Persuasion in Advertisements over Time

Leonie Gehrmann, Stefan Kluge and Florian Stahl

Marketing researchers assume ads are used by firms to inform or persuade ...

Informative

- **Functional aspects** (product features, benefits and value)
- Advertising as response to imperfect information
- Results in **cognitive** response

Persuasive

- **Experiential aspects** and cues
- Advertising alters consumer tastes and creates perceived product differentiation
- Results in **affective** response

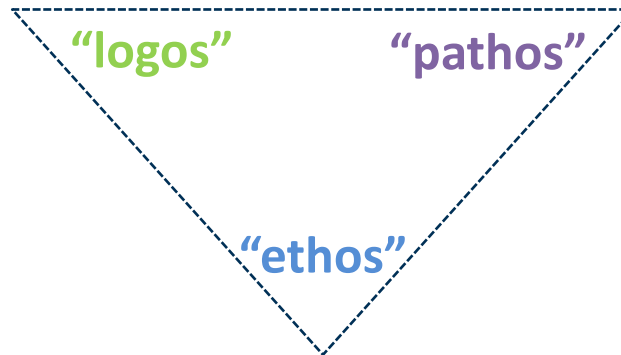e.g., Bagwell (2007), Mehta et al. (2008), Zarantonello et al. (2013)

Marketing Science

June 9, 2023

... but information and persuasion are not mutually exclusive

"Persuasion is human communication that is designed to influence others by modifying their beliefs, values or attitudes." (Simons, 1976, p.21)

Logic, reason, facts and data

"logos"   "pathos"

"ethos"

Feelings and emotions

Character, position and reliability

Pollay (1985), Ertimur & Gilly (2012)

Marketing Science

June 9, 2023

Research Questions

1 How does the **nature of persuasion** in advertising change **over time** in terms of (text & visual) rhetoric?

2 Are there **structural shifts** in the application of different methods of persuasion?

3 To what extent is the **industry type** related to the use of rhetoric and the way companies persuade consumers with ads?

Data

- **Print ads**
  - 1900 – 2014
  - Over 400,000 ads of more than 25,000 brands

- **Subset** of four different industries:

	# ads	Time period	# brands
Fashion	1058	1903 – 2014	98
Tobacco	1579	1904 – 1998	37
Automotive	4205	1935 – 2014	103
Watches	1984	1951 – 2014	52

Data (Pre-)Processing

Pre-processing:

- Neural network to detect ads and separate them from the editorial content
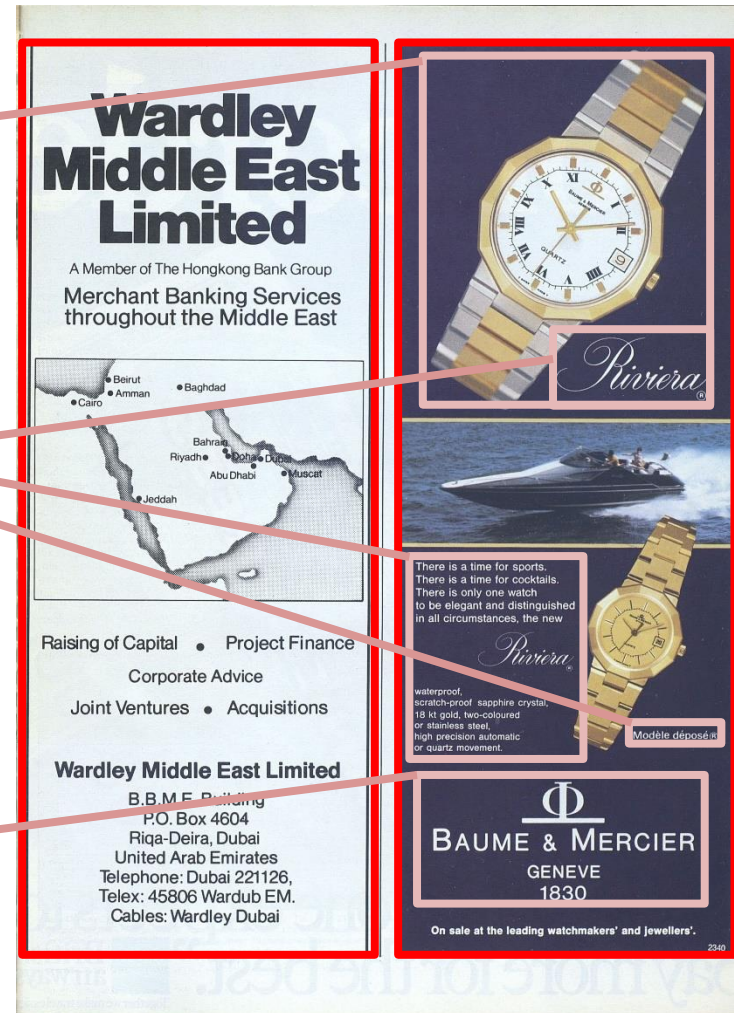- Handle exceptions

Processing:

- Computer vision
- NLP

Data Labeling

Persuasion using text & image rhetoric

UNIVERSITY OF MANNHEIM
Business School

"Logos"
Statistics
Performance metrics
Product utility
Use case/example
Common knowledge
Price

"Pathos"
Flattery
Guilt
Greediness
Humor
Sentimentality
Belongingness
Illustrations
Action
Personalization
Other

"Ethos"

Endorser	Ethical standpoint
Brand name/logo	Brand heritage/experience
Quality signal	Geographic origin
Reference to competition	Other

Combining and extending Pollay (1985), Chandy et al. (2001), Middleton et al. (2022) and Mangió et al. (2021)

Marketing Science

June 9, 2023

AACSB ACCREDITED   EQUIS ACCREDITED   AMBA ASSOCIATION OF MBAs ACCREDITED

Data Labeling
Example

Belongingness

Product utility

Geographic origin

Use case/ example

Sentimentality

Brand name/ logo

Brand heritage/ experience

Data Labeling
Analysis

"Logos"
Statistics
Performance metrics
Product utility
Use case/example
Common knowledge
Price

"Pathos"
Flattery
Guilt
Greediness
Humor
Sentimentality
Belongingness
Illustrations
Action
Personalization
Other

"Ethos"
Endorser   Ethical standpoint
Brand name/logo   Brand heritage/experience
Quality signal   Geographic origin
Reference to competition   Other

Data Labeling
Analysis

"Logos"
Statistics
Performance metrics
Product utility
Use case/example
Common knowledge
Price

"Pathos"
Flattery
Guilt
Greediness
Humor
Sentimentality
Belongingness
Illustrations
Action
Personalization
Other

"Ethos"

Endorser   Ethical standpoint
Brand name/logo   Brand heritage/experience
Quality signal   Geographic origin
Reference to competition   Other

Data Labeling
Analysis

"Logos"
Statistics
Performance metrics
Product utility
Use case/example
Common knowledge
Price

"Pathos"
Flattery
Guilt
Greediness
Humor
Sentimentality
Belongingness
Illustrations
Action
Personalization
Other

"Ethos"

Endorser   Ethical standpoint
Brand name/logo   Brand heritage/experience
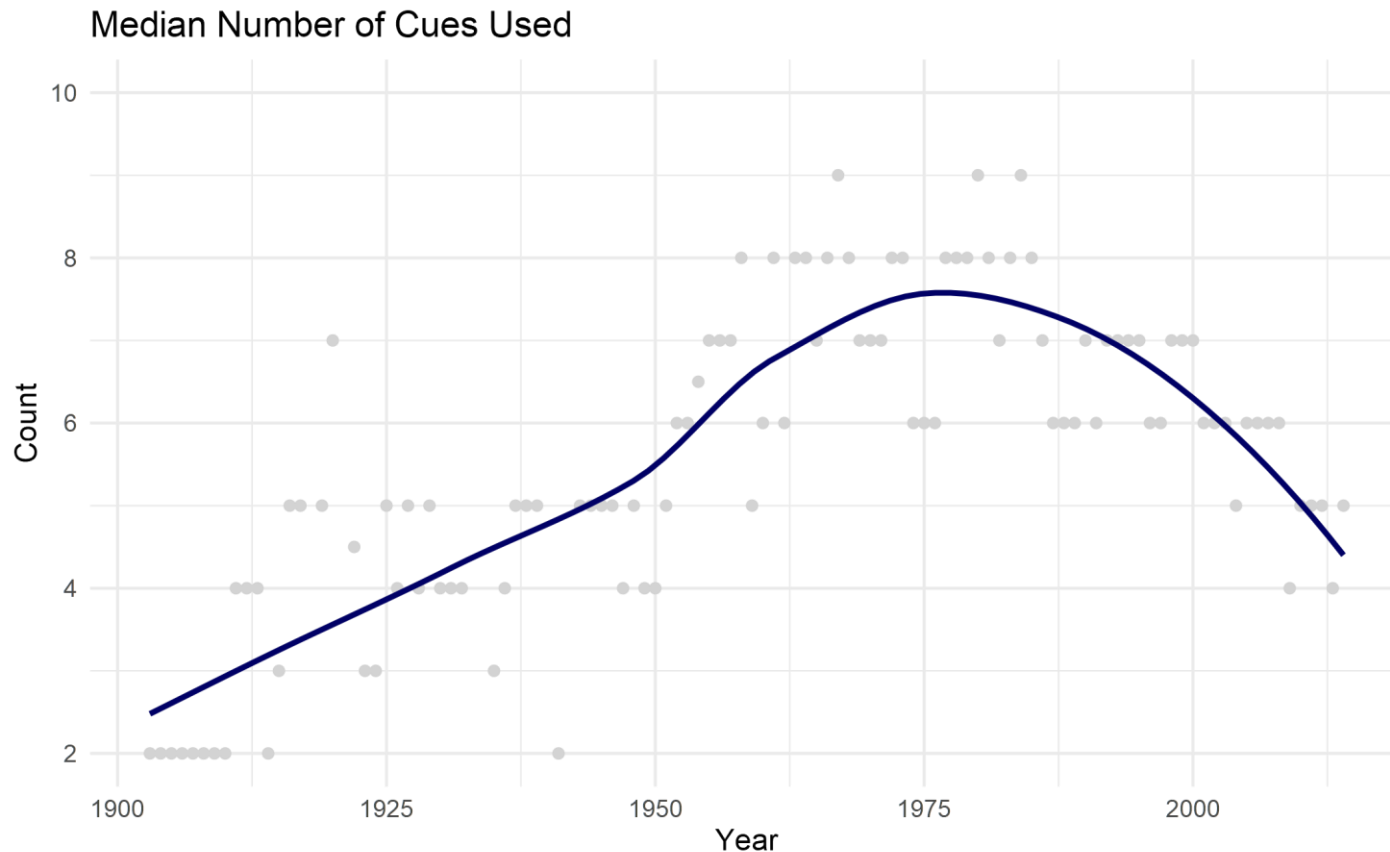Quality signal   **Geographic origin**
Reference to competition   Other

Analysis

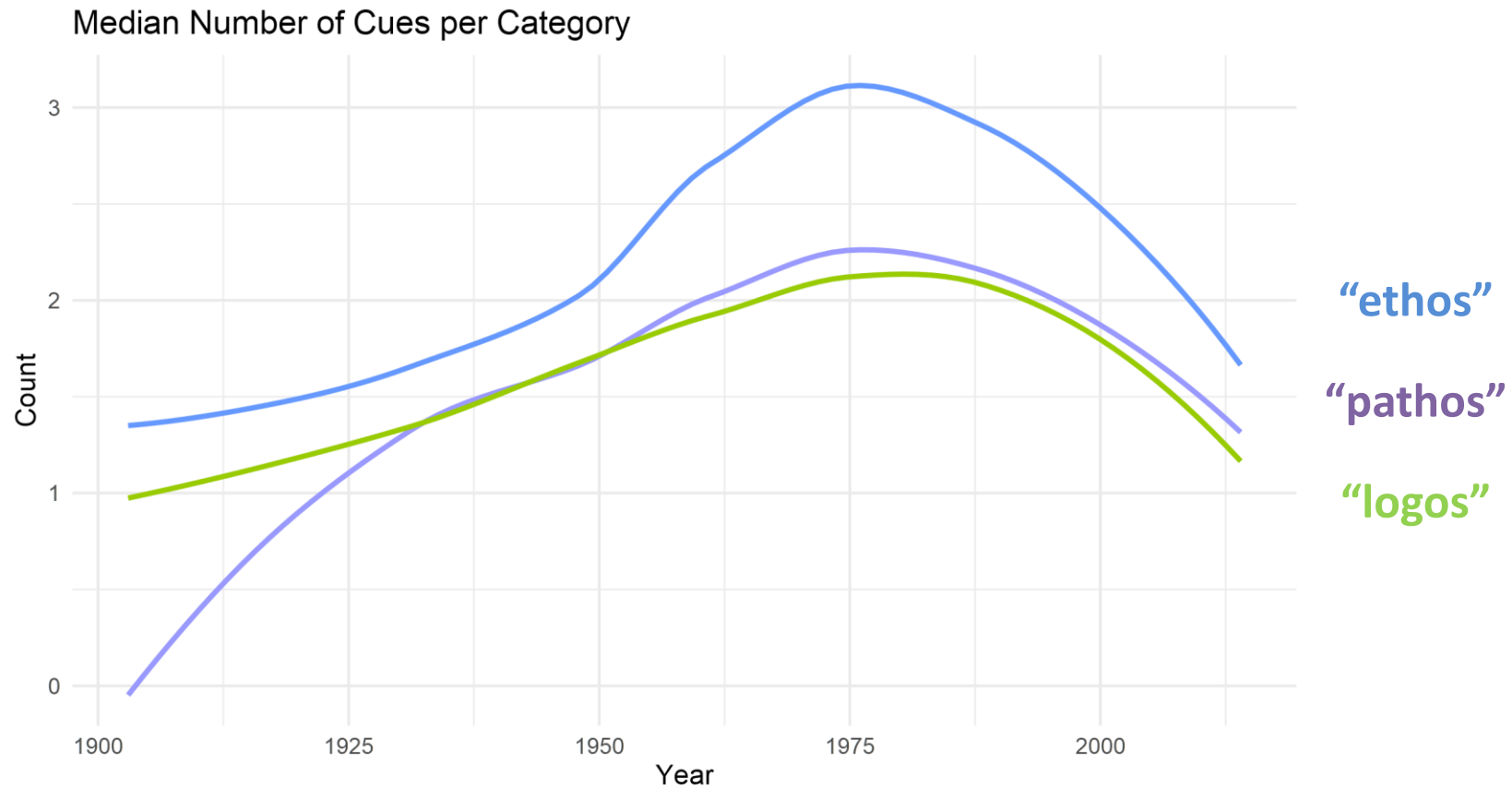On average, ads initially use an increasing amount of rhetoric cues before this number sinks at the end of the 20th century
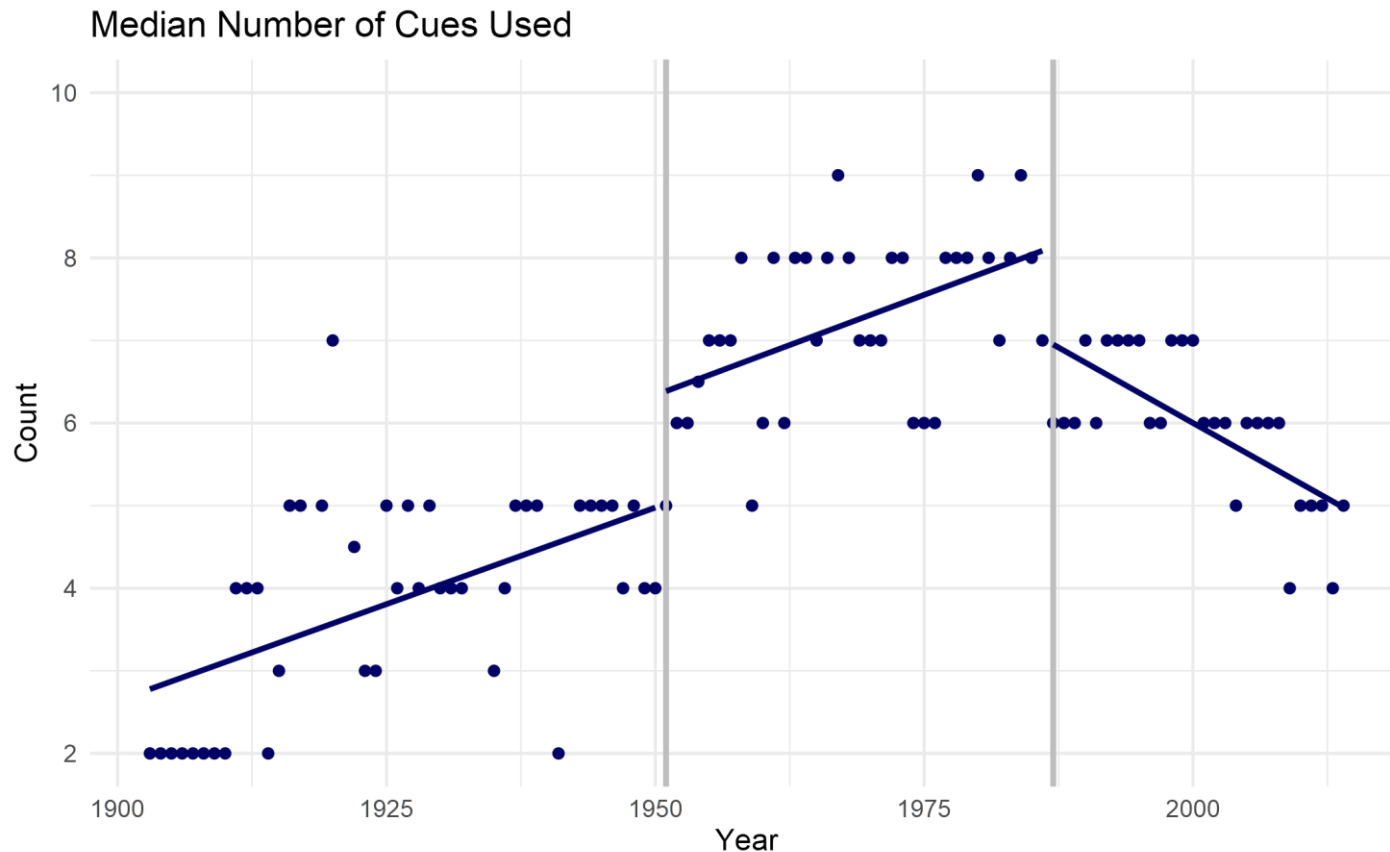

Median Number of Cues Used

Analysis

The same inverted U-shape for the number of used cues is observed for all three means of persuasion

"ethos"

"pathos"

"logos"

AACSB
ACCREDITED

EQUIS
ACCREDITED

ASSOCIATION
OF
MBAs
ACCREDITED

Analysis

The average number of rhetoric cues used indicates two changepoints in the development over time

Median Number of Cues Used

Analysis

It seems firms increasingly use their own credibility
for persuasion

Share of Ads Using Persuasion Type

"ethos"

"pathos"
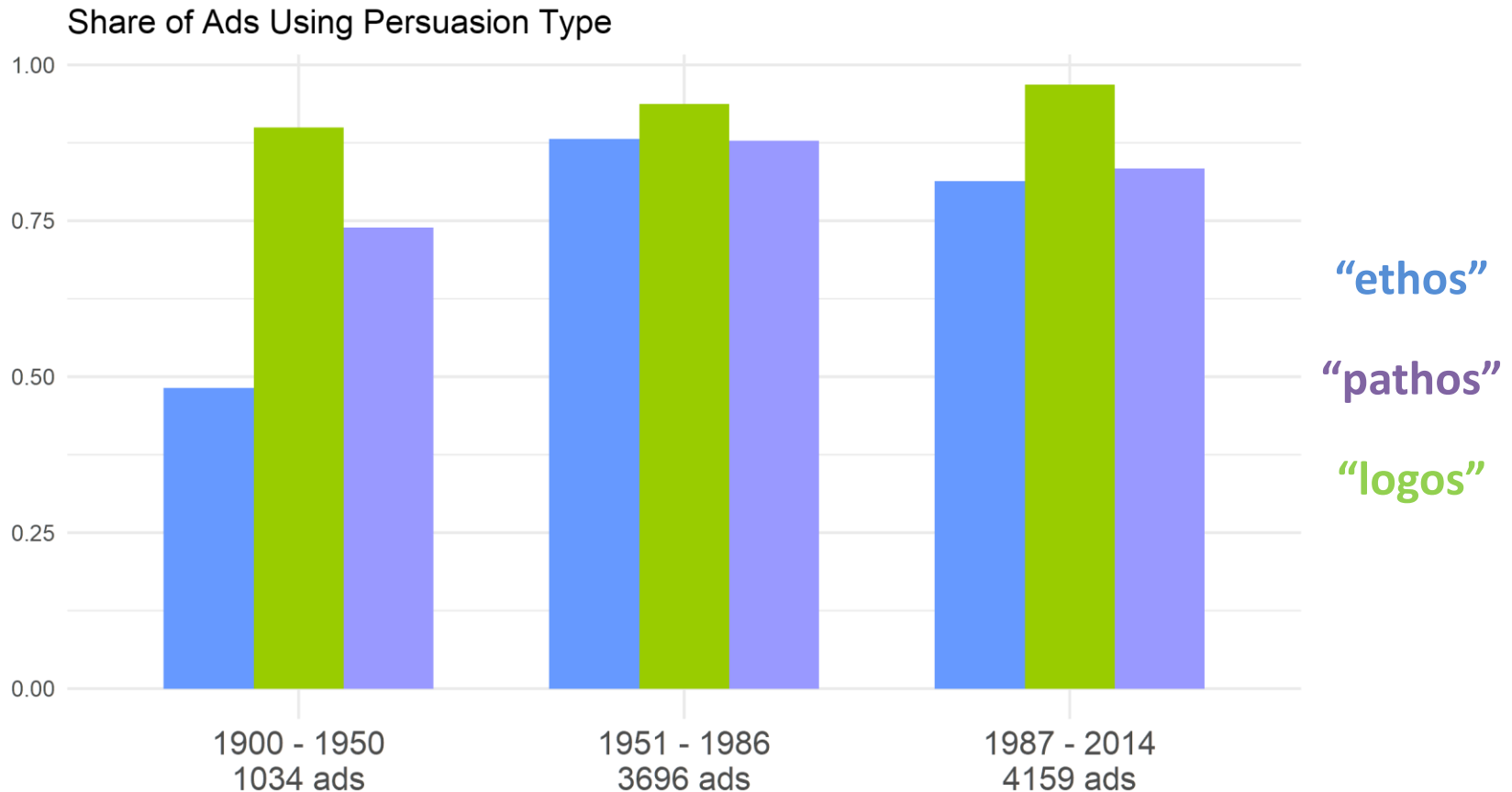
"logos"

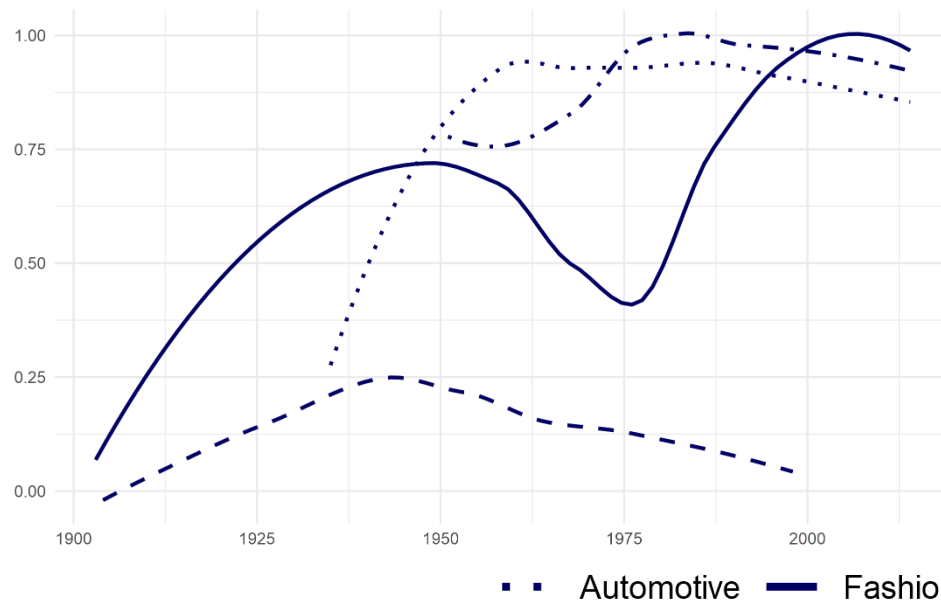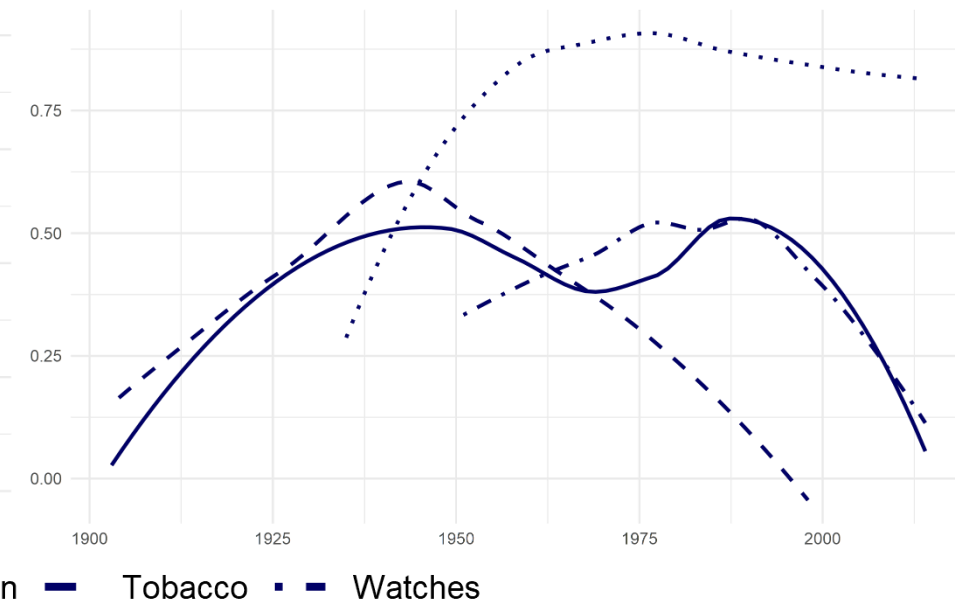**Analysis**

For most industries, the use of facts and information to persuade consumers is highly common

Share of Ads Providing an Example
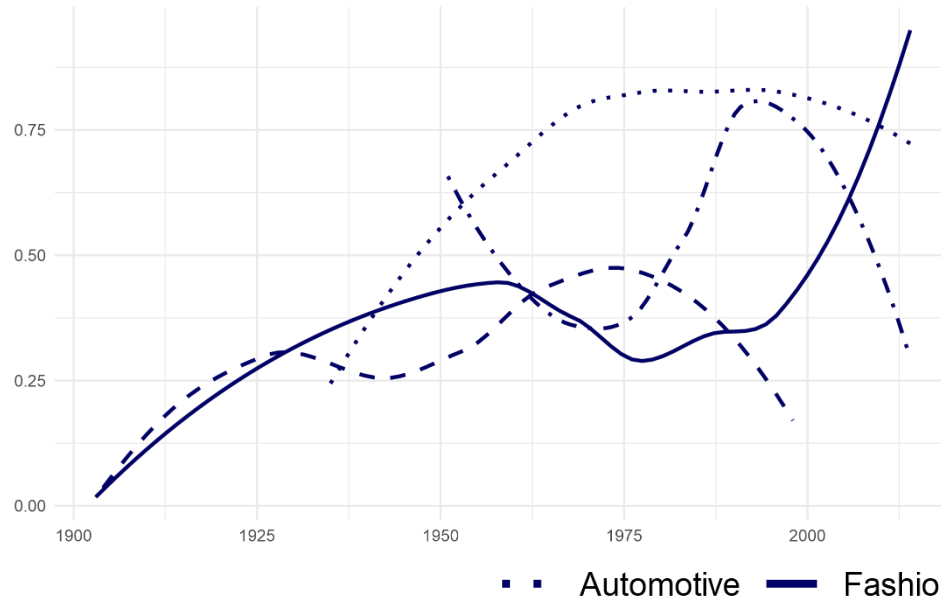

Share of Ads Mentioning Product Utility

· · Automotive ⸺ Fashion ▬ Tobacco · ▬ Watches

- For most industries, **more than 93%** of ads use at least one "logos" cue
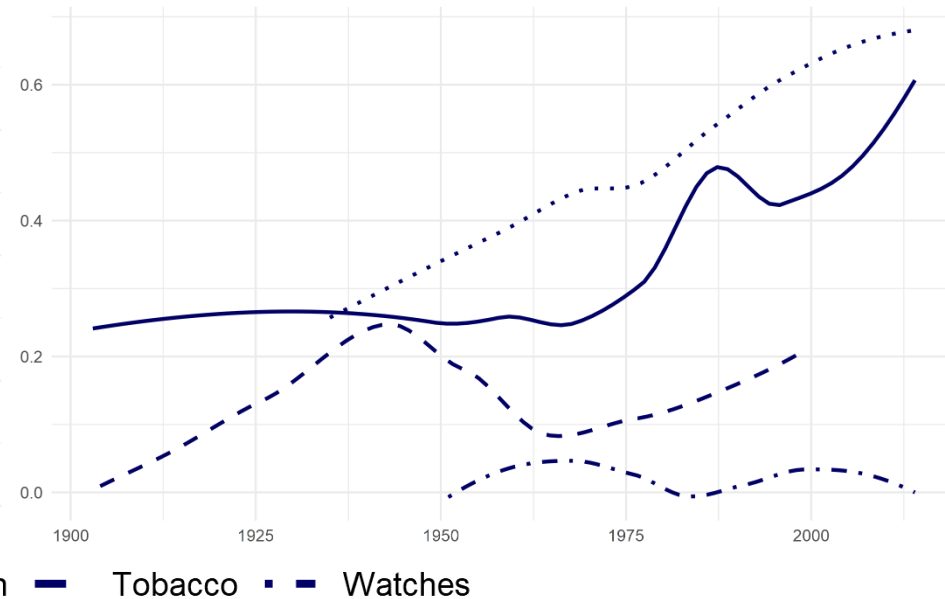- **Tobacco** firms abandoned this type of rhetoric cue over time

Analysis

The use of emotions fluctuates across industries and over time

Share of Ads Evoking Emotions

Share of Ads Motivating Consumers to Take Action

······ Automotive ── Fashion ── Tobacco ─ ─ Watches

- **Overall use** of "pathos" **varies** more between industries (68% - 95%)
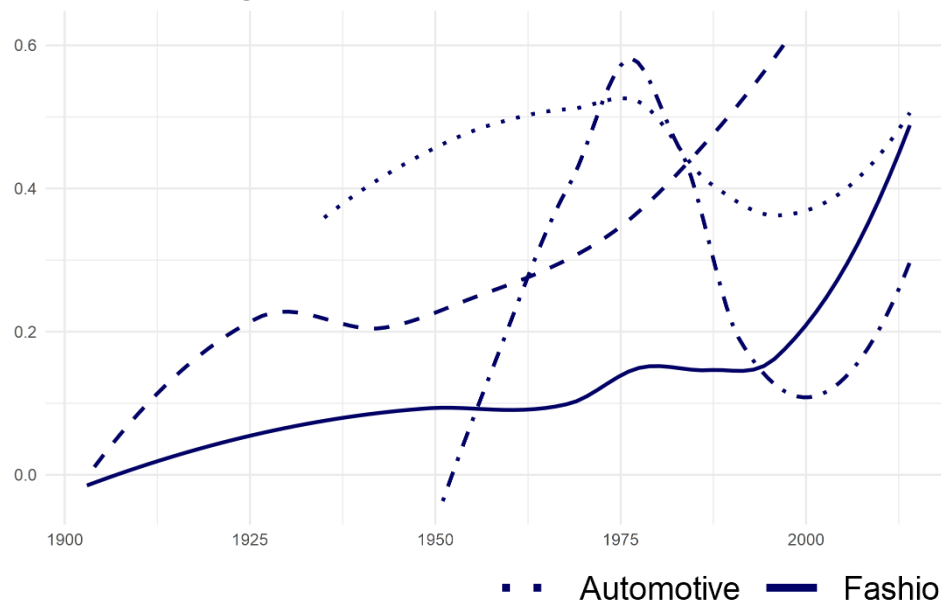- **Automotive** and **fashion** brands increasingly motivate consumers to take action
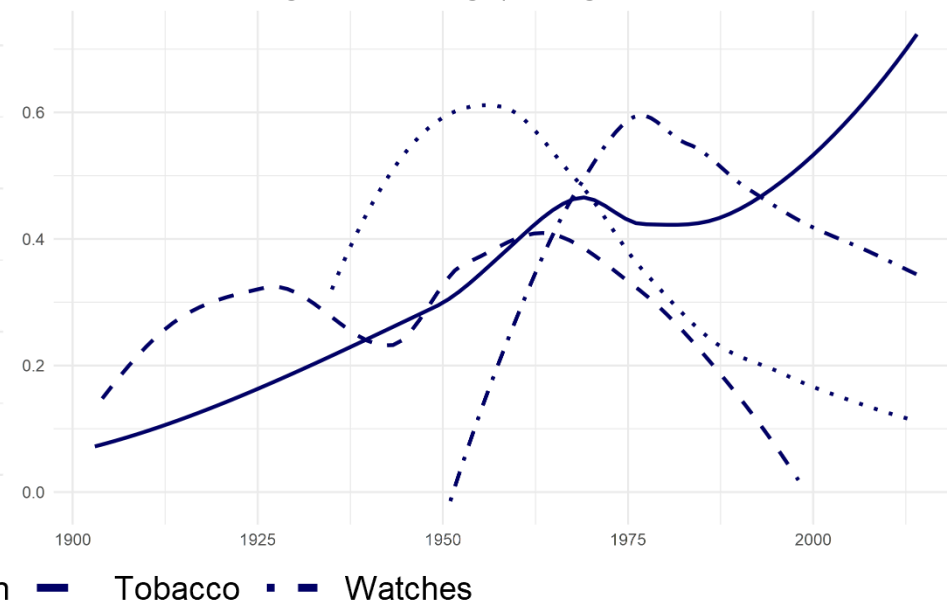
The use of endorsers is generally increasing while most brands abandon geographic references

Share of Ads Using an Endorser

Share of Ads Referring to Brands' Geographic Origin

•••• Automotive   —— Fashion   — — Tobacco   • — Watches

- **Overall use** of "ethos" **varies** even more between industries (56% - 90%)
- Only **fashion** brands are consistent in increasingly referencing geographic origin

Summary and Outlook

- The data suggests that firms indeed use **multiple textual** and **visual cues** to **communicate persuasively** with consumers.
  - Number of cues generally follows inverted U-shape
- Inclusion of **information** is **most common** across all ads, but references to **brand reputation** has **strongest increase** over time.

Future work:

- In-depth analysis of industry comparisons
- Validation of intercoder reliability

Thank you for your attention!

I'm happy to connect:

✉ leonie.gehrmann@uni-mannheim.de

in Leonie Gehrmann

References

Bagwell, Kyle (2007), "The Economic Analysis of Advertising," in *Handbook of Industrial Organization*, Volume 3. Elsevier B.V., 1701 – 1844.

Chandy, Rajesh K.; Tellis, Gerard J.; MacInnis,, Deborah J. and Pattana Thaivanich (2001), "What to Say When: Advertising Appeals in Evolving Markets," *Journal of Marketing Research*, 38 (4), 399 – 414.

Eritmur, Burçak and Mary C. Gilly (2012), "So Whaddya Think? Consumers Create Ads and Other Consumers Critique Them," *Journal of Interactive Marketing,* 26, 115 – 130.

Mangió, Federico; Pedeliento, Giuseppe and Daniela Andreini (2012), "Branding Rhetoric in Times of a Global Pandemic: A Text-Mining Analysis," *Journal of Advertising*, 50 (3), 240 – 252.

Mehta, Nitin; Chen, Xinlei and Om Narasimhan (2008), "Informing, Transforming, and Persuading: Disentangling the Multiple Effects of Advertising on Brand Choice Decisions," *Marketing Science*, 27 (3), 334 – 355.

Middleton, Karen; Thompson-Whiteside, Helen; Turnbull, Sarah and Judith Fletcher-Brown (2022), "How consumers subvert advertising through rhetorical institutional work, " *Psychology & Marketing*, 39, 634 – 646.

Pollay, Richard (1985), "The Subsidizing Sizzle: A Descriptive History of Print Advertising, 1900 – 1980, " *Journal of Marketing*, 49 (3), 24 – 37.

Simons, Herbert W. (1976), *Persuasion: Understanding, Practice and Analysis*, Longman Higher Education.

Zarantonello, Lia; Jedidi, Kamel and Bernd H. Schmitt (2013), "Functional and experiential routes to persuasion: An analysis of advertising in emerging versus developed markets," *International Journal of Research in Marketing*, 30, 46 – 56.