

# *Jujeop* : Korean Puns for K-pop Stars on Social Media



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**Our data is publicly open!**



**QR for our Github page**

# What is *Jujeop* ?

Comment has a **sense of humor by praising K-pop stars** with exaggerations and flashy modifiers.

Girl, you're **PAIN**.  
Luxury Cham**PAIN** that intoxicates me.



**[Type 1]** Fragmenting words to create a twist

**[Type 2]** Homophones and Homographs

**[Type 3]** Repetition

**[Type 4]** Nonsense

# Type1. Fragmenting words to create a twist

Intentionally fragment a specific word and **extract a single character** from the word to **disguise the word's meaning**



바다가 보이면 **오션 뷰** 언니가 보이면 언니 **알러뷰**

**Ocean view**, when I see the ocean, **I love view**, when I see you



왜 맨날 같은 **티**만 입어? **프리티!**

Why are you always wearing a same **Tee**? **Pretee!**

# Type2. Homophones and homographs

Using specific lexical features of homophones and homographs



너 영어이름을 **조지 부시**로 해줘... 내 마음을 **조지**고 **부시**니까

Change your English name to **George Bush**... because you **beat and break** my heart



언니가 사는 곳은 여름이 **없다**면서요, **더워\***가 없으니까

There is no summer where you live in cause **there's no where to go higher**

\***더워** means high temperature in Korean, which is pronounced same as go higher in Korean.

# Type3. Repetition

Using repetition to emphasize the complimentary meanings



그만 보고 싶다. 그만 보고 싶다.

I want to stop seeing. I want to stop seeing.



그거 알아요? 멋진 사람을 보면 기억을 잃는대요. 그거 알아요? 멋진 사람을 보면 기억을 잃는대요. 그거 알아요? 멋진 사람을 보면 기억을 잃는대요.

Gosh, you know what? They say you lose your memory when you see a handsome person. Gosh, you know what? They say you lose your memory when you see a handsome person. Gosh, you know what? They say you lose your memory when you see a handsome person.

# Type4. Nonsense

Using almost **nonsensical, over-the-top expressions**



그녀가 예쁘다고 생각하는 사람 일어나! 라고 했더니 **지구가 일어나서 태양계 순서가 바뀌었잖아!**

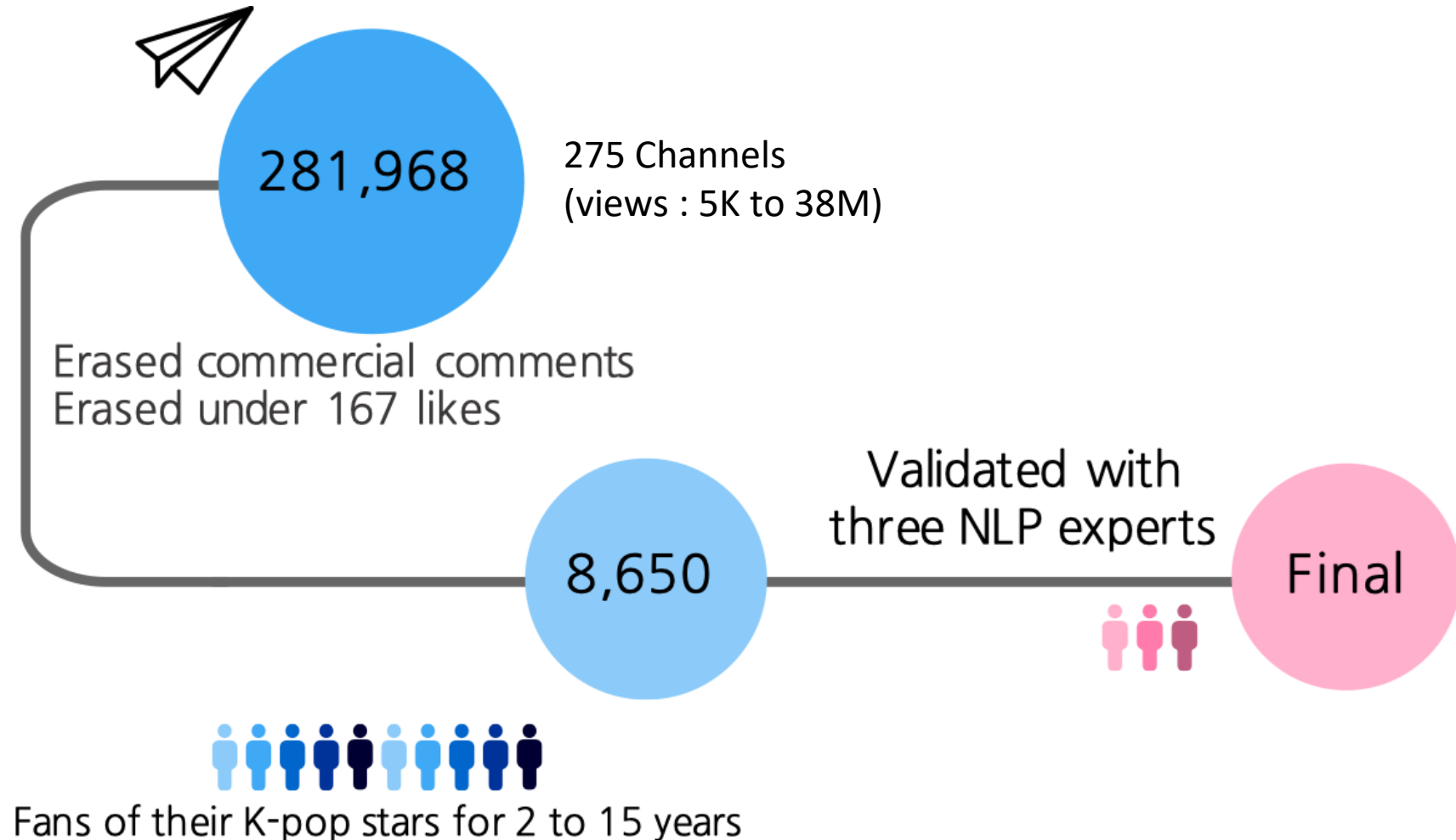
Is anybody who thinks she's pretty, get up! And then **the whole Earth got up and the order of the solar system changed!**



언니 사실 **혼혈** 이라 면서요, **천국과 한국**

Sis, I heard you're **Mixture. Heaven** and **Korea**.

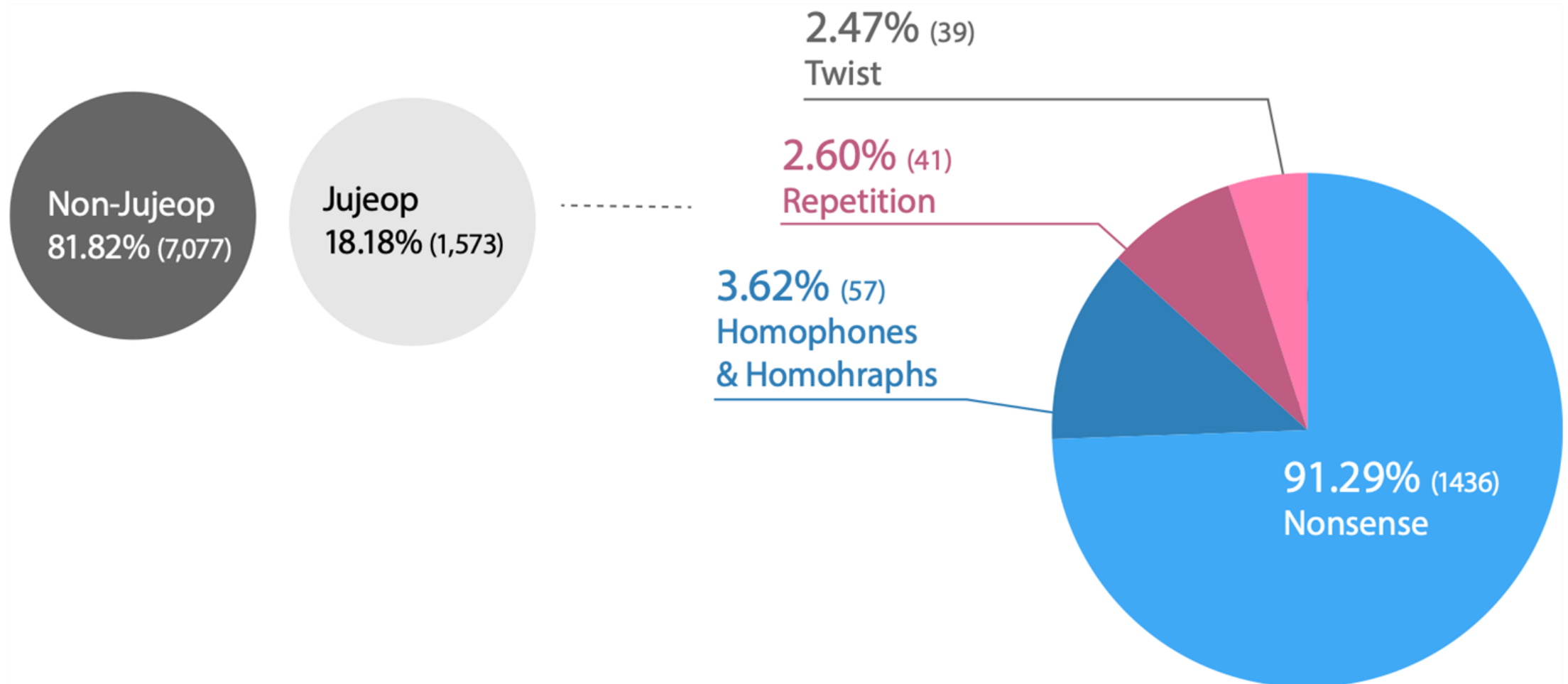
# Annotation process



**Krippendorff's alpha** on four  
types of *Jujeop* comments **0.532**

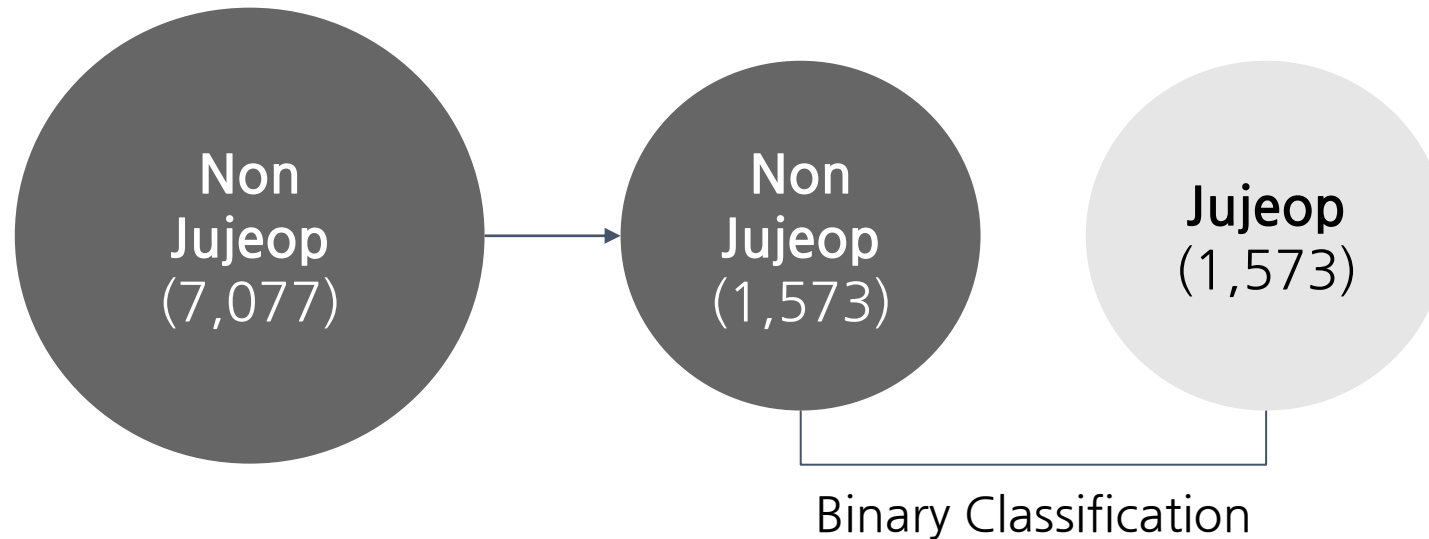


# Corpus description



# Experiments (1) Classification

## Handle class imbalance



## *Jujeop* type classification

Binary and Multi-class classification for *Jujeop* types (marco f1-score)

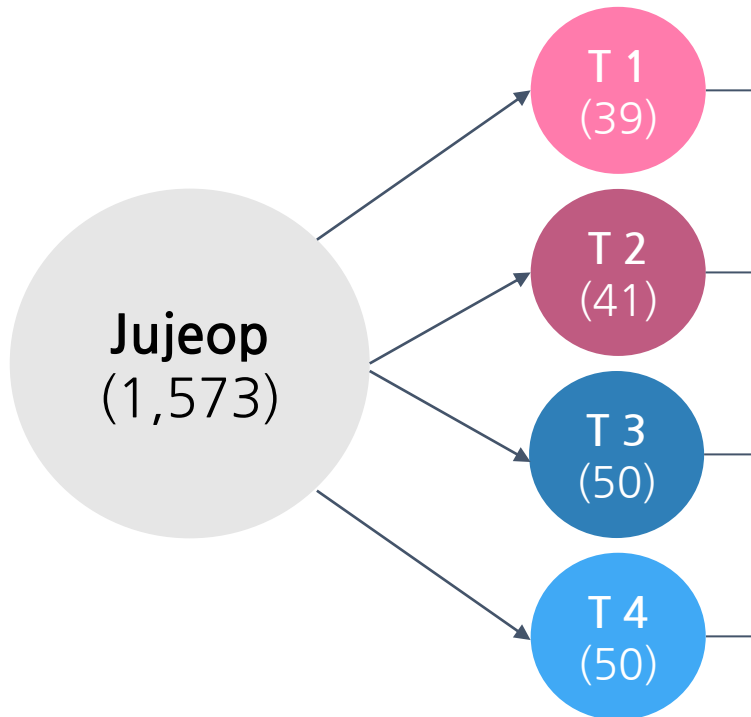
F1-score	<i>Jujeop</i> (2-ary)	<i>Jujeop</i> type (4-ary)
CNN	67.94%	62.63%
BiLSTM	69.91%	56.96%
KoBERT	<b>72.91%</b>	<b>77.18%</b>

# Experiments (2) Clustering

## K-means clustering (k=4)

Used Part-Of-Speech tagged sentences as input

e.g., [언니/Noun, 다/Adverb, 좋은데/Adjective, 자꾸/Noun, 벽/Noun, 이/Josa, 느껴져요/Verb, 완벽/Noun]



Total accuracy 32%

Type 1 : 2.56%

Type 2 : 59.65%

Type 3 : 48.78%

Type 4 : 10%

	Type 1	Type 2	Type3	Type 4
Type 1	1	4	9	9
Type 2	13	34	10	18
Type 3	23	17	20	18
Type 4	2	2	2	5



# Conclusion & Future Work

## What we done is

- First definition of the Jueop with each type
- Finding that Jueop comments **share semantic and syntactic characteristics**
- **Publicly opened Jueop corpus** for further research

## To make more balanced corpus

- A **crowd sourcing experiment**
- **Text generation** based on the given definition

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Feel free to ping me at  
Gather.town!

*paper9*

Thank you 😊