

# NLP and the Web - Lecture 2 - Q&A Session

Use your phone / tablet / second screen to participate

# Agenda for today

- Quick recap
- Quizzes
- Questions

# Linguistic Analysis Levels

- Phonetics and Phonology
- Segmentation
- Morphology
- Syntax
- Semantics
- Pragmatics and Discourse



# "Elementary, my dear Watson."

- Phonetics and Phonology
- Segmentation
- Morphology
- Syntax
- Semantics
- Pragmatics and Discourse



# "Elementary, my dear Watson."

- [əlɪməntəri, maɪ dɪər əwtsən]
- Segmentation
- Morphology
- Syntax
- Semantics
- Pragmatics and Discourse



# "Elementary, my dear Watson."

- [əlɪməntəri, maɪ dɪər ˈwɔːtsən]
- ["Elementary", ";", "my", ...]
- Morphology
- Syntax
- Semantics
- Pragmatics and Discourse



# "Elementary, my dear Watson."

- [əlɪməntəri, maɪ dɪər ˈwɔtsən]
- ["Elementary", ",", "my", ...]
- Base: Element, Suffix: -ary
- Syntax
- Semantics
- Pragmatics and Discourse



# "Elementary, my dear Watson."

- [əlɪməntəri, maɪ dɪər ˈwɔːtsən]
- ["Elementary", ",", "my", ...]
- Base: Element, Suffix: -ary
- ADJ, PRP\$ ADJ NNP
- Semantics
- Pragmatics and Discourse



# "Elementary, my dear Watson."

- [əlɪməntəri, maɪ dɪər ˈwɔtsən]
- ["Elementary", ".", "my", ...]
- Base: Element, Suffix: -ary
- ADJ, PRP\$ ADJ NNP
- Dr. Watson, John (not IBM)
- Pragmatics and Discourse



# "Elementary, my dear Watson."

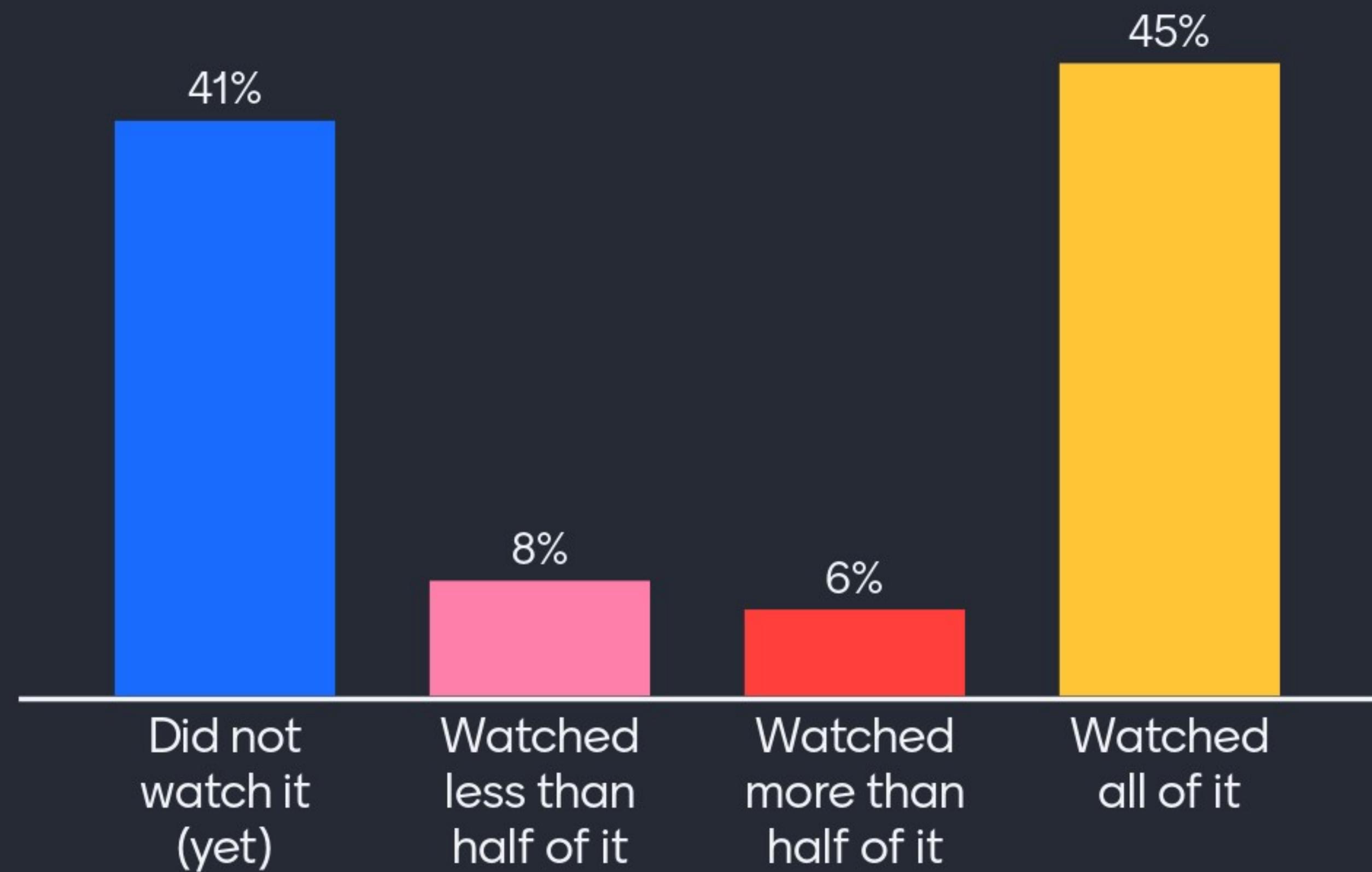
- [əlɪməntəri, maɪ dɪər ˈwɔtsən]
- ["Elementary", ".", "my", ...]
- Base: Element, Suffix: -ary
- ADJ, PRP\$ ADJ NNP
- Dr. Watson, John (not IBM)
- "You are so stupid..."



# Any questions?

14 questions  
2 upvotes

# Did you watch the lecture video for today?





Please enter the quiz  
on [www.menti.com](http://www.menti.com)

# Question 1

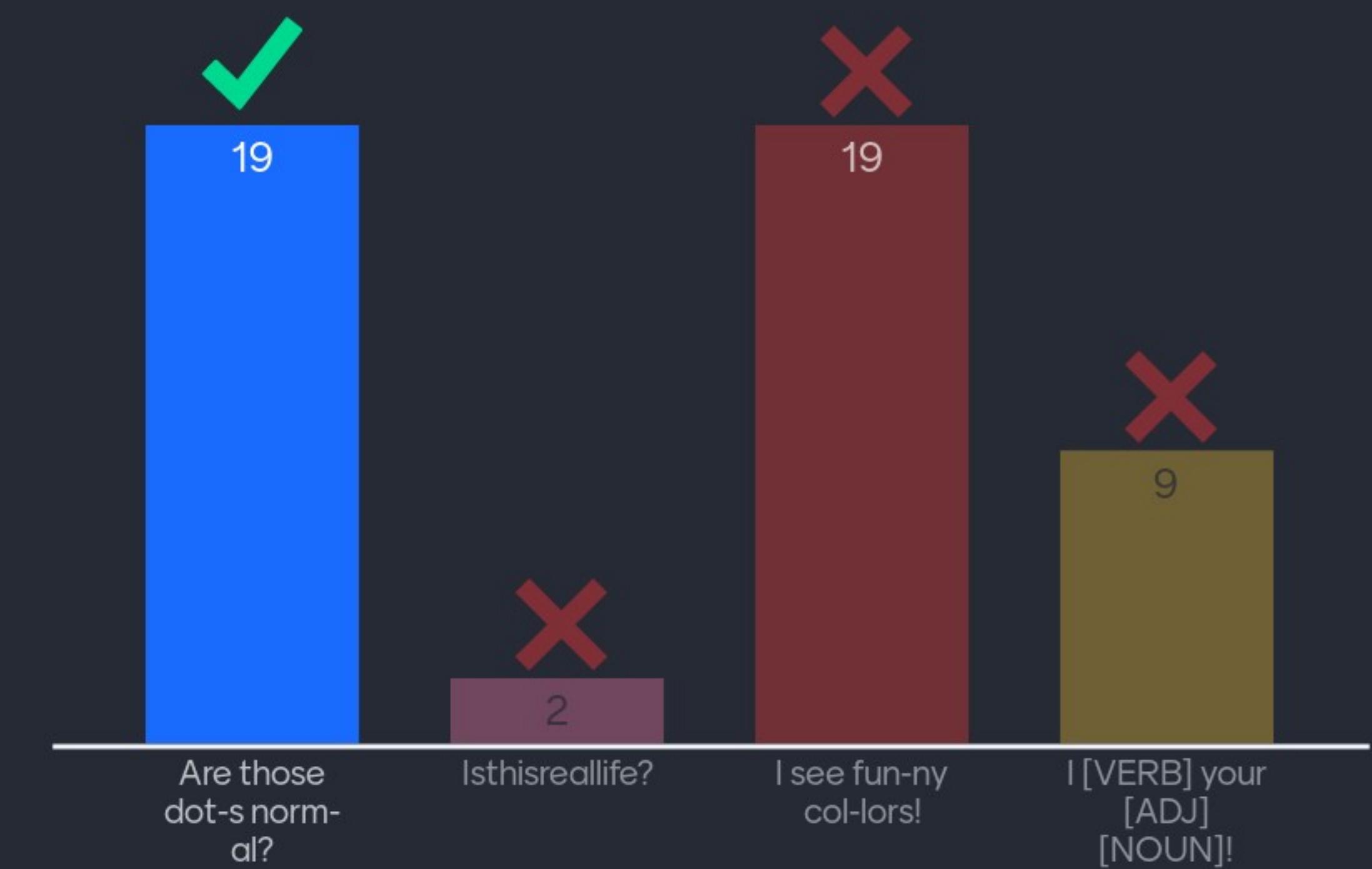
It is your first day as a nurse in the famous UKP hospital, and you are very nervous. The head physician, Dr. med. Arnold, gives you your first task: Calm down a patient by giving him a dose of Morphine. Should be easy!

Sadly, you mix up the medicine and give the patient a dose of "Morphemes" instead. The patient now talks in Morphemes! What will the patient reply to you?

(Which following option consists of morphemes?)



# Which following option consists of morphemes?



# Leaderboard



## Question 2

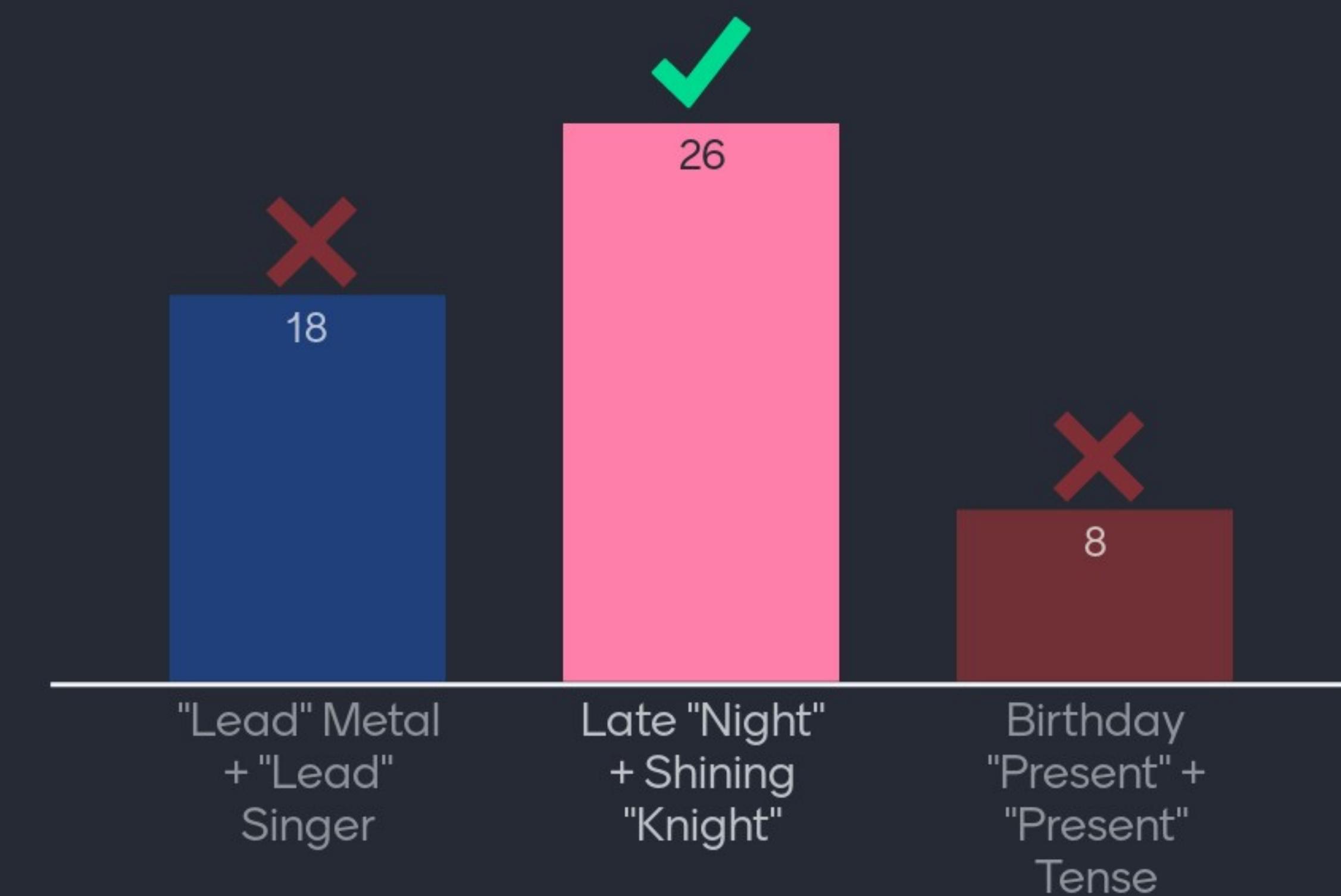
The World Wrestling Federation extends its portfolio of wrestling leagues to increase its fans and demonstrate diversity. To the surprise of all wrestling fans, they start with introducing the "Homograph Only Tag Team European Association" (HOT TEA), where two wrestlers can only participate if their names are homographs.

Which of these teams can not participate in the homograph league?

(Which of these phrases does NOT contain a phonograph?)



# Which of these phrases does NOT contain a homograph?



# Leaderboard



# Question 3

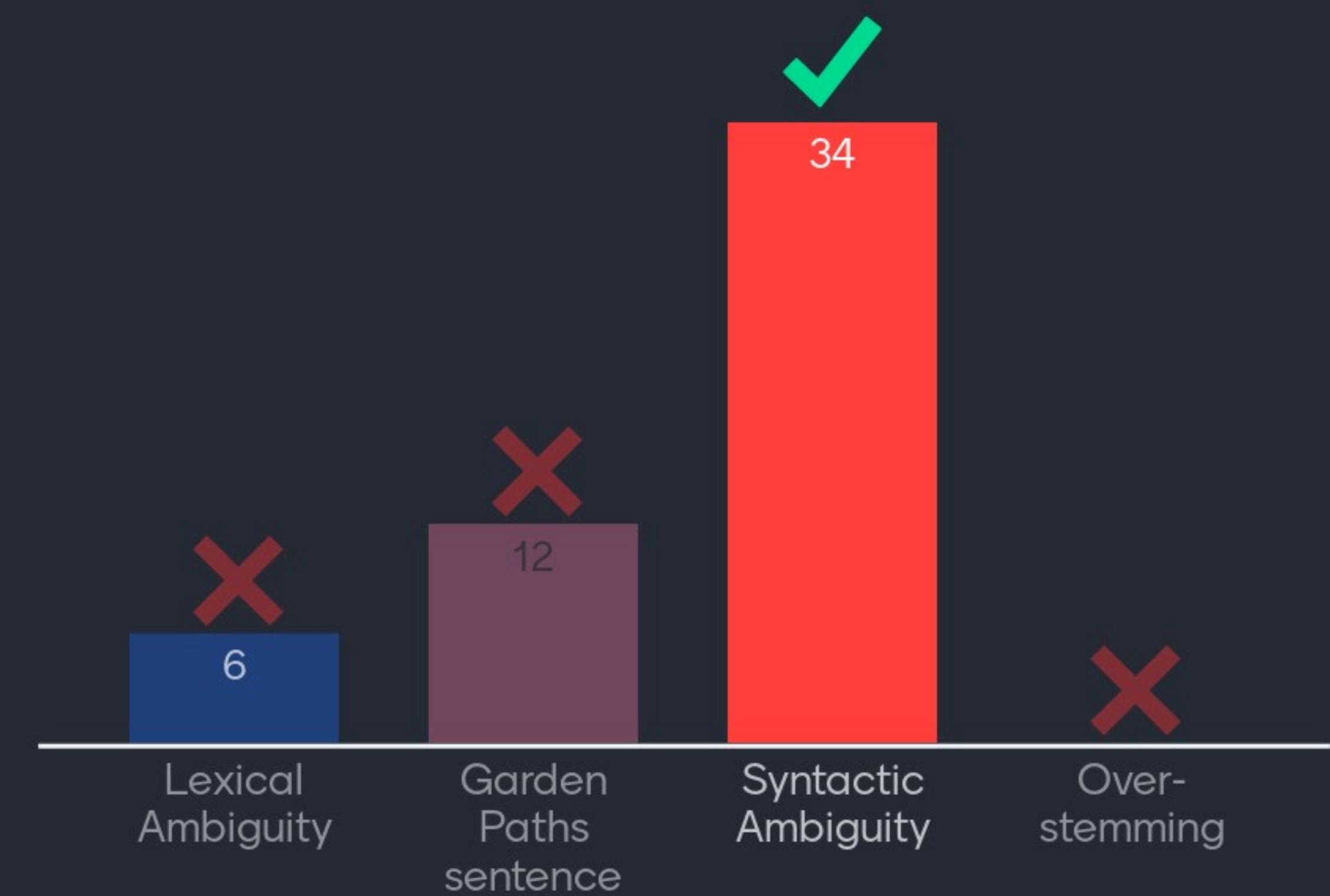
You are applying for a new job as "Viceroy of NLP Research Excellence" at a renowned company. In the job interview, the recruiter wants to know you better and asks you about your hobbies. In your nervousness, you respond:

"I like grilling burgers and my friends!"

Which ambiguity is contained in that sentence?



# Which ambiguity is in "I like grilling burgers and my friends!"?



# Leaderboard



## Question 4 - Textual answer



The bomb ticks incessantly, there is no escape. The crazy and extremely dangerous NLP villain "Doctor Octo-POS" has provided this treacherous explosive device with a linguistic riddle - only you and your knowledge from the lecture can save the city now! The riddle reads:

"If you can find the head of the phrase  
you get to leave this dangerous place.  
But if the head of the phrase is missed  
then you abruptly cease to exist."

You see a piece of paper - except for the first words "This is..." all further words are marked as a nominal phrase. 60 seconds.

Can you find the head of the following nominal phrase?

This is [my grandma's old gold ring that she gave me for my birthday many years ago].

Ring



gold ring



My



my grandma's



This is my grandma's old gold ring



my grandma's old gold ring



many years ago



My grandmas's old gold ring



the



The correct answer is: ring

# Leaderboard



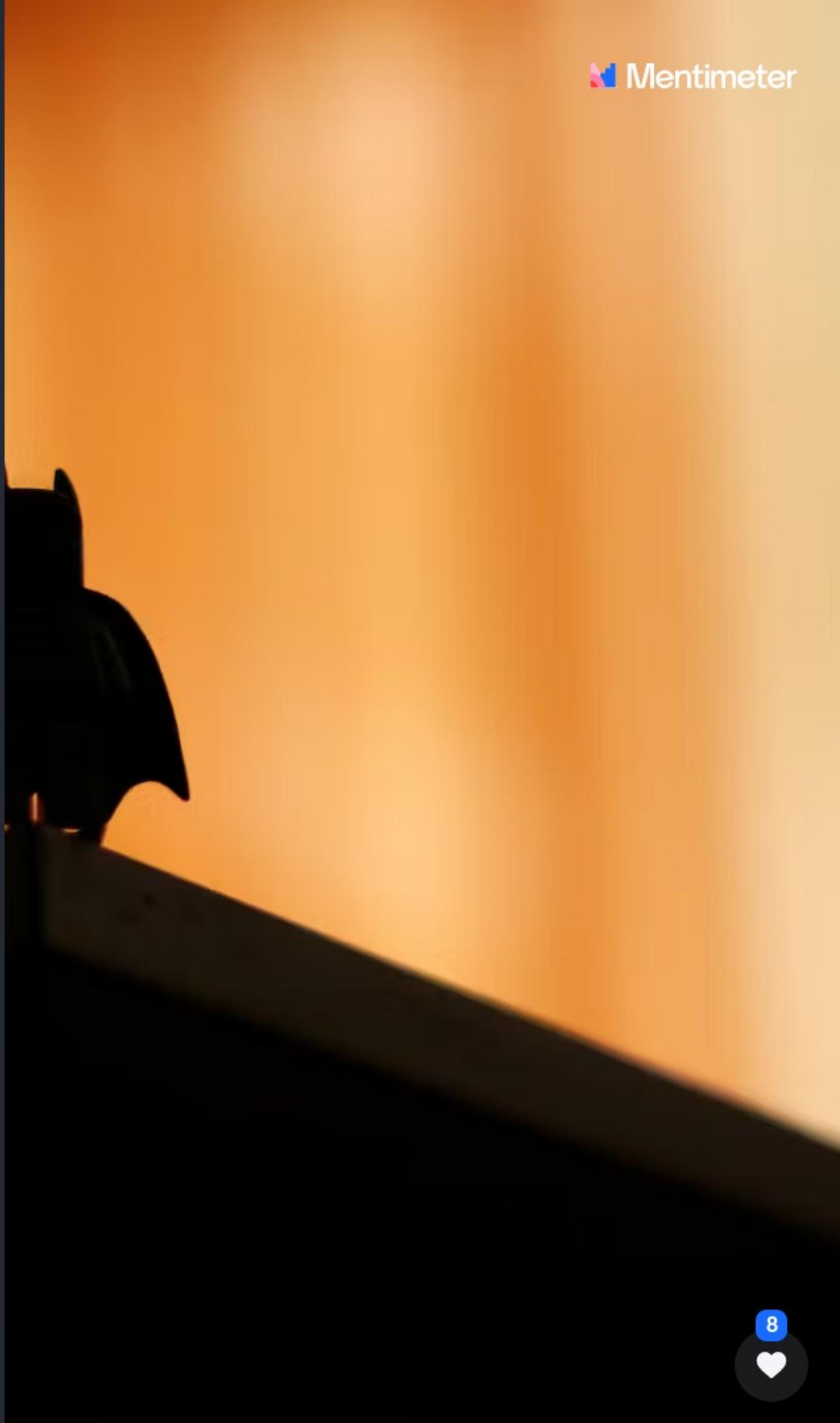
# Question 5

Behold, the earth is attacked by an evil force of infernal NLP energy! A foul, fiendish foe, a diabolic, destructive demon, a malignant, mischievous monster, only known by his nefarious nickname:

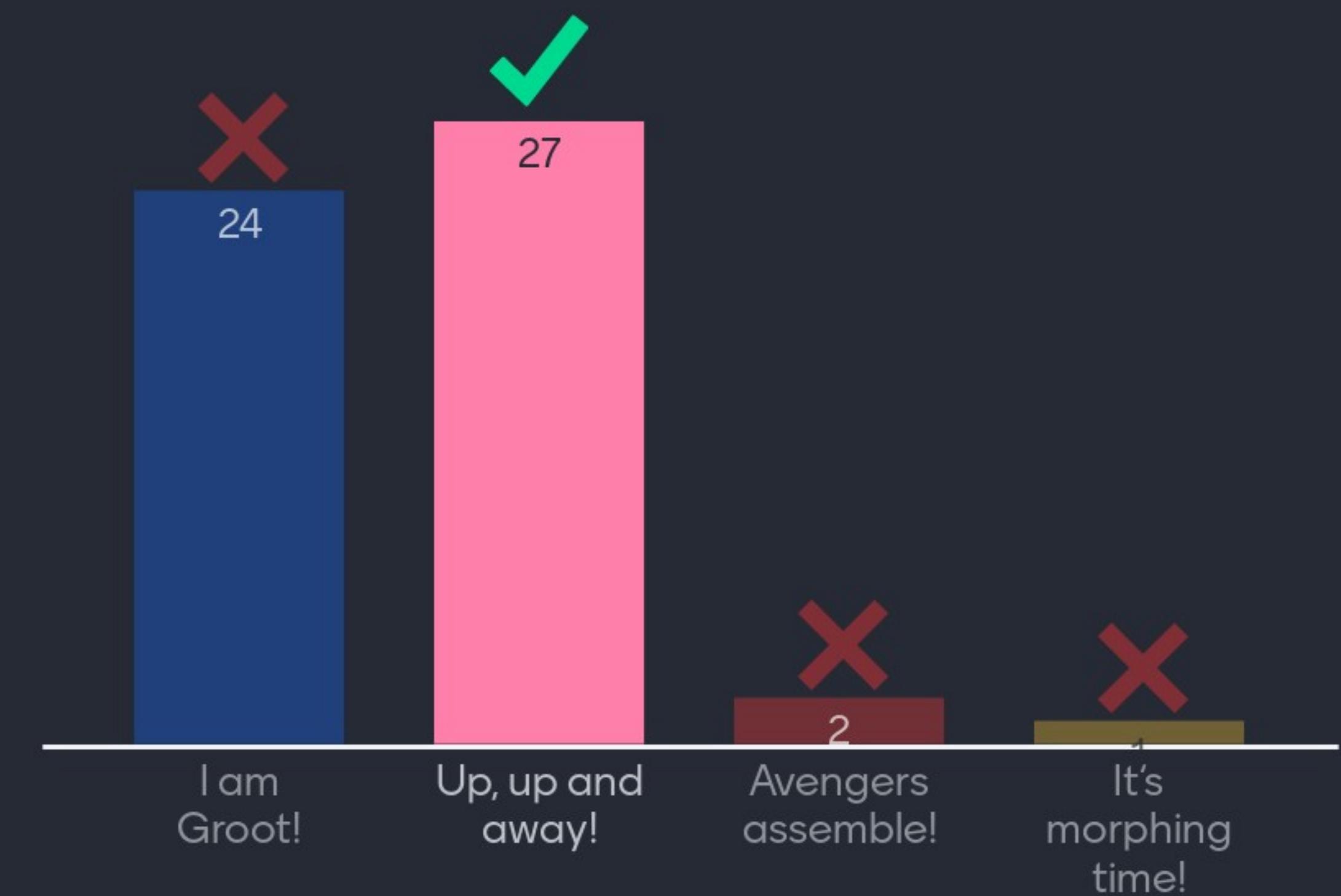
THE LEMMATIZER!

Strong superheroes join forces in a battle of epic proportions, each one shouting their signature catchphrase before attacking the enemy.

Which of these catchphrases is most effective, because it will not be changed by a LEMMATIZER?



# Which catchphrase is not changed by a LEMMATIZER?



# Leaderboard



# Any questions?

14 questions  
2 upvotes

A screenshot of a Google search results page. The search query "sentences with ambiguity" is entered in the search bar. Below the search bar, there are navigation links: "Alle" (selected), "Bilder", "News", "Videos", "Shopping", "Mehr", and "Suchfilter". The search results indicate approximately 16.4 million results found in 0.57 seconds. A section titled "Ambiguity sentence example" lists several examples:

- Their actions showed moral ambiguity ...
- The ambiguity begins to disappear as more explanations are made. ...
- This statement has a lot of ambiguity ...
- She chose her clothing carefully to avoid gender ambiguity . ...
- The ambiguity cannot be cured. ...
- They found possible ambiguity in interpretation.

[Weitere Einträge...](#)

<https://sentence.yourdictionary.com/ambiguity>

[Use ambiguity in a sentence](#)

Informationen zu hervorgehobenen Snippets · Feedback geben

## Ambiguity

# Ambiguity

Tim isn't coming to the movies so tell J.D. that we will see him on Sunday. He should bring beer or wine and pudding.

Now call me a taxi!



Ambiguity

# Ambiguity

- Intrinsic characteristic of human conversations
- Some are easy for humans, some are hard
- Very challenging for NLP: Disambiguation

# Any questions?

14 questions  
2 upvotes

# Next week: Text Classification I

Live Lecture (Zoom)



Any final words / feedback?

