

# Assignment 9 Tips/Practice

# Uhura caught the tribble with the tricorder under the ship



N V D N P D N P D N  
Uhura caught the tribble with the tricorder under the ship

$NP \rightarrow D \bar{N}$

$NP \rightarrow \bar{N}$

$\bar{N} \rightarrow A \bar{N}$

$\bar{N} \rightarrow \bar{N} PP$

$\bar{N} \rightarrow \bar{N} CP$

$\bar{N} \rightarrow N$

$CP \rightarrow C S$

$S \rightarrow NP VP$

$S \rightarrow CP VP$

$PP \rightarrow P NP$

$PP \rightarrow P$

$VP \rightarrow VP PP$

$VP \rightarrow VP CP$

$VP \rightarrow V NP$

$VP \rightarrow Aux VP$

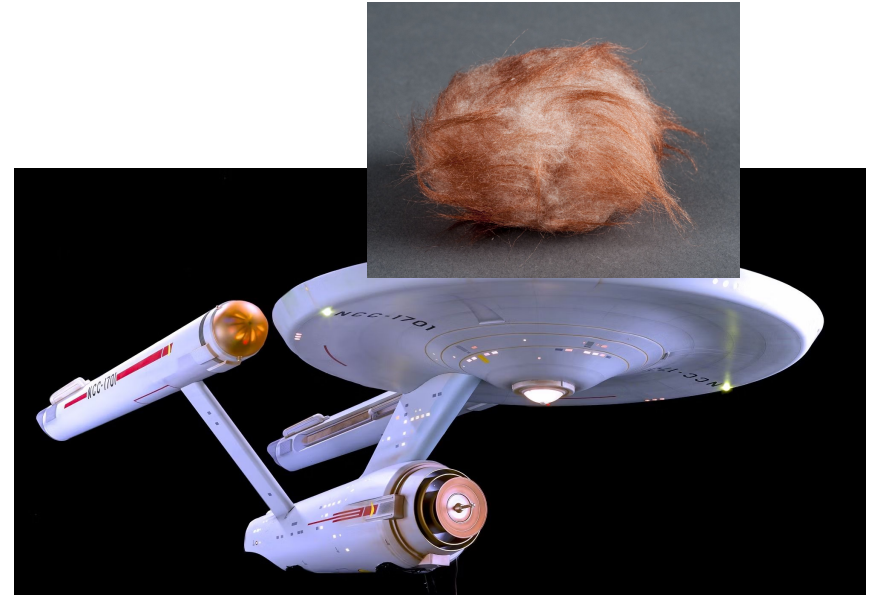
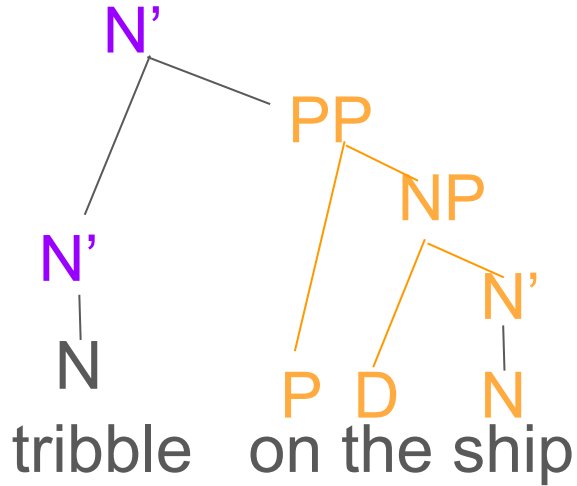
$VP \rightarrow V$

$\alpha \rightarrow \alpha \text{ and } \alpha,$

$\begin{matrix} N & V & D & N & P & D & N & P & D & N \\ \text{Uhura} & \text{caught} & \text{the} & \text{tribble} & \text{with} & \text{the} & \text{tricorder} & \text{under} & \text{the} & \text{ship} \end{matrix}$

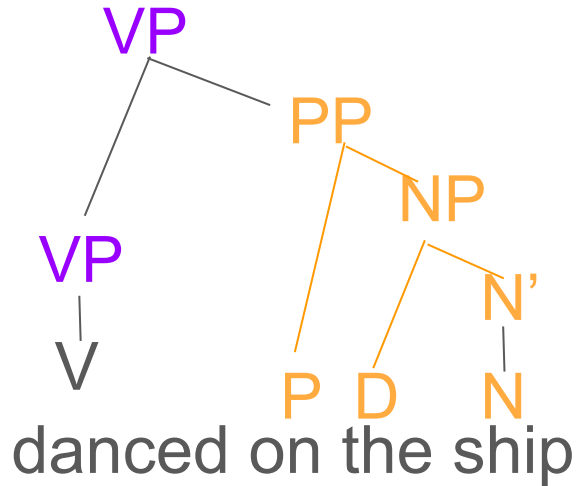
Notice that PPs can attach to a variety of things:

They can attach to a N':  $N' \rightarrow N' PP$



Notice that PPs can attach to a variety of things:

They can attach to a VP: VP → VP PP

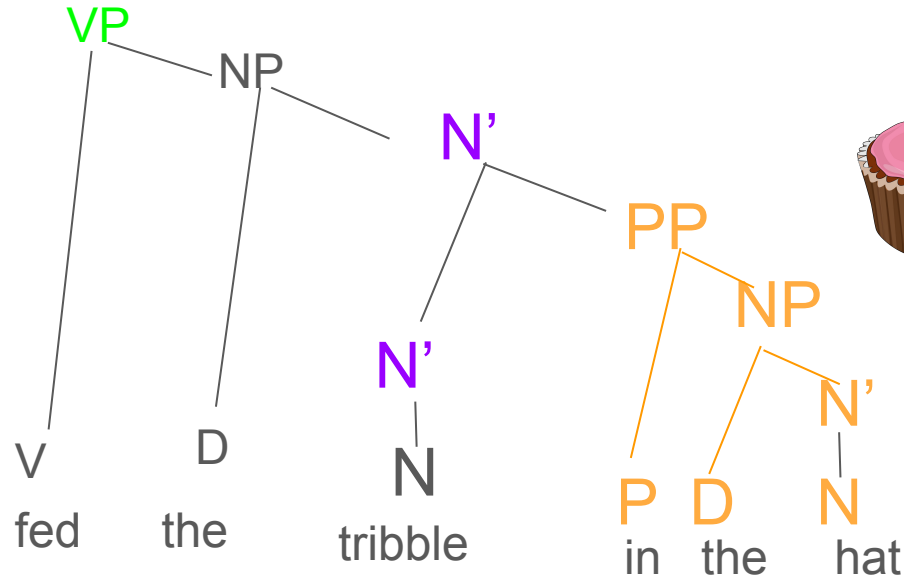


Notice that PPs can attach to a variety of things:

They can attach to a N' inside of a VP:  $N' \rightarrow N' PP$

$NP \rightarrow D N'$

$VP \rightarrow V NP$

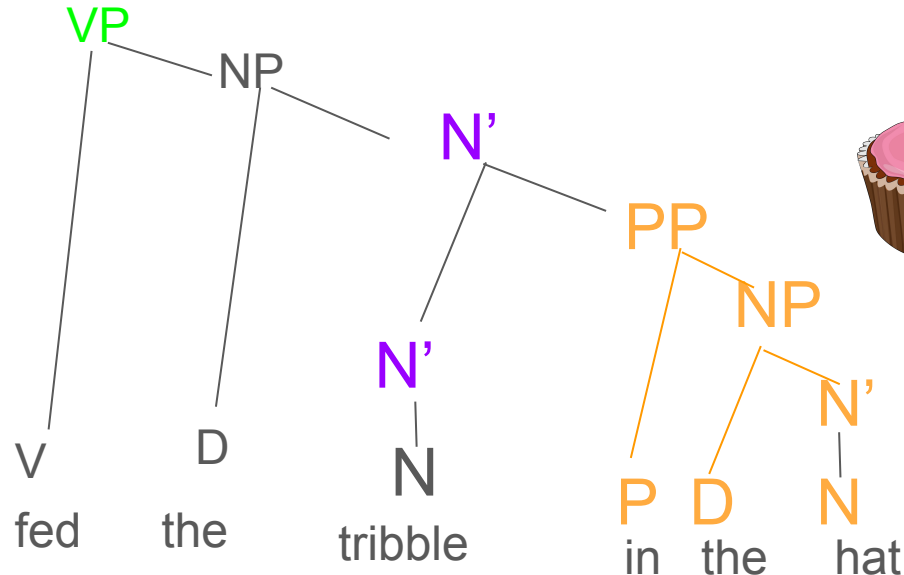


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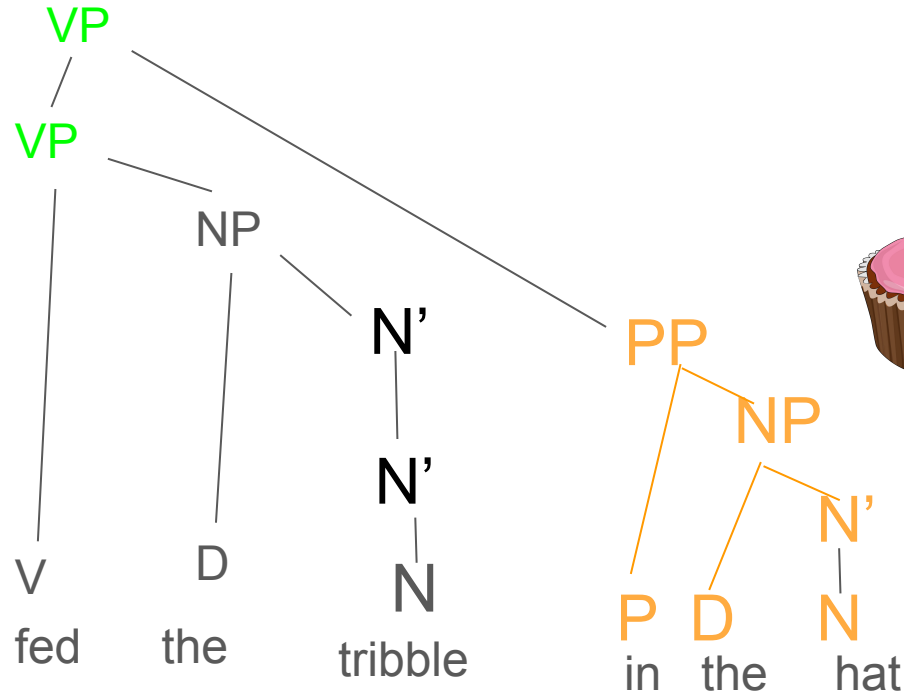
$VP \rightarrow V NP$





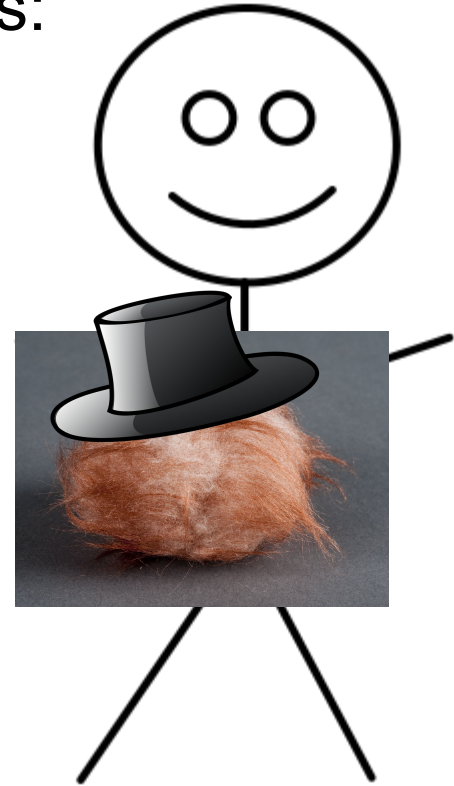
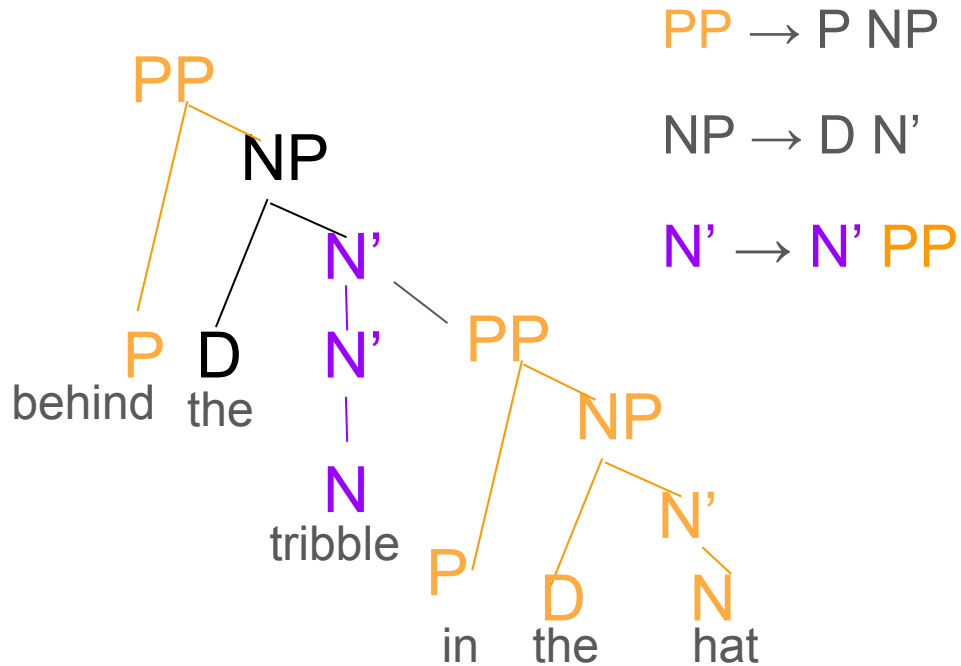
# Notice that PPs can attach to a variety of things:

They can also instead attach to the whole VP to describe the whole action: VP → VP PP



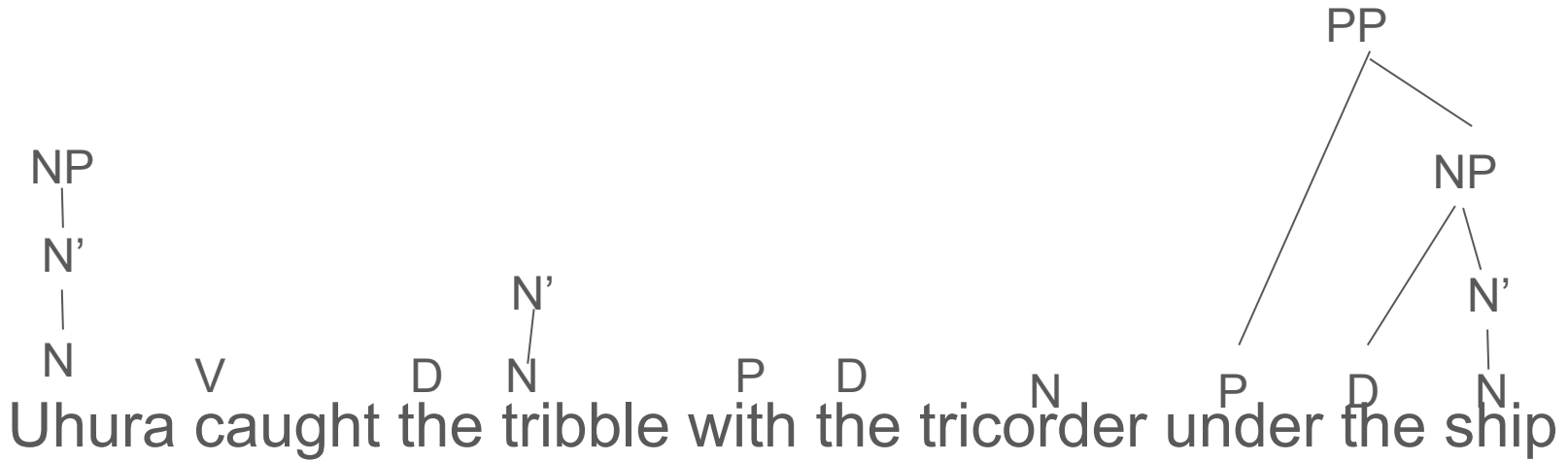
Notice that PPs can attach to a variety of things:

They can attach to a N' inside of another PP:

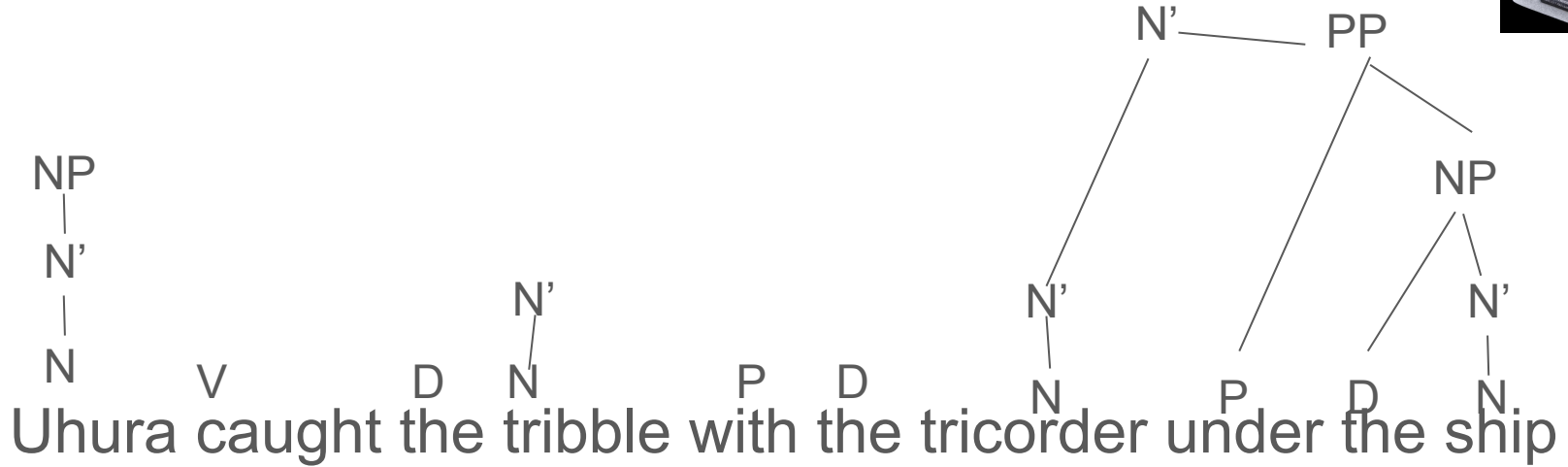


While looking for all the parses on Assignment 9, think about all the alternative places (N's, VPs, N's inside VPs, N's inside PPs) you can attach each PP to

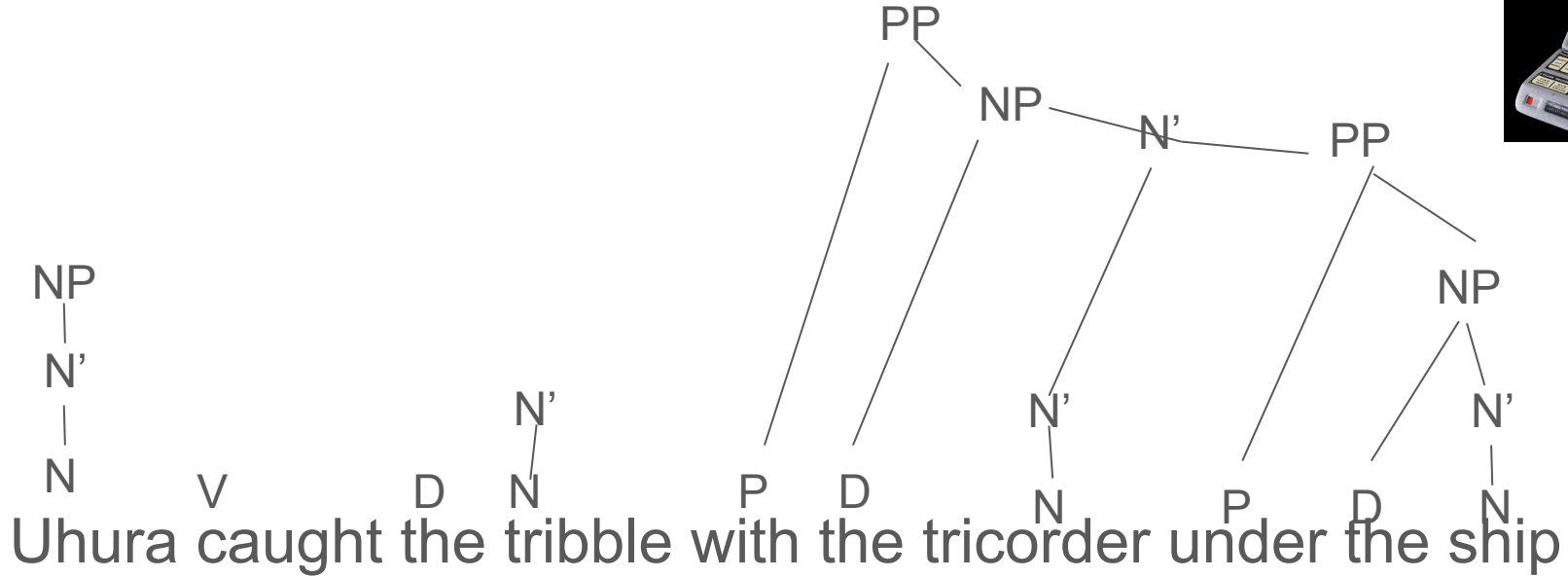
Example



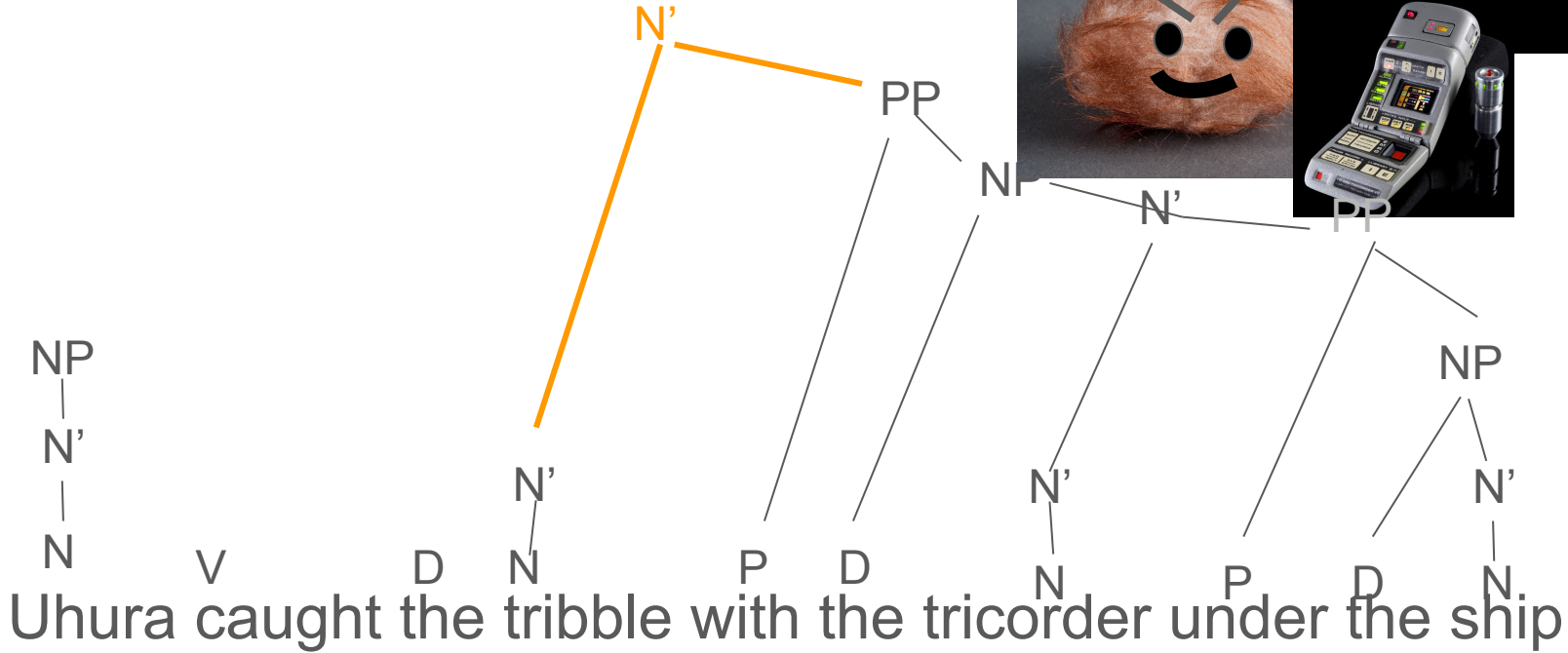
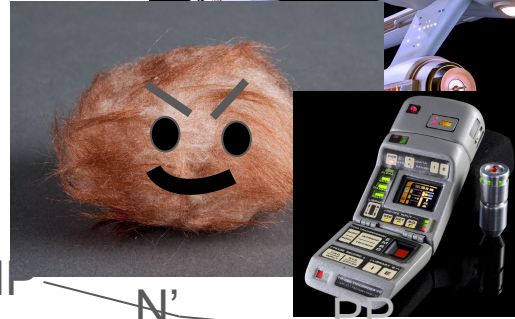
tricorder under the  
ship



with the tricorder  
under the ship



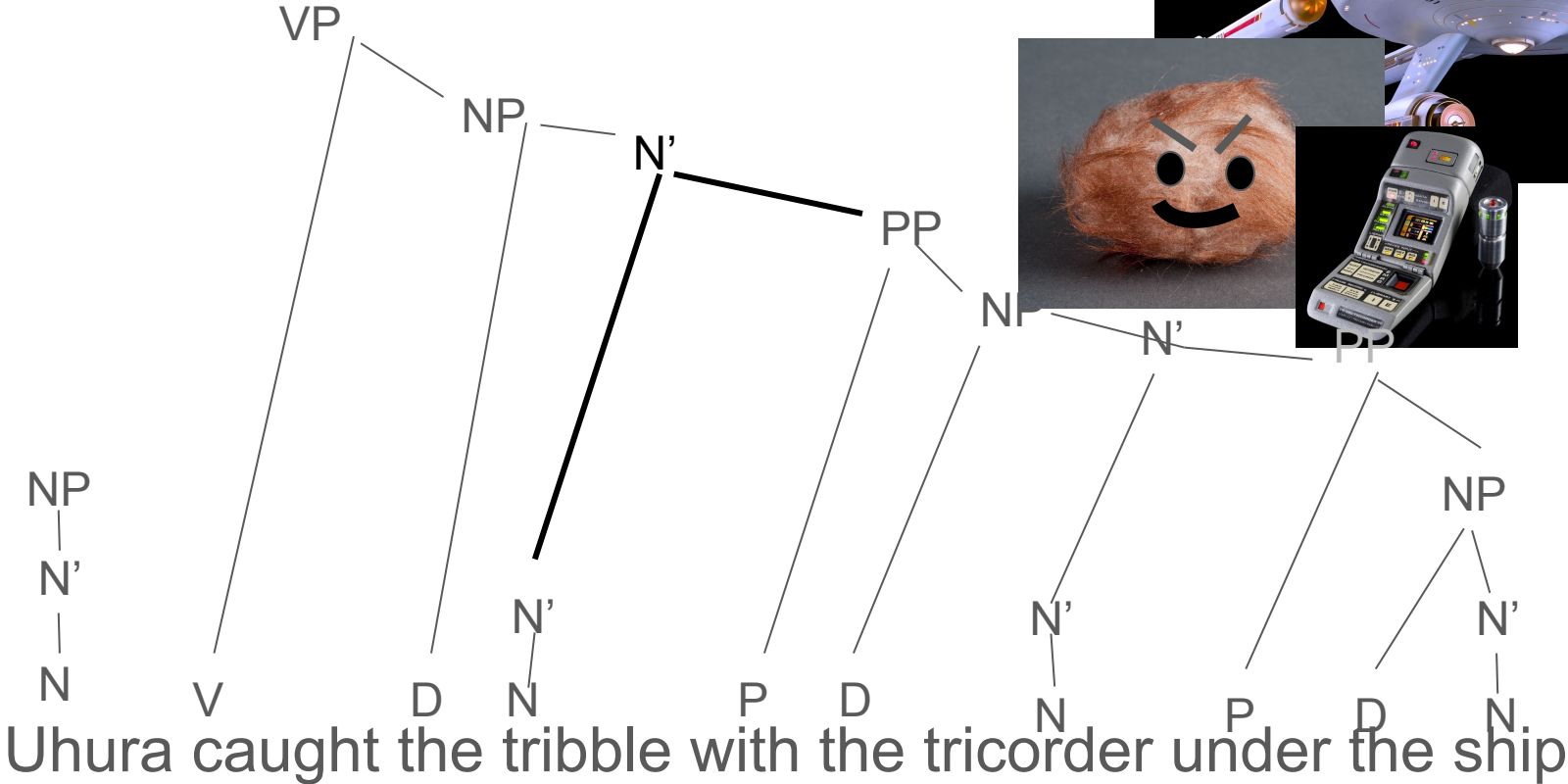
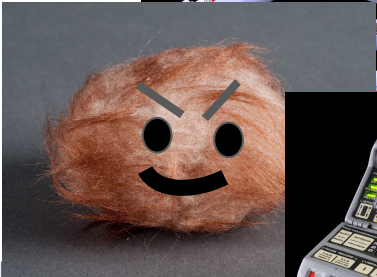
tribble with the tricorder under the ship





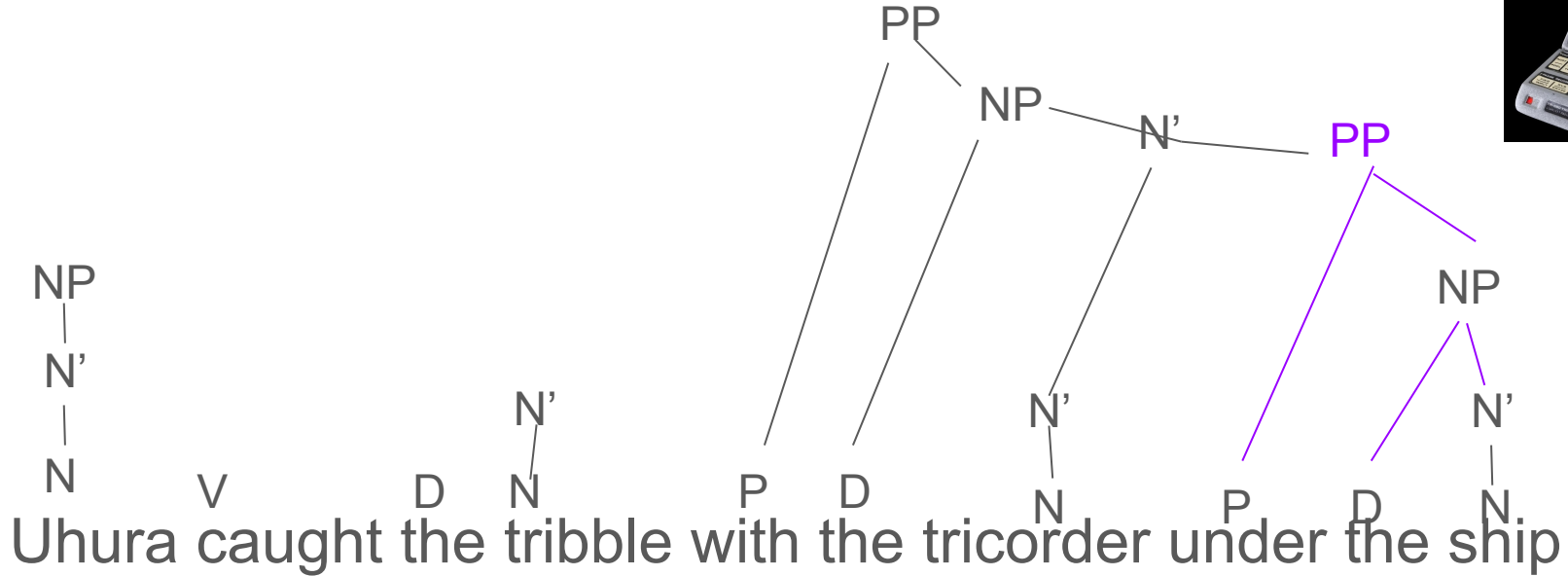


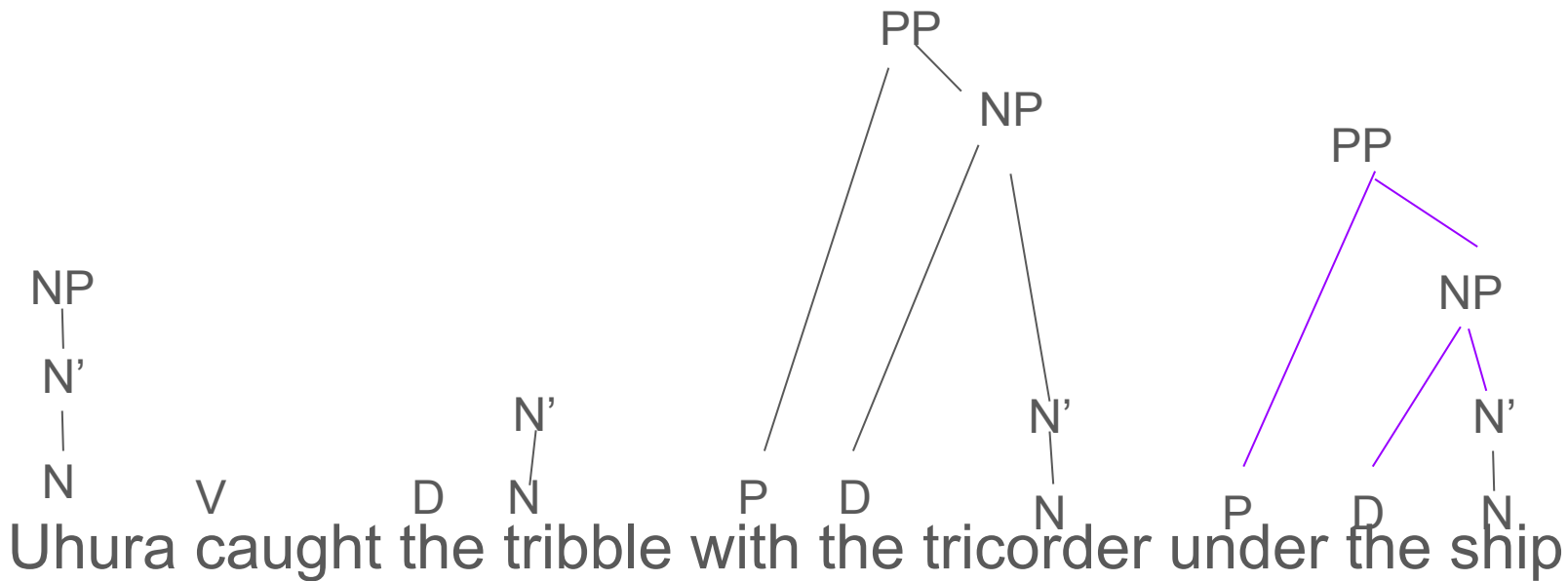
caught the tribble with the tricorder under the ship





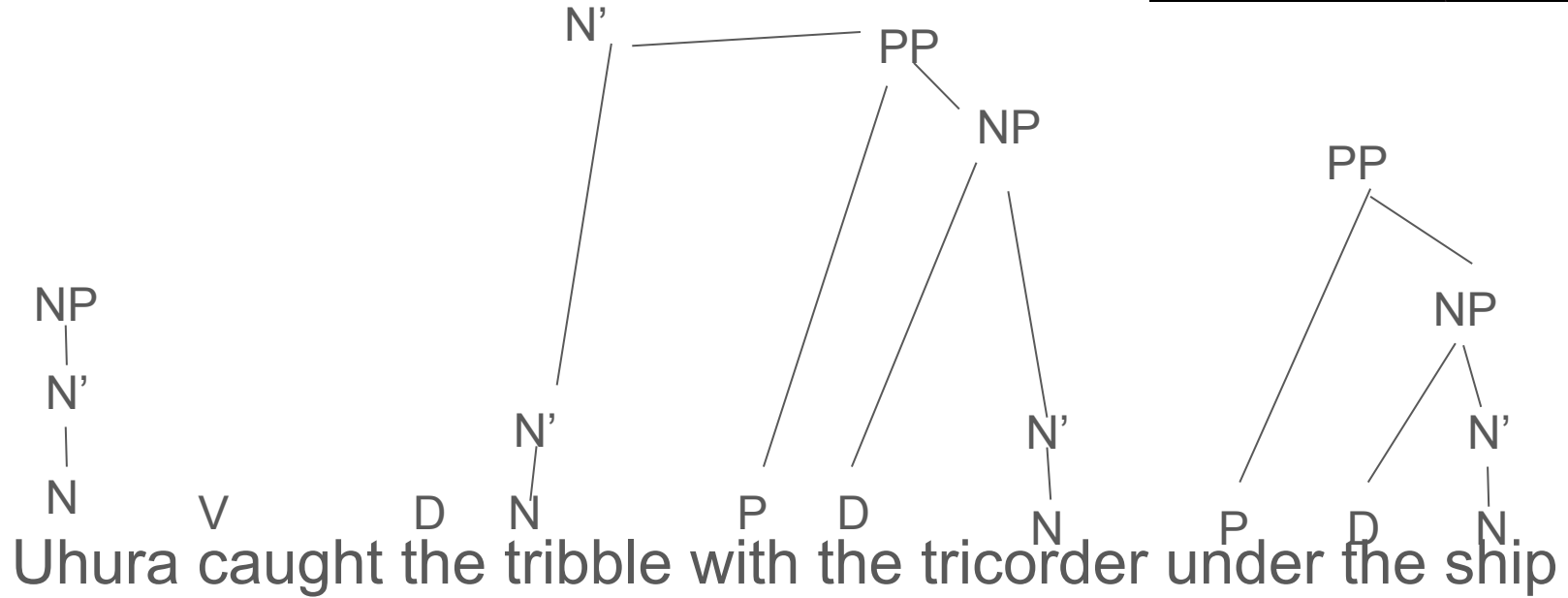
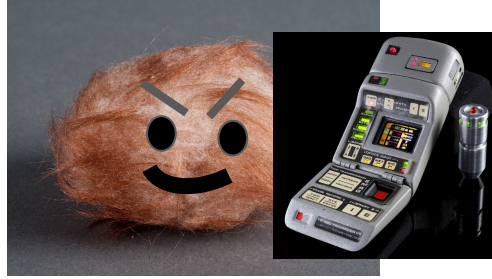
What if we don't attach the "under the ship" PP to "tricorder"?





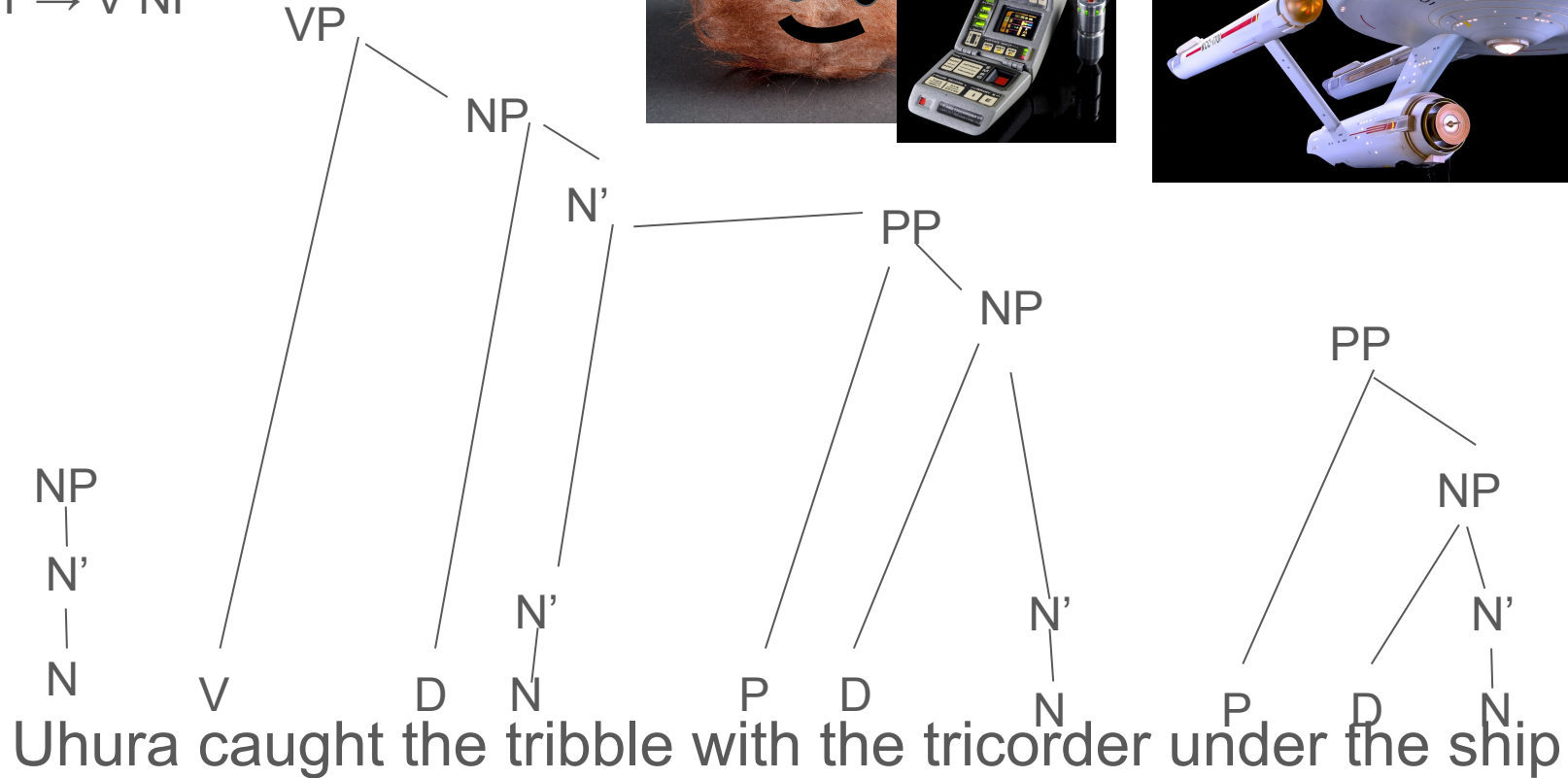
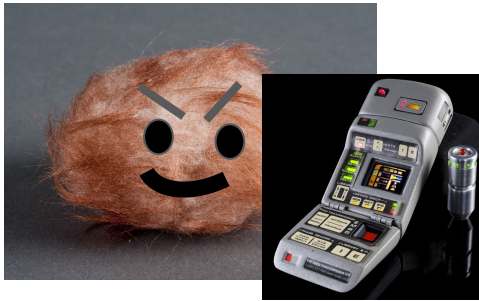
What if we attach “with the tricorder” to “tribble”?

$N' \rightarrow N' PP$



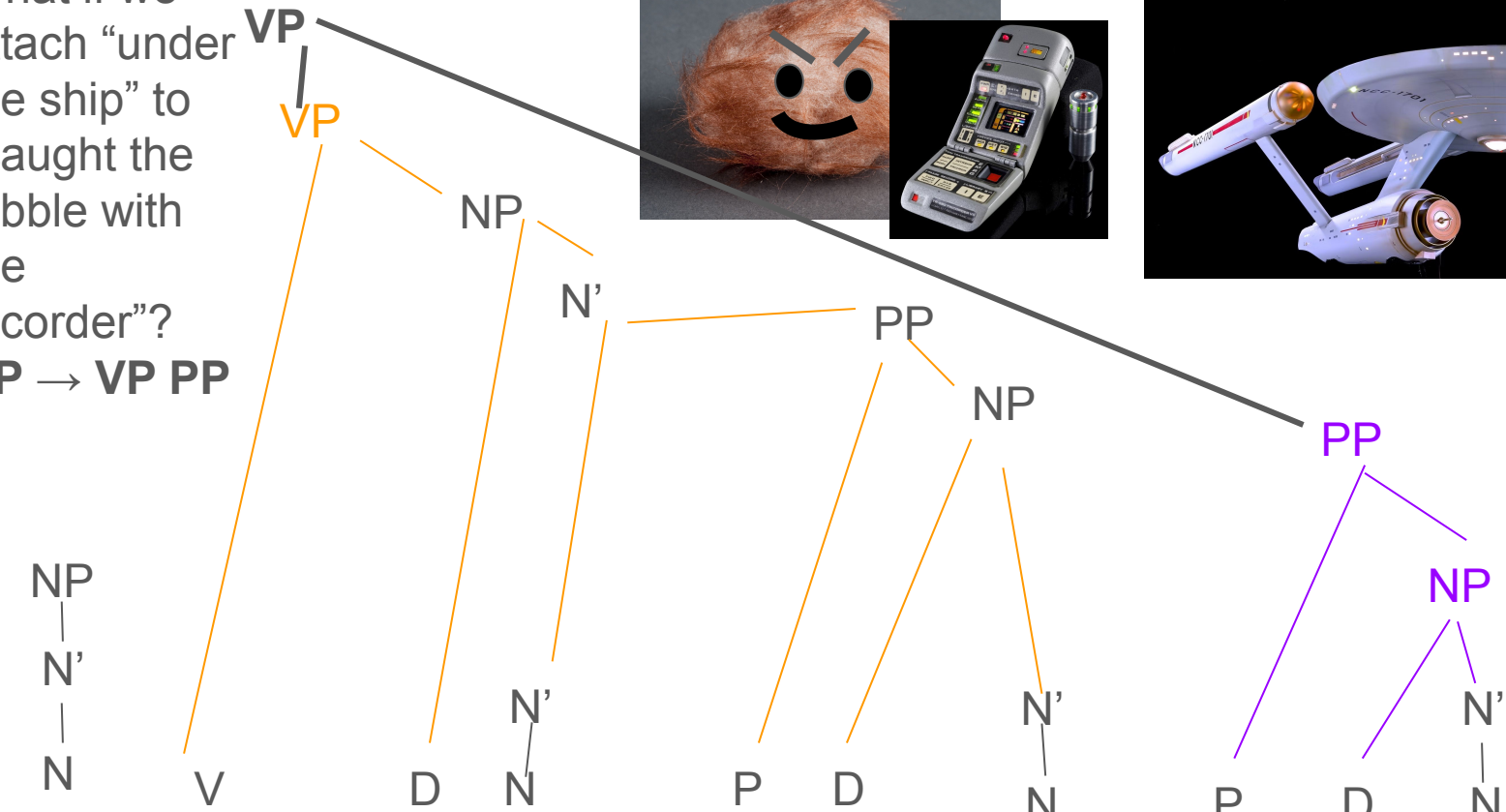
“caught the tribble with the tricorder”

VP → V NP



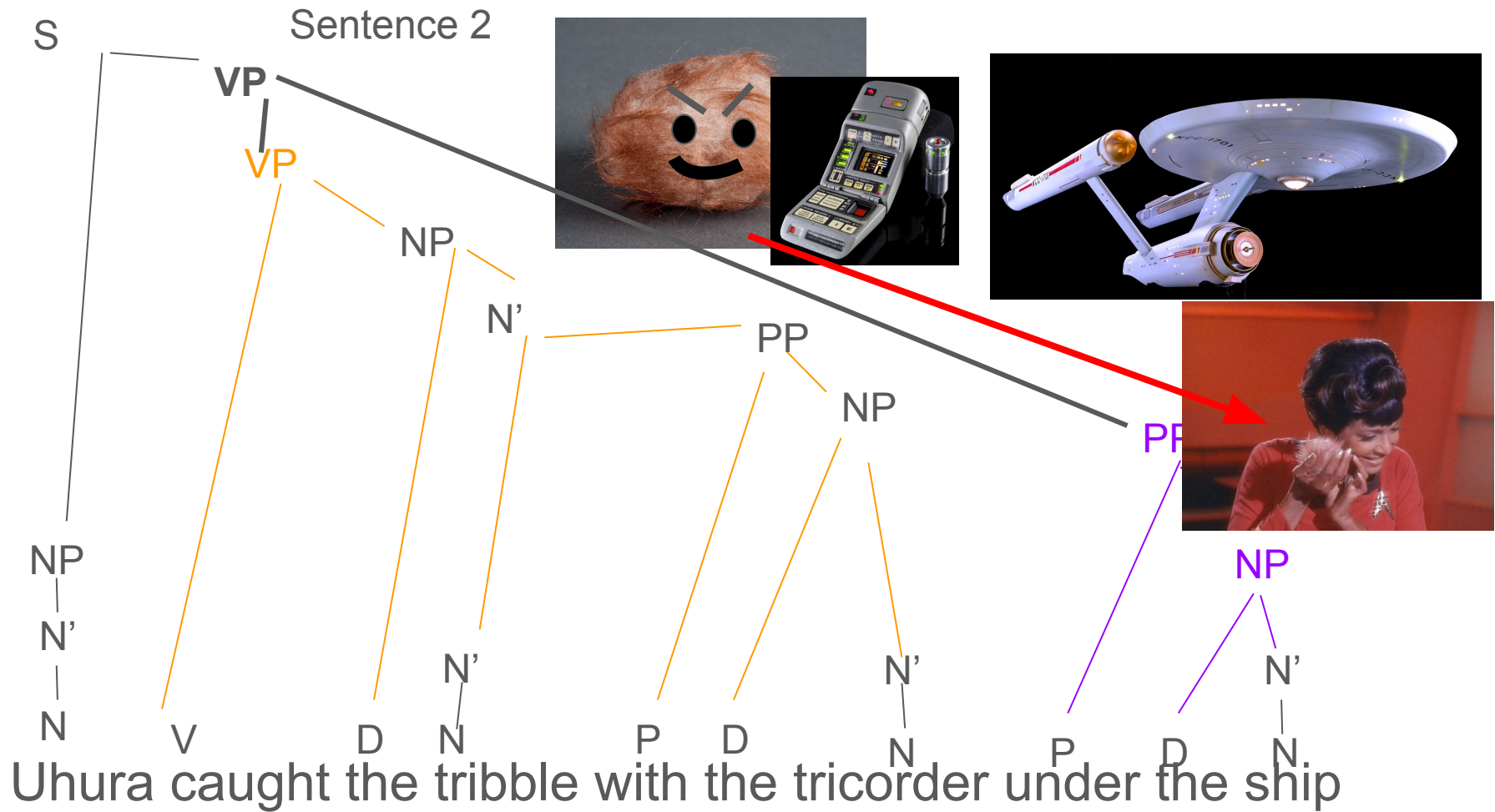
What if we attach “under the ship” to “caught the tribble with the tricorder”?

**VP → VP PP**



Uhura caught the tribble with the tricorder under the ship





S

Sentence  
attaching t

VP

PP

NP

PP

NP

NP

N'

N

V

D

N'

N

P

D

N'

N

P

D

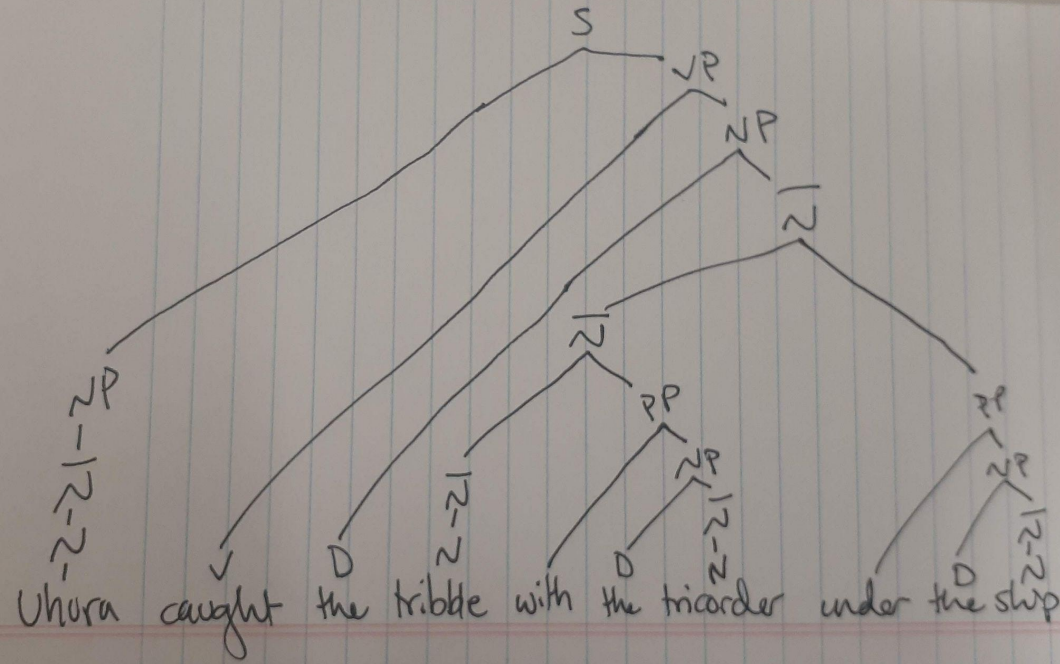
N'

N

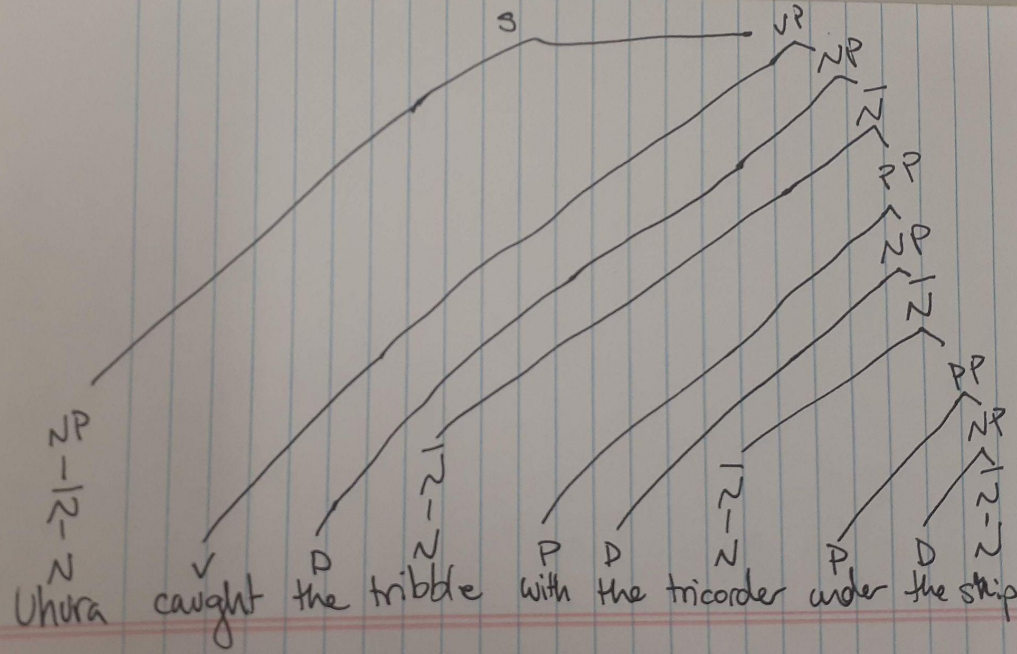


Uhura caught the tribble with the tricorder under the ship

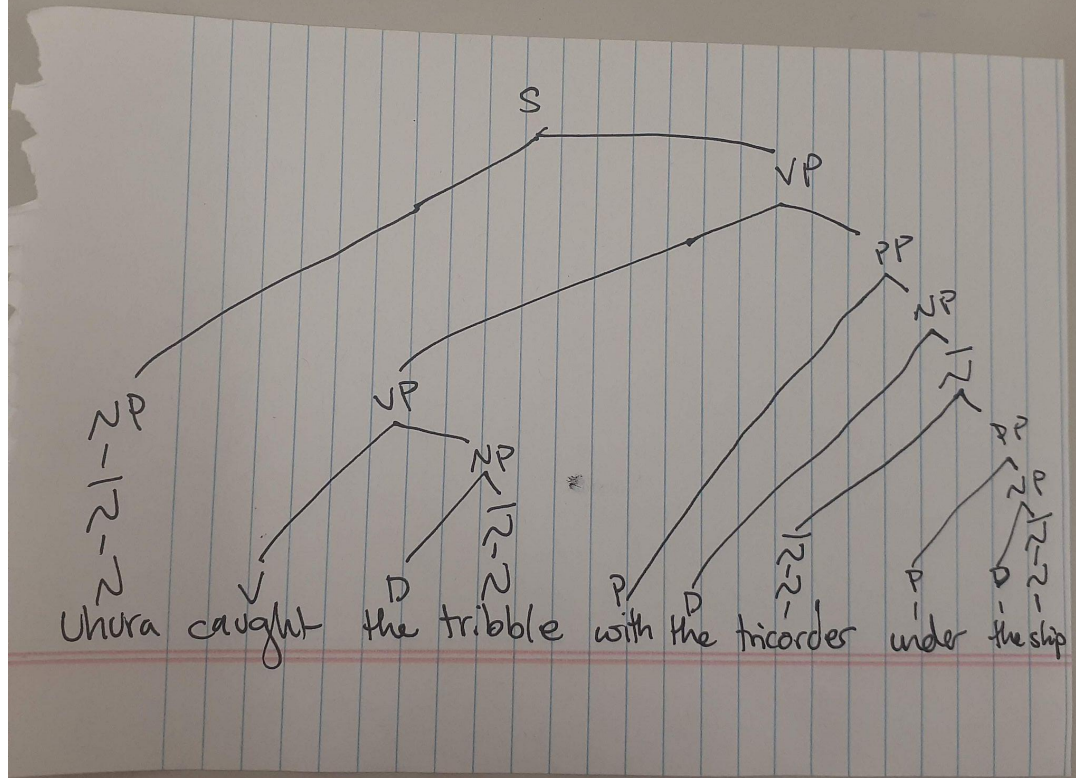
# Parse 1



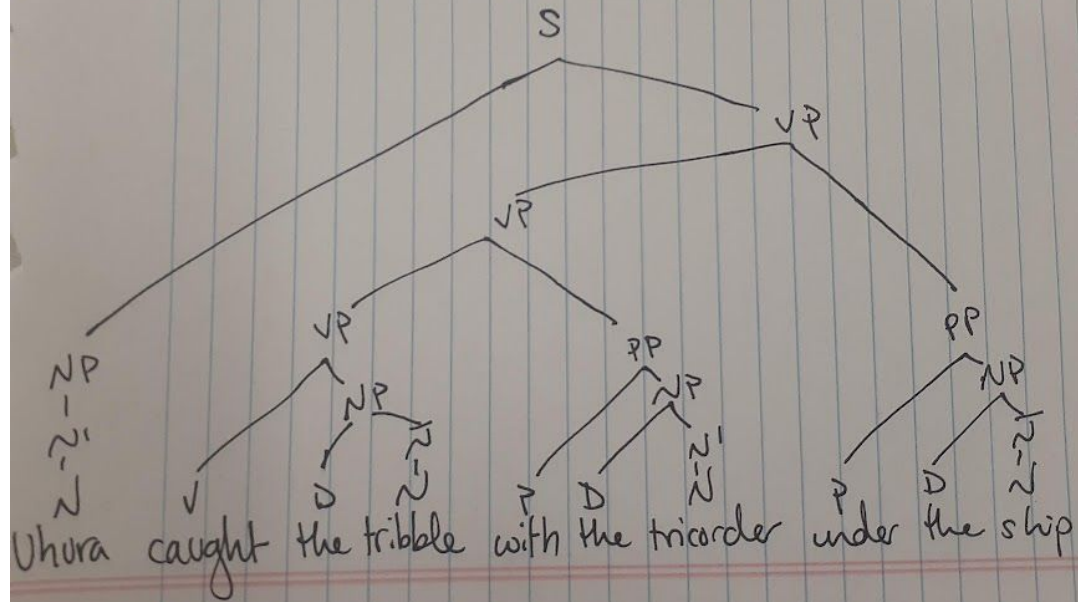
# Parse 2



# Parse 3



# Parse 4



# Parse 5

