

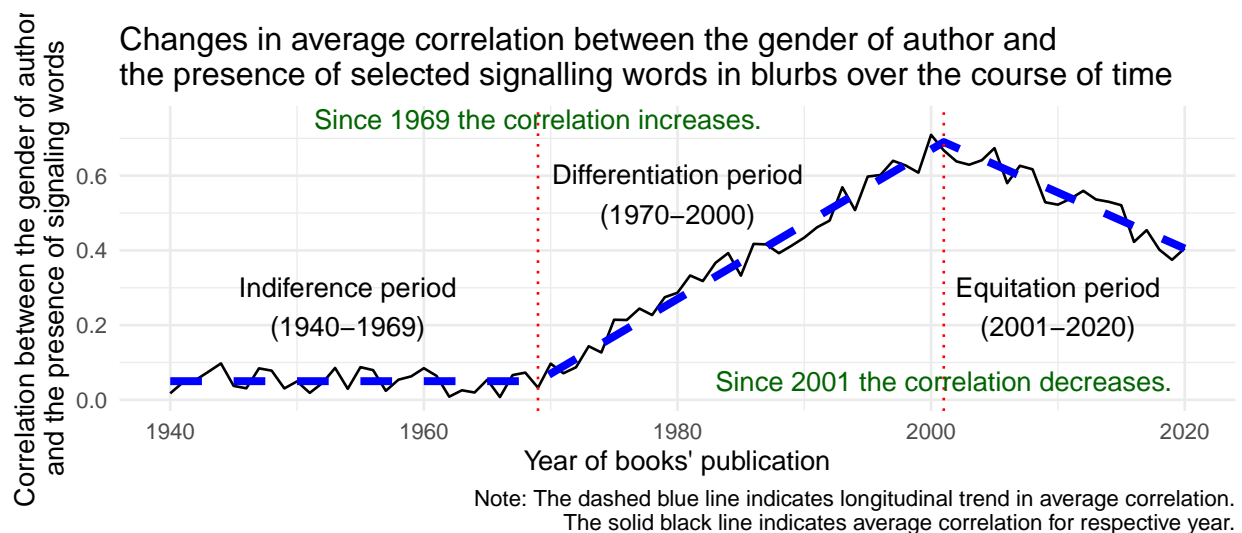
FAHA – Assignment 02

Question 1: Understanding

I drew the graph in the R software. Here is the code used for the creation, followed by the graph itself.

```
library(tibble)
library(ggplot2)
corrs = c(rep(0, 29), seq(0, 0.62, 0.02), seq(0.64, 0.355, -0.015))
df = tibble(years = 1940:2020, trend = corrs + 0.05, corrs = corrs + runif(81, 0, 0.1))

ggplot(data = df, aes(x = years, y = corrs)) +
  geom_line(linetype = 1) +
  geom_line(aes(y = trend), color = 'blue', linetype = 2, size = 1.5) +
  geom_vline(xintercept = c(1969, 2001), color = "red", linetype = 3) +
  annotate("text", x = 1969, y = 0.75, label = "Since 1969 the correlation increases.",
          color = "darkgreen") +
  annotate("text", x = 2001, y = 0.05, label = "Since 2001 the correlation decreases.",
          color = "darkgreen") +
  annotate("text", x = 1954, y = 0.25, label = "Indifference period\n(1940-1969)") +
  annotate("text", x = 1980, y = 0.55, label = "Differentiation period\n(1970-2000)") +
  annotate("text", x = 2010, y = 0.25, label = "Equitation period\n(2001-2020)") +
  labs(title = "Changes in average correlation between the gender of author and
the presence of selected signalling words in blurbs over the course of time",
       x = "Year of books' publication",
       y = "Correlation between the gender of author
and the presence of signaling words",
       caption = "Note: The dashed blue line indicates longitudinal trend in average correlation.
The solid black line indicates average correlation for respective year.") +
  theme_minimal()
```



Question 2: Application

Question 2.1 – Novelty in the set of blurbs

Mesuring novelty

We could measure novelty by finding new metaphors. More precisely, we could count how many new metaphors not used in past 5 years before blurb's publication the blurb contains.

Scenario description

My scenarion is inspired by Simon's lecture (<https://youtu.be/8rDUREWVnEM?t=808>)

Why does the scenario emerged?

Question 2.2 – Novelty and imitation across institutions

Description of imitation and novelty

For distinguishing imitation and novelty we again use the 5 years window. The novelty we measure as a count of the metaphors not used in other blurbs in the 5 years before the publication of respective blurb. The imitation then we measure as a count of the metaphors that have been used in the 5 years before the respective blurb's publication.

Scenario description

Why does the scenario lead to the imitation-versus-novelty pattern?