

Introduction to Formal Semantics

Tutorial Lecture 5: Function Application

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- **Generalised Quantifiers**

Exercise 1

- **Types & Lambda Abstraction**

Exercises 2

Reading:

- Coppock, E., and Champollion, L. (2021). Invitation to formal semantics. Manuscript, Boston University and New York University (Ch.6)





Discussion



- Did you have any difficulties understanding **the main concepts**?
- Were the **exercises** difficult?
- Is there something you would like to review from **tutorial 4**?



Exercises



Exercise 1

(1) Some of the cats play the piano.

$$=_{def} |C \cap P| \neq \{\}$$

(2) 10 tables have been reserved.

$$=_{def} |T \cap R| = 10_{|T|}$$

(3) Most warlocks are evil.

$$=_{def} |W \cap E| > 1/2_{|W|}$$

(4) I pay you not more than 5 dollars

$$=_{def} |D \cap P| \leq 5_{|D|}$$

(5) Sadly, none of the students tipped the waitress.

$$=_{def} |S \cap T| = \{\}$$

$$|T| = 10$$

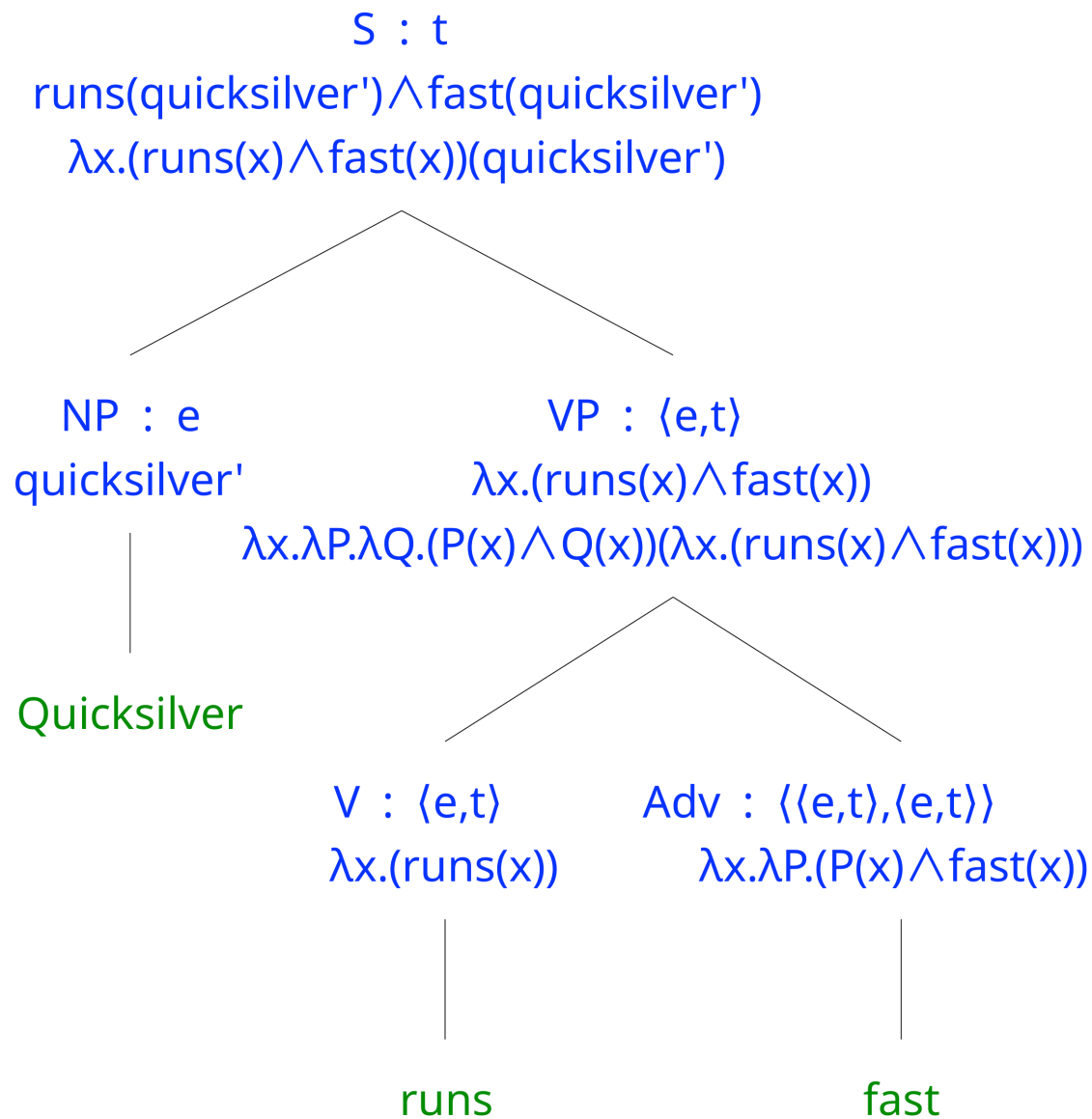
$$|W|^* = 51-100\%$$

$$|D| = 1-5$$

*keep in mind the semantic reading of existential quantifiers as scalars, e.g. *most* = some and possibly all.



Exercise 2

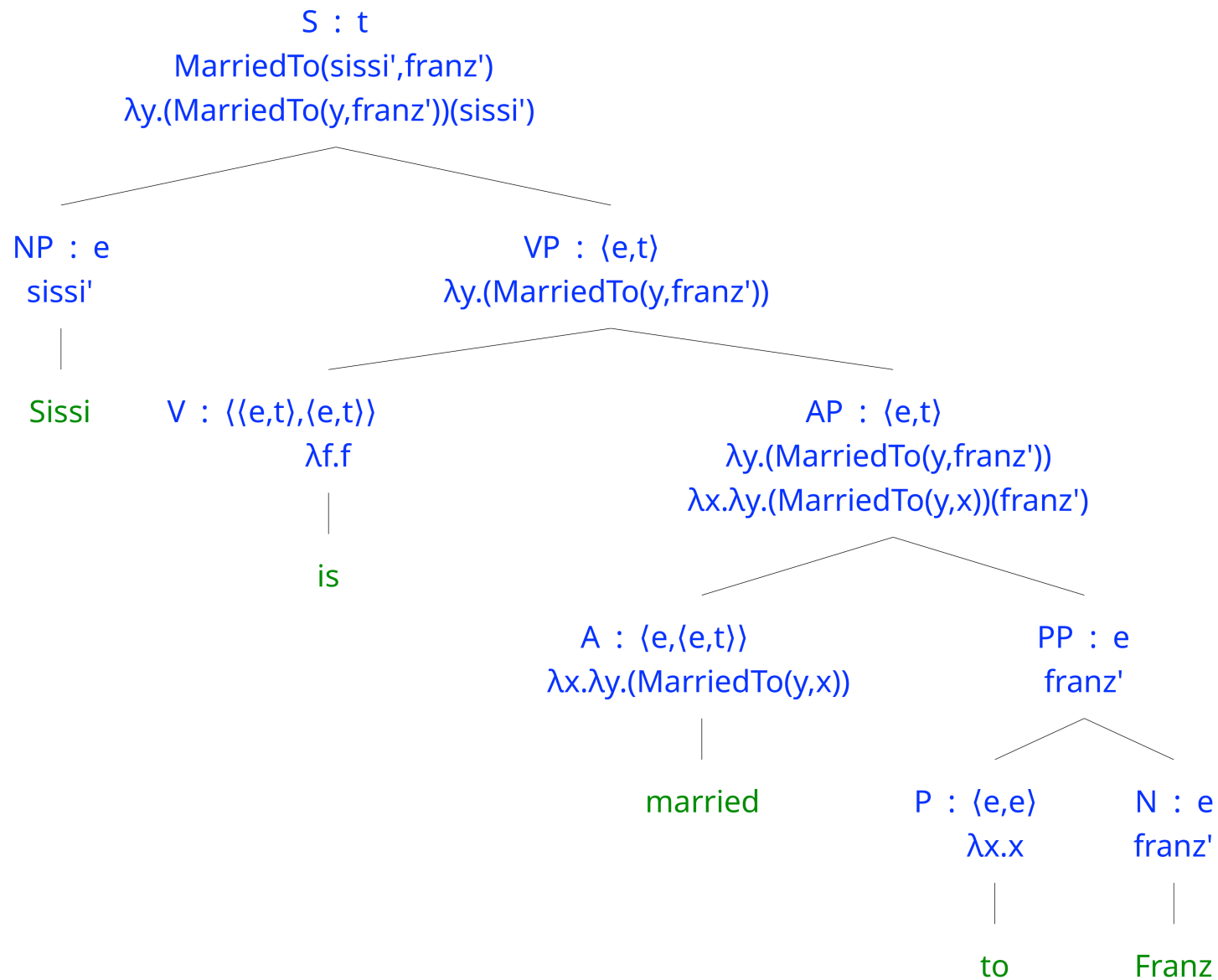


Note:

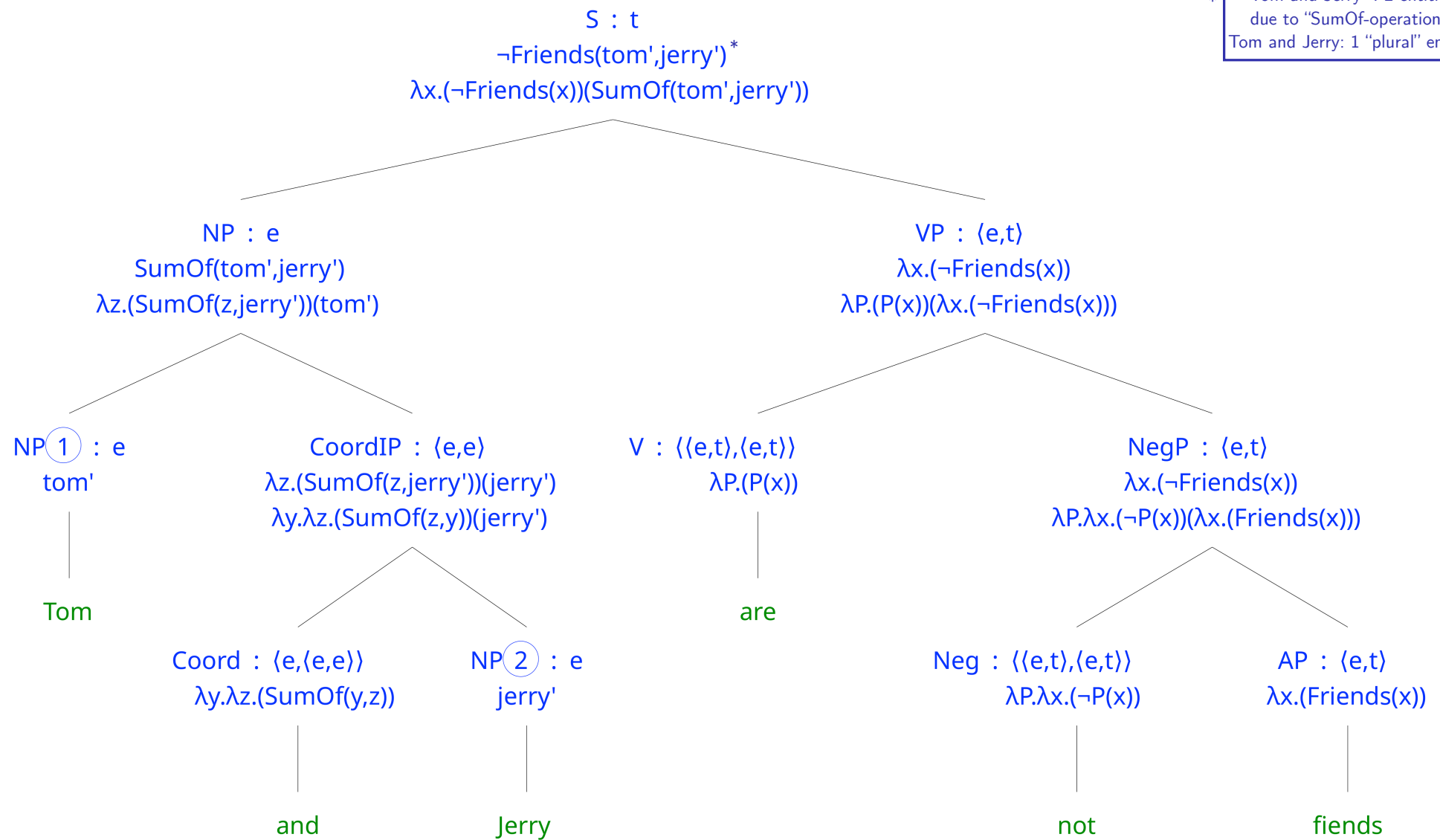
By strictly following the syntactic order of the tree you have to swap RUNS with FAST.



Exercise 2



Exercise 2




* "Tom and Jerry" : 2 entities
 due to "SumOf-operation"
 Tom and Jerry: 1 "plural" entity



**Thank you all
for the kind
attention!**





**If you need further help or have
additional questions,
please contact us.**

