



# **Speeches analysis of political leaders of the 20th century using text mining methods**

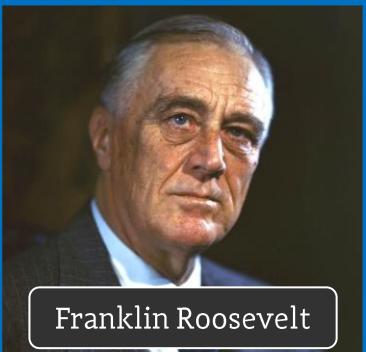
Kamil Orzechowski & Kordian Makulski

Faculty of Physics WUT

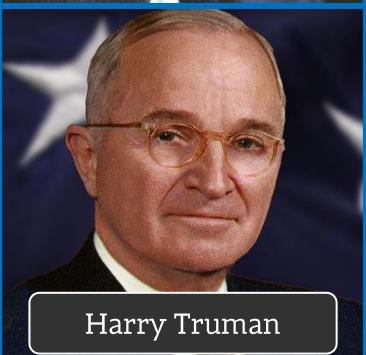
30 I 2023



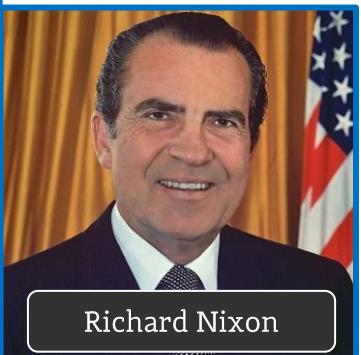
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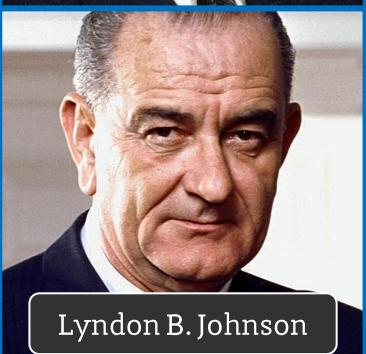
Franklin Roosevelt



Harry Truman



Richard Nixon



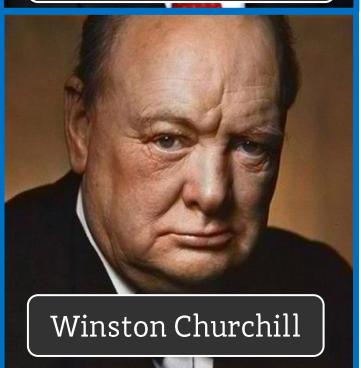
Lyndon B. Johnson



Ronald Reagan



Margaret Thatcher



Winston Churchill

# Intro



# duction



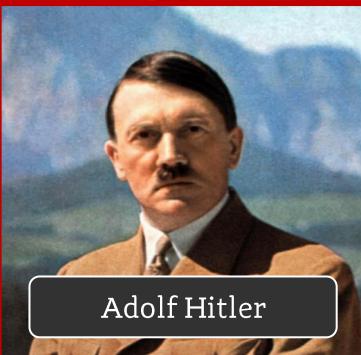
Ferdinand Marcos



Josip Tito



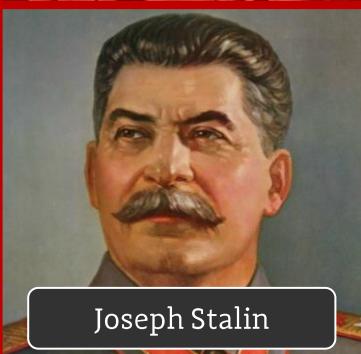
Mao Zedong



Adolf Hitler



Fidel Castro



Joseph Stalin

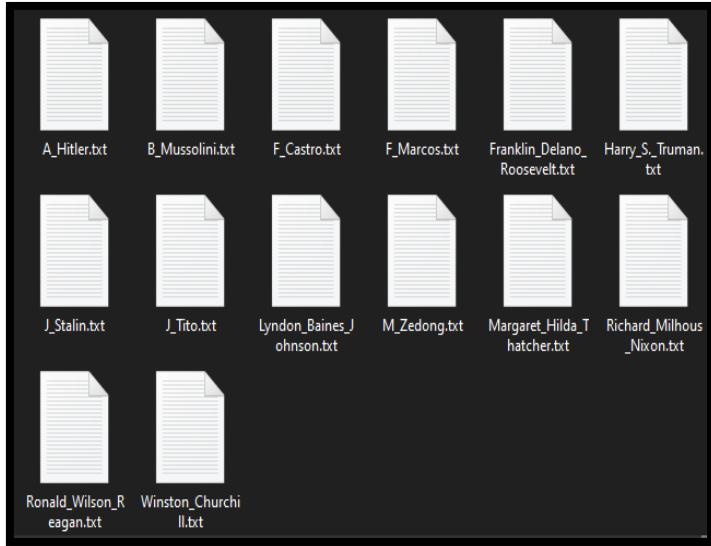


Benito Mussolini

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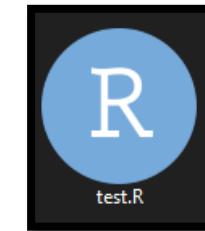
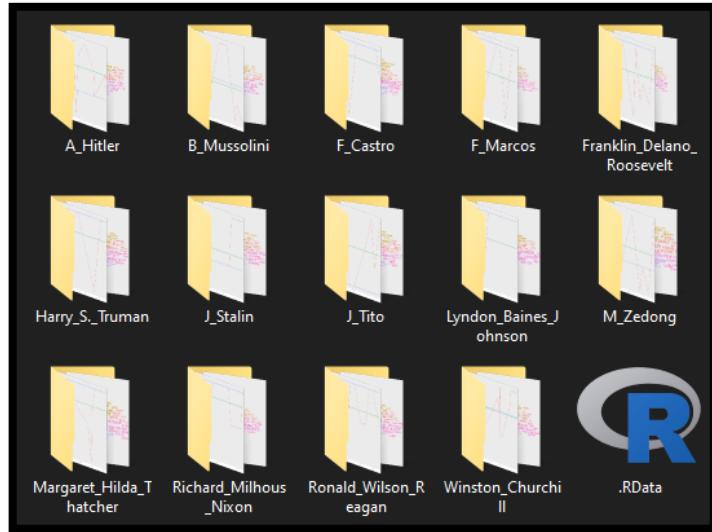
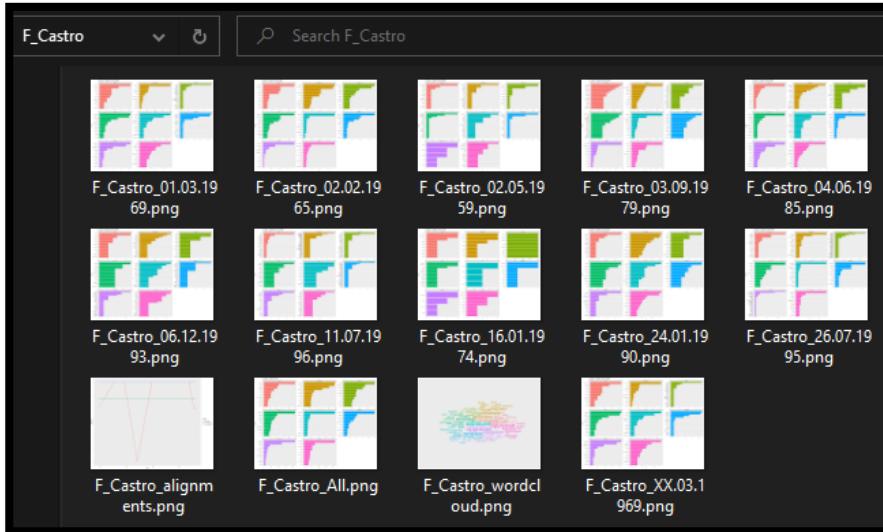
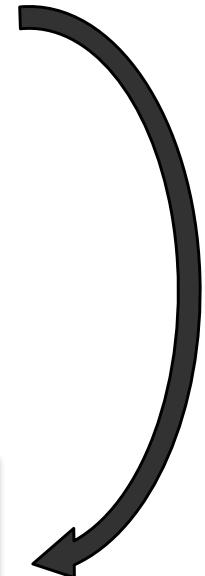
# Project workflow

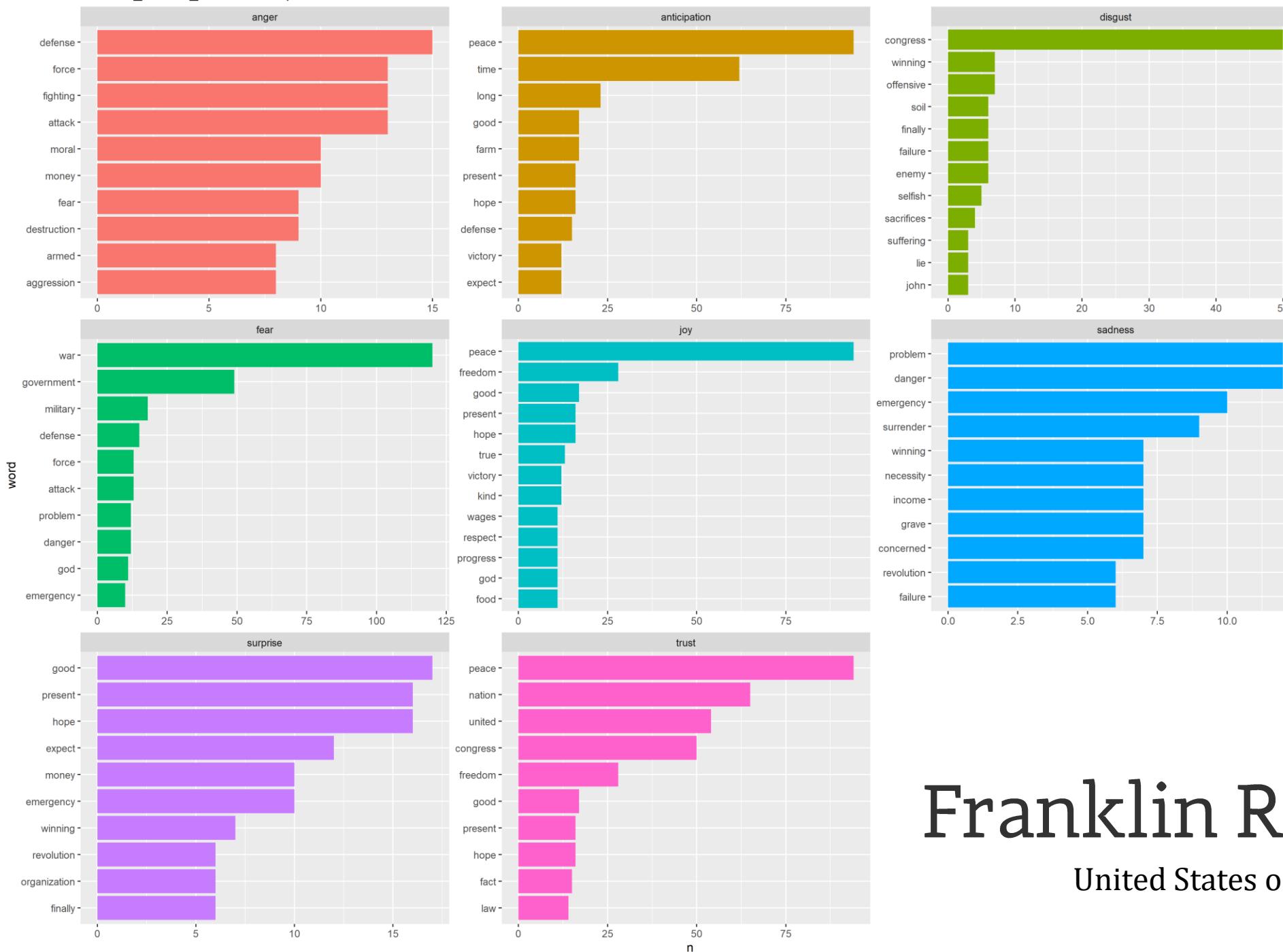


Separator

Content

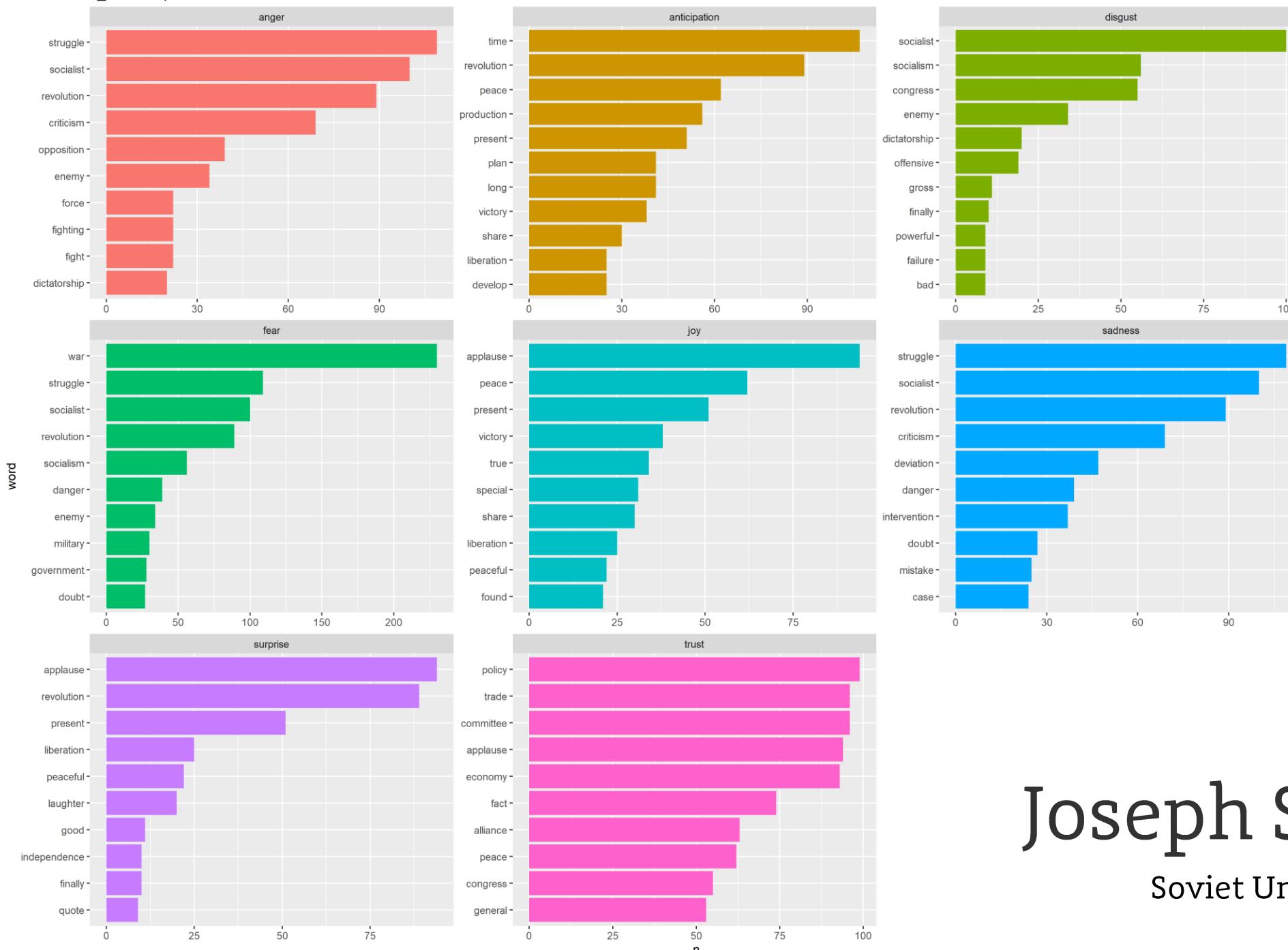
F\_Castro.txt - Notepad  
File Edit Format View Help  
---New Data---  
{02.05.1959} Date  
We are all conscious of the sacrifices made by our peoples; we are all conscious of the hopes that have been prompting those sacrifices, and also of the expectant unrest caused in the conscience of America by the recent victories of democracy against dictatorial rulers. We have all cherished the illusion that tyrants are disappearing from the face of our Continent. Yet, the truth is that such disappearance is only an illusion, and nobody would dare to state here, honestly and frankly, how long will the constitutional governments of Latin America actually last; how long do they suppose this period of democratic awakening, -- which has cost so much suffering and so many sacrifices, will last; and also how long do they suppose those democratic governments, overrun with poverty and need, which create an unending series of troubles and conflicts will last, before those who are watching for the right moment to take power from those democratic rulers, through violence, of course. How is it possible for Democracy to





# Franklin Roosevelt

United States of America



# Joseph Stalin

## Soviet Union

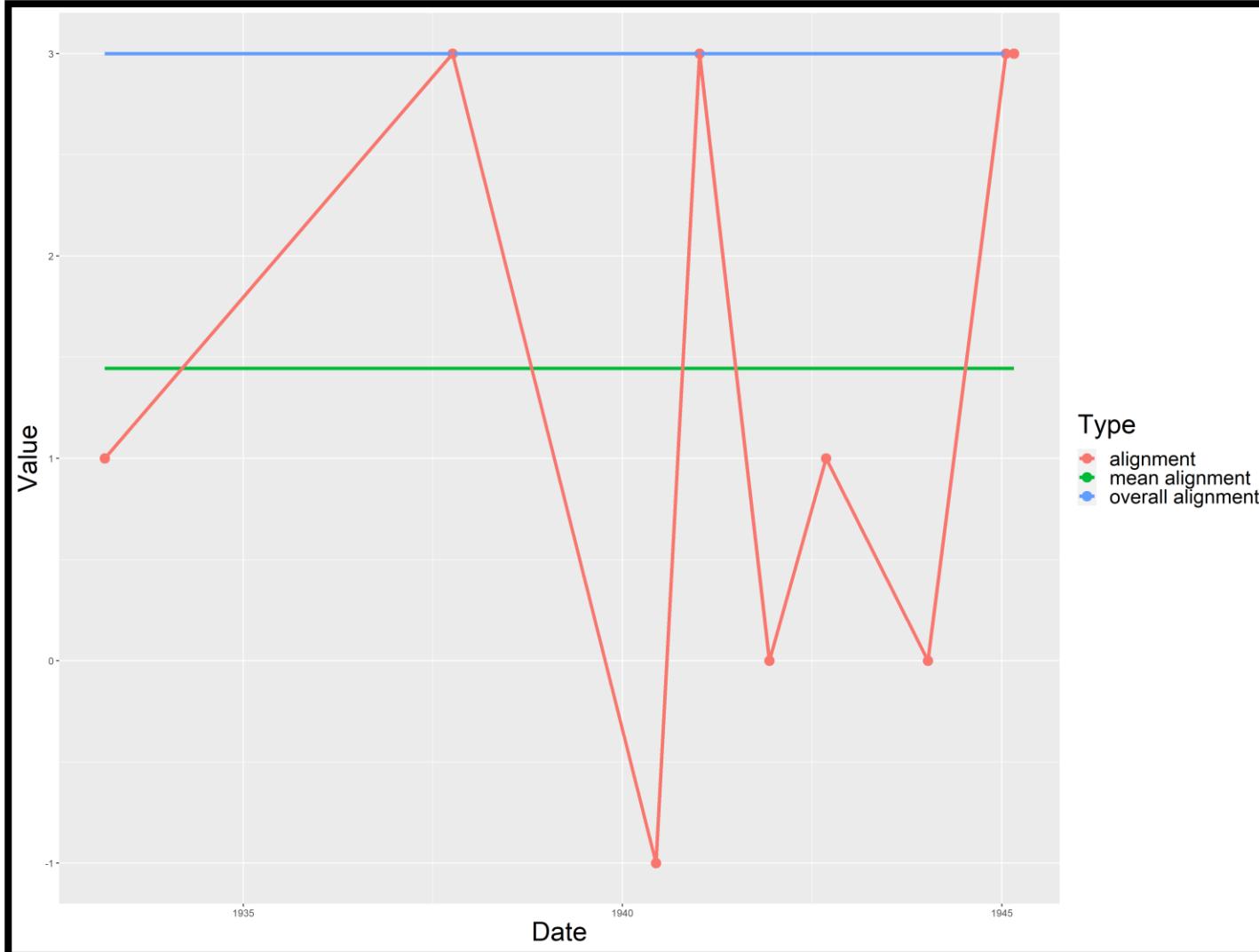


# Sentiment analysis

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Democrats

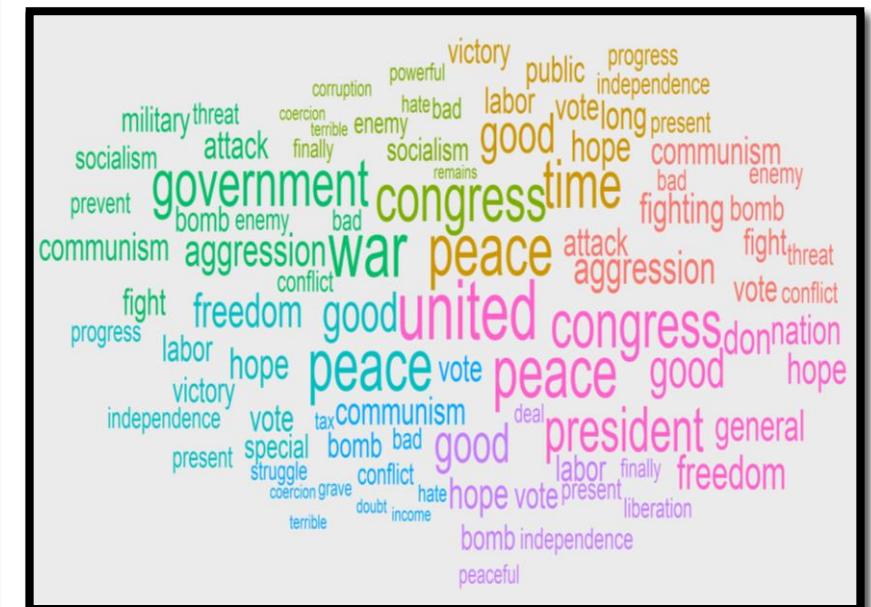
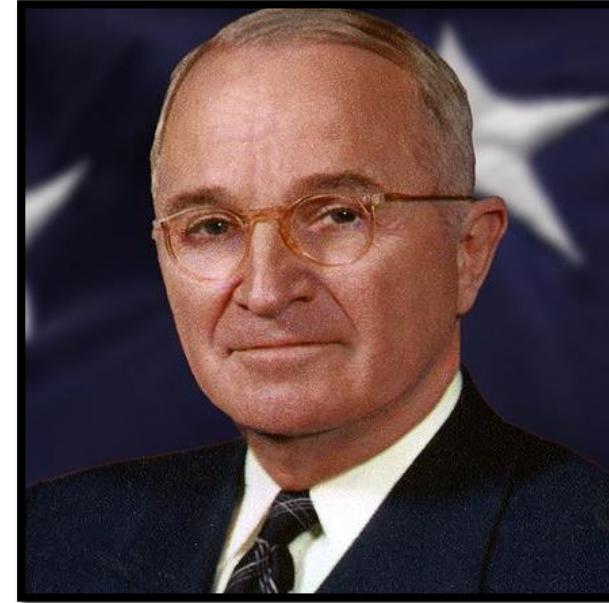
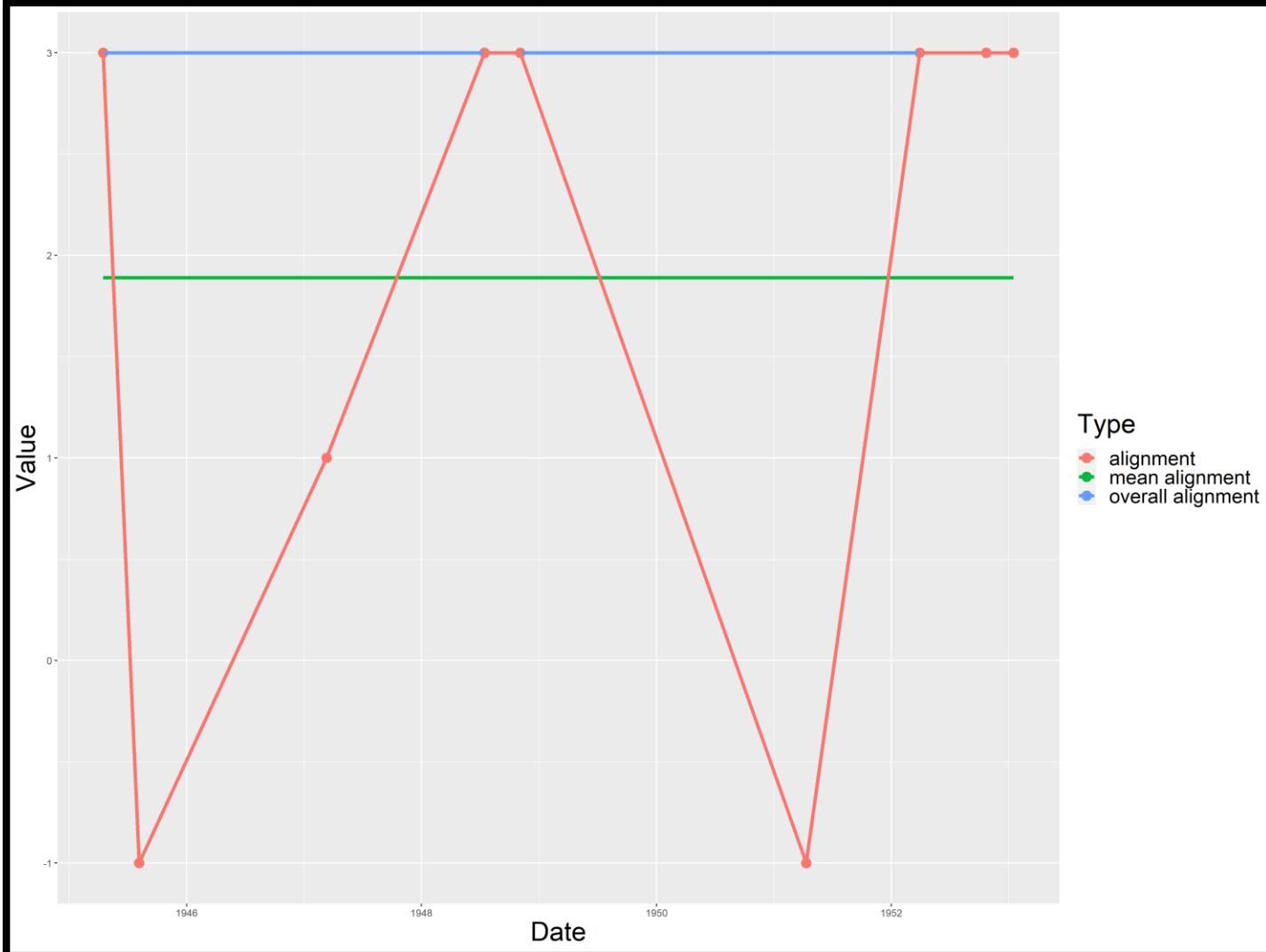
# Franklin Roosevelt (1933 – 1944)



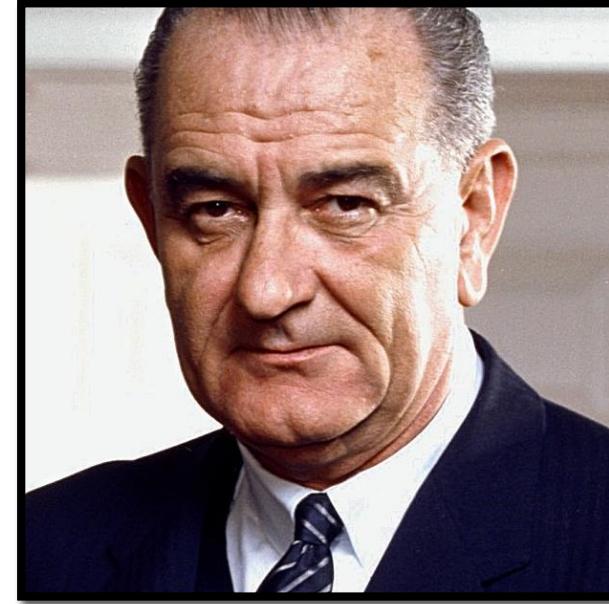
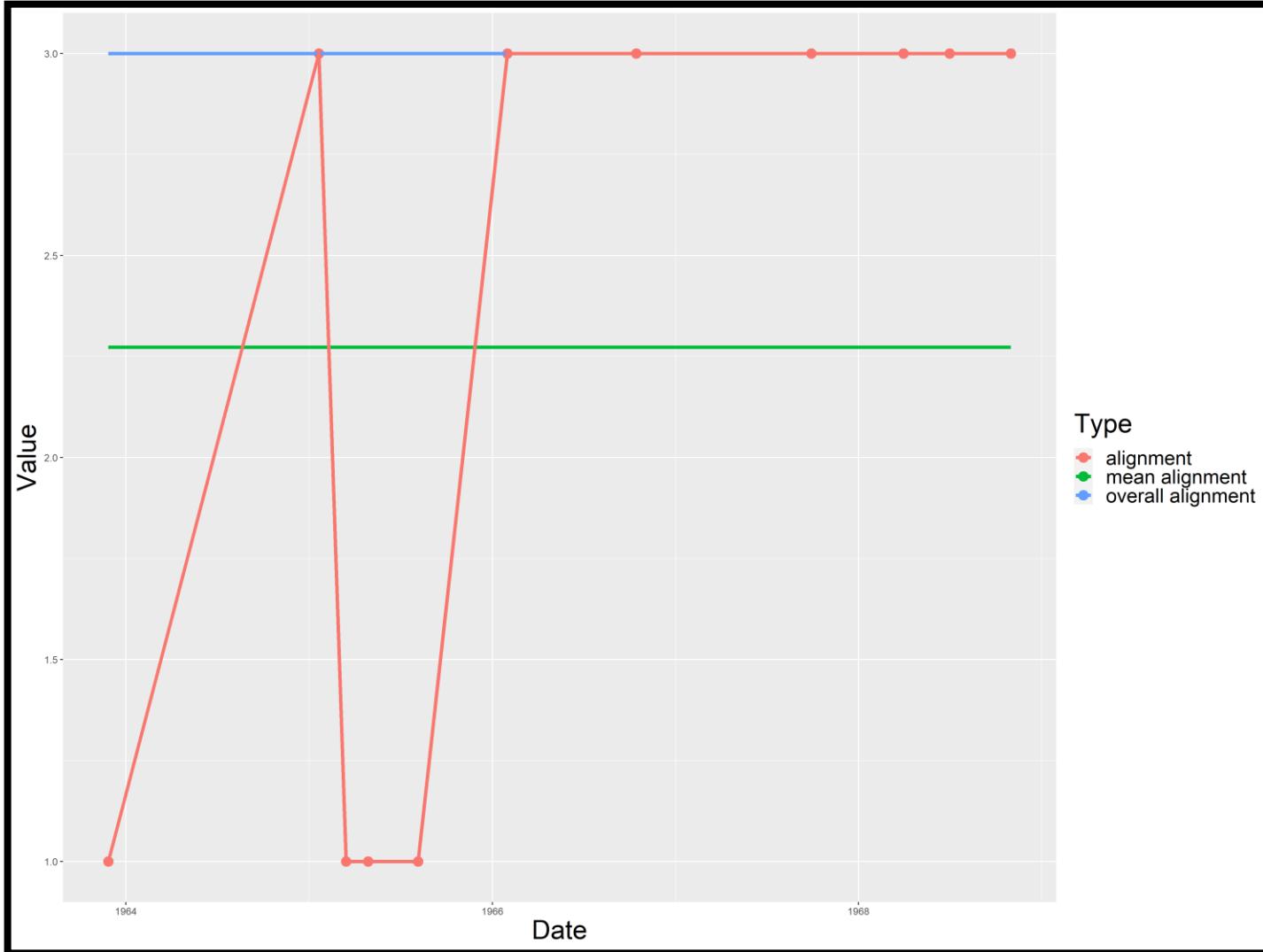
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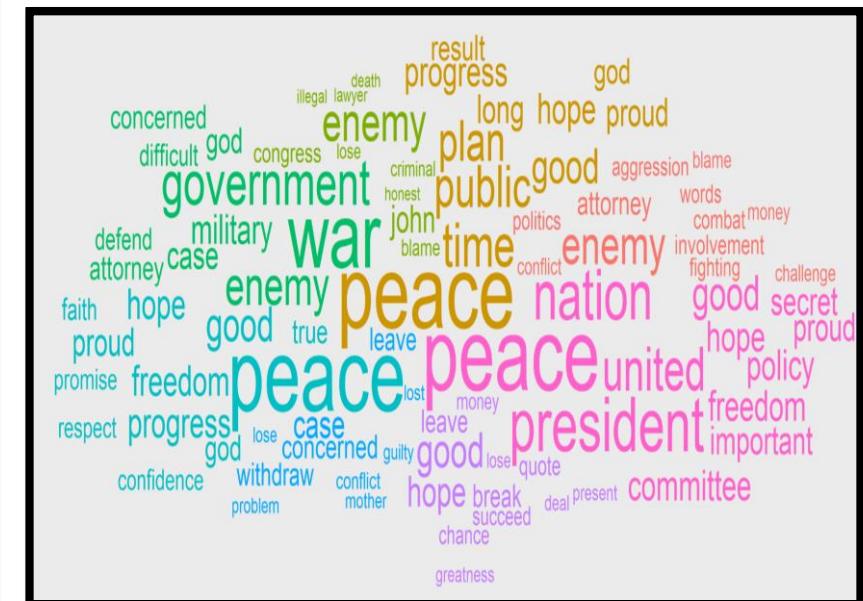
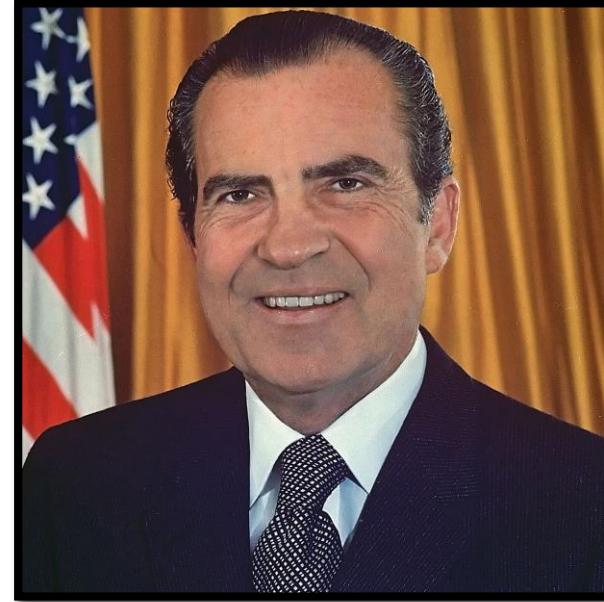
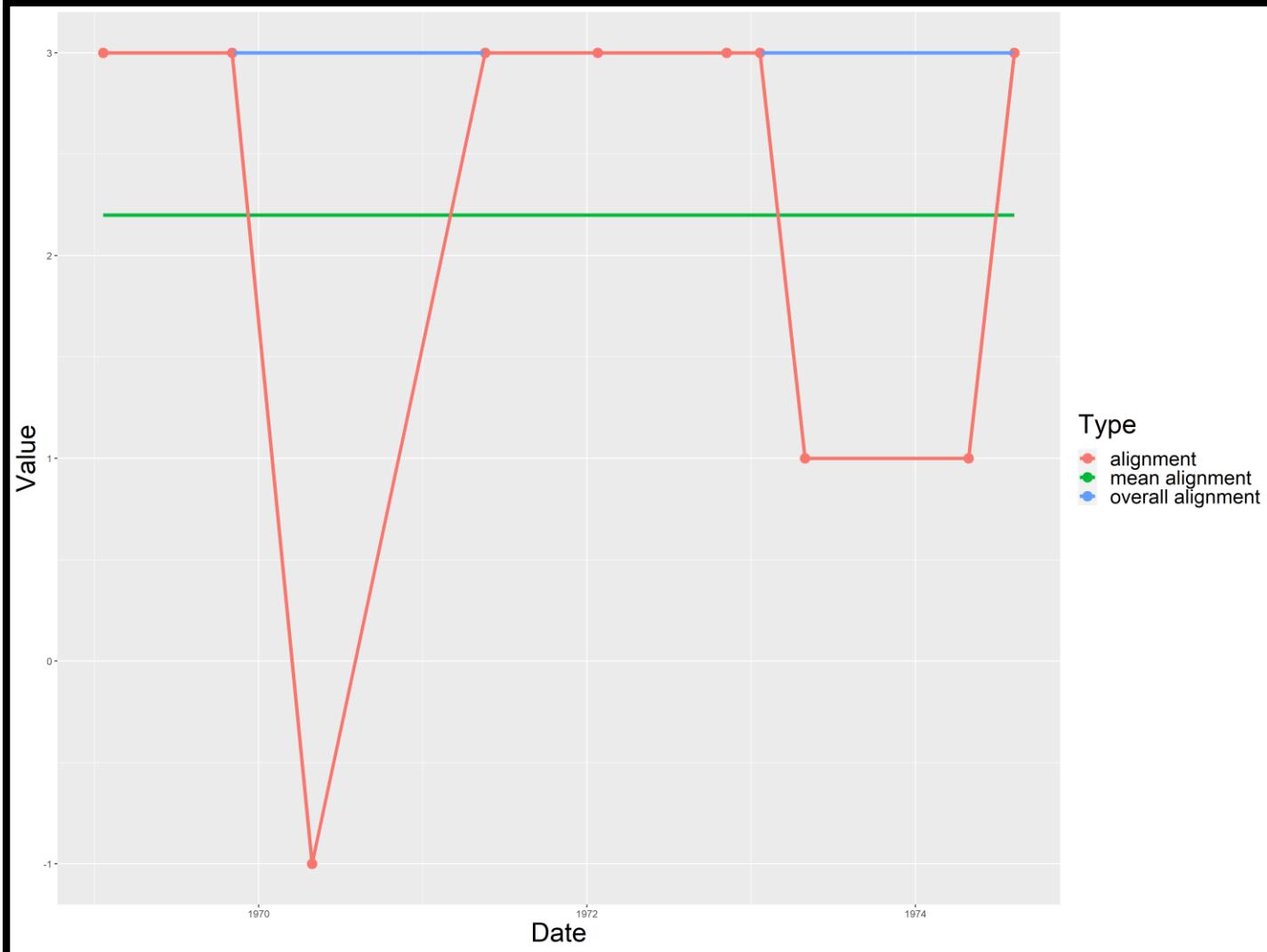
# Harry S. Truman (1945 – 1952)



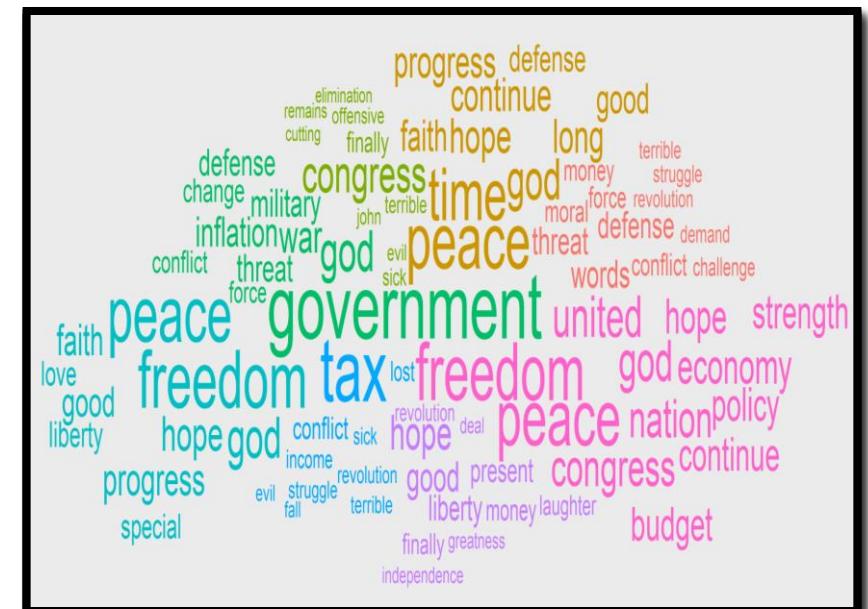
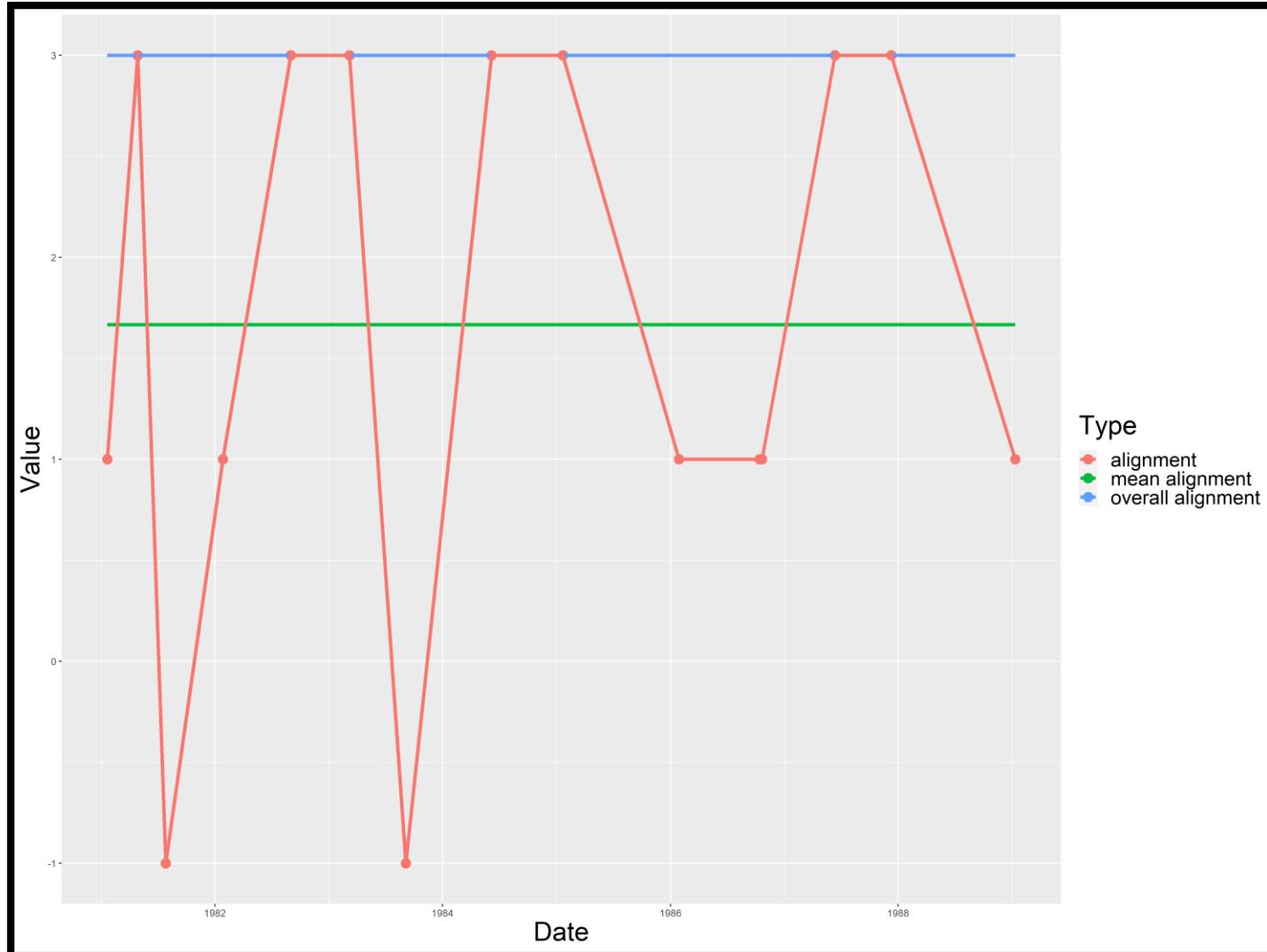
# Lyndon B. Johnson (1963 – 1968)



# Richard M. Nixon (1969 – 1974)



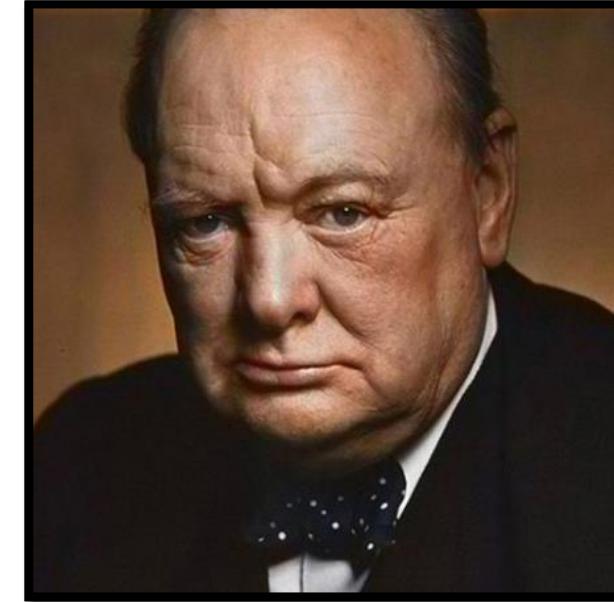
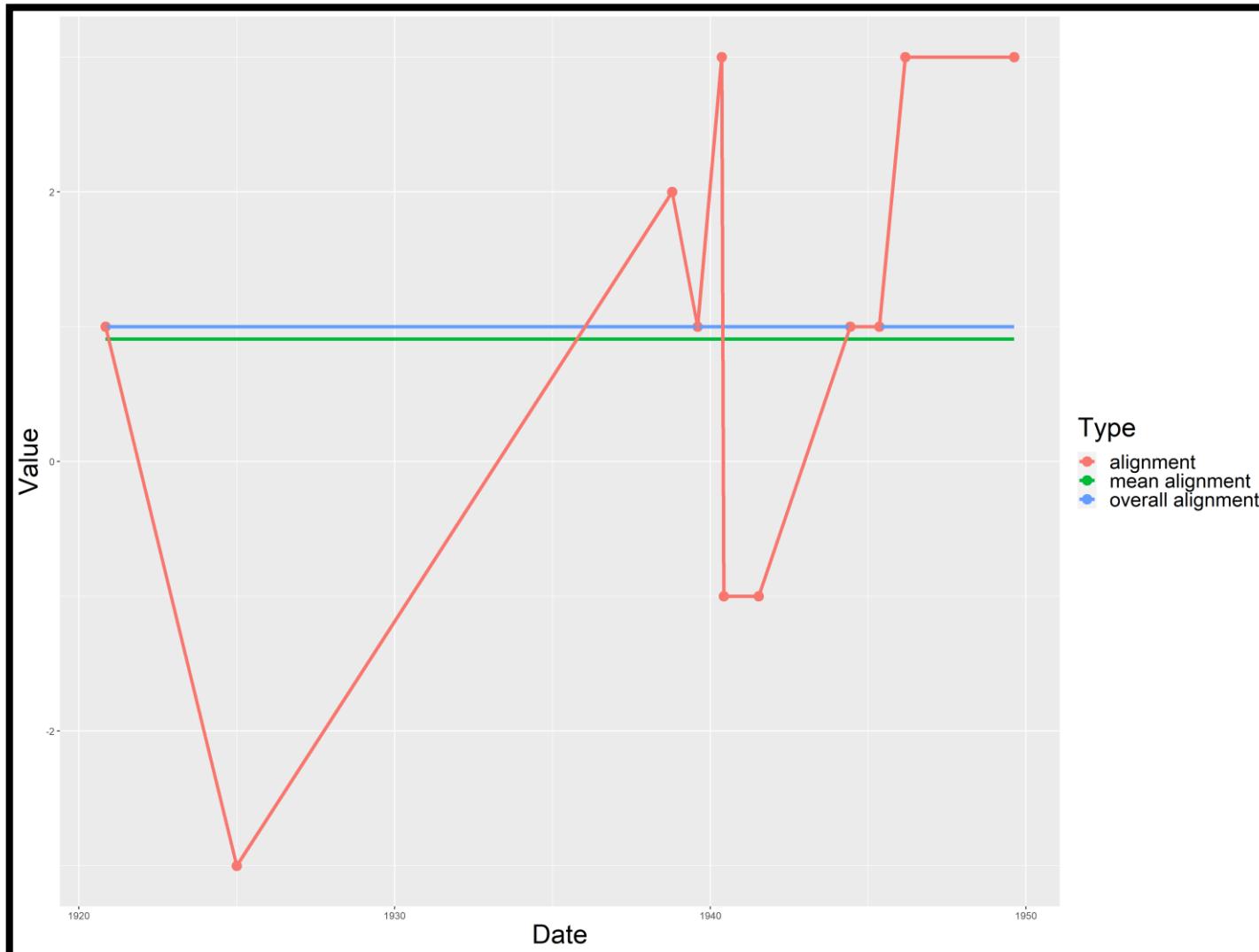
# Ronald W. Reagan (1981 – 1989)



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# Winston Churchill (1920 - 1946)

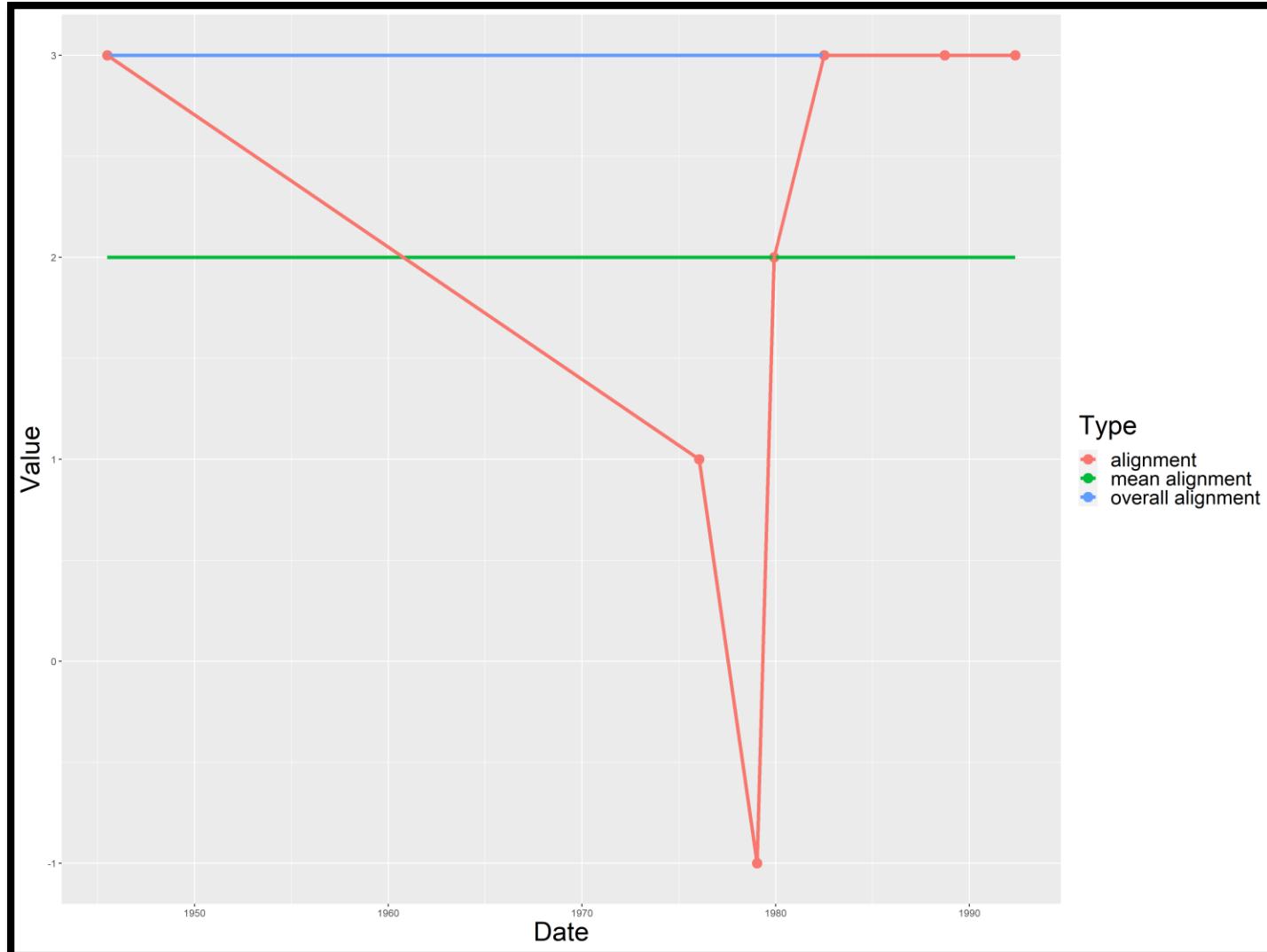


suffering organization  
disaster progress present  
lines confidence  
fire powerful  
difficult death intense  
loss government enemy peace good  
struggle attack military force time long  
tyranny doubt freedom enemy remains lie  
progress hope peace  
organization' good  
present good doubt fall  
powerful struggle loss  
victory tyranny  
suffering broken surrender  
difficulties organization  
leave liberation

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# Margaret Thatcher (1945 - 1992)



thought pay peace  
present good  
operation  
conflict force military  
problem government  
achieve majority  
success peace problem  
change  
tariff  
larger  
terrible  
lie  
offensive  
socialism  
terrorism  
council  
long  
time  
war  
strike  
court  
threat  
deal  
court  
vote  
commission  
majority  
freedom  
pay  
good  
money  
vote  
vote  
present  
doubt  
money  
leave  
policy  
united  
trade  
freedom  
majority  
nation  
council  
case  
conflict  
intervention  
impossible  
terrible  
destination  
leader  
liberty  
hope  
destination  
terrorism

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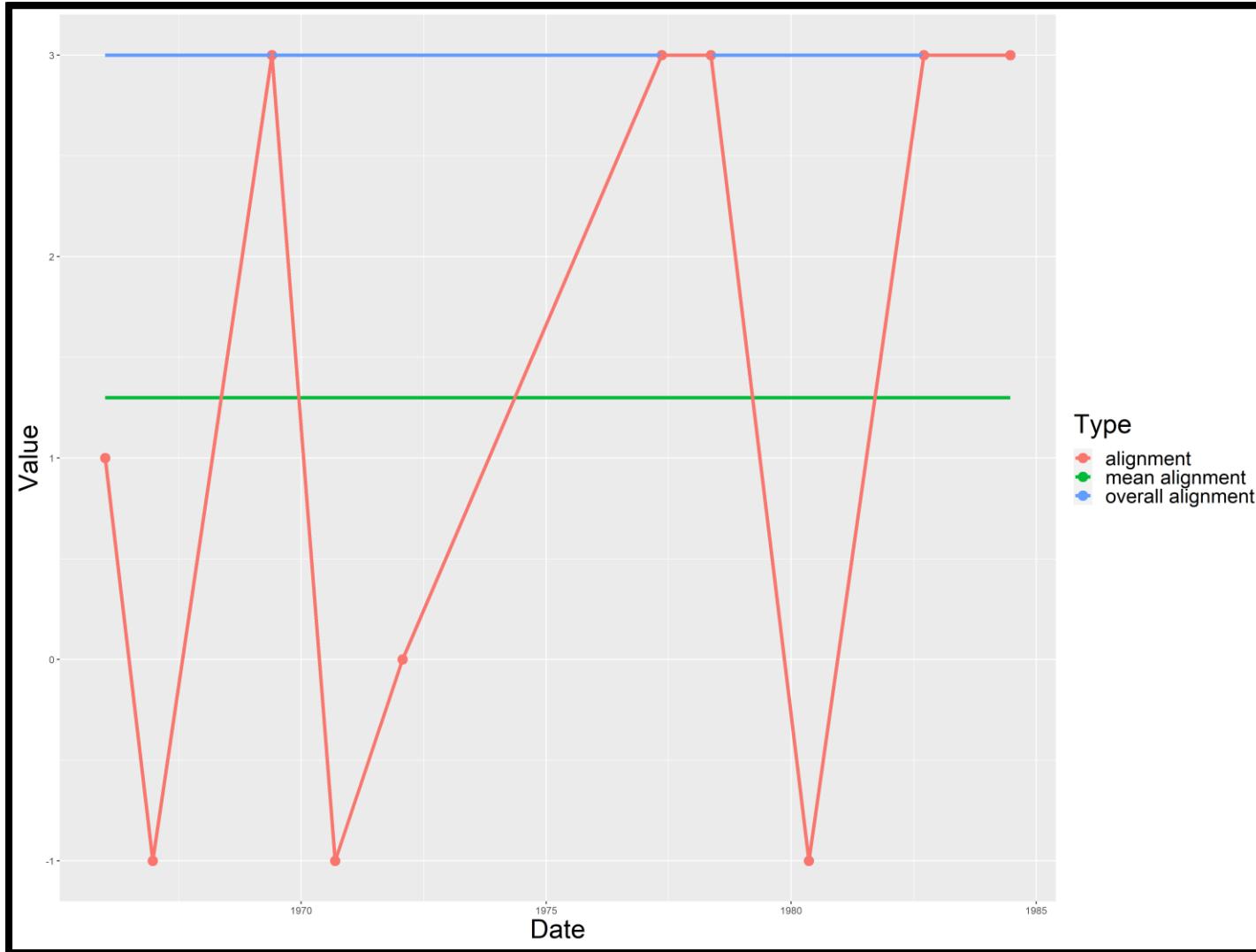


# Sentiment analysis

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Dictators

# Ferdinand Marcos (1965 – 1984)

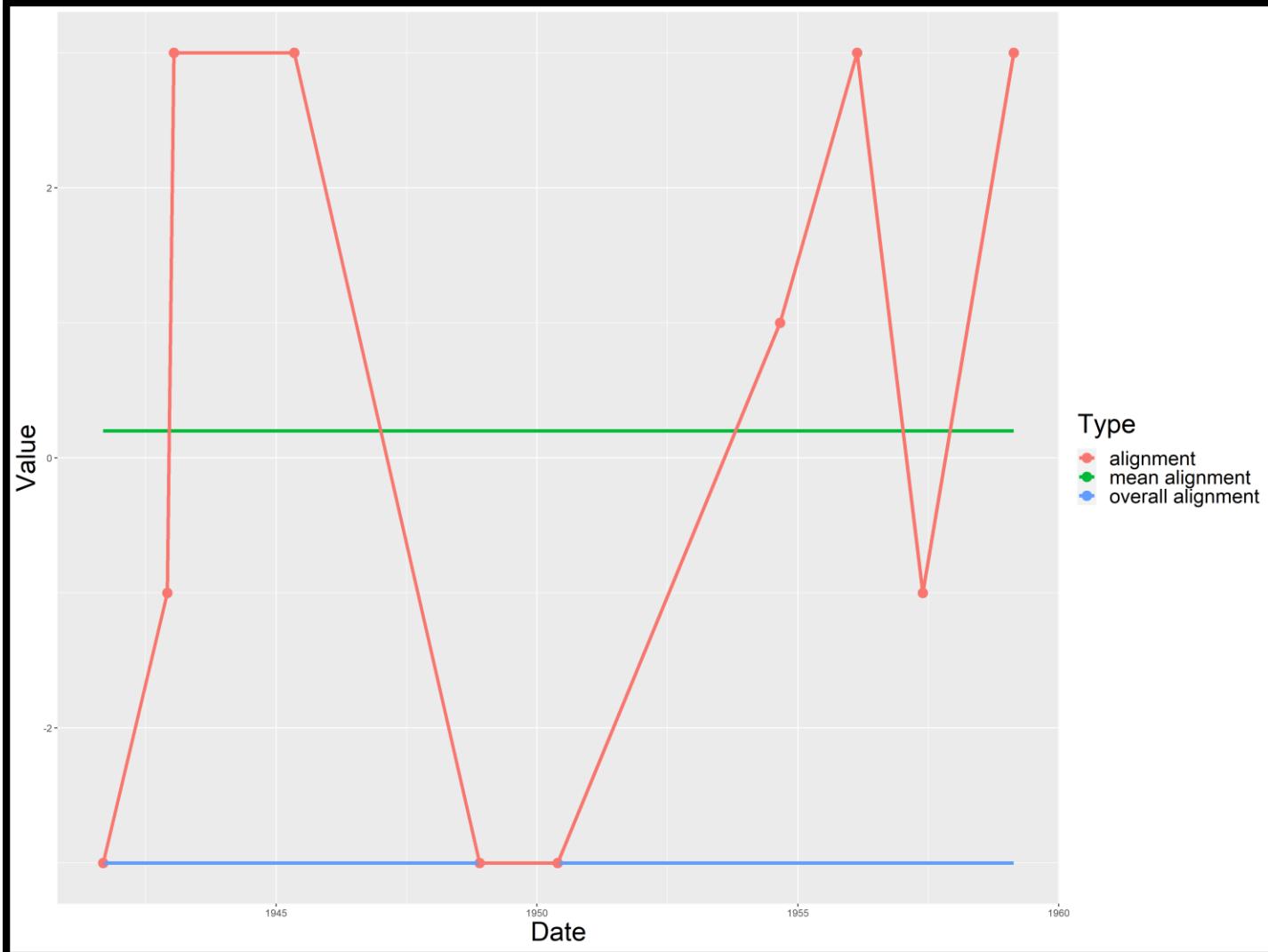


government

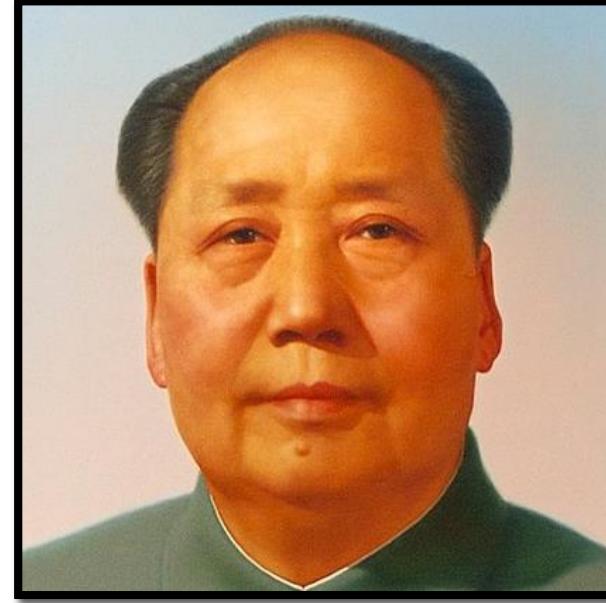
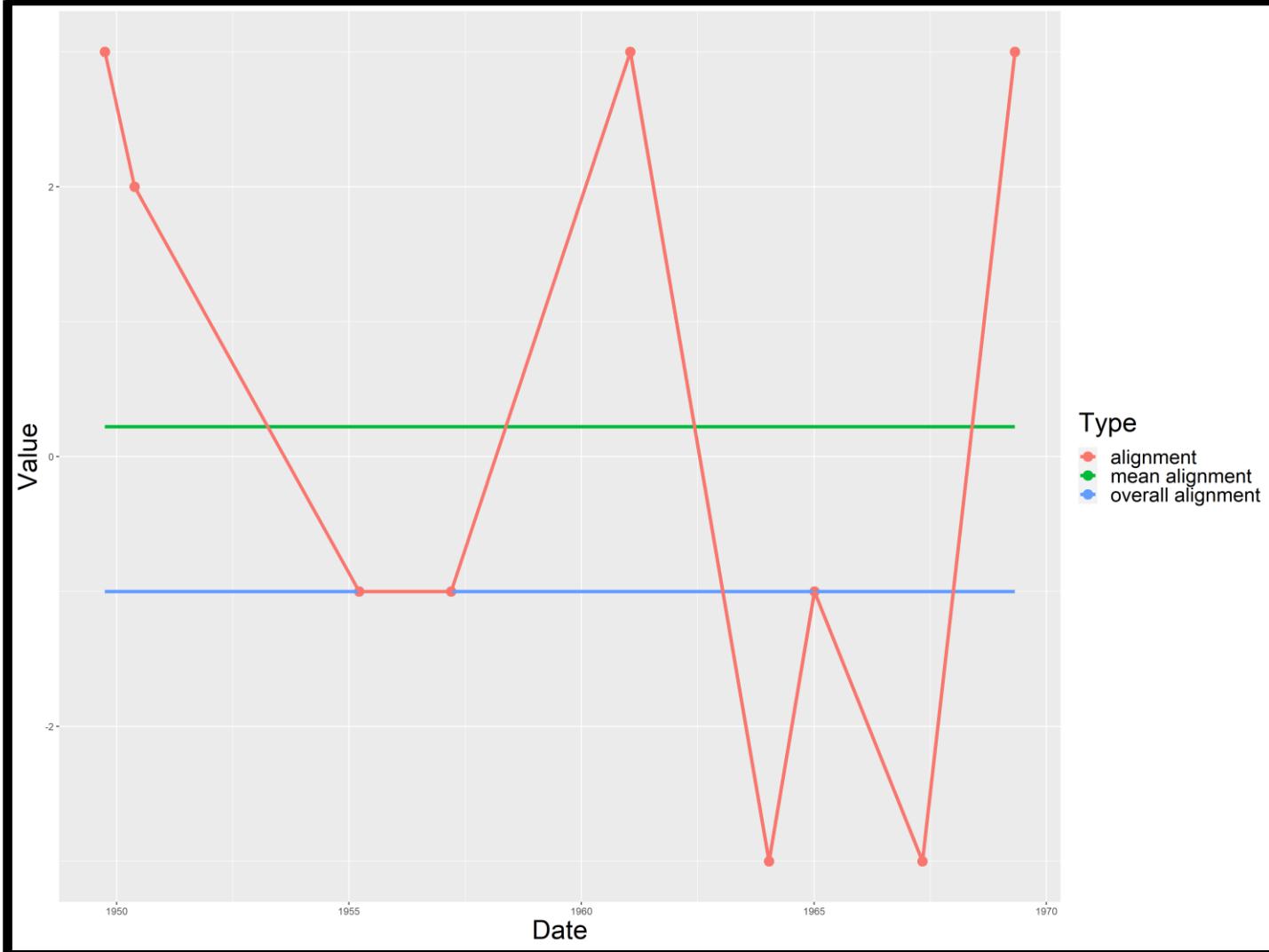
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# Josip Tito (1941 – 1959)



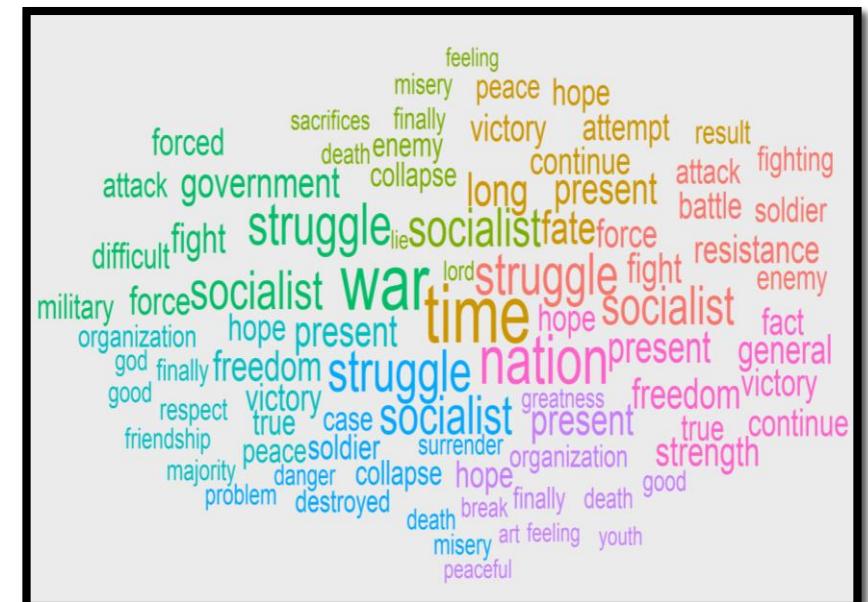
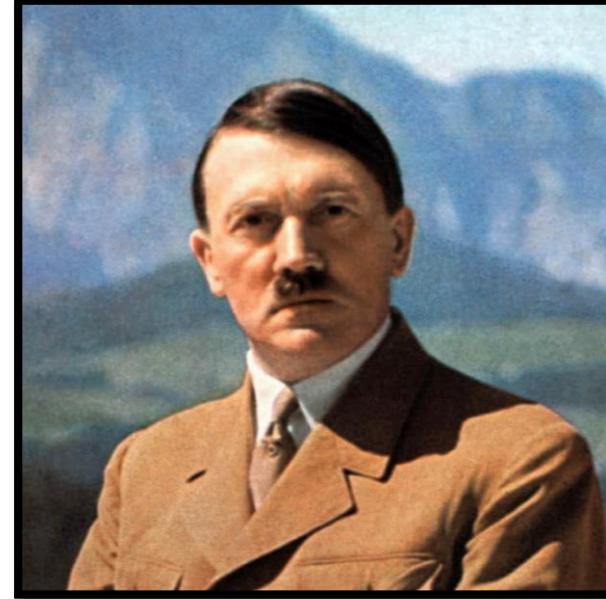
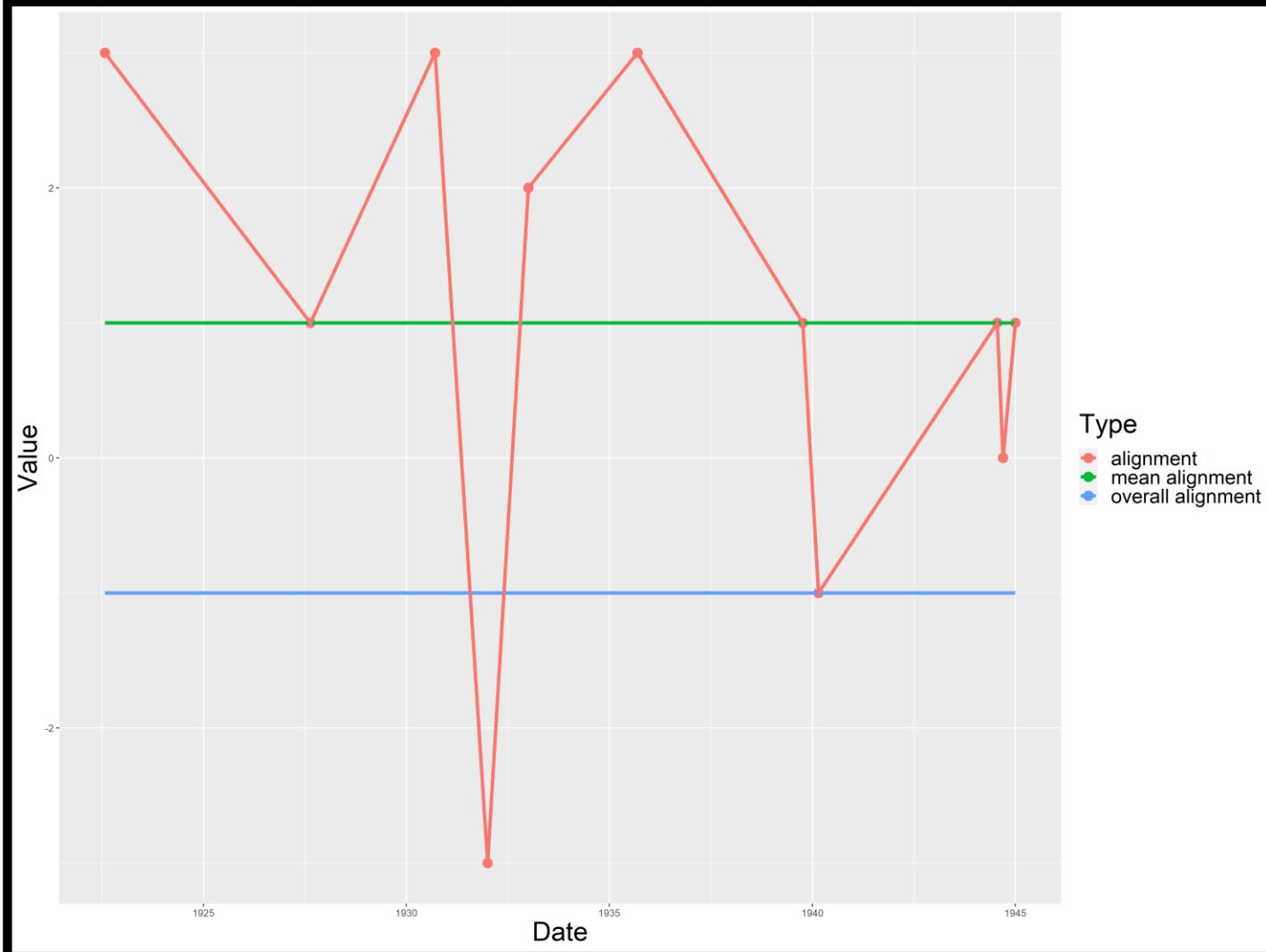
# Mao Zedong (1949 – 1969)



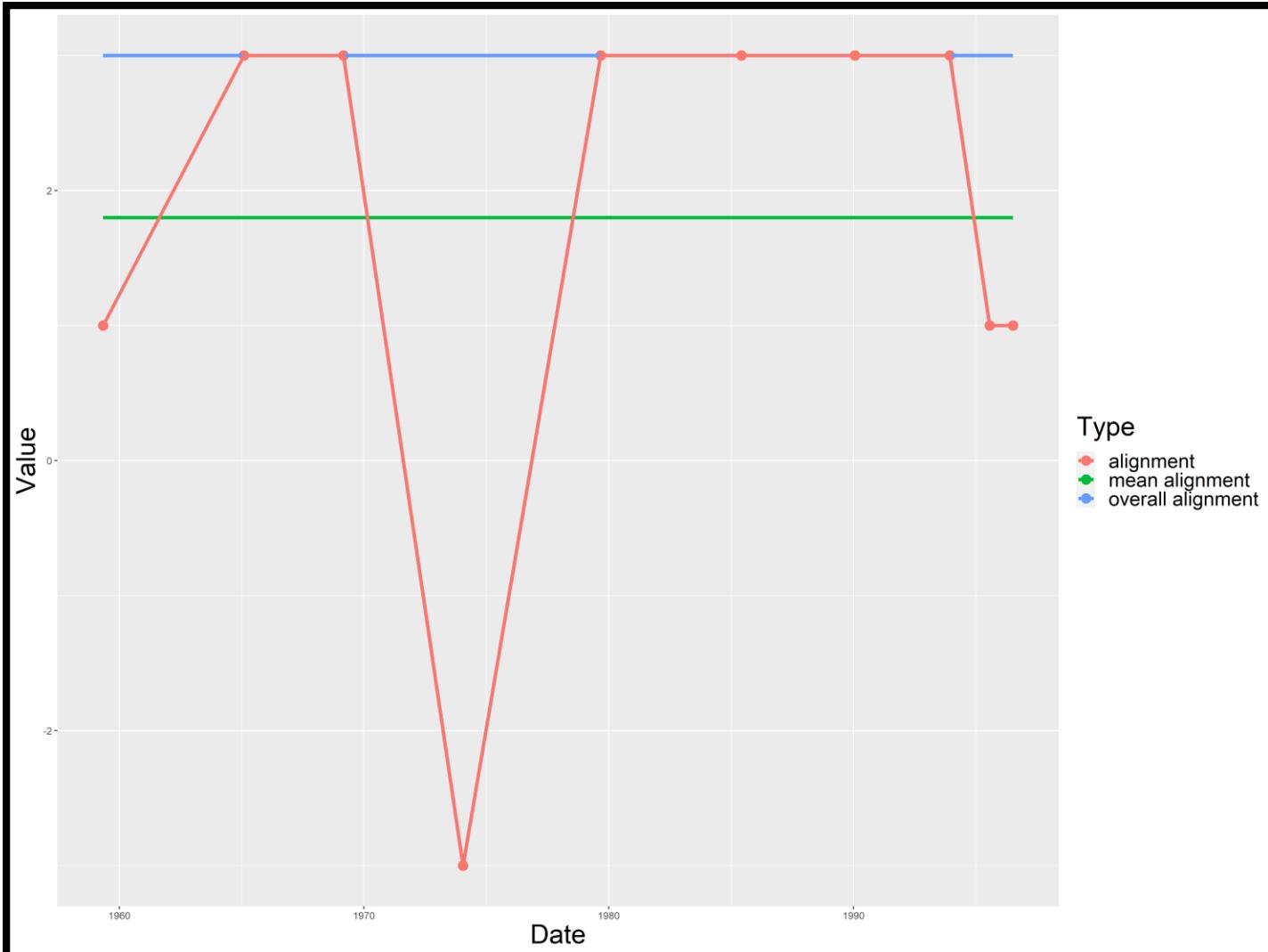
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# Adolf Hitler (1922 – 1945)



# Fidel Castro (1959 – 1996)

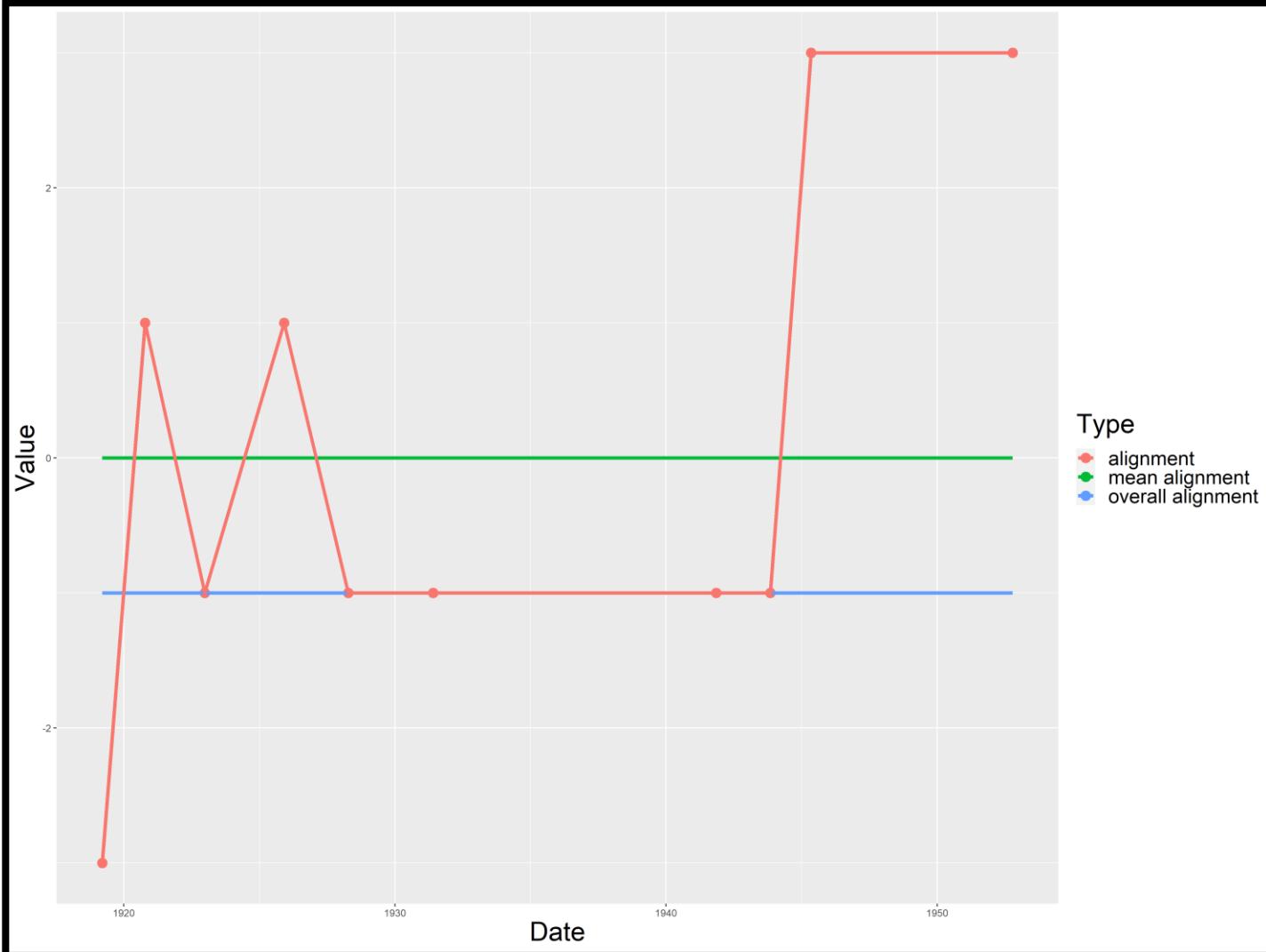


thought  
harvest  
good  
long time production  
honest sacrifices  
powerful dictatorship  
socialism interior enemy socialist university moral  
doubt case socialist problem socialism death  
difficult revolution soil death money  
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government struggle cane revolution struggle demand  
peace resources words  
resources money good  
organization true harvest  
progress special  
problem school good  
dictatorship fact  
sacrifices present  
case laughter  
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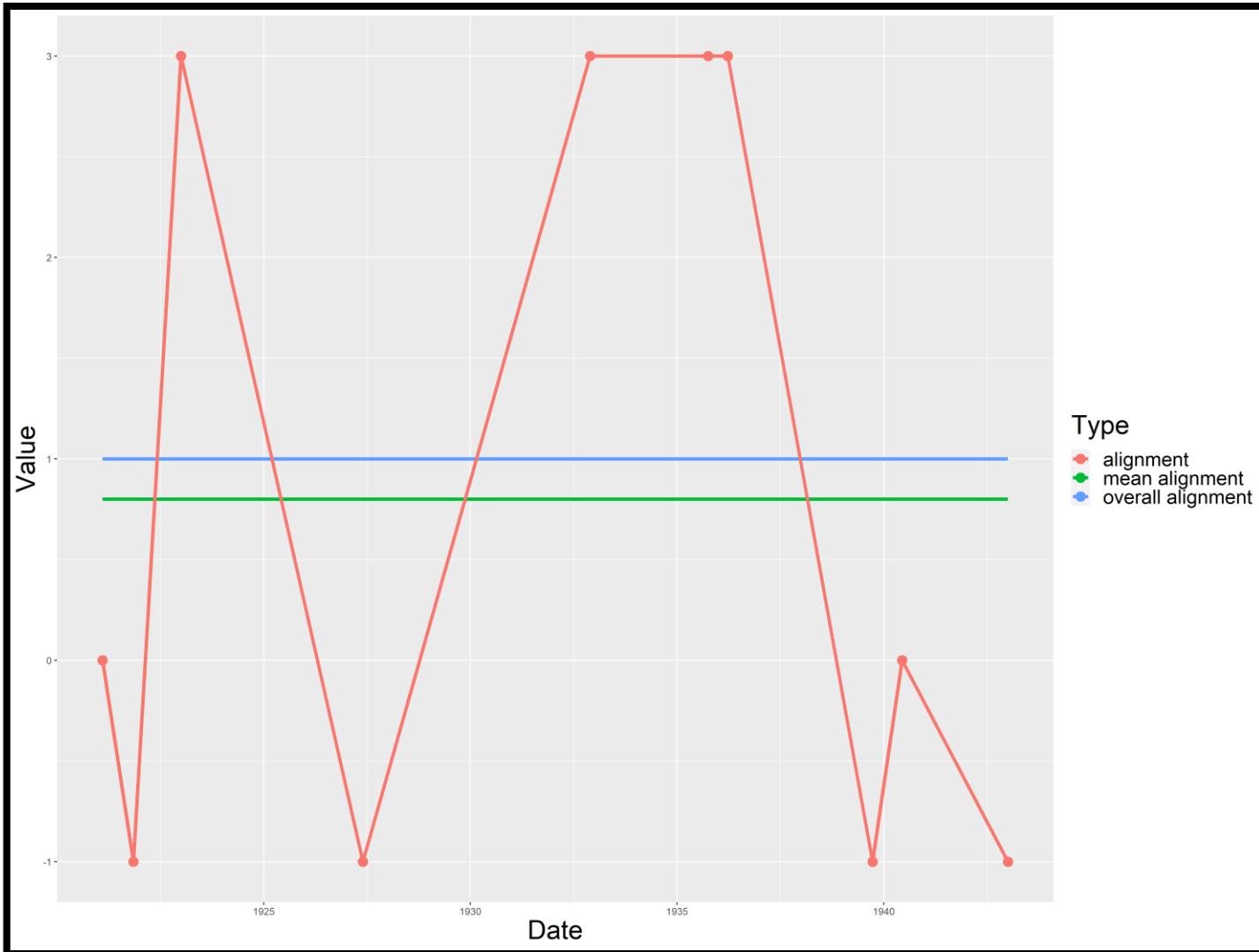
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# Joseph Stalin (1919 – 1952)



# Benito Mussolini (1921 - 1943)



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# Technical issues

- Numerical operations and data analysis:
  - R Package.
- Visualization of analyzed data:
  - GGPlot2.
- IDE:
  - RStudio.



# References/Sources of Speeches

## Democrats

- Winston Churchill: [Source](#)
- Margaret Hilda Thatcher: [Source](#)
- Franklin Delano Roosevelt: [Source](#)
- Harry S. Truman: [Source](#)
- Lyndon Baines Johnson: [Source](#)
- Richard Milhous Nixon: [Source](#)
- Ronald Wilson Reagan: [Source](#)

## Autocrats & dictators

- Josip Tito: [Source](#)
- Ferdinand Marcos: [Source](#)
- Mao Zedong: [Source](#)
- Adolf Hitler: [Source](#)
- Józef Stalin: [Source](#)
- Benito Mussolini: [Source](#)
- Fidel Castro: [Source](#)

All data were collected manually by authors from above sources.



# Questions?



# Thank you for your attention!