Was ist ein Parsewald und wozu brauchen wir ihn?

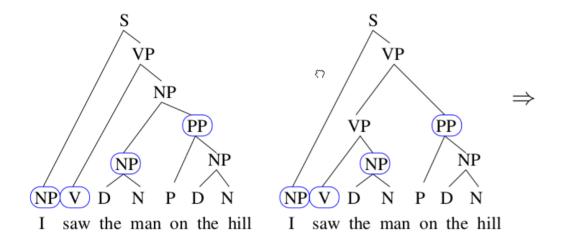
Parsewald

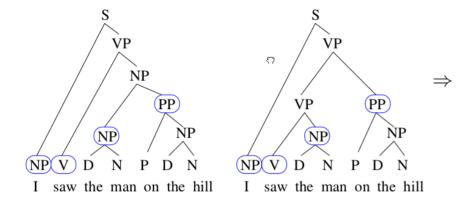
- eine kompakte Repräsentation der Menge aller Analysen eines Satzes
- ergibt sich aus der Menge der Parsebäume durch 2 Operationen:
 - 1 Zusammenfassen gemeinsamer Teilbäume
 - 2 Zusammenfassen von Parsebäumen, die sich nur in einem Teilbaum unterscheiden.

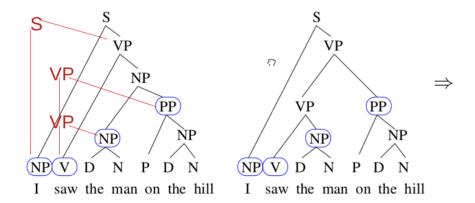
Wann verwenden wir eine Parsewald-Repräsentation?

- Viterbi
- Inside-Outside

Zusammenfassen gemeinsamer Teilbäume



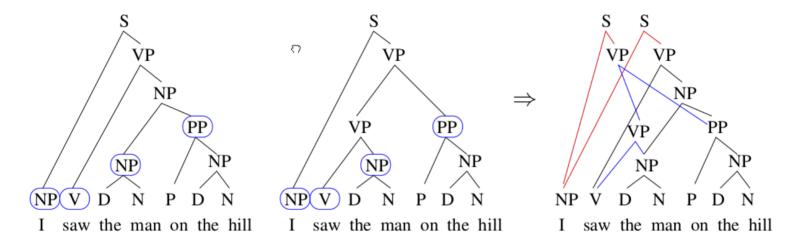




S - NP VP VP - VP PP VP - V NP

we have to add these rules to the first tree

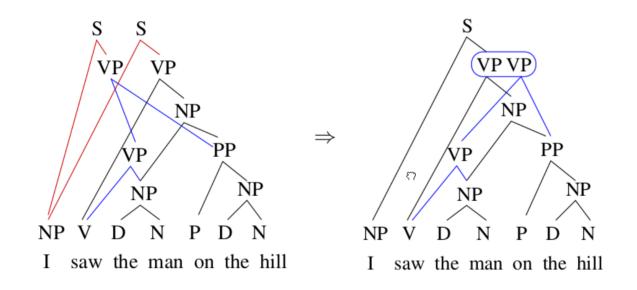
start from the bottom

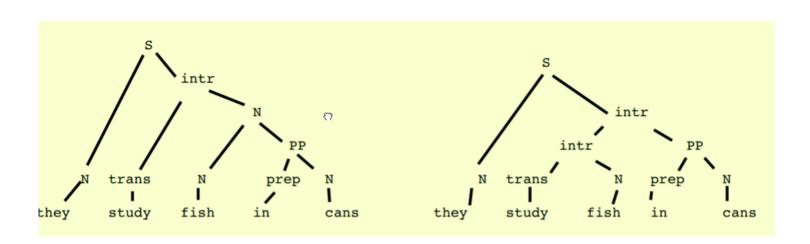


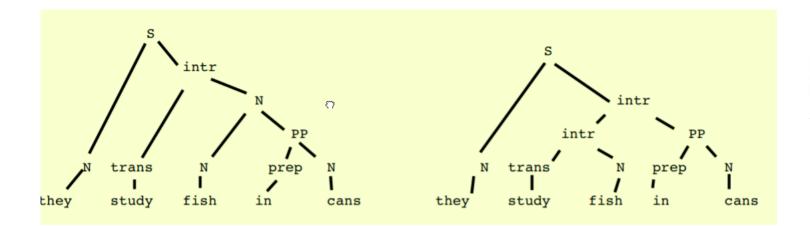
Die blauen Knoten der beiden Parsebäume werden jeweils zu einem Knoten zusammengefasst.

merge the same symbols together

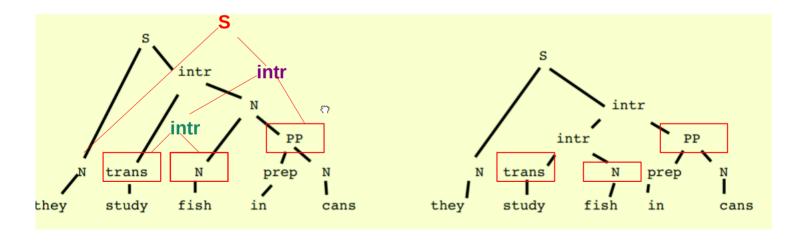
Zusammenfassen von Parsebäumen, die sich nur in einem Teilbaum unterscheiden



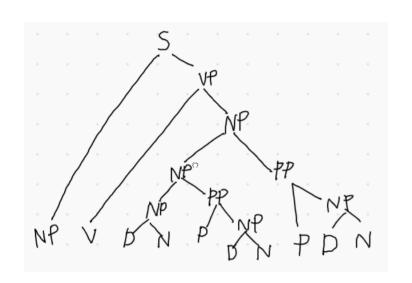


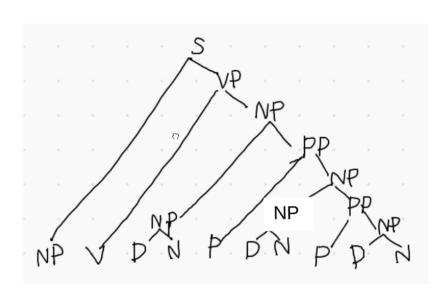


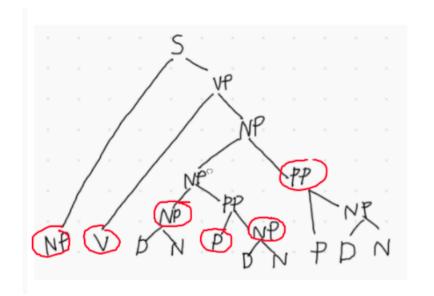
intr - trans N intr - intr PP S - N intr

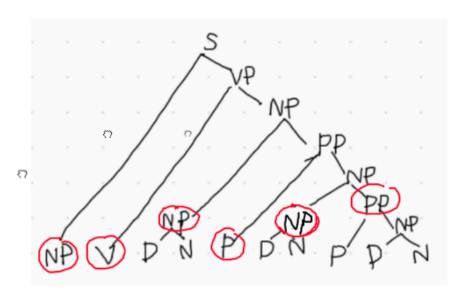


intr in trans Study Fish cans









different rules from t2

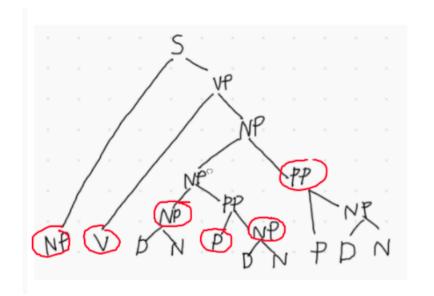
 $NP' \rightarrow NP PP$

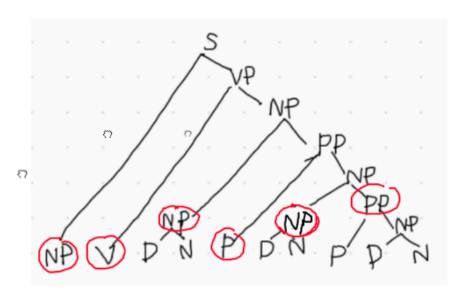
PP' → P NP'

NP' → NP PP'

 $VP \rightarrow V NP'$

 $S' \rightarrow NP VP'$





different rules from t2

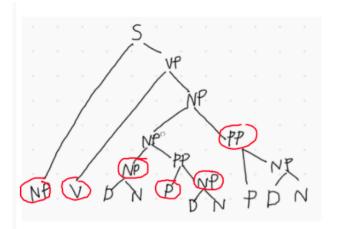
 $NP' \rightarrow NP PP$

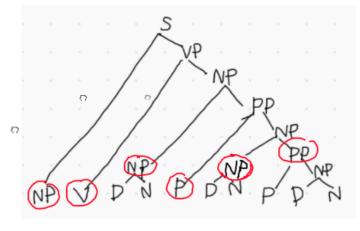
PP' → P NP'

NP' → NP PP'

 $VP \rightarrow V NP'$

 $S' \rightarrow NP VP'$





different rules from t2

 $NP' \rightarrow NP PP$

PP' → P NP'

 $NP' \rightarrow NP PP'$

 $VP \rightarrow V NP'$

 $S' \ \to \ NP \ VP'$

