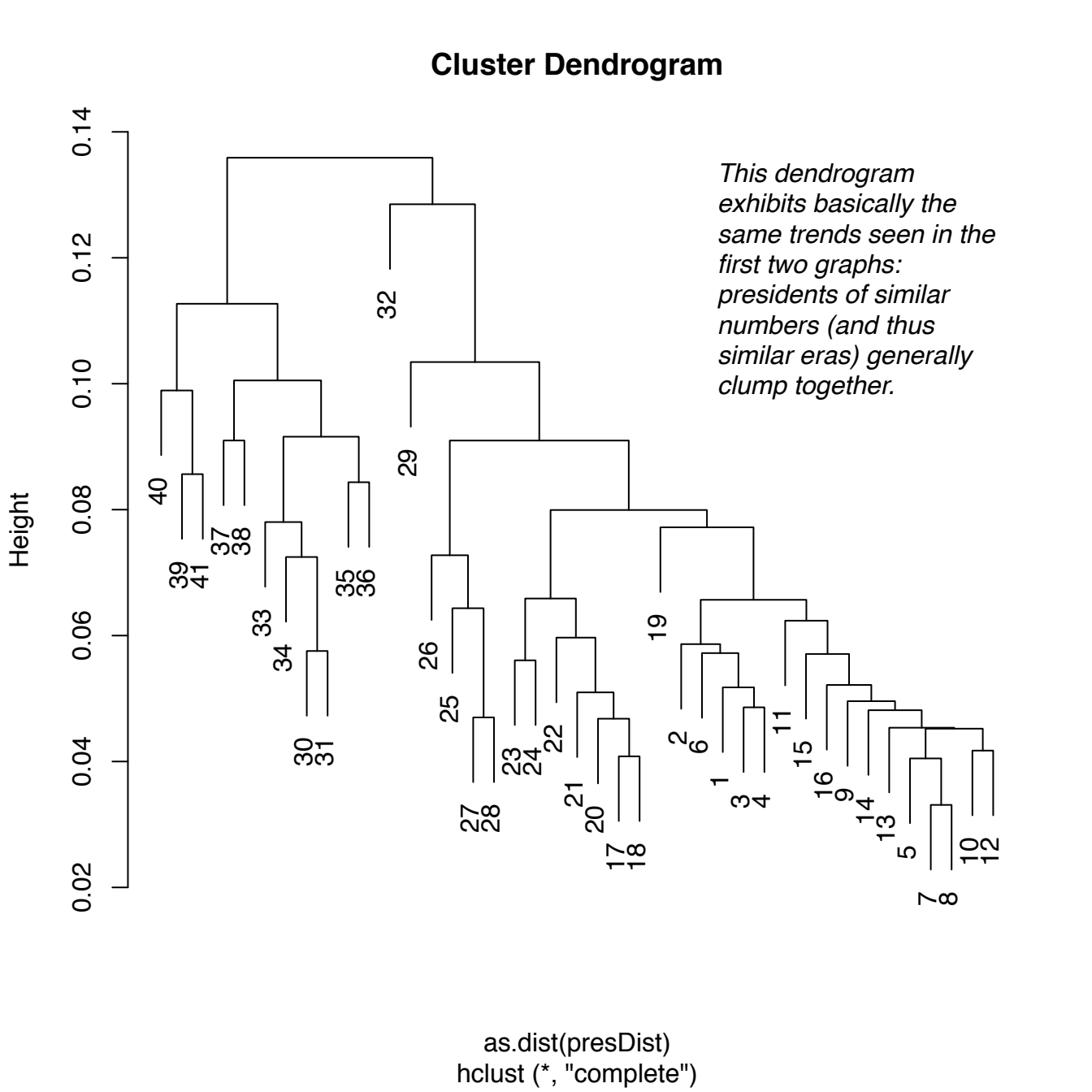
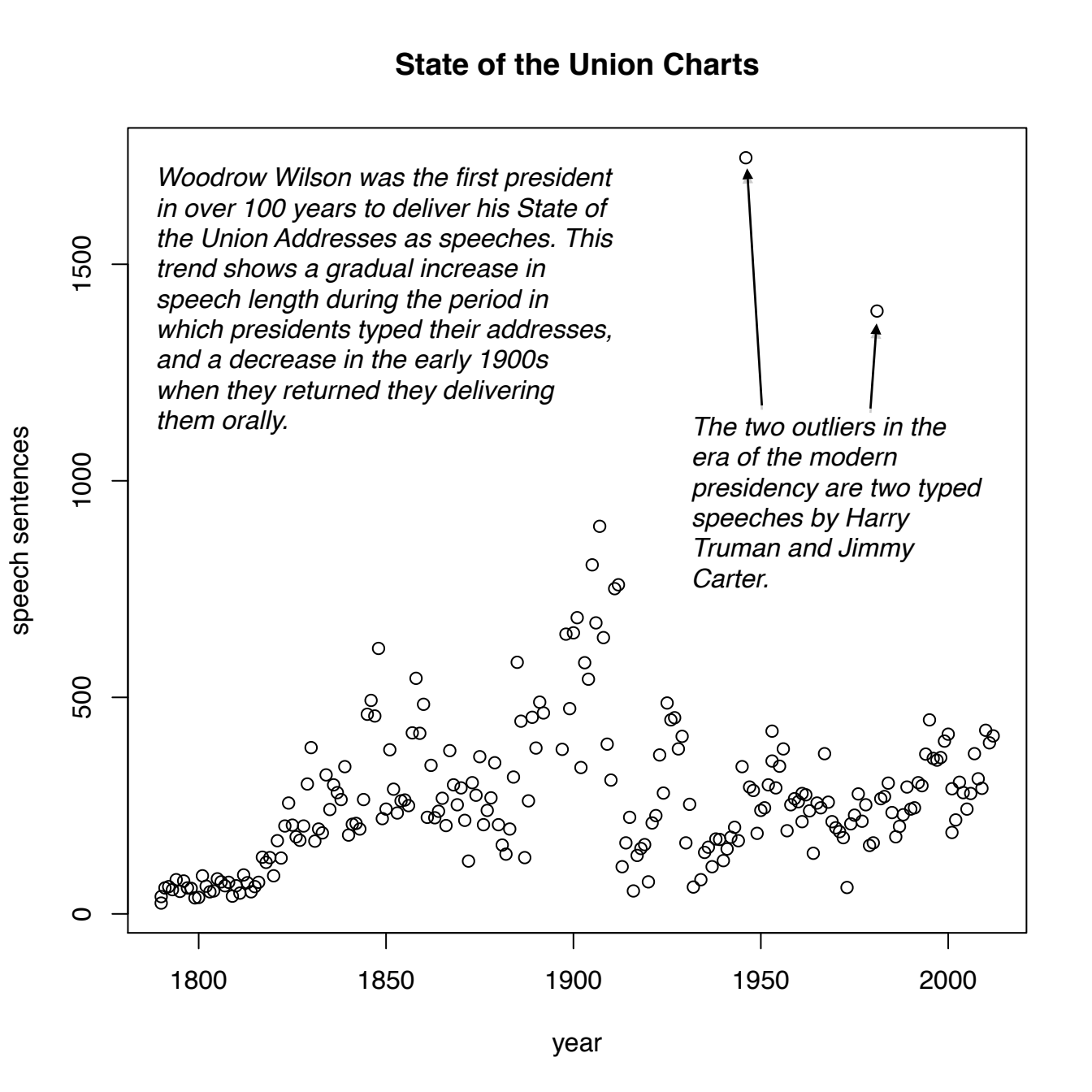

This data doesn't tell us very much, except that a large number of presidents are clustered at one point.
mds[,2]
mds[,1]
0.06
0.04
0.02
0.00
−0.02
−0.04
−0.02
0.00
0.02
0.04
0.06

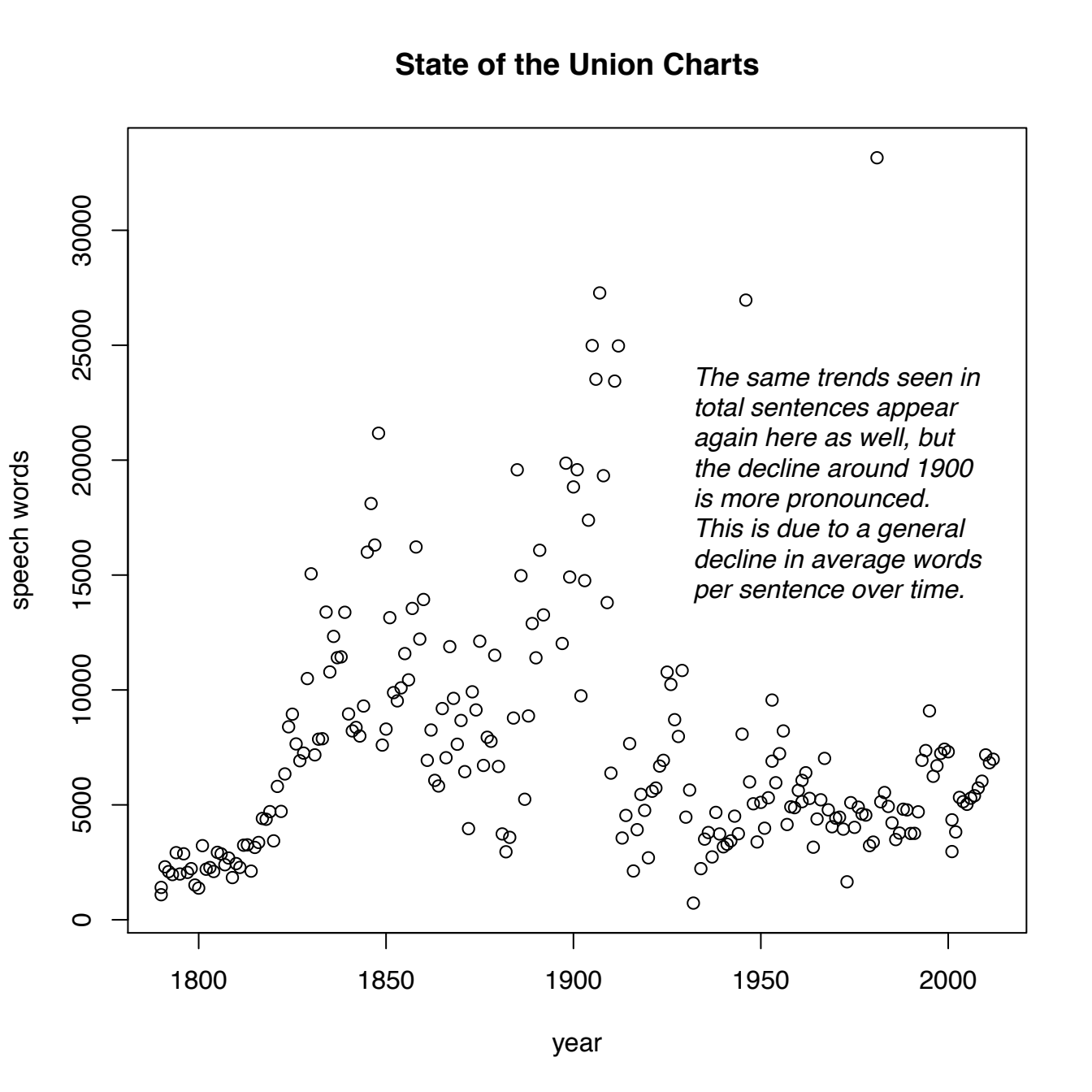

Presidents
Presidents are primarily clustered temporally, with a general left-right shift over time. The early presidents are more similar to each other in their speaking styles than are modern presidents, as evidenced by their greater clumping.
0.06
0.04
0.02
0.00
−0.02
−0.04
−0.02
0.00
0.02
0.04
0.06

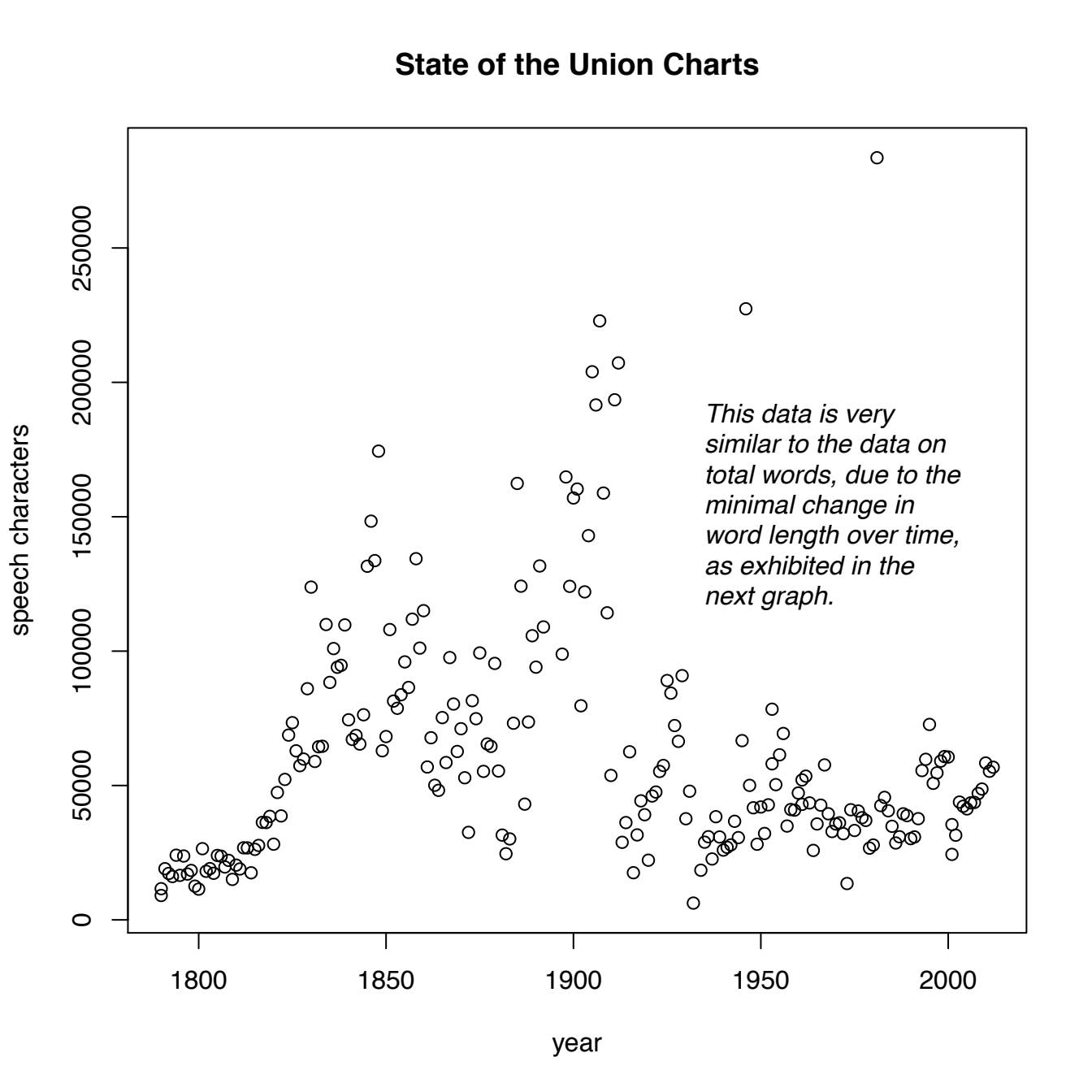

Presidents
John F. Kennedy
Party affiliations hold little role in grouping speakers together. Since most of the early presidents are grouped closely together, this rule seems to apply to the early parties as well.
Dwight D. Eisenhower
Harry S. Truman
Franklin D. Roosevelt
Jimmy Carter
Gerald R. Ford
Herbert Hoover
Warren Harding
Lyndon B. Johnson
Calvin Coolidge
Woodrow Wilson
Richard Nixon
Theodore Roosevelt
Grover Cleveland
Ronald Reag
George H.W. Bush
William J. Clint
George W. Bus
Barack Ob
0.06
0.04
0.02
0.00
−0.02
−0.04
−0.02
0.00
0.02
0.04
0.06

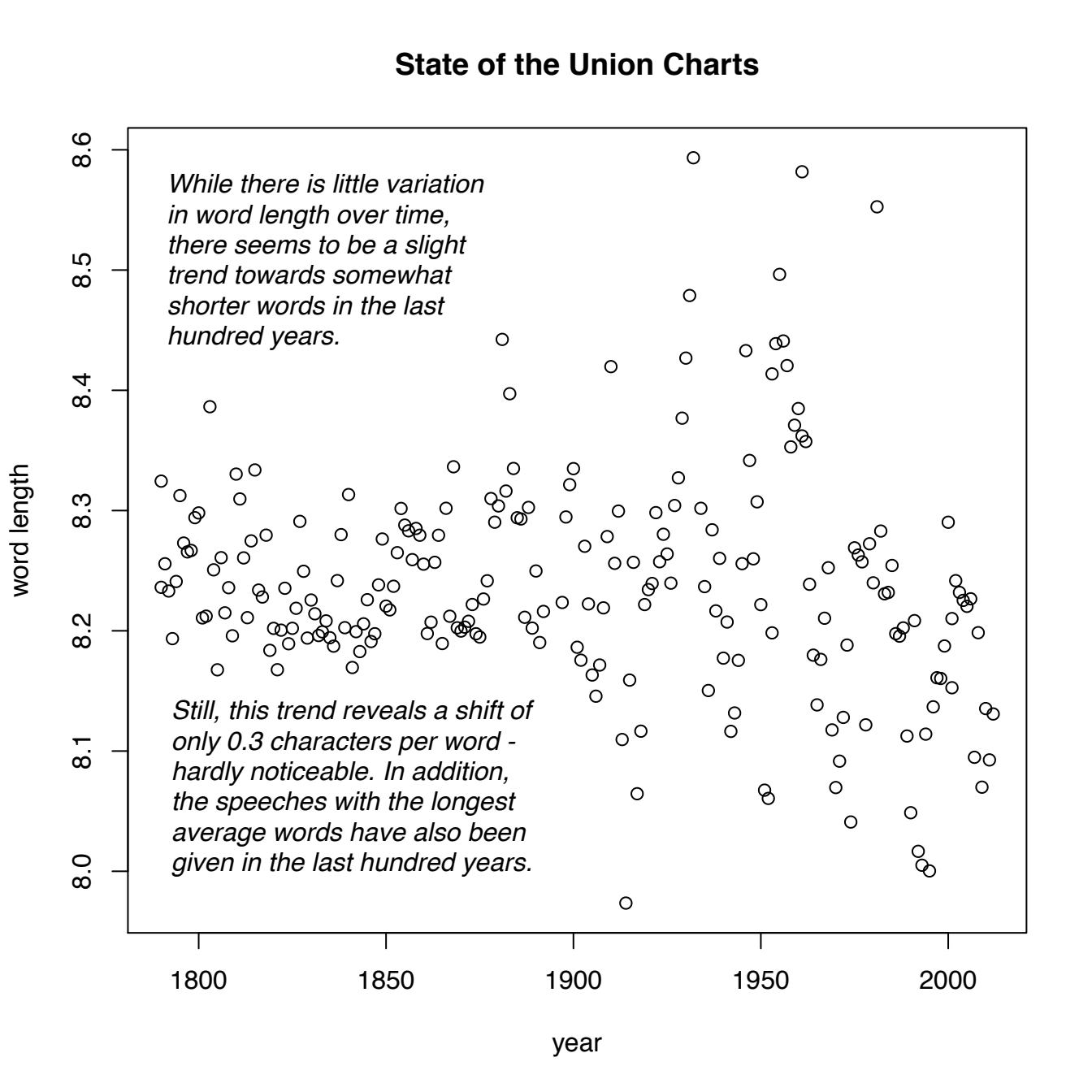


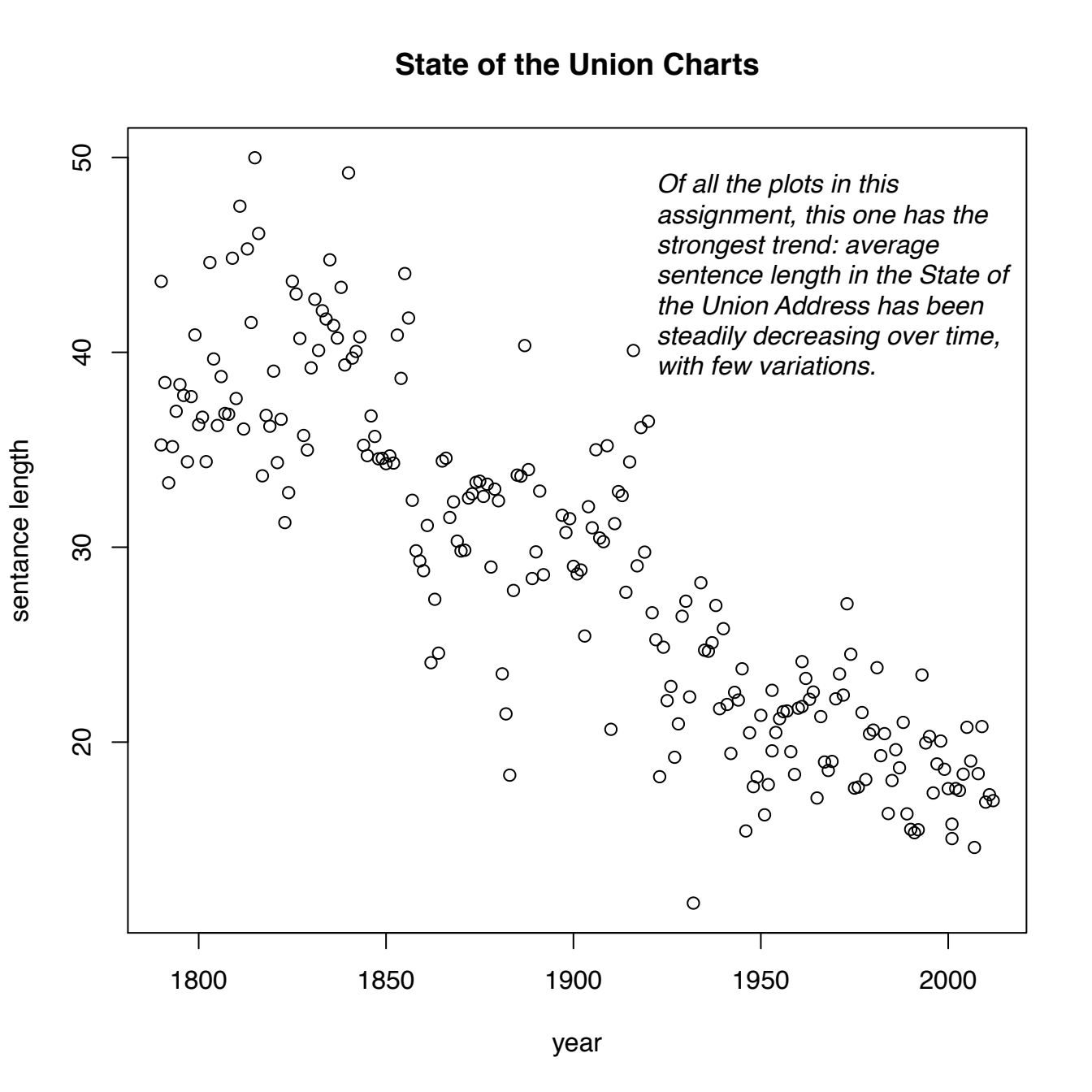
This dendrogram exhibits basically the same trends seen in the first two graphs: presidents of similar numbers (and thus similar eras) generally clump together.


State of the Union Charts
Woodrow Wilson was the first president in over 100 years to deliver his State of the Union Addresses as speeches. This trend shows a gradual increase in speech length during the period in which presidents typed their addresses, and a decrease in the early 1900s when they returned they delivering them orally.
The two outliers in the era of the modern presidency are two typed speeches by Harry Truman and Jimmy Carter.
speech sentences
0
500
1000
1500
1800
1850
1900
1950
2000
year


State of the Union Charts
speech words
0
5000
10000
15000
20000
25000
30000
1800
1850
1900
1950
2000
year
The same trends seen in total sentences appear again here as well, but the decline around 1900 is more pronounced. This is due to a general decline in average words per sentence over time.


State of the Union Charts
speech characters
0
50000
100000
150000
200000
250000
1800
1850
1900
1950
2000
year
This data is very similar to the data on total words, due to the minimal change in word length over time, as exhibited in the next graph.


State of the Union Charts
While there is little variation in word length over time, there seems to be a slight trend towards somewhat shorter words in the last hundred years.
Still, this trend reveals a shift of only 0.3 characters per word - hardly noticeable. In addition, the speeches with the longest average words have also been given in the last hundred years.
word length
8.0
8.1
8.2
8.3
8.4
8.5
8.6
1800
1850
1900
1950
2000
year


State of the Union Charts
sentance length
year
20
30
40
50
1800
1850
1900
1950
2000
Of all the plots in this assignment, this one has the strongest trend: average sentence length in the State of the Union Address has been steadily decreasing over time, with few variations.