



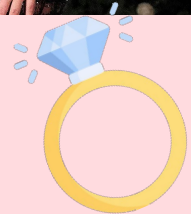
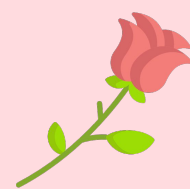
Bachelorette Season 19

Twice the Bachelorettes, twice the drama?

Nicole McBride
Metis NLP Oct 2022

What is the deal with *The Bachelorette*?

- ★ 19 seasons in total; sister show to *The Bachelor* (which has 26 seasons)
- ★ ABC owned reality dating show
- ★ 1 bachelorette and a pool of romantic interests
- ★ Endstate is a potential husband for bachelorette
- ★ **This season makes HISTORY** - there are TWO Bachelorettes (Rachel & Gabby)
- ★ Does this mean twice the drama?



Goal

Explore how ABC paints the arc of the show across the season and also within each episode.

01

Data
Collection +
Cleaning

02

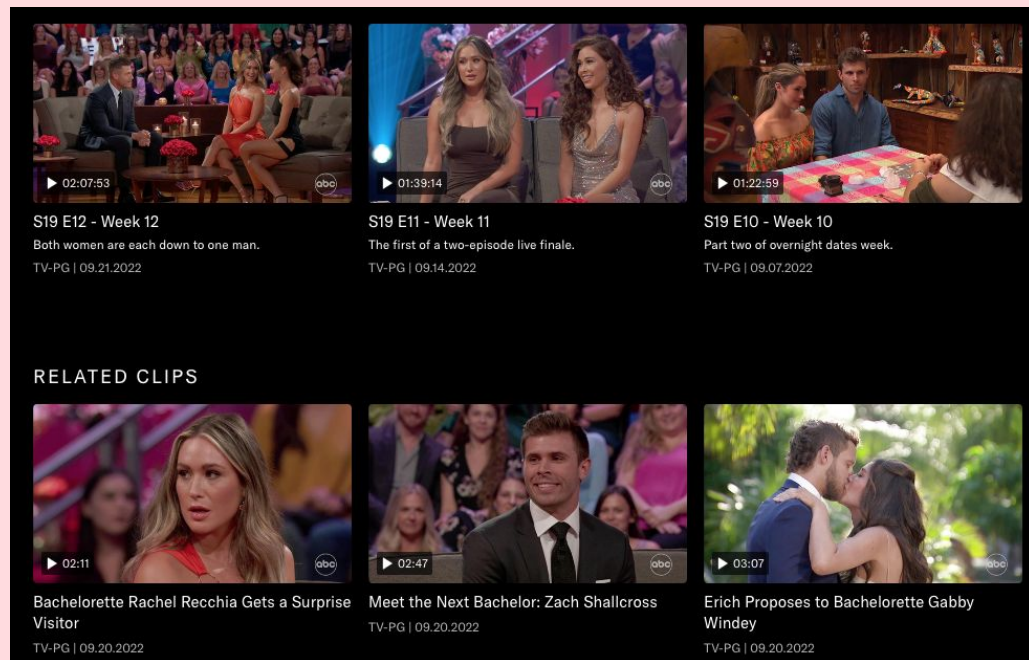
Exploratory
Analysis

03

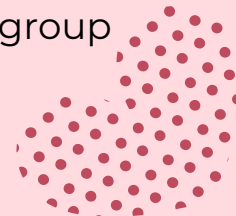
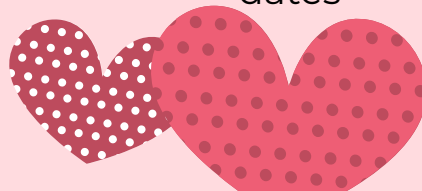
Textual
Analysis



Contextual Breakdown

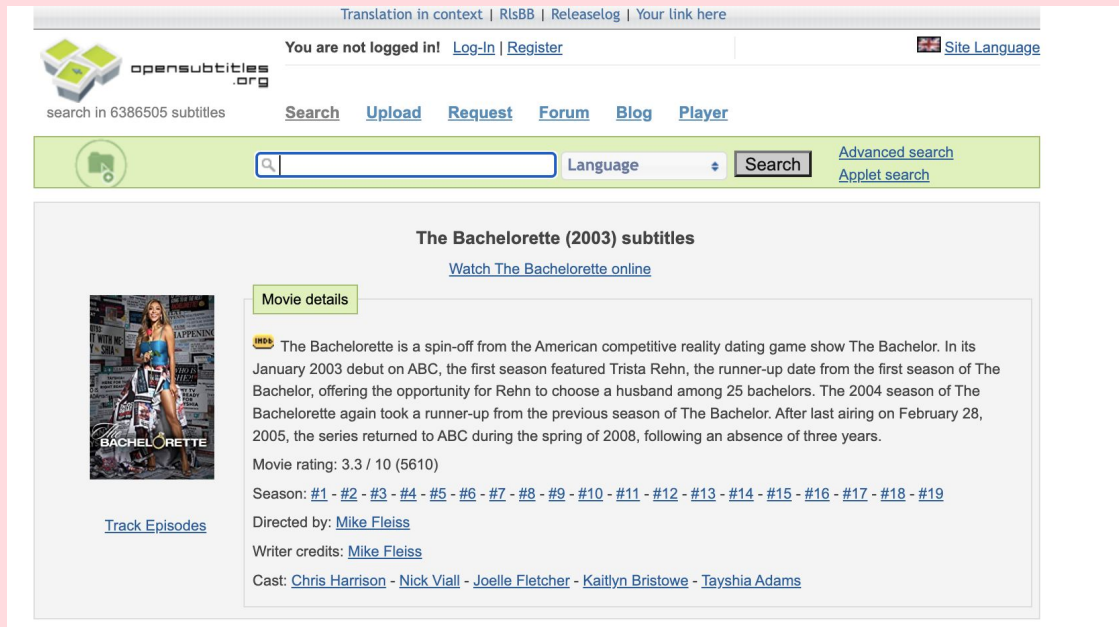


- ★ 11 episodes
- ★ Ea episode is ~80-95 mins (no ads)
- ★ As the season progresses, men get eliminated and relationships “deepen” to hopefully end in an engagement
- ★ Most episodes contain a mix of 1:1 dates and group dates



Data Collection

- ★ Text from each episode was downloaded from:
opensubtitles.org
- ★ .srt files transformed into manageable database
- ★ .srt files = plain text file that contains start and end timecodes of text and sequential number of subtitles
- ★ Does not contain speaker name identifiers



Data Cleaning

1
00:00:05,105 --> 00:00:07,508
<i>- I still can't believe
that I'm the Bachelorette,</i>

2
00:00:07,574 --> 00:00:08,842
<i>Rachel's the Bachelorette,</i>

3
00:00:08,909 --> 00:00:11,044
<i>we get this
amazing experience together</i>

4
00:00:11,111 --> 00:00:13,046
<i>to truly find love.</i>

5
00:00:17,317 --> 00:00:19,186
<i>- There's really no rule book
for this,</i>

6
00:00:19,253 --> 00:00:20,888
<i>so we're just going with it.</i>

episode	start_times	segment	5_min_interval	lines
0	1	2022-10-04 00:00:00	intro	0
i still cannot believe that i am the bachelorette rachel s the bachelorette we get this amazing experience together to truly find love there is really no rule book for this so we are just going with it but i have absolutely no doubt our future husbands are here if you could kiss one of us which one would it be both absolutely good answer i am having so much fun getting to know the guys so what do you think yeah he is a piece of oh love is in the air and i am so excited to see where things go from here i am so crazy about you and i do not want a future without you i am so happy right now what is up gabby what is up rachel what is up gabby what is up rachel meatball will you accept this rose i am sorry i cannot i am here for gabby meatball rejected my rose like this is the most embarrassing thing in my life no one s really ready to pick a lane and stay in it having two bachelorettes has provided struggle and i think it is all coming to a head i do have my intentions solely for rachel it is just like validating my fears things have obviously taken a turn what do you want to do i need to tell her this full truth you change your mind why am i even doing this life is so hard i am so done it is just so crazy that this is like the way it ends it is the most shocking season of the bachelorette yet and it starts right now hi i am jesse palmer and welcome to this extraordinary season of the bachelorette what makes it so extraordinary well for the first time in bachelor history we are going to have not one but two bachelorettes both looking for love and both hoping for a romantic proposal and let me just tell you it is going to be a wild ride the way to the end rachel recchia is a flight instructor who is not afraid to put her heart on the line gabby windey is an icu nurse with a sense of humor that is had of america laughing and personally i am so thrilled that these two amazing women will get a second chance to find love right here on this show so two women dating one group of men how is that going to work which woman gets to date which guy who chooses and then what happens if both women fall in love with the same man honestly i am not really sure but i am confident that gabby and rachel can figure it out the most important thing is that the women come in here with a plan of their own and then they support each other on this unusual quest to find love rachel and gabby represent their				

- ★ Feature Engineering
- ★ Text Pre-processing
- ★ 5 minute interval segments of all text

What were the most common words?

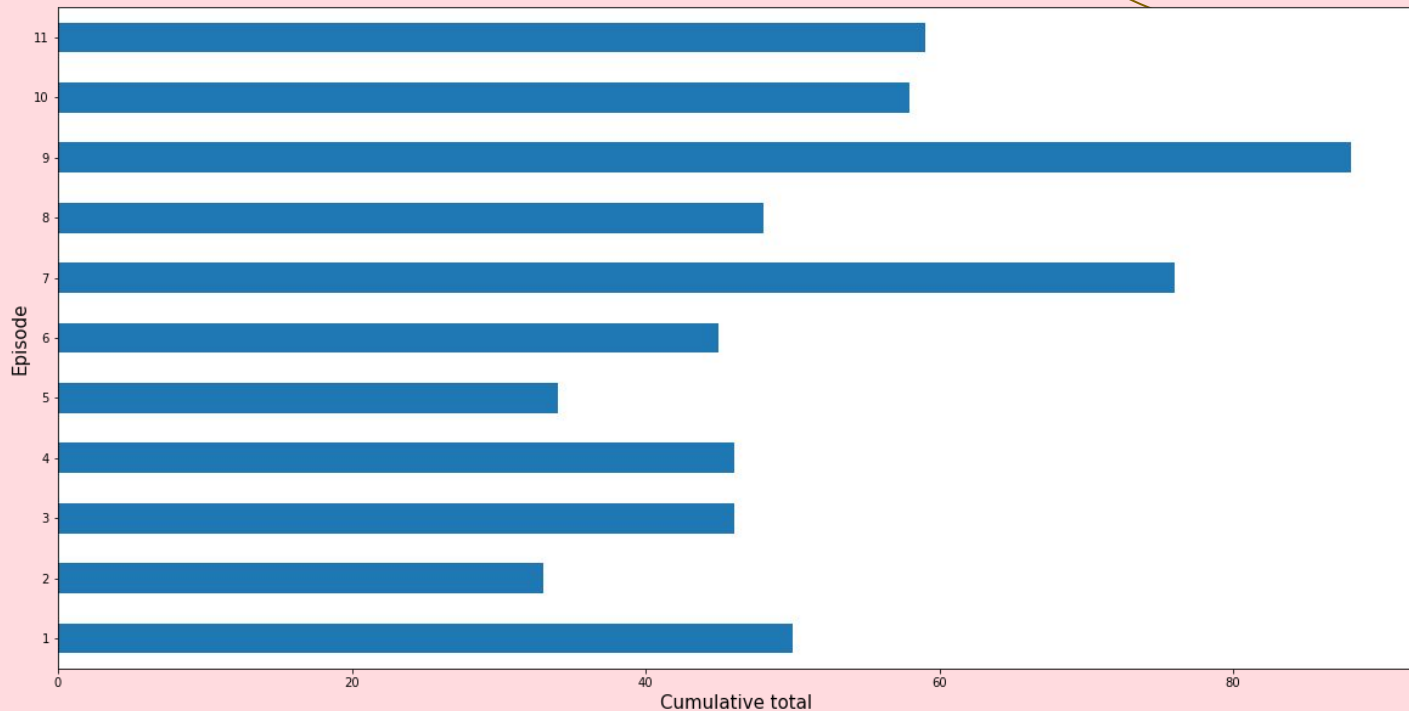
[illegible]

Exploratory Analysis II



How often does “love” get said as the season progresses?

- ★ Episode 7 = hometowns
- ★ Episode 9 = overnights
- ★ Episode 11 = finale

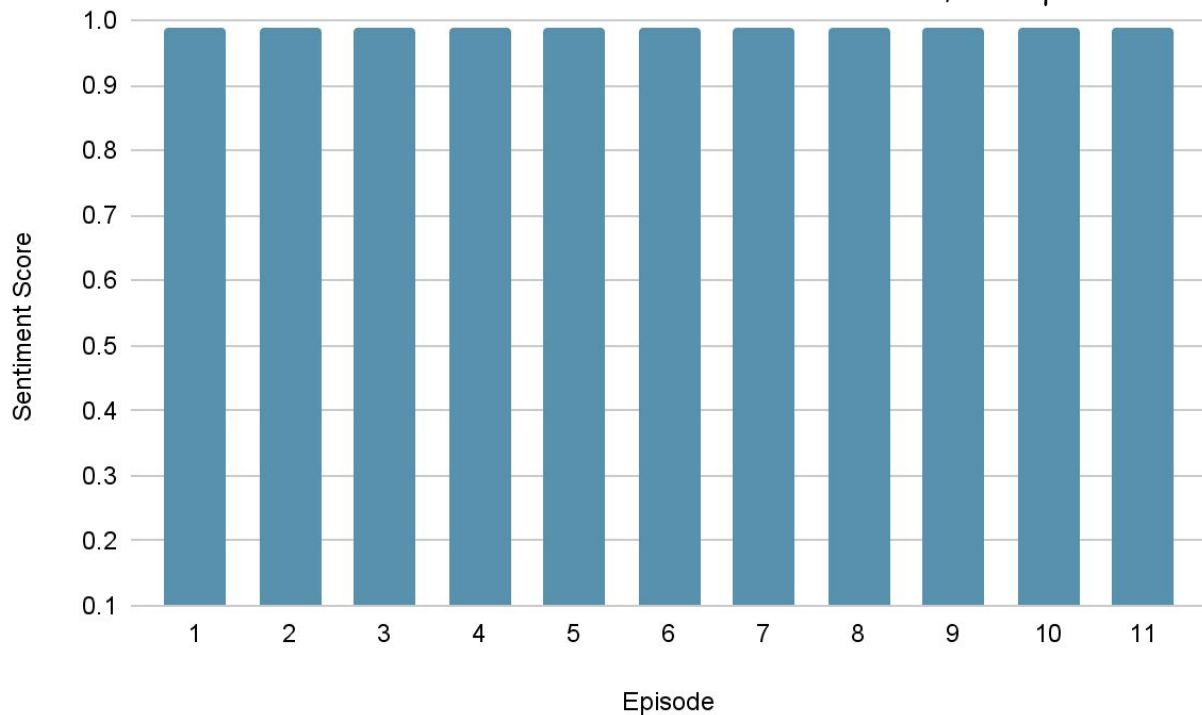


Textual Analysis I

What was the emotional tone of each episode?

Range is -1 to 1
(the higher the more positive)

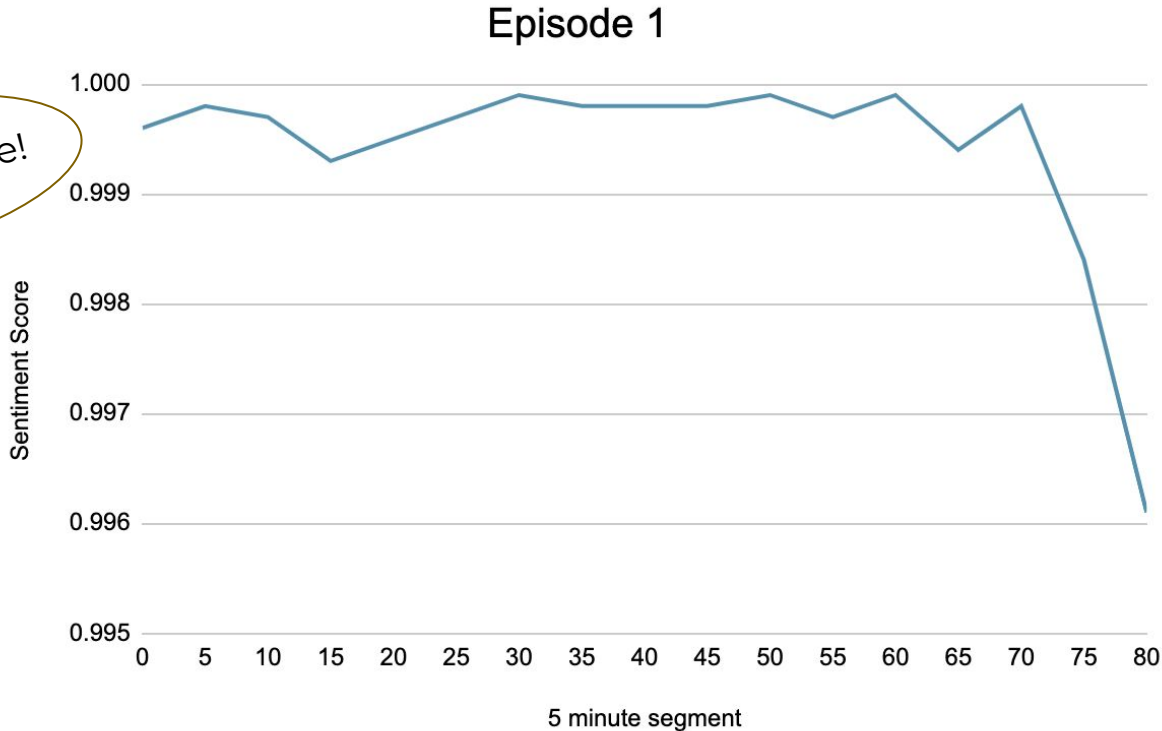
- ★ All are > 0.97
- ★ SUPER positive!?



Textual Analysis I

What was the emotional tone of each episode, across 5 min segments?

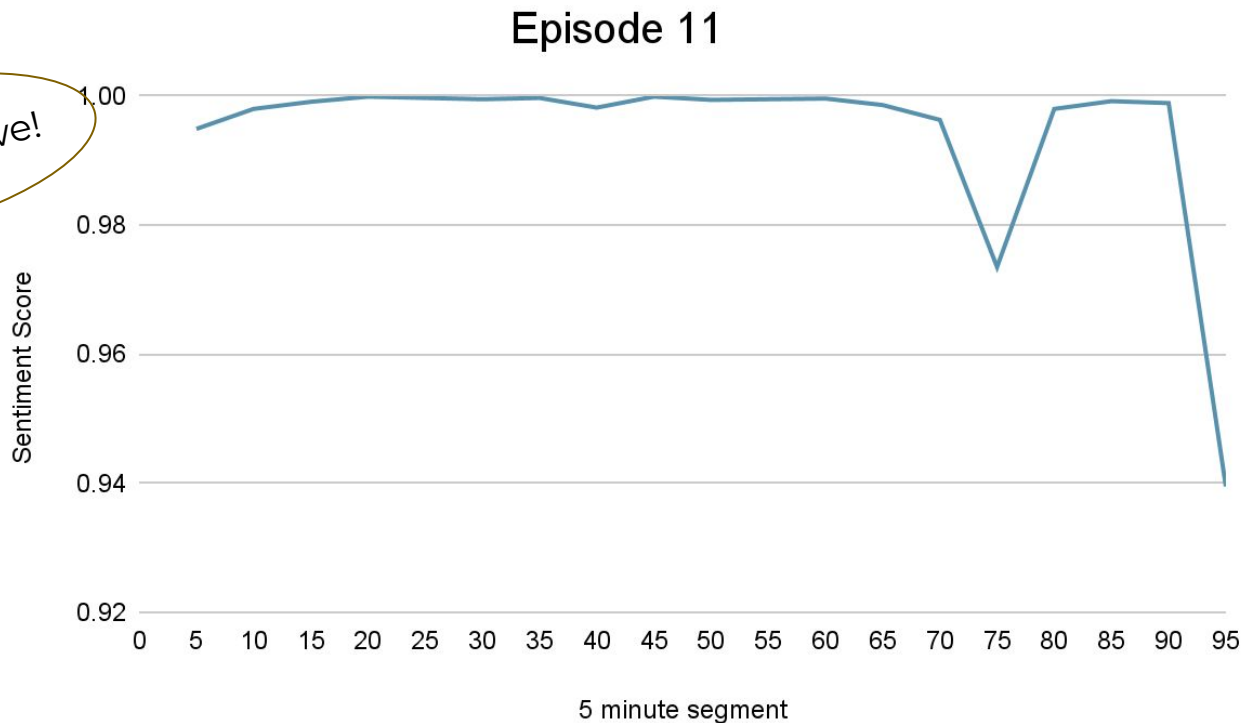
SUPER positive!



Textual Analysis I

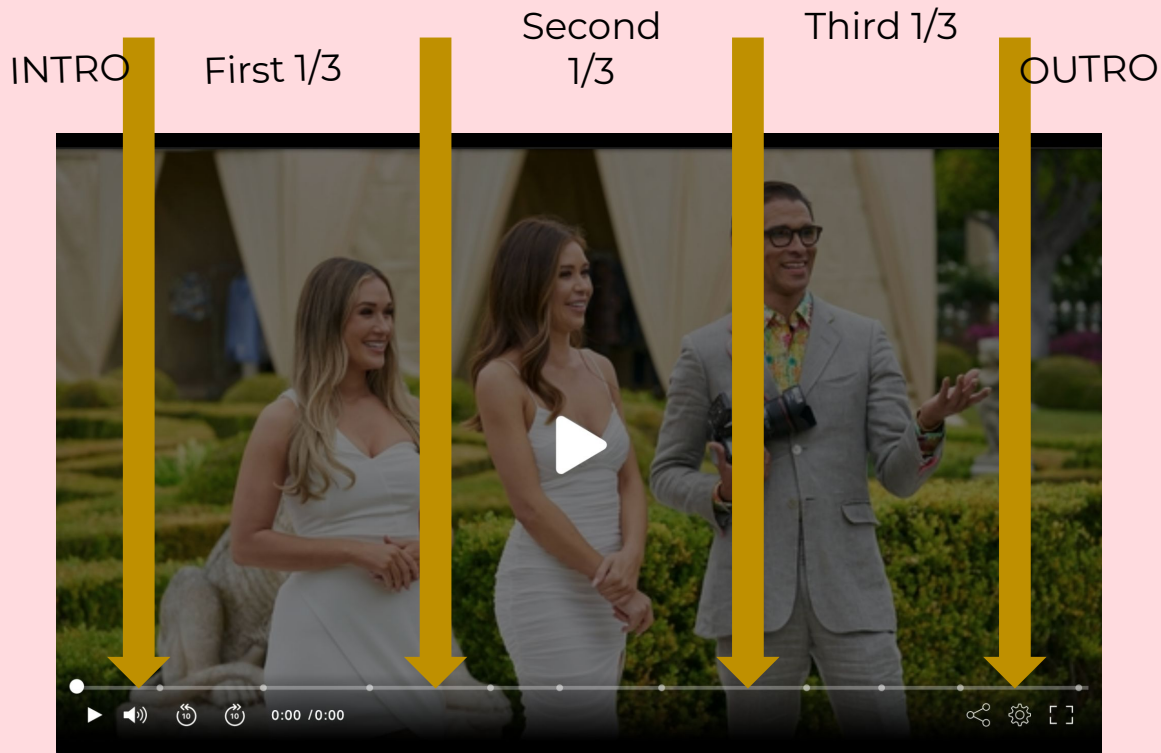
What was the emotional tone of each episode, across 5 min segments?

SUPER positive!

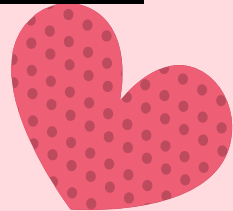


Textual Analysis II

What themes exist
within the
segments of the
show?



Combined these
segments across all
episodes

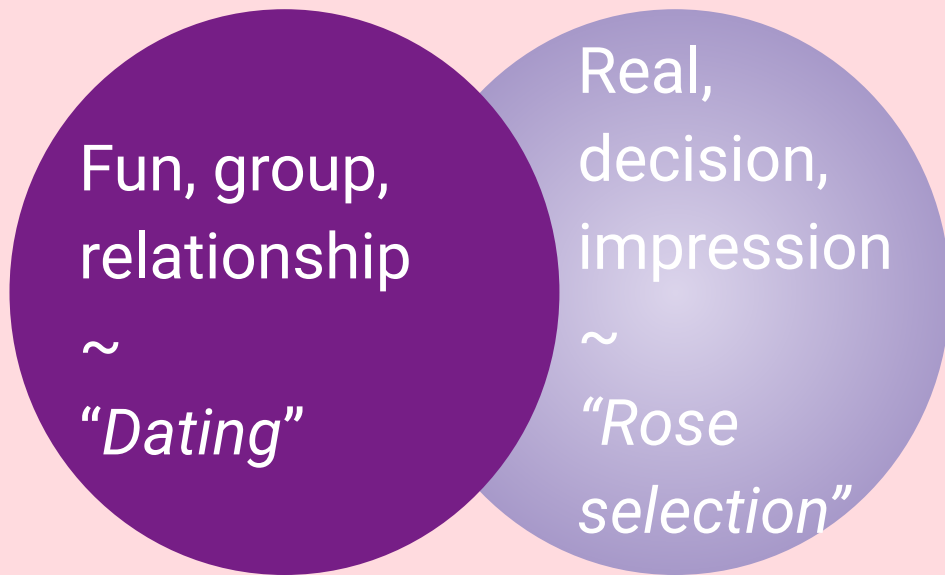


Textual Analysis II

After 24 topic models run, model #8 with two topics made the most sense!

Behind the Scenes:

- Only nouns, adjectives, and plural nouns
- Words that appeared in less than 25% of documents were removed
- Words that appeared in more than 80% of documents were removed

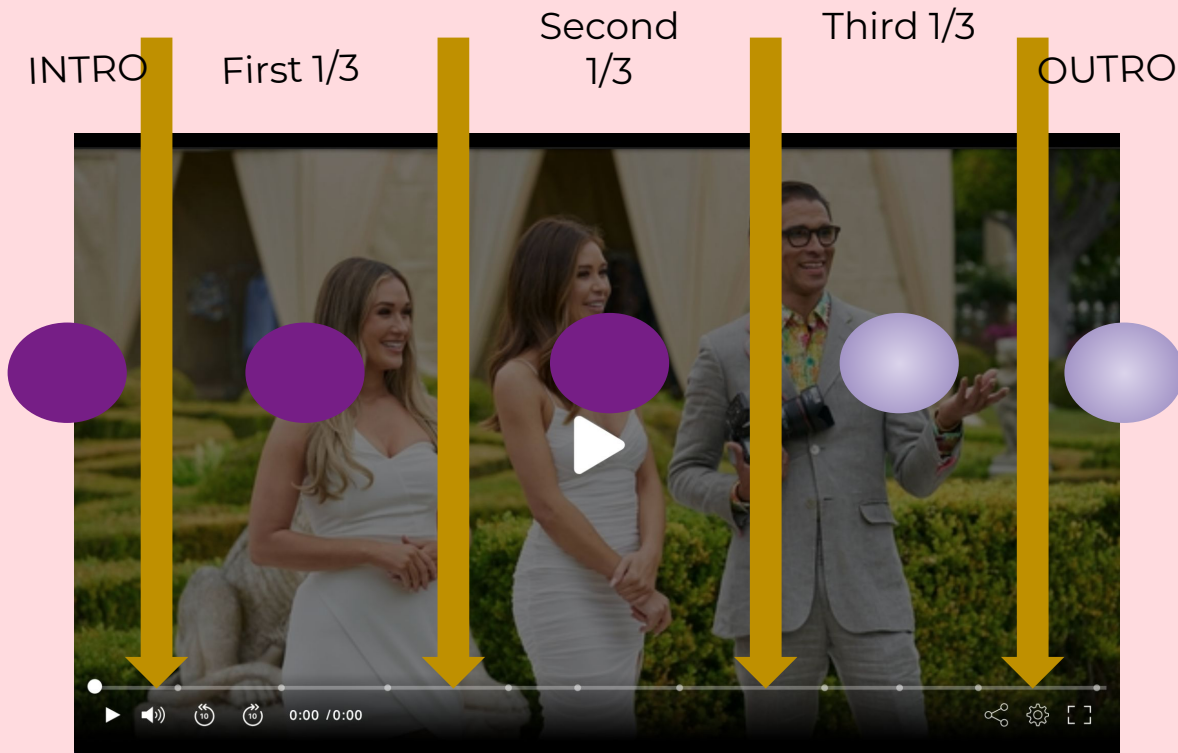


Textual Analysis II

Let's take a look at these topics to see which segments belong to which topic

Topic 1
"Dating"

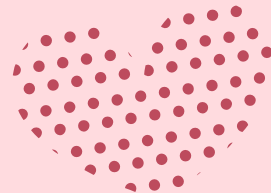
Topic 2
"Rose selection"



So, was it twice the drama?

- ★ Not much drama! Positive sentiment overall
- ★ Hard to say without comparison to single Bachelorette season
- ★ Drama could get lost in the text (i.e., no delineation on who said what)
- ★ Based of my own viewing of entire season, most drama happened in the final 1-2 episodes

Future Work



Lemmatize Text

01

Topic modeling
across episodes

02



03

Topic modeling
across each episode
x segment

04

Re-segment time
intervals

Thanks!

QUESTIONS?

CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon**, infographics & images by **Freepik**

