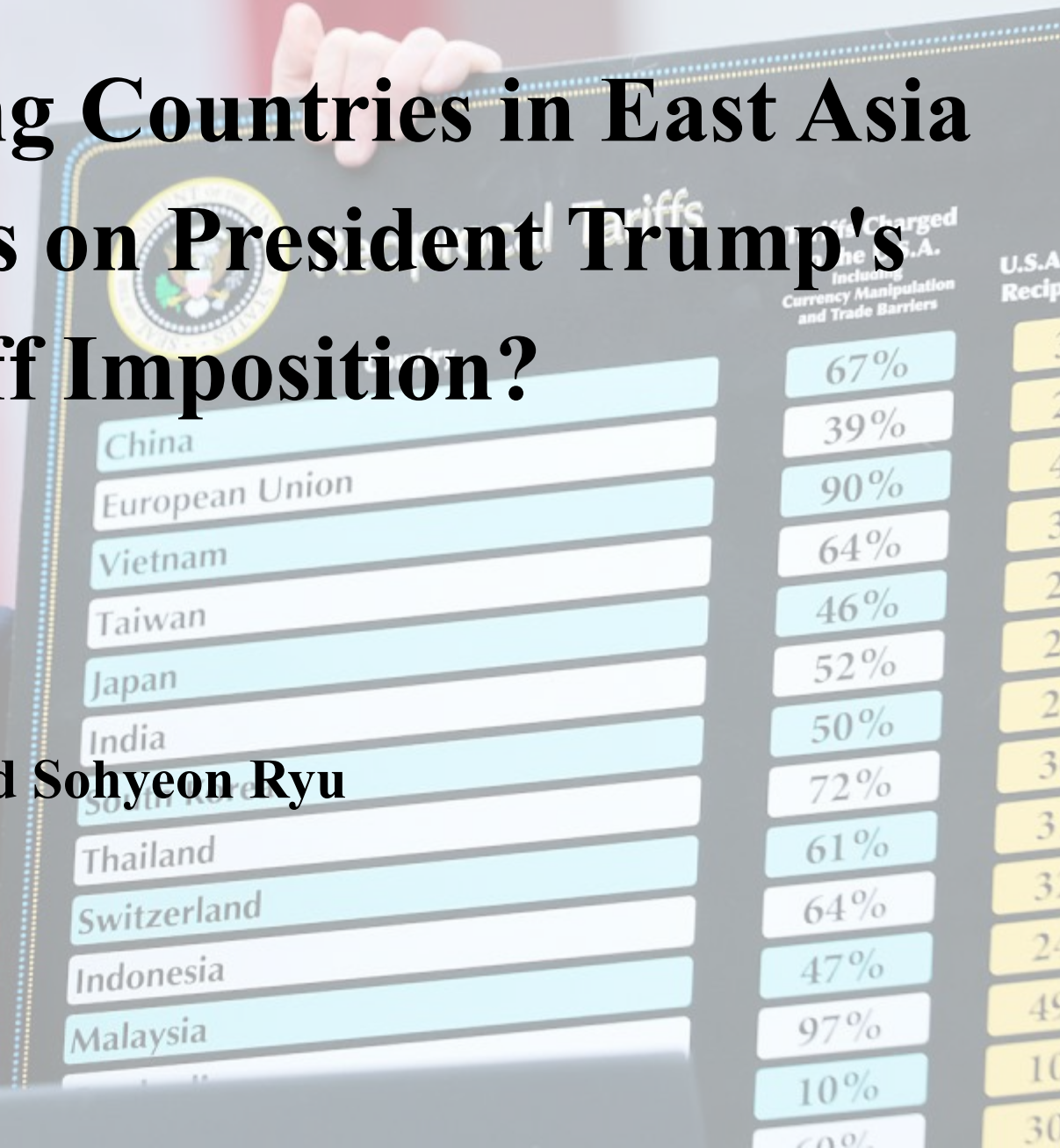# How Do Two Neighbouring Countries in East Asia Hold Varying Perspectives on President Trump's Election and Mutual Tariff Imposition?

ACE-592-SAE

Jaehyun Kim, Tongtong Li, Fengqi Liu, and Sohyeon Ryu

Motivation

- This study compares public sentiment in China and South Korea in response to:
    - Trump's re-election: **Nov 6, 2024**: Donald Trump re-elected as the **47th U.S. President**
    - The mutual tariff announcement: **Apr 3, 2025**: Announced **mutual tariffs on 183 countries**

- China and South Korea had different trade experiences during Trump's first term.
    - China experienced intense trade conflict during Trump's first term, and thus likely anticipated renewed tension upon his re-election.
    - In contrast, South Korea, a close U.S. ally that had not been directly involved in previous trade disputes, faced an unexpected tariff policy, resulting in greater shock.

- By examining public reactions, this study aims to reveal how prior experience with Trump's trade policy shaped each country's emotional response to these events.

Text analysis methods

1. This study uses **Word cloud** and **Sentiment Score Analysis** to:
- Identify the **most frequently used words** in user comments
- Quantify **emotional tone** (positive, negative, neutral) over time

2. Sentiment analysis
- For China, sentiment analysis was conducted by using Bixin which is a lightweight, dictionary-based Chinese sentiment analysis tool. It assigns scores from -1 to 1 and achieves over 82% accuracy across various text types.
- For **South Korea**, sentiment analysis was conducted by using a **VADER-style model**, which is well-suited for analyzing **short, social media-style texts** in English and Korean (model name = kcelectra).

Country-specific

Regional and Gender Heterogeneity in China
- Public attitudes toward **Trump and the tariff policy** may vary across regions, especially between:
  - Areas **heavily involved in exports to the U.S.**
  - Areas **less dependent on U.S. trade**

- **Bilibili** provides information on users' **locations** at the provincial level and **gender.**
- Calculated the **correlation coefficient** between each province's total exports to the United States and the average sentiment scores.

Emotional divide in South Korea
- South Korea was affected by **an unexpected tariff announcement, causing widespread** public shock.
- Sentiment toward **Trump's re-election** and the **tariff policy** shifted noticeably over time.
- To capture this change, we apply **K-means clustering** to analyze how Korean users' emotions are divided

Data collection

Election videos:

Video Name (Chinese)	Video Name (English)	Date	Channel	# of Comments
特朗普宣布胜选	**Trump Claims Election Victory**	11/06/2024	CCTV NEWS (央视新闻)	15154
败选后再胜选，这复仇的滋味多美妙谁能比他更懂	**Losing Then Winning Again — Who Knows the Sweet Taste of Revenge Better Than Him?**	11/07/2024	麻薯波比呀	4265
特朗普胜选后，拜登笑得比花灿烂，嘴角比AK还难压	**After Trump's Victory, Biden's Smile Blooms Brighter Than Flowers**	11/08/2024	江平舟	4955
【深度】特朗普胜选！美国公务员清除计划启动！	**[In-Depth] Trump's Victory: U.S. Civil Servant Purge Plan Begins!**	11/03/2024	CLS同学	2487
川普以277票大胜哈里斯后，对国际和国内有哪些影响？	**After Trump's 277-Vote Landslide Over Harris, What Are the Impacts Domestically and Internationally?**	11/06/2024	卢克文工作室	2564

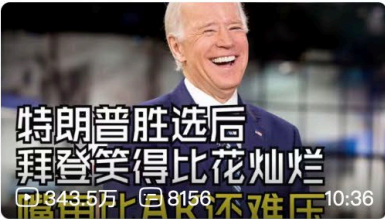综合排序　　最多播放　　最新发布　　最多弹幕　　最多收藏　　　　　　更多筛选 ∨

▶ 566.1万 ▤ 1.3万 00:53	▶ 287.9万 ▤ 1.3万 15:32	▶ 343.5万 ▤ 8156 10:36	▶ 79.3万 ▤ 7143 14:54	▶ 119.9万 ▤ 3282 02:57
特朗普宣布胜选	败选后再胜选，这复仇的滋味多美妙谁能比他更懂?	特朗普胜选后，拜登笑得比花灿烂，嘴角比AK还难压	【深度】特朗普胜选！美国公务员清除计划启动！	川普以277票大胜哈里斯后，对国际和国内有哪些影响？
UP 央视新闻 · 2024-11-6	UP 麻薯波比呀 · 2024-11-7	UP 江平舟 · 2024-11-8	UP CLS同学 · 2024-11-3	UP 卢克文工作室 · 2024-11-6

Data collection
Tariff videos:

Video Name (Chinese)	Video Name (English)	Date	Channel	# of Comments
特朗普关税王八拳，打中国，打美元，国际贸易必然重塑	**Trump's Tariff King Punches: Hitting China, the U.S. Dollar, and America — A Reshaping of Global Trade Is Inevitable**	04/10/2025	小王Albert	9671
【爆笑每日秀】美国人吐槽特朗普加征关税，全程高能讽刺	**[Hilarious Daily Show] Americans Roast Trump for Raising Tariffs — Packed with High-Energy Sarcasm**	04/06/2025	米国脱口秀	5399
特朗普实施对等关税，赌你们的枪里没有子弹？	**Trump Implements Reciprocal Tariffs — Do You Even Have Bullets in Your Guns?**	04/05/2025	麻薯波比呀	11665
【巫师】全球关税混战背后，是不能输的终局之战	**Behind the Global Tariff Chaos Lies the Final Battle That Must Not Be Lost**	04/08/2025	巫师财经	14042
【厉害】海湖庄园协议：特朗普疯狂关税背后，最终棋局是什么？	**Mar-a-Lago Agreement: What Is the Endgame Behind Trump's Tariff Frenzy?**	04/12/2025	厉害财经	1685

关税大战
▶ 643.1万 ⊟ 3.2万 26:17
特朗普关税王八拳，打中国，打美元，国际贸易必然重塑
ⓊⓅ 小王Albert · 4-10

吐槽特朗普加征关税
▶ 529.3万 ⊟ 6071 07:06
【爆笑每日秀】美国人吐槽特朗普加征关税，全程高能讽刺
ⓊⓅ 米国脱口秀 · 4-6

"万税爷"实施对等关税 赌全世界没人敢还手？
▶ 484.3万 ⊟ 2万 20:48
特朗普实施对等关税，赌你们的枪里没有子弹？
ⓊⓅ 麻薯波比呀 · 4-5

中美关税战争 输不起的终局
▶ 407.6万 ⊟ 1.6万 12:28
【巫师】全球关税混战背后，是不能输的终局之战
ⓊⓅ 巫师财经 · 4-8

海湖庄园协议 是什么
▶ 165.7万 ⊟ 721 13:21
【厉害】海湖庄园协议：特朗普疯狂关税背后，最终棋局是…
ⓊⓅ 厉害财经 · 4-12

Temporal distribution of comments

The majority of comments were posted during the election week (2024-11-05 ~ 2024-11-11) and the reciprocal tariff announcement week (2025-04-05 ~ 2024-04-11).
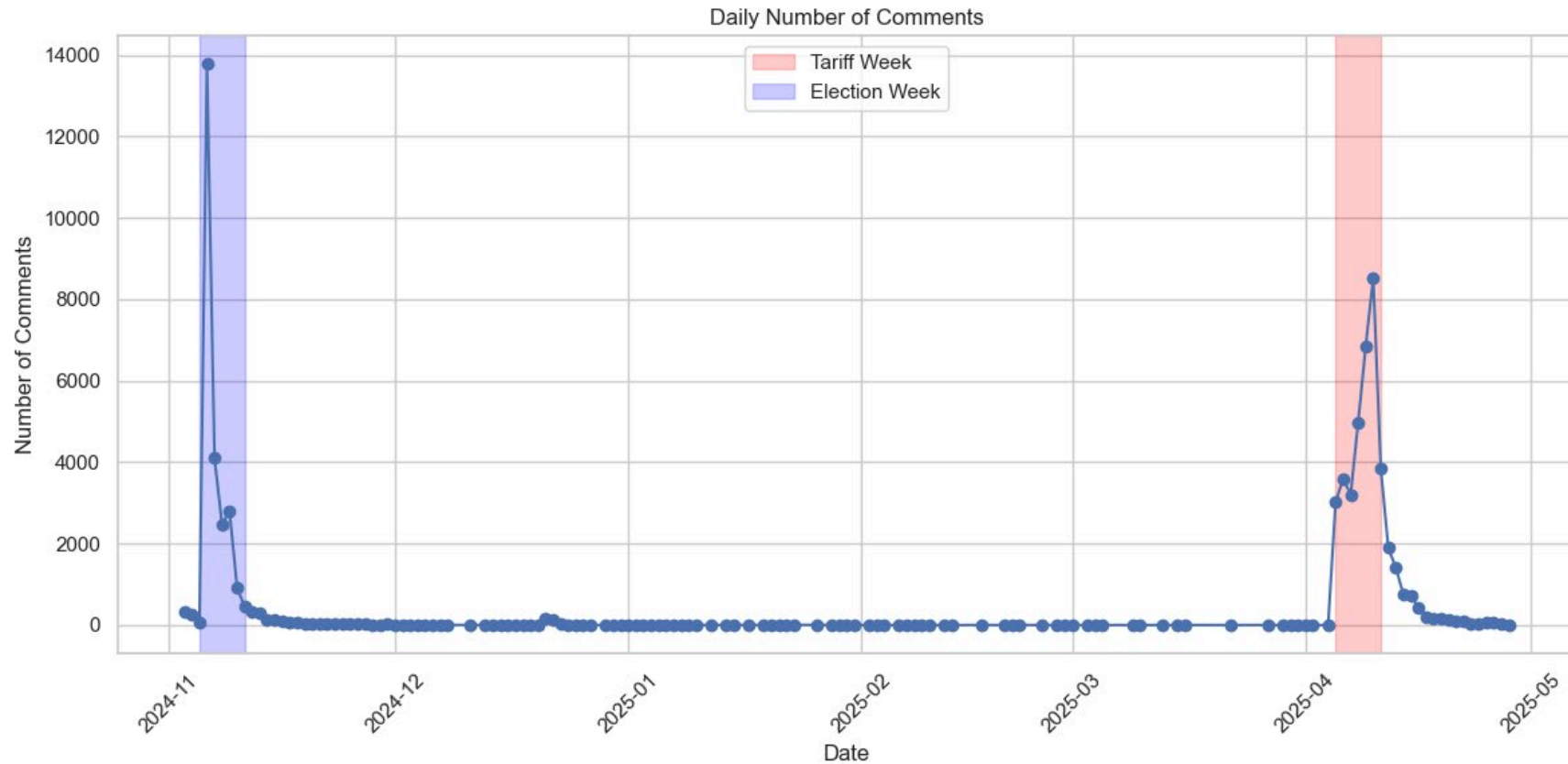
Top 5 most liked comments in "election" videos

<u>Among the five most-liked comments:</u>

- The first one mocked Kamala Harris for losing the election;

- The second reflected on Elon Musk's critical role in facilitating Trump's victory;

- The third conveyed a conspiratorial tone, speculating that Biden, as a shrewd political strategist, might have secretly assisted Trump;

- The fourth expressed amazement that Trump survived an assassination attempt. The commenter also conveyed hope for China's continued prosperity;

- The fifth praised Trump's sweeping success in securing seven swing states.

Username	Comment Text	Like Count	Comment Time
写张卷子冷静下-	假如你是李华，你的朋友哈里斯告诉你，她输掉了大选，心情非常沮丧，你要写一封信安慰一下她。要求在120词左右。	36106	2024-11-06 15:37:37
雨未歇べ	埃隆马斯克这种金牌辅助，收购推特真是神助攻，确实厉害，首富的眼光和胆识	24400	2024-11-06 11:04:06
打不过就喷口水	可能很多人忘记了，拜登虽然是个老人，但他是冷战思维的政治家，谁得罪他，他自然而然就会站在得罪他的人的对立面	19471	2024-11-08 15:07:40
-_-狐尼克-_-	那颗子弹偏移了1mm。命运的齿轮改变了，不知道历史会怎样谱写。只希望中华人民共和国 繁荣富强 国泰民安。普通老百姓以后的生活好一点。	13504	2024-11-06 11:42:24
奶油浓汤ww	摇摆州7:0，这是致敬啊	12773	2024-11-07 03:14:26

Top 5 most liked comments in "tariff shock" videos

Among the five most-liked comments:

- The first comment laments the massive losses in the commenter's stock account;

- The second comment says Trump supporters may not realize that they are the ones who have to bear the cost of tariffs;

- The third comment mocks Trump's failed casino ventures;

- The fourth comment ridicules Trump for imposing tariffs on an island inhabited only by penguins.

Username	Comment Text	Like Count	Comment Time
四月阿-	今天自己洗车省了40块钱，下午打开股票账户一看车没了	36335	2025-04-07 11:17:19
大地怒吼2	很多MAGA是真的不知道关税最终是由自己承担的	15922	2025-04-05 11:12:27
282364786	特朗普赌场都能经营倒闭 到这真绷不住了	13459	2025-04-06 10:45:20
深圳全球速递	在川普的关税中有个叫做赫德岛和麦克唐纳群岛的国家，川普对他收取了10%的关税 但是该岛是个无人居住的小岛，岛上只有企鹅🐧	9987	2025-04-07 08:32:06
39_Z01	顶级回旋镖	8843	2025-04-07 12:54:19

Word cloud of election videos

- Among the five videos related to the election, frequently occurring words included "**history**", "**return**", "**hope**," and "**wages**."

- This suggests that commenters may have felt they were witnessing a historic moment, were suprised by Trump's return after four years, and were concerned about how their wages might be affected.

Word cloud of tariff videos

- Among the five videos related to the tariff, frequently occurring words included "**economy**", "**manufacuring**", "**cost**", "**dollar**" and "**war**".

- This suggests that commenters were deeply concerned about the costs of the tariff war and were keen to discuss its implications for the status of the U.S. dollar and the global manufacturing landscape.

Sentiment analysis

- The sentiment scores of both video comments were **highly polarized.**

- **Many comments were also emotionally neutral**.

- In addition, **following the tariff shock, the proportion of negative comments increased.**

Distribution of Sentiment Scores (Normalized)
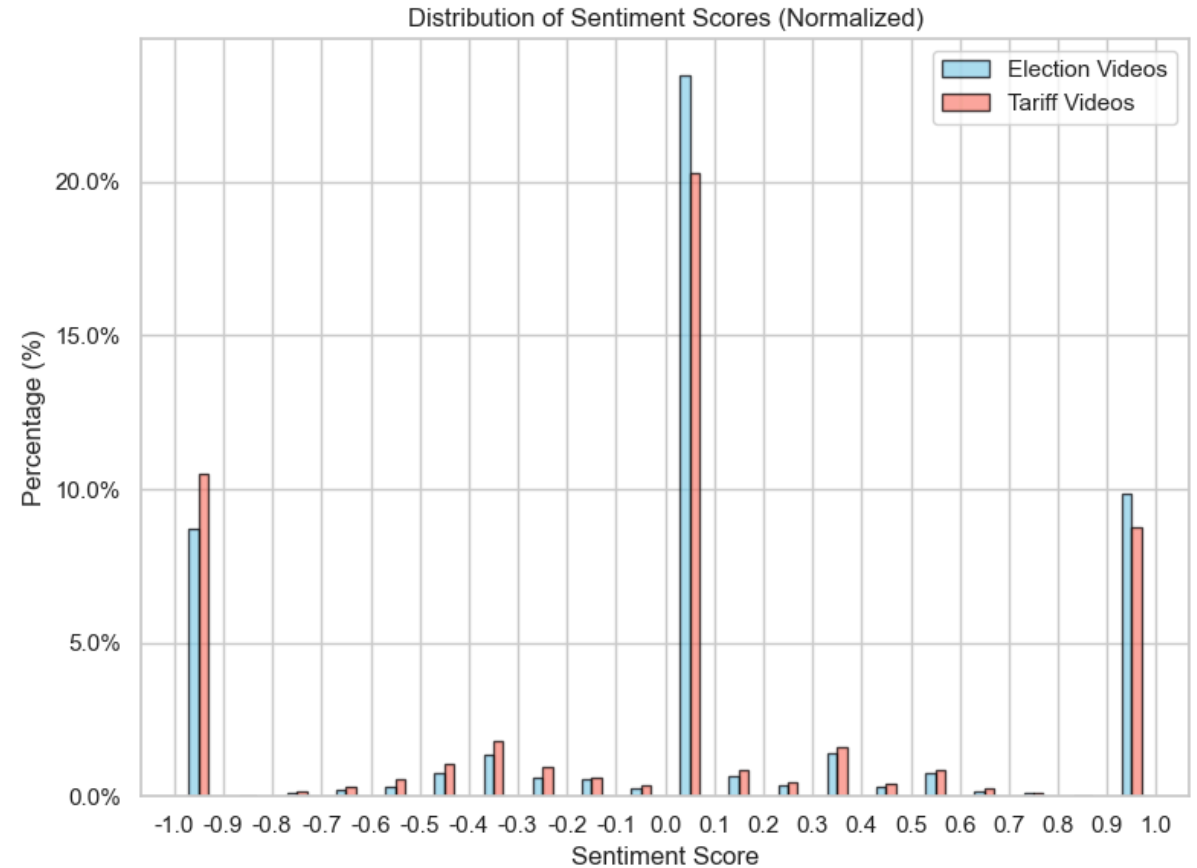
Sentiment analysis

- Sentiment scores of comments with specific keywords:

	"Trump"		"Trade" or "Tariff"		"South Korea"	
	# Comments	Average sentiment	# Comments	Average sentiment	# Comments	Average sentiment
After the election	859	**0.0871**	173	**-0.0512**	11	**0.0227**
After the tariff shock	433	**-0.0765**	610	**-0.0882**	27	**0.2567**

- Comment counts and sentiment scores by gender:

	After the election		After the tariff shock	
	Comment count	Average sentiment	Comment count	Average sentiment
Female	611	**-0.0041**	865	**-0.0335**
Male	4250	**0.0286**	4547	**-0.0440**
Secret	7514	**0.0201**	8967	**-0.414**

Sentiment scores by provinces
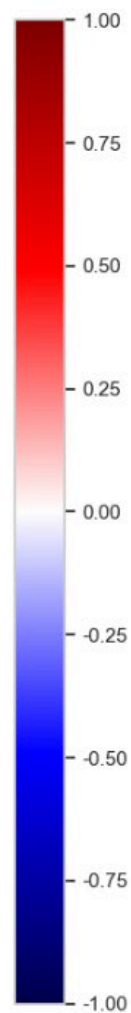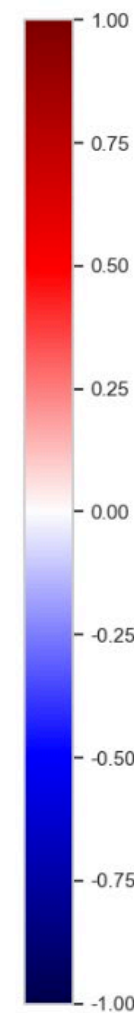
Sentiment scores vs. Exports to US

We calculated the **correlation coefficient** between each province's total exports to the United States and the average sentiment scores:

- **After the election**, the correlation coefficient between sentiment scores and exports to US was **-0.0416**;
- **After the tariff shock**, the correlation coefficient between sentiment scores and exports to US became **-0.1113**.

The results imply that provinces with higher export volumes to the U.S. tend to have commenters who express more negative sentiments. This negative relationship became even more pronounced after the tariff shock.

Export to US (100M RMB)
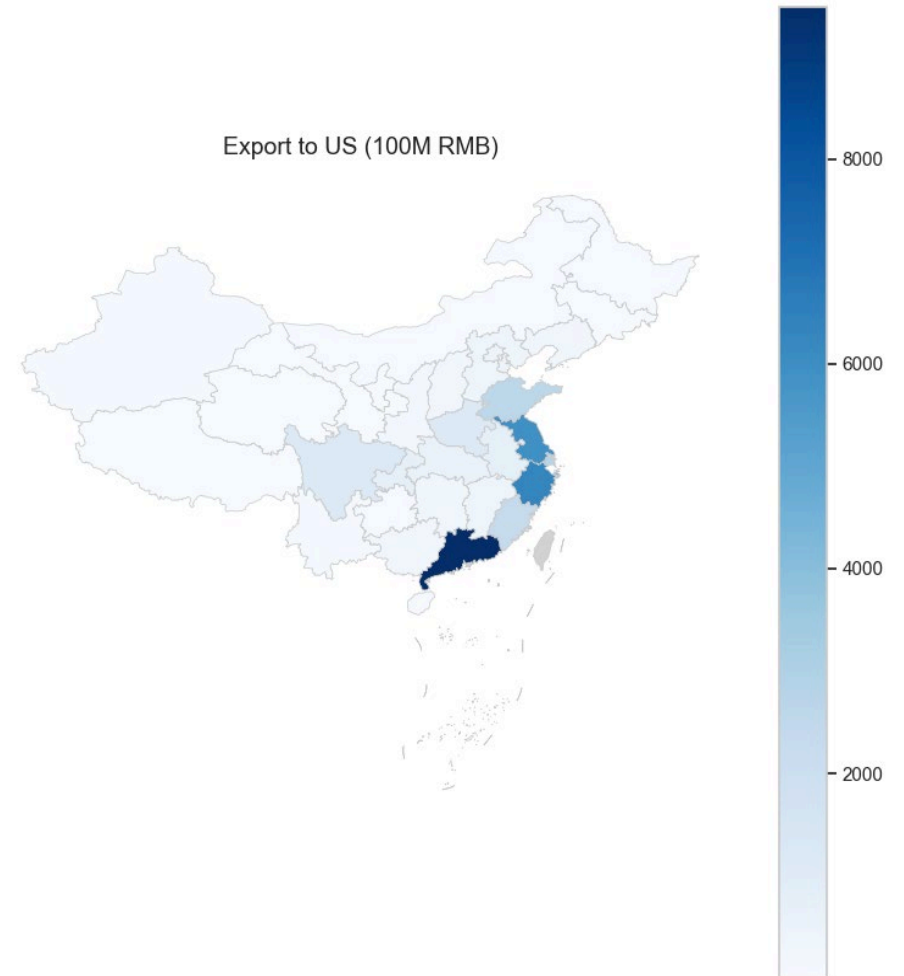
1. After Trump was elected president, the sentiments expressed by Chinese netizens were **highly polarized**, though overall they **leaned slightly positive**.

2. This may be attributed to the dramatic nature of Trump's return to the White House after four years, as well as the excitement of witnessing a historic moment.

3. However, following the announcement of his **aggressive tariff plan**, the overall sentiment among Chinese netizens **became more negative**.

4. We also found that **users living in provinces with higher export volumes to the U.S. tended to express more negative sentiments**.

5. In addition, **comments from female** users were **fewer** in number and exhibited **more negative** sentiment.

Background

- **US-Korea relationship**

- Politically and economically amicable
- US troops, International students in US
- US is Korea's 2nd largest trading partner, Korea is US's 6th largest trading partner. KOR-US FTA (2012-)

- **Trump's 1st administration**

- Koreans mostly experienced political, military, security issues
    - N. Korea
    - US troop withdrawal. 500% increase in Korea's costs for the US troop
- Relatively less experienced economic issues (compared to China)
    - Some adjustments in the FTA

- **YouTube as a popular news media**
- Used by all generations and in all regions.
- Official accounts of public broadcasting networks
- Comments are known for being extreme, emotional, and active.

Seoul agrees to pay more for hosting American troops in 2021

By **Robert Burns, The Associated Press**   Mar 10, 2021

In this April 26, 2019, file photo, South Korean and U.S. Army soldiers patrol during a rehearsal to mark the first anniversary of a summit between South Korean President Moon Jae-in and North Korean leader Kim Jong Un on April 27, at the border village of Panmunjom in the demilitarized zone (DMZ) between the two Koreas in Paju, South Korea. (Ahn Young-joon/AP)

Data collection

Post Election
- Selected the 5 most-viewed YouTube videos from major Korean broadcasters reporting on Trump's victory
- Collected a total of 2,937 comments
- Timeframe: November 6 to November 9, 2024, to avoid capturing comments influenced by the tariff announcement
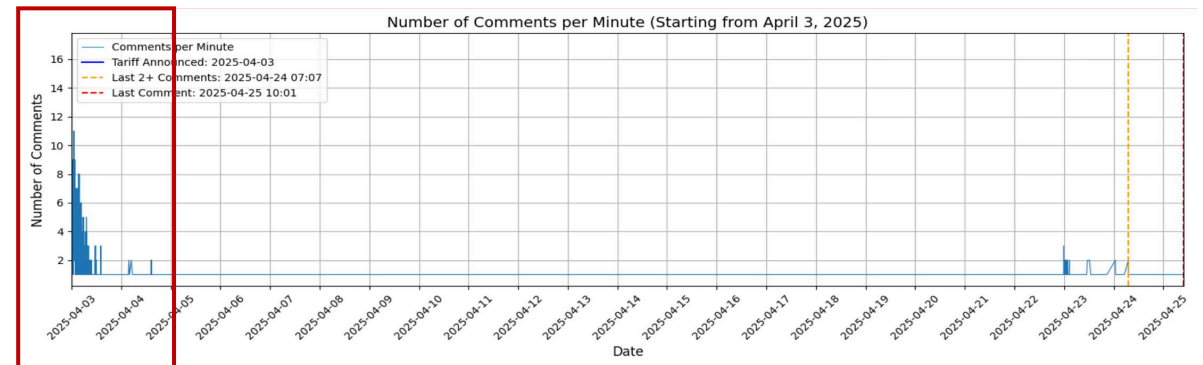
Post Tariff
- Selected the 7 most-viewed YouTube videos from major Korean broadcasters covering the tariff announcement
- Collected and analyzed 1,431 comments
- Timeframe: April 3 to April 4, 2025

Temporal distribution of election comments

Temporal distribution of tariff comments

Word cloud – Comparison between post election and tariff

- **Post Election**
  Frequent mentions of **domestic media**:

  - "언론 (media)", "방송 (broadcasting)",
    "언론사 (press)", "뉴스 (news)"

- **Post Tariff**
  Increase in **trade-related terms**: "관세 (tariff)", "수출 (exports)" and "수입 (imports)"
  Mentions of 중국(China) also rise noticeably

  Emergence of interesting words such as:

  - **"계란 (eggs)", "탄핵 (impeachment)"**, and **"성조기(Stars and strips)"**

Word cloud after the election

Word cloud after the tariff

Sentiment score – Comparison between after election and tariff

- Overall sentiment was predominantly negative after both events.

- Positive comment share:
  After Election: 10.3% (4.3% very positive + 6.0% somewhat positive)
  After Tariff: 7.7% (4.1% very positive + 3.6% somewhat positive)
  → A drop in positive sentiment after the tariff announcement.

- Negative comment share:
  A slight increase in negative sentiment was observed after the tariff announcement (89.7% → 92.3%).
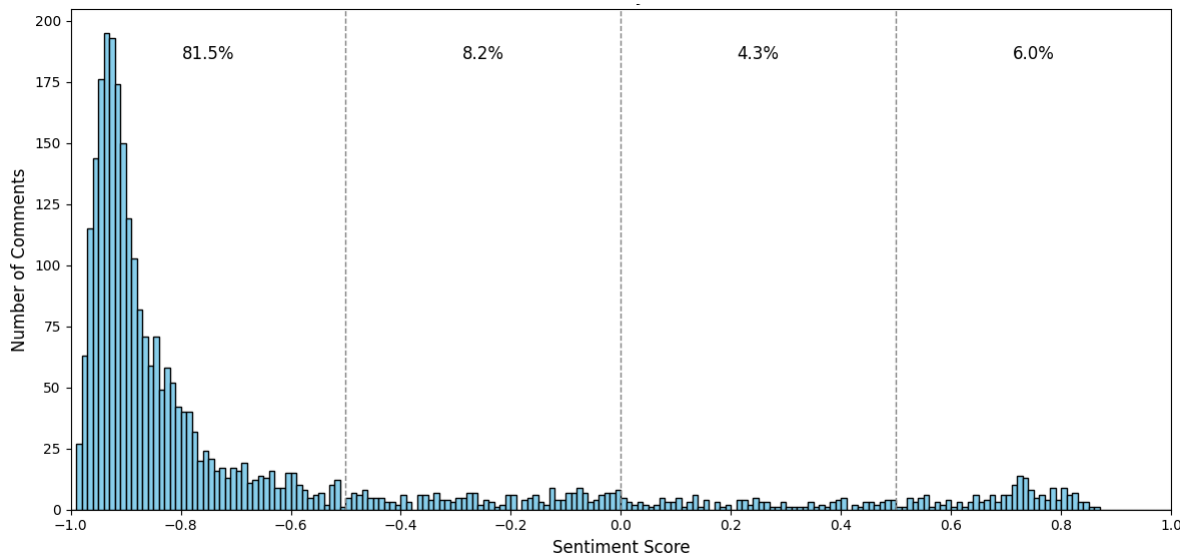
Sentiment score distribution of post-election
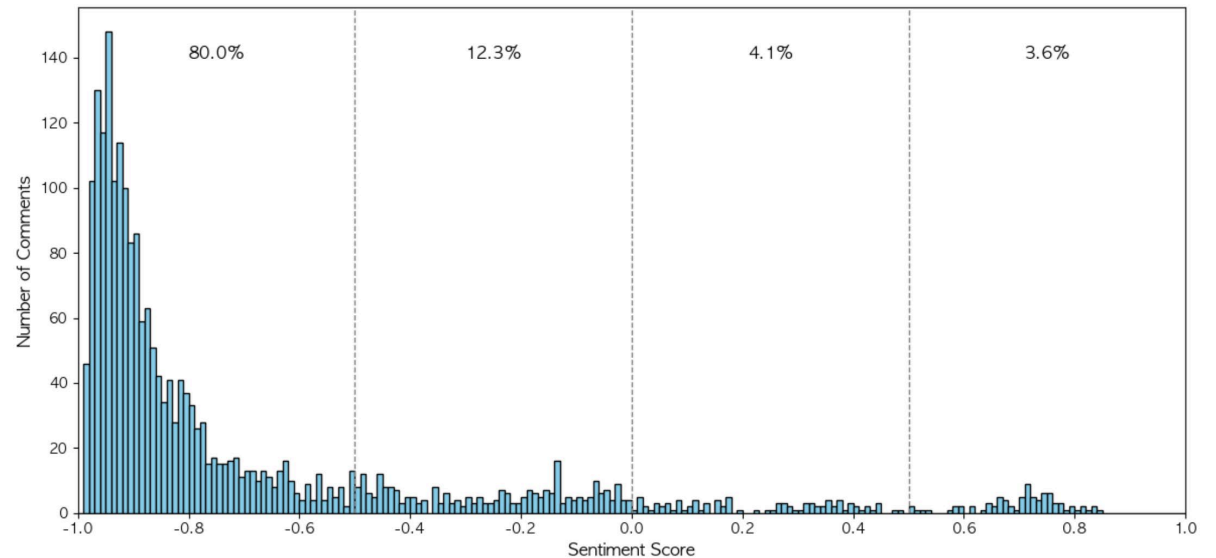
**Sentiment score distribution of post-tariff**

Sentiment score – Post election

1. **After the election**, many Koreans criticized **biased media coverage**, as local news had predicted a high likelihood of **Harris winning**, but Trump ultimately won.

   Frequent keywords in negative comments:
   - **Media (1,065)**, **Press (147)**, **News (80)**
   - Often appeared alongside words like **"trash," "biased,"** and **"manipulative".**

   - These patterns point to a **dominant sentiment of** *annoyance* driven by perceived **media distortion.**

The number of comments by sentiment after the election
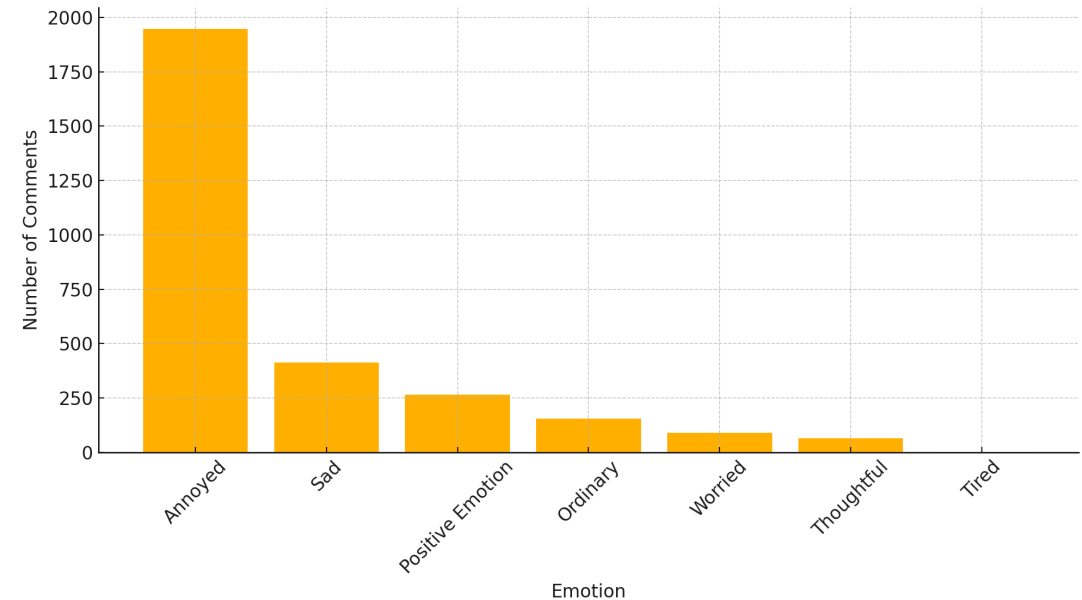
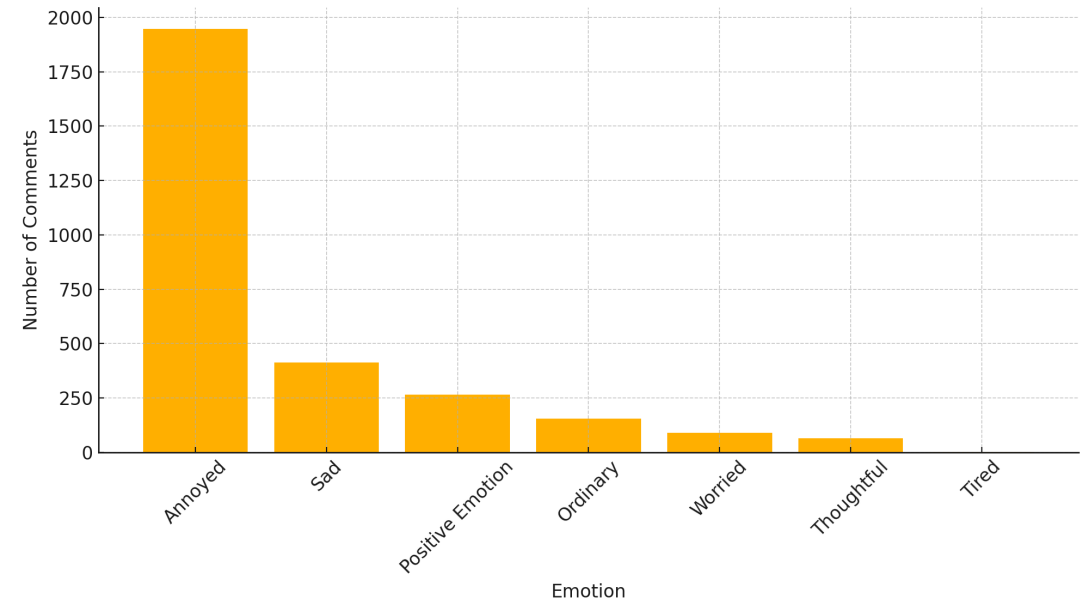Note: 'Positive Emotion' Includes 'Joyful', 'Excited', 'Grateful', and 'Loving'

Sentiment score – Post election

2. Positive Sentiment: Support for Trump

- Most **positive comments** focused on **celebrating Trump's win**.
- Among the **302 positive comments**, key themes included:
  - **Congratulations (44)**, **God blessed (18)**, **Cheer up (11)**, **Support (9)**

- These expressions reflect **supporters**, emphasizing **approval and hope** tied to Trump's re-election.

**The number of comments by sentiment after the election**

Note: 'Positive Emotion' Includes 'Joyful', 'Excited', 'Grateful', and 'Loving'

Sentiment score – After tariff, mentioning 'China'

- 15% of total comments mentioned 'China'

- Slightly less negative than the total comments, but still, negative sentiment prevails.

- We are criticizing the Korean government for not balancing out between the US & China. And we are upset about the trade war situation.
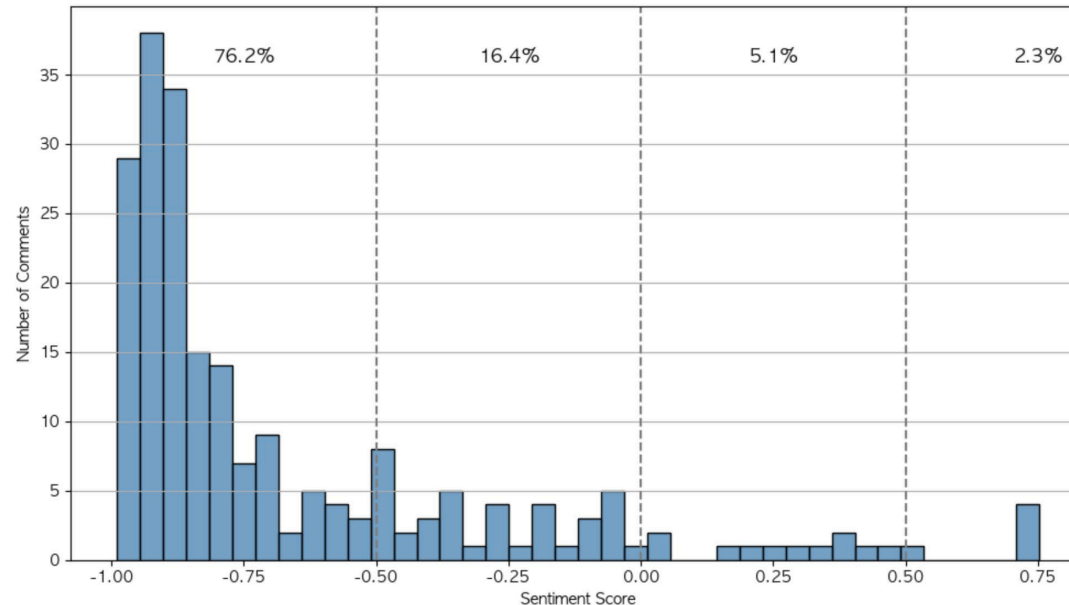

Sentiment score distribution after the tariff mentioning 'China'

K-means clustering – Post election

- Most clusters shared **similar keywords**, making clear separation difficult.
- Cluster 0 keywords: Media, close match, trash, domestic …
- Cluster 1 keywords: Press, Left wing, reporting…

- **PCA projection** showed **no distinct separation** among clusters

- A small number of **comments** appear to focus on distinct topics such as:
  Economy: 36 comments (1.23%)
  Tariff: 9 comments (0.31%)
  Tax: 17 comments (0.58%)

- These results suggest that the **tariff imposed on South Korea was not widely anticipated** by the public, as only a small fraction of users discussed trade-related issues directly.

PCA visualization of comment clusters (Post-election comments)
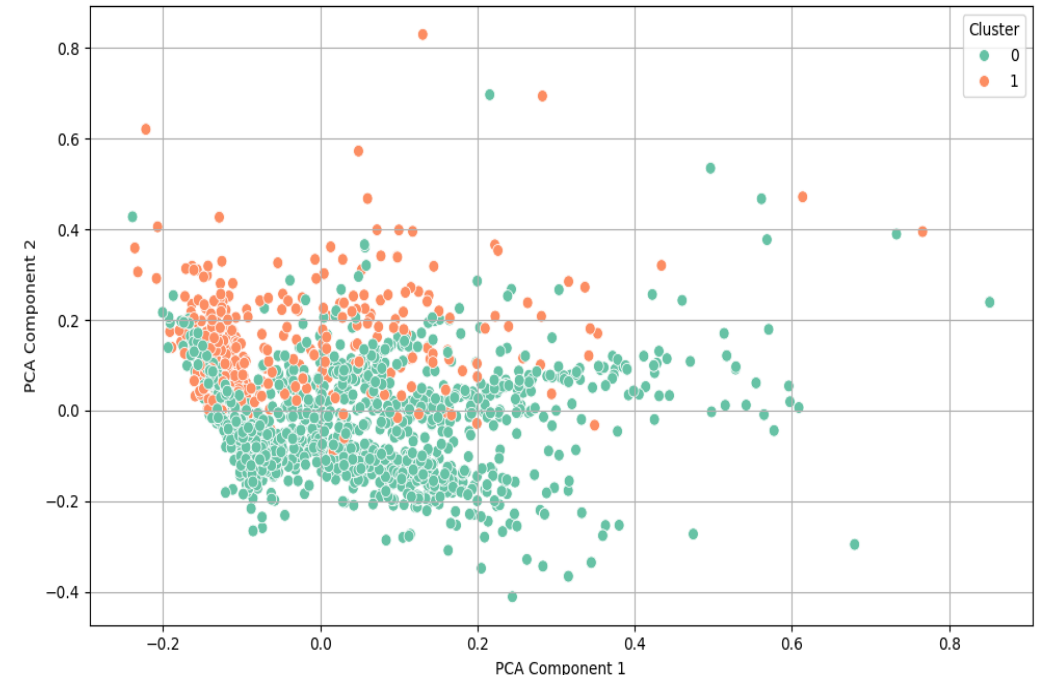
K-means clustering – Post tariff

- The comments **after the tariff announcement** clearly separate into **two distinct clusters.**

- **Cluster 0**
  - Expresses emotional reactions such as frustration with Korea's limited geopolitical power and disappointment over investments in the U.S.
  - Focuses on **blame and boycott-related discussions**
  - **Keywords**: *Trump, protect, boycott*

- **Cluster 1**
  - Focuses on **strategic discussions** about how to respond to the tariff
  - Includes mentions of specific goods and broader concerns over national protection
  - **Keywords**: *Import, world, product*

PCA visualization of comment clusters (After-tariff comments)
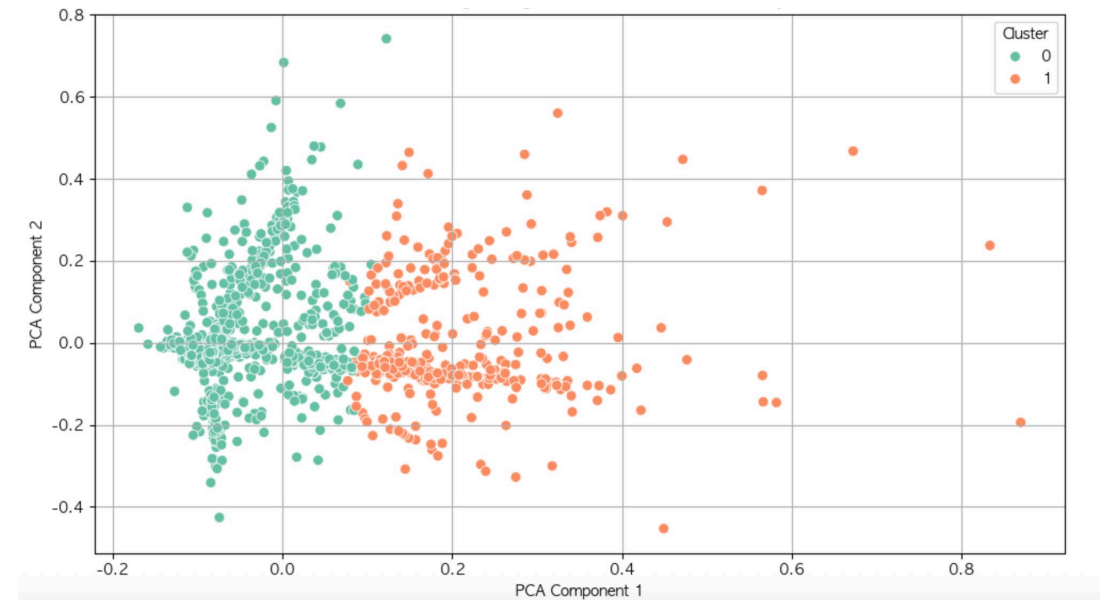
1. Negative sentiment dominated both periods, but the underlying reasons differed:
- Post-election: no clustering separation
    1) Most comments were classified as negative, and both negative and positive comments supported Trump.
    2) The negativity was largely directed toward domestic media bias, not the election outcome itself.

- Post-tariff: The negative sentiment stemmed from two sources: a sense of emotional disappointment, and frustration over the Korean government's lack of strategy.

2. The absence of trade-related keywords prior to the tariff announcement suggests that Koreans did not anticipate the policy, reinforcing the shock and emotional volatility observed in post-tariff discourse.