CLSINFRA COMPUTATIONAL LITERARY STUDIES INFRASTRUCTURE

Syntax in Universal Dependencies

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Principles

- parallelism – same things the same way across languages
  - no artificial nodes, no unifying in an “interlingua”
  - enough leeway for language-specific phenomena
- dependency – syntactic (indicated e. g. by gr. congruence)
  - exceptions: multiword prepositions, proper names with titles, etc.
  - auxiliaries usually dependent of content words, no children
  - punctuation attaches to its clause/phrase head
- labels: trade-off between form and function

Taxonomy of core dependencies

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- main sentence predicate: `root`
- subject
  - nominal: `nobj`
  - clausal: `csubj`
- direct object
  - nominal: `obj`
  - clausal: `ccomp`
- indirect object:
  - nominal: `iobj`
- noun not object/prepositional noun phrase/oblique case: `obl`
- prepositions: `case`
- verb complement (quasi copula): `xcomp`

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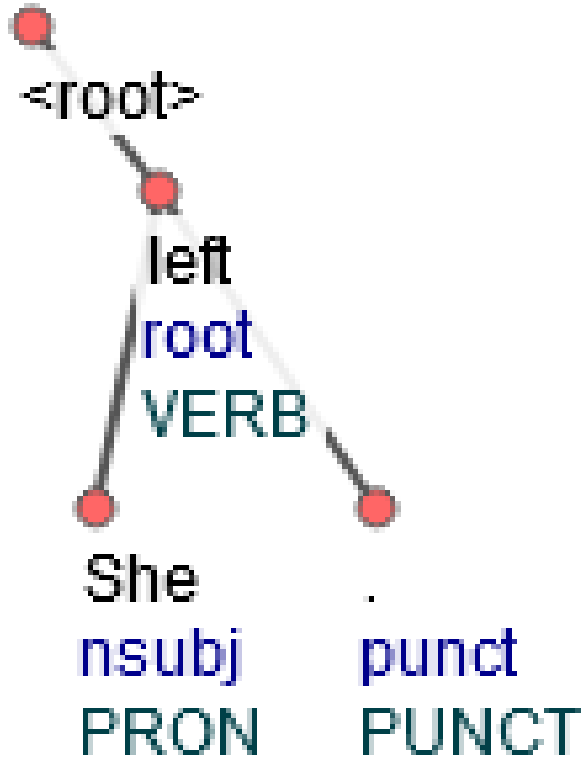
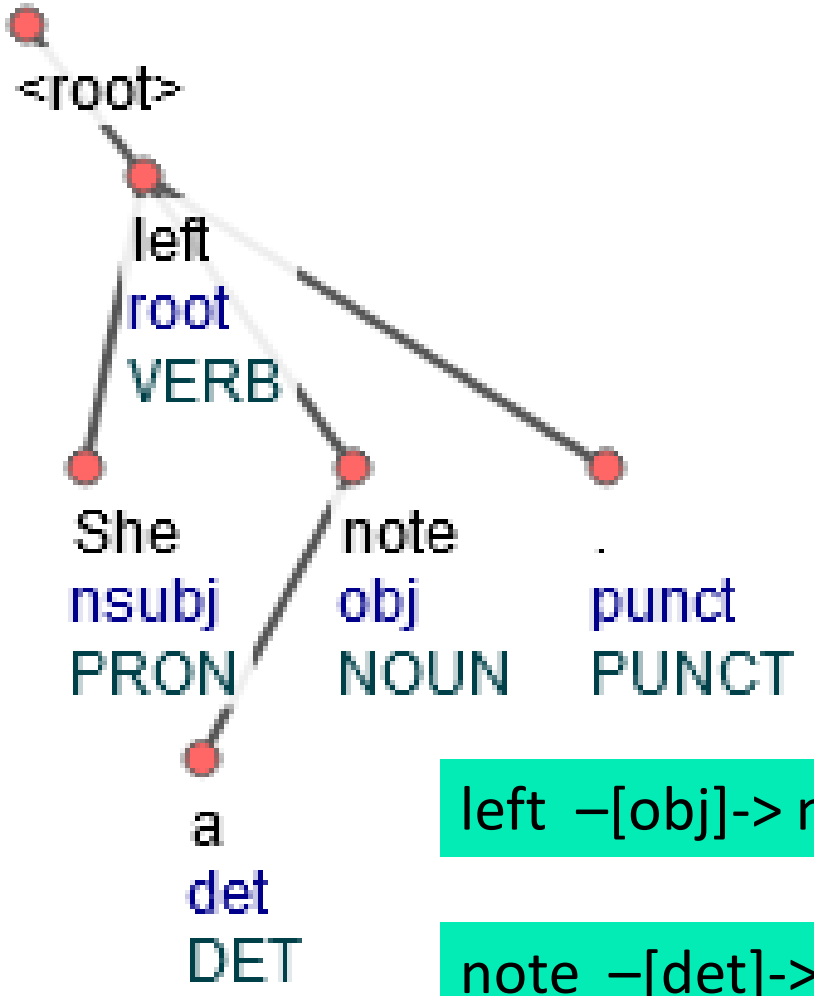
Simple clause

She left .



left – [nsubj]-> she

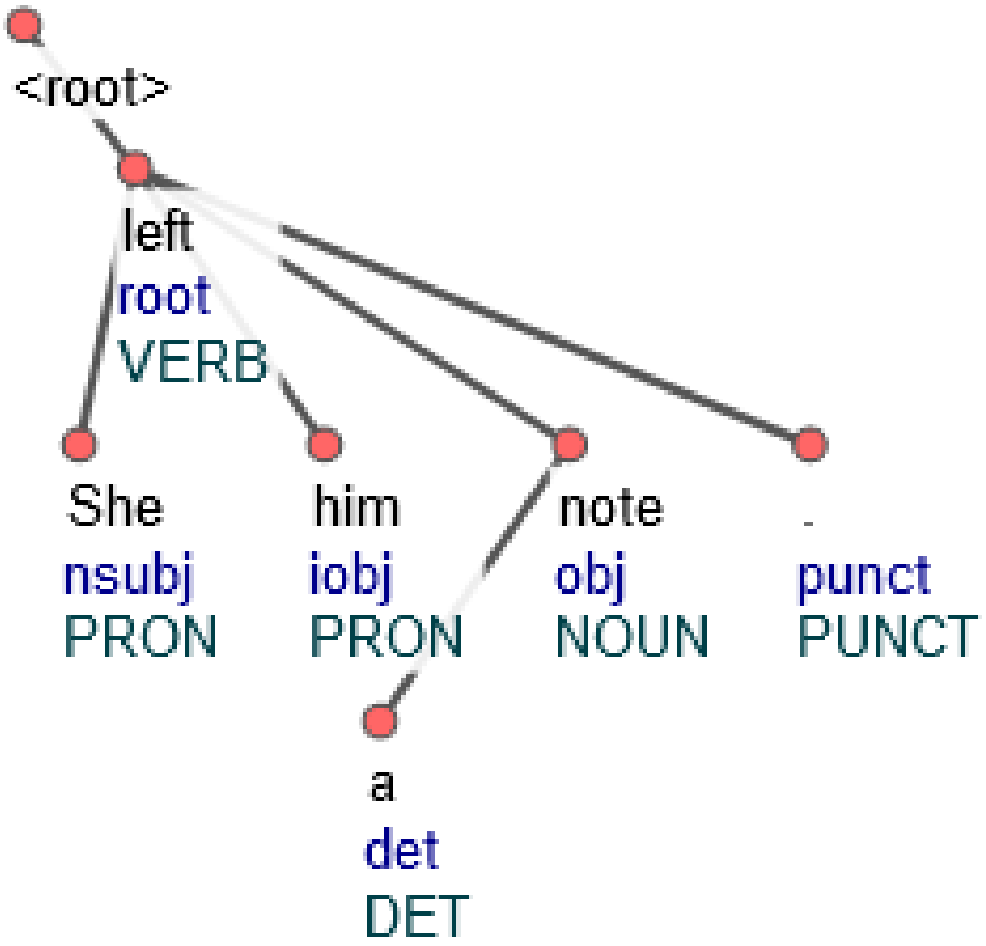
She left a note .



left –[obj]-> note

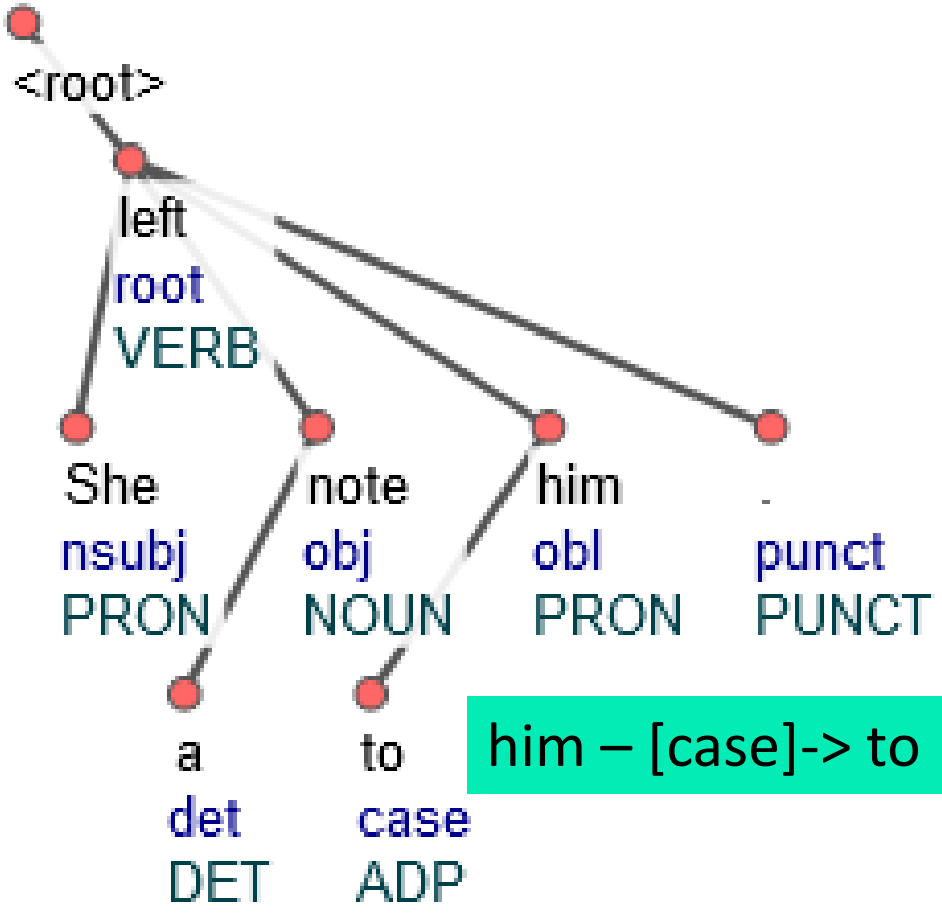
note –[det]-> a

She left him a note .



left – [iobj]-> him

She left a note to him .



him – [case]-> to

She left a note on the table .

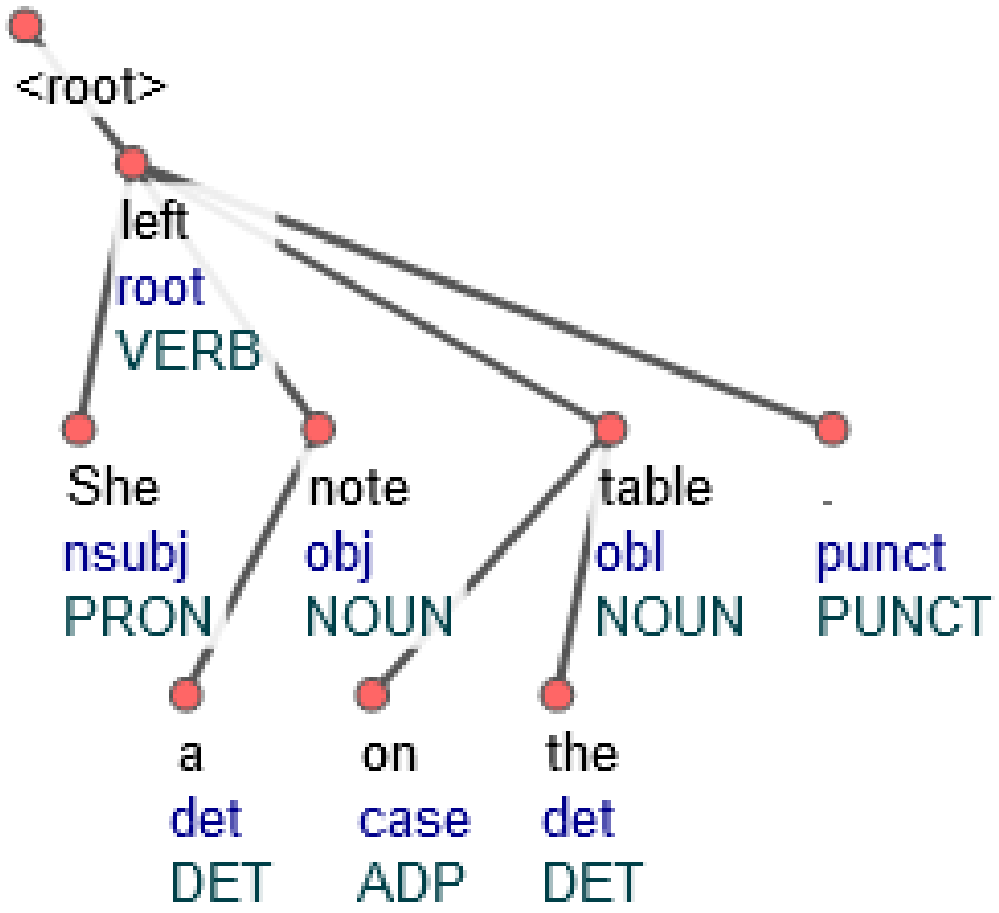
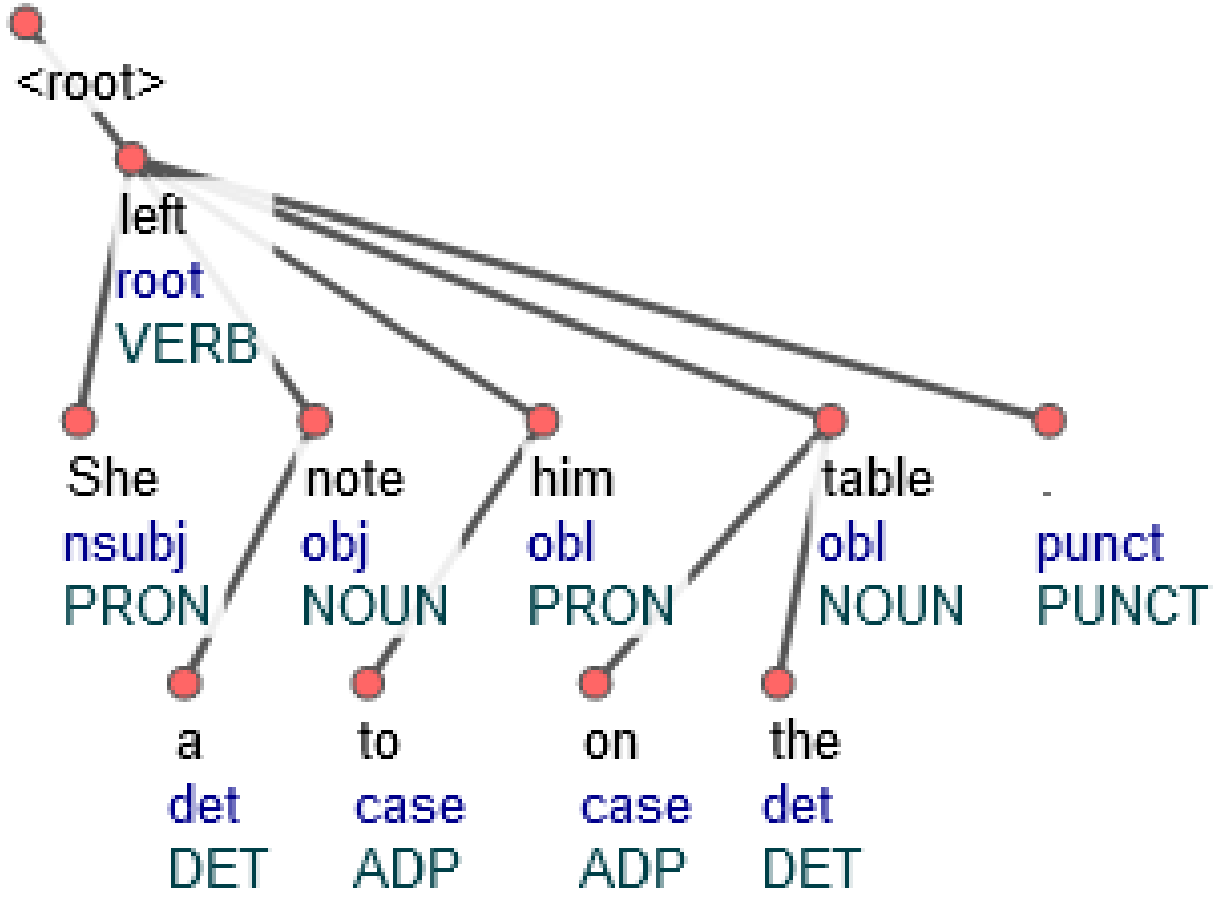


table – [case]-> on

table – [det]-> the

She left a note to him on the table .

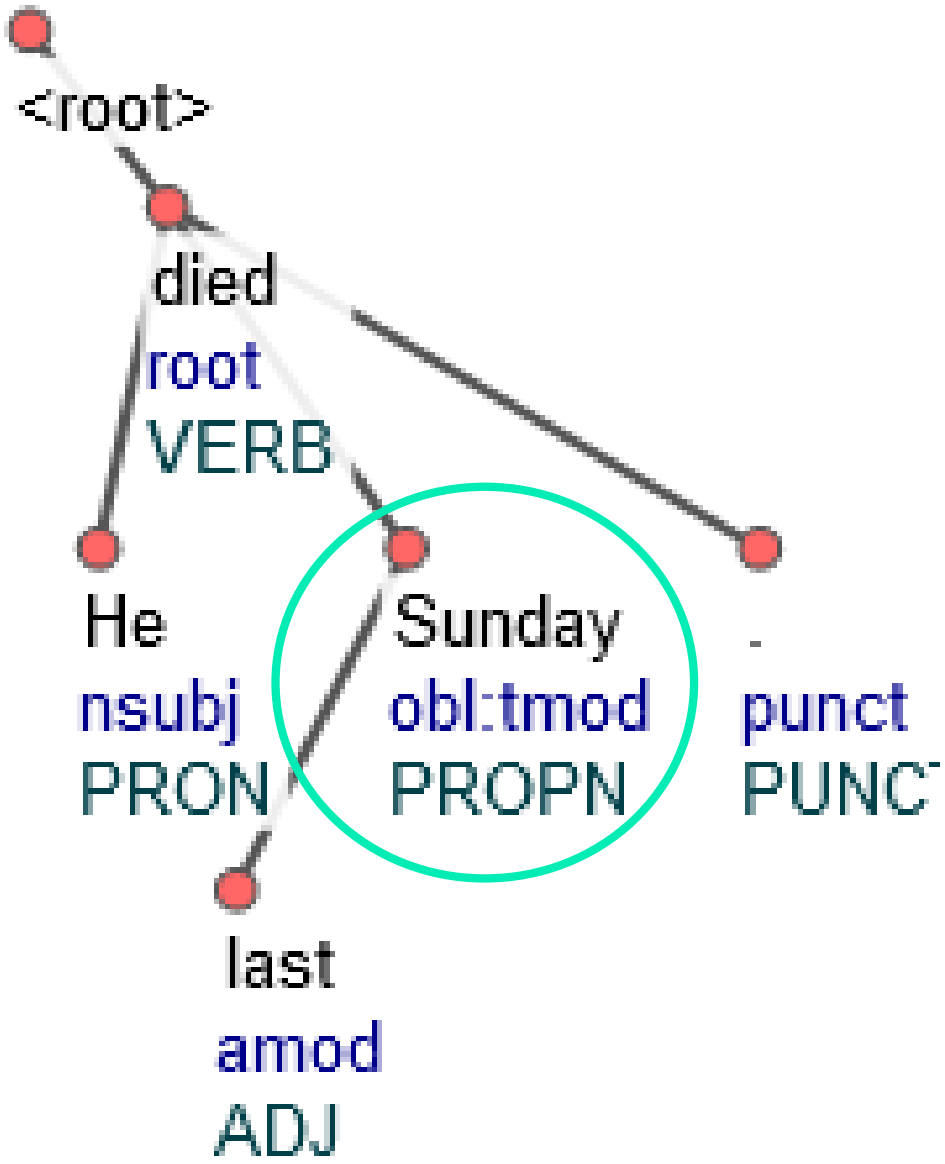


left – [obl]-> him

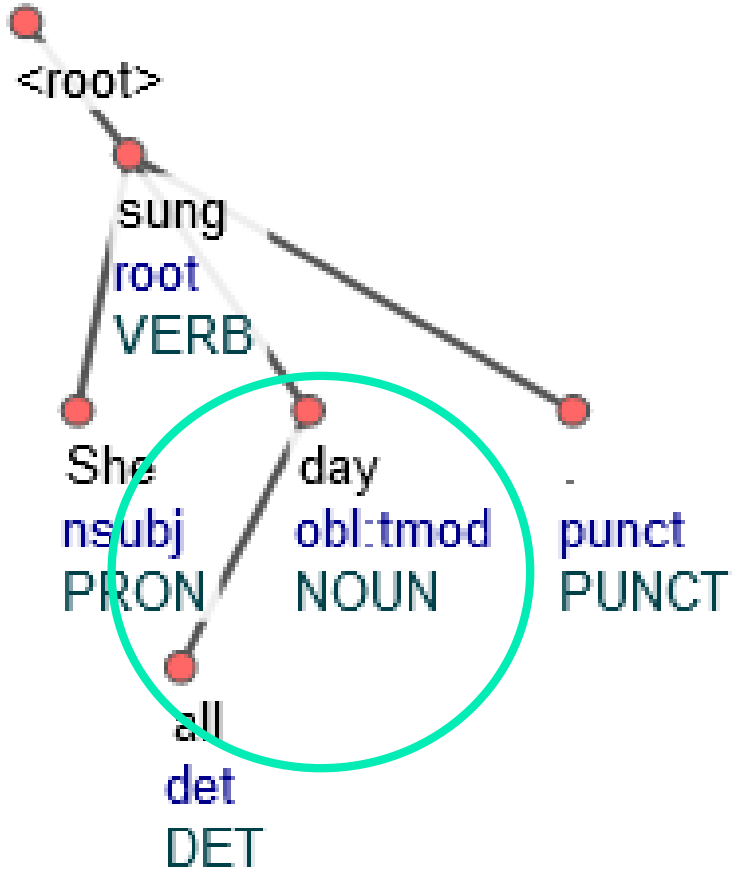
left – [obl]-> table

left – [obj]-> note

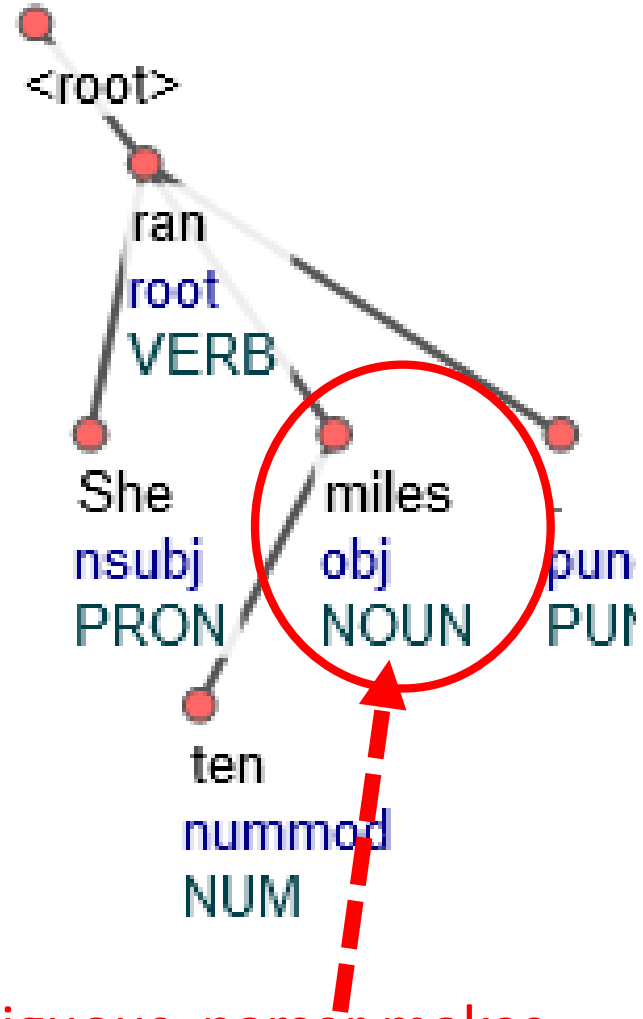
He died last Sunday .



She sung all day .



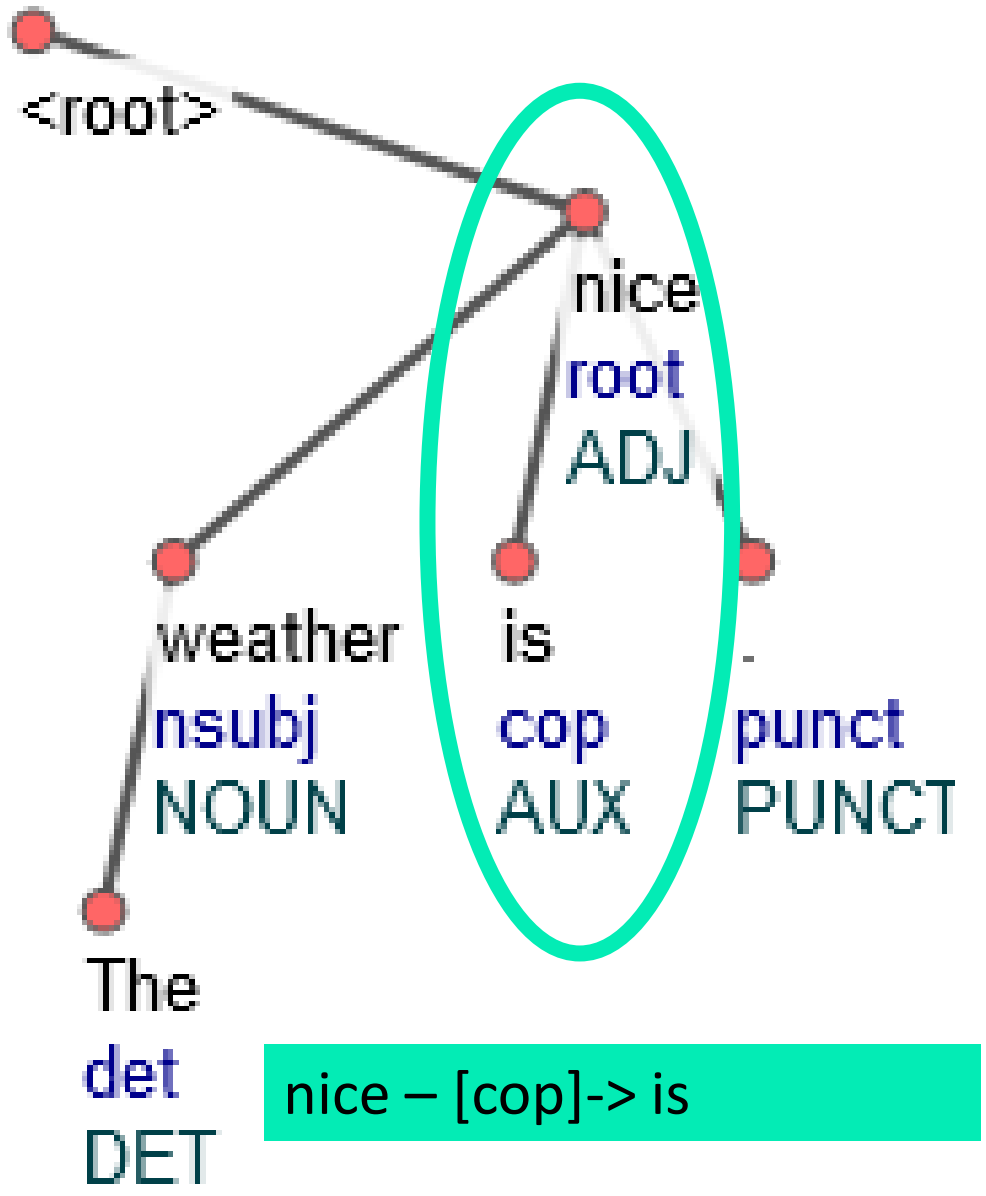
She ran ten miles .



ambiguous, parser makes guesses and errs sometimes

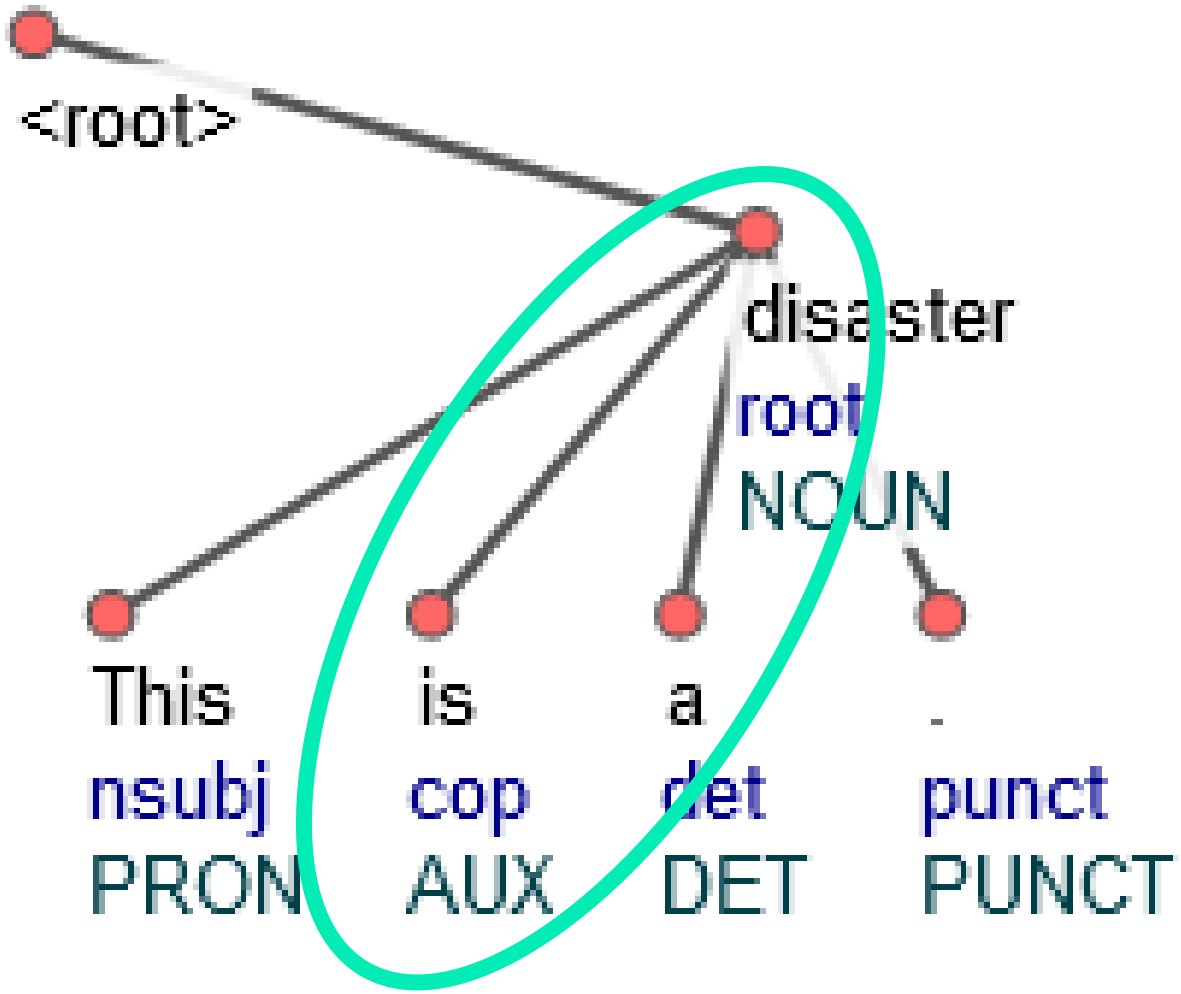
Copula predicate and its verbal complements

The weather is nice .



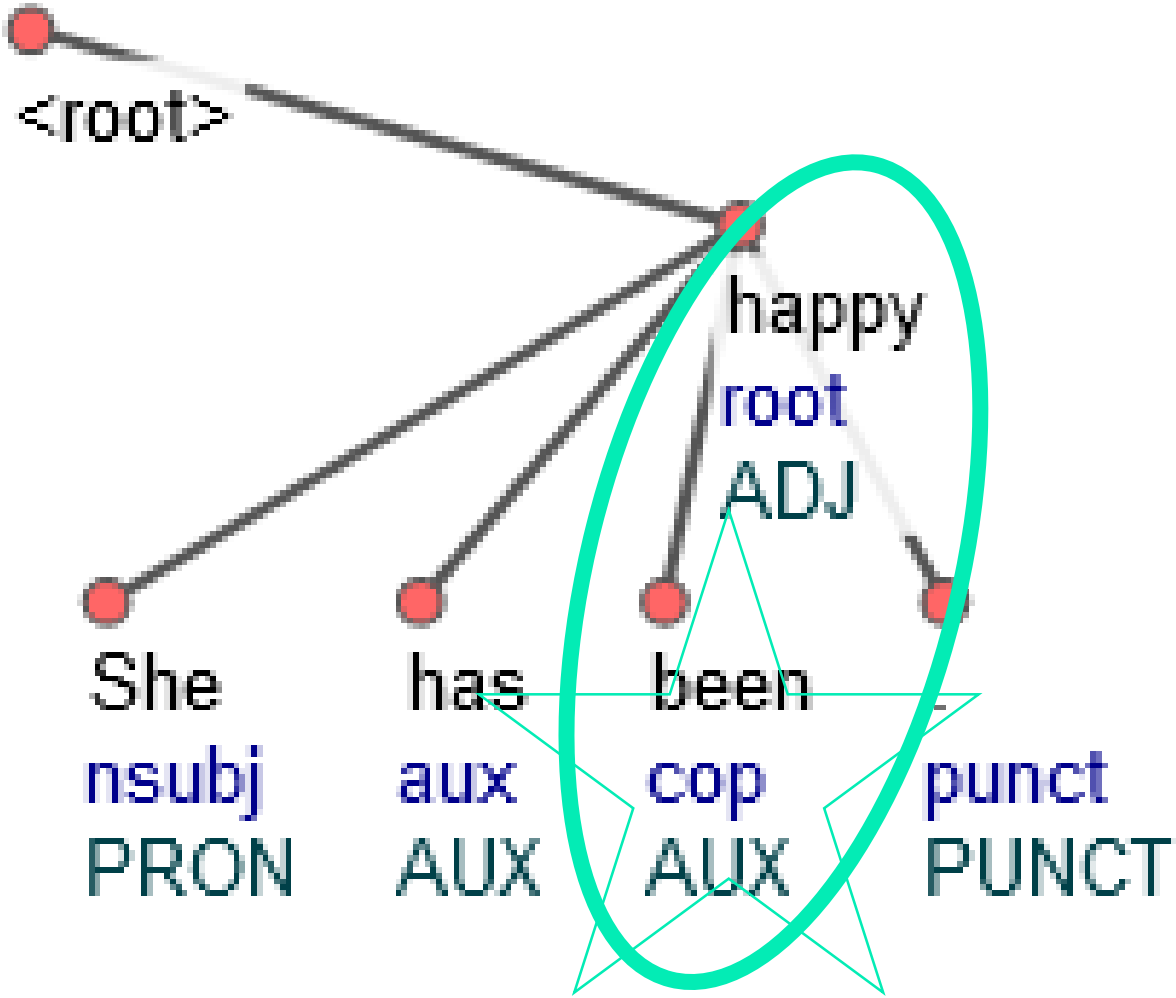
nice – [cop]-> is

This is a disaster .



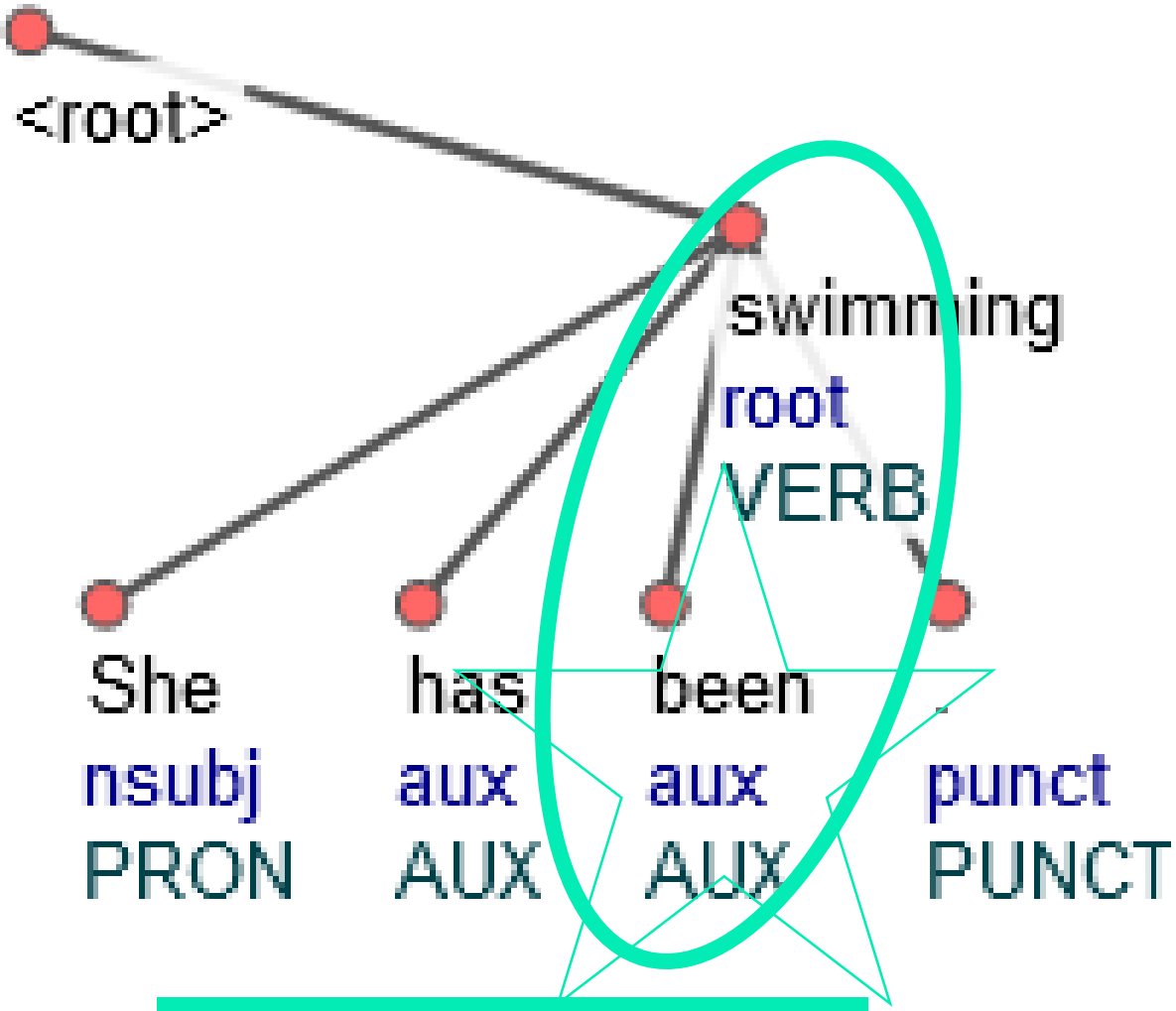
disaster – [cop]-> is

She has been happy .



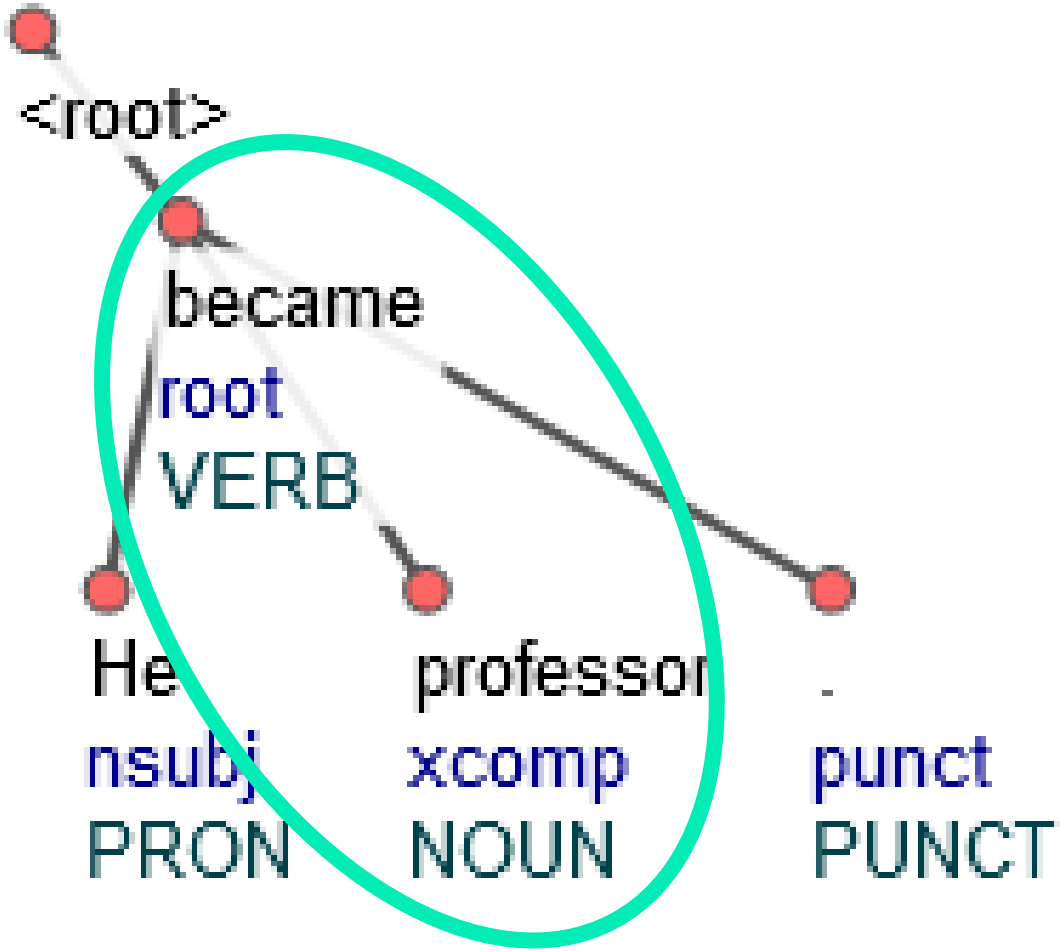
happy – [cop]-> been

She has been swimming .



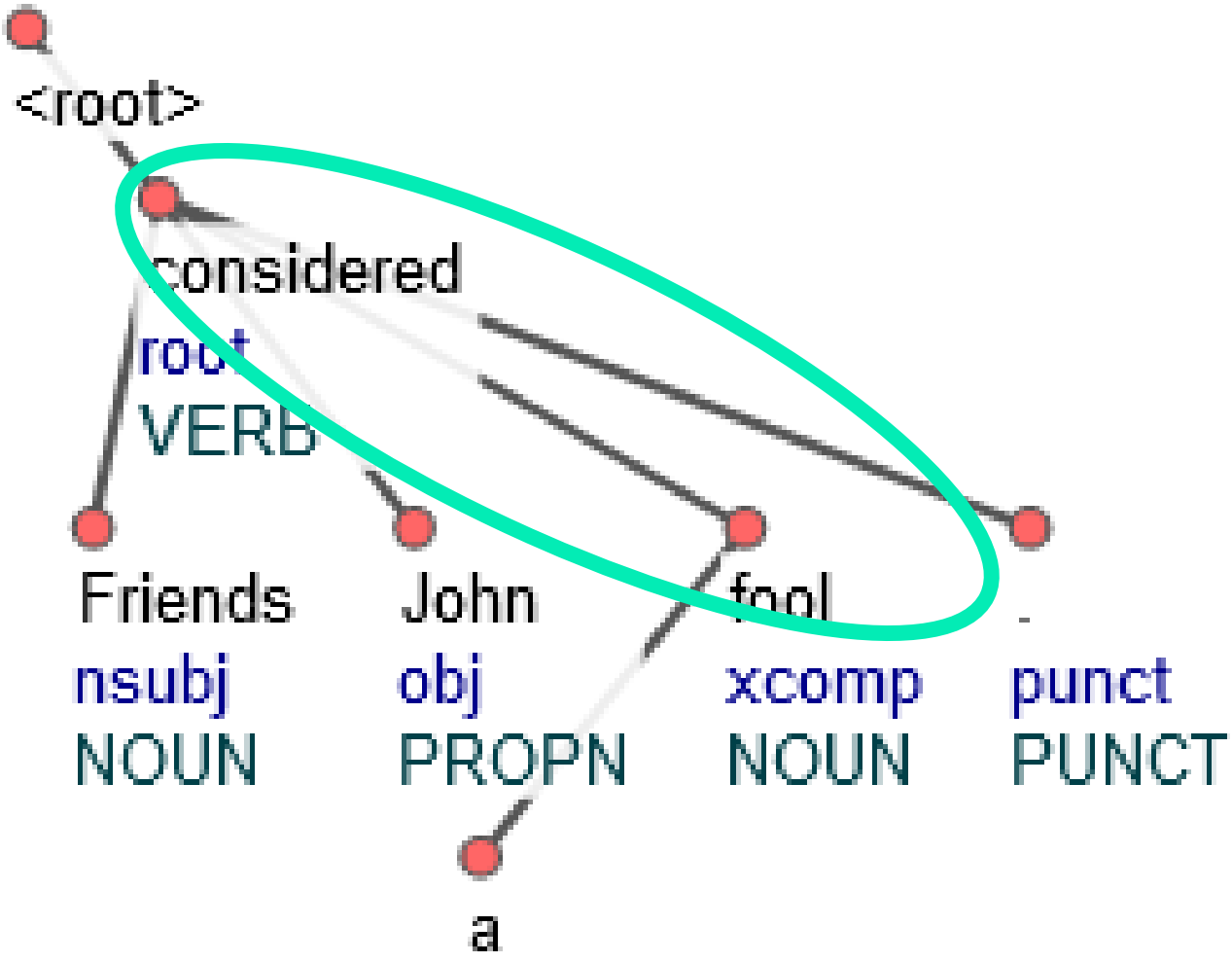
swimming – [aux]-> been

He became professor .



became – [xcomp]-> professor

Friends considered John a fool .



considered – [xcomp]-> fool

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Exercise!

https://arboratorgrew.elizia.net/#/projects/dracor_shake/syntax01

Sentences 3 - 13

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Nominals (nouns/pronouns and their modifiers)

What can modify a noun/adjective

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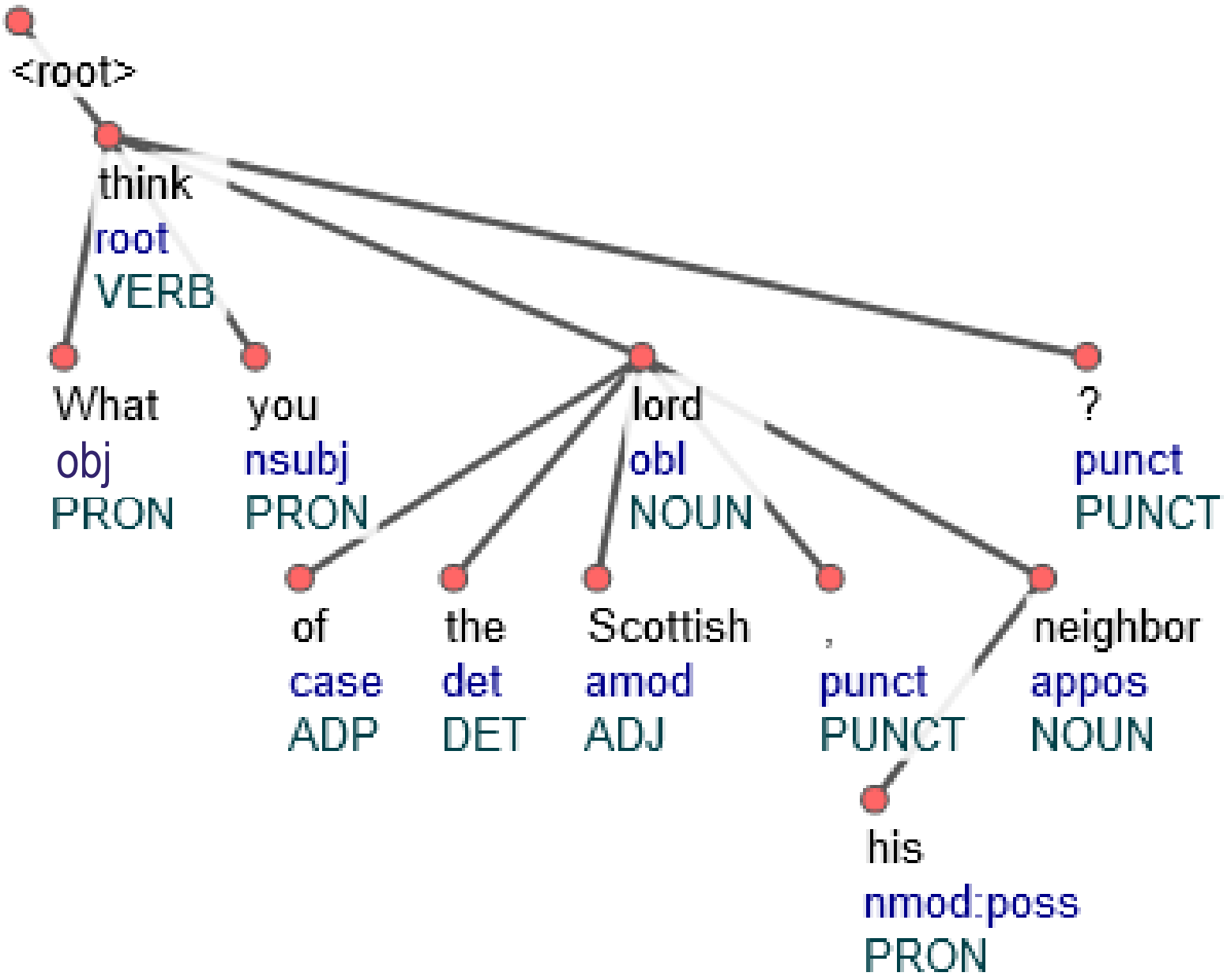
- noun/nominal phrase:
- `nmod` *(the **office** of the Chair)*
- `compound` (*dinner **time***)
- apposition: `appos`
  - follows the head and denotes the same thing *(**Sam**, the manager)*
- adjective: `amod` *(red **roses**)*
- numeral: `nummod` *(four **kids**)*
- clause, typically a relative clause
  - generally: `acl` (*cars stolen yesterday*)
  - relative clause: `acl:relcl` *(Sam spent **everything** he could)*

What think you of the Scottish lord , his neighbor ?



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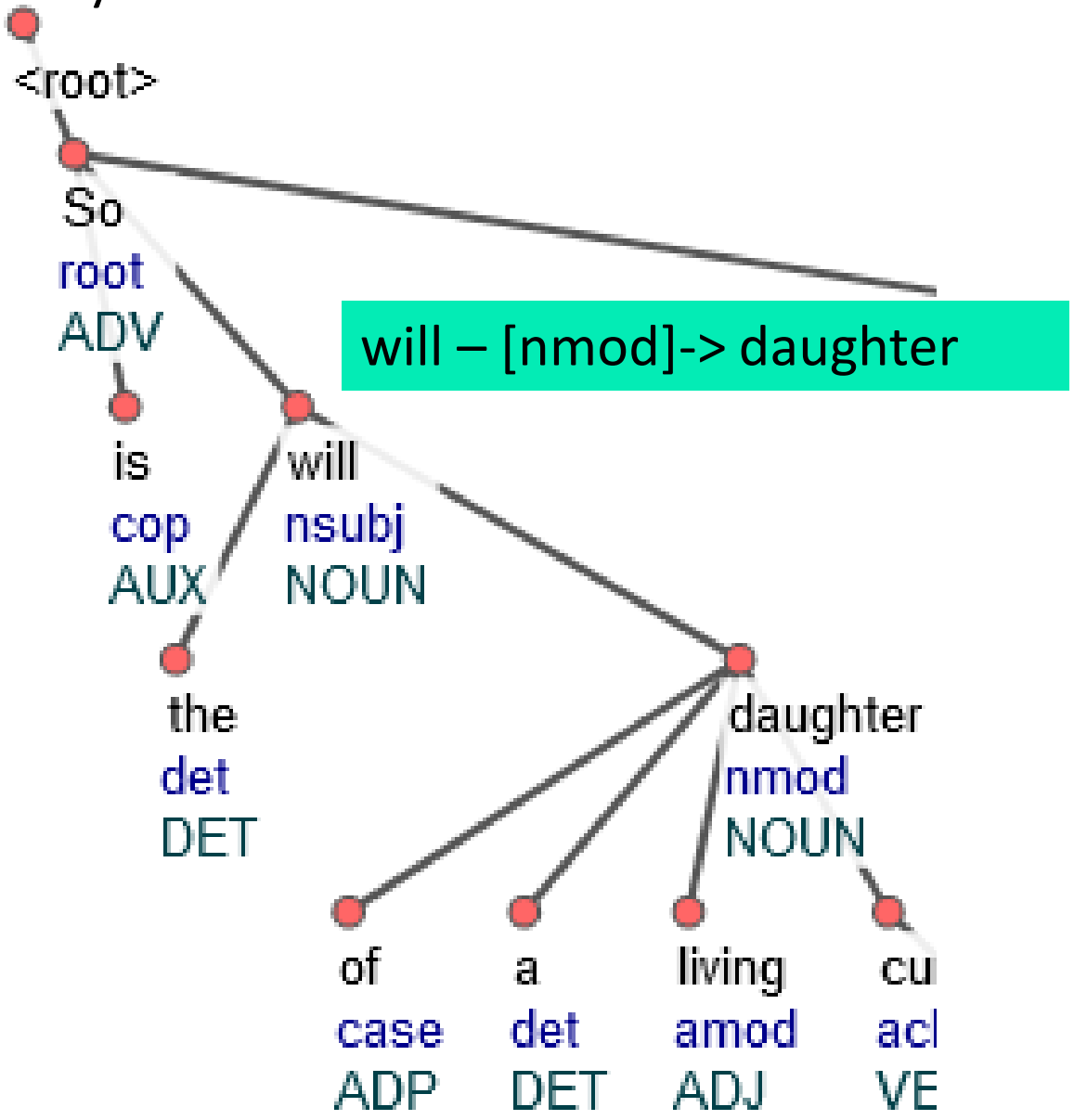
lord – [amod]-> Scottish

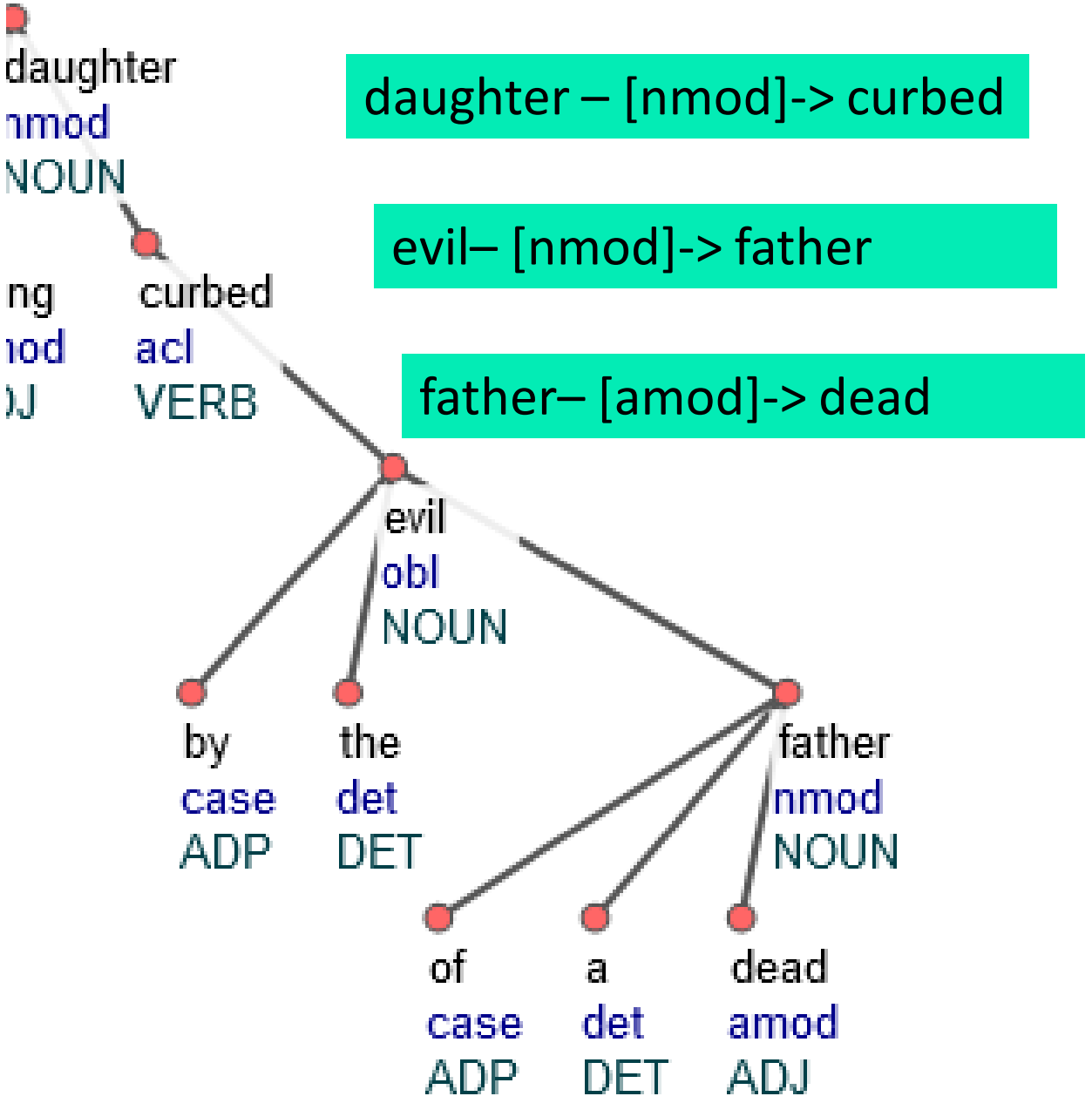
lord – [appos]-> neighbor

neighbor – [nmod]-> his

So is the will of a living daughter curbed by the evil of a dead father



will – [nmod]-> daughter



daughter – [nmod]-> curbed

evil– [nmod]-> father

father– [amod]-> dead

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Exercise!

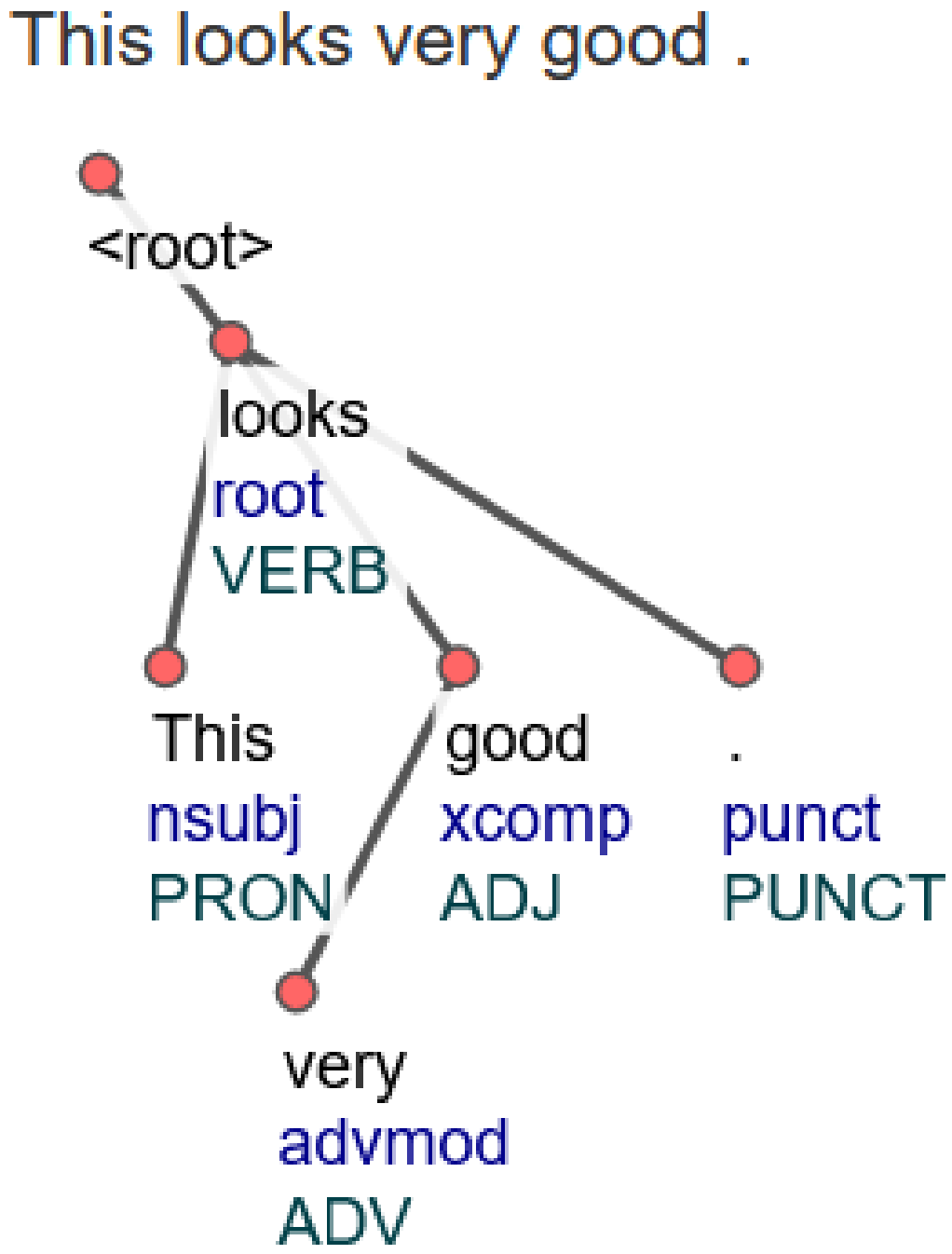
https://arboratorgrew.elizia.net/#/projects/dracor_shake/syntax03

Sentences 1 - 8

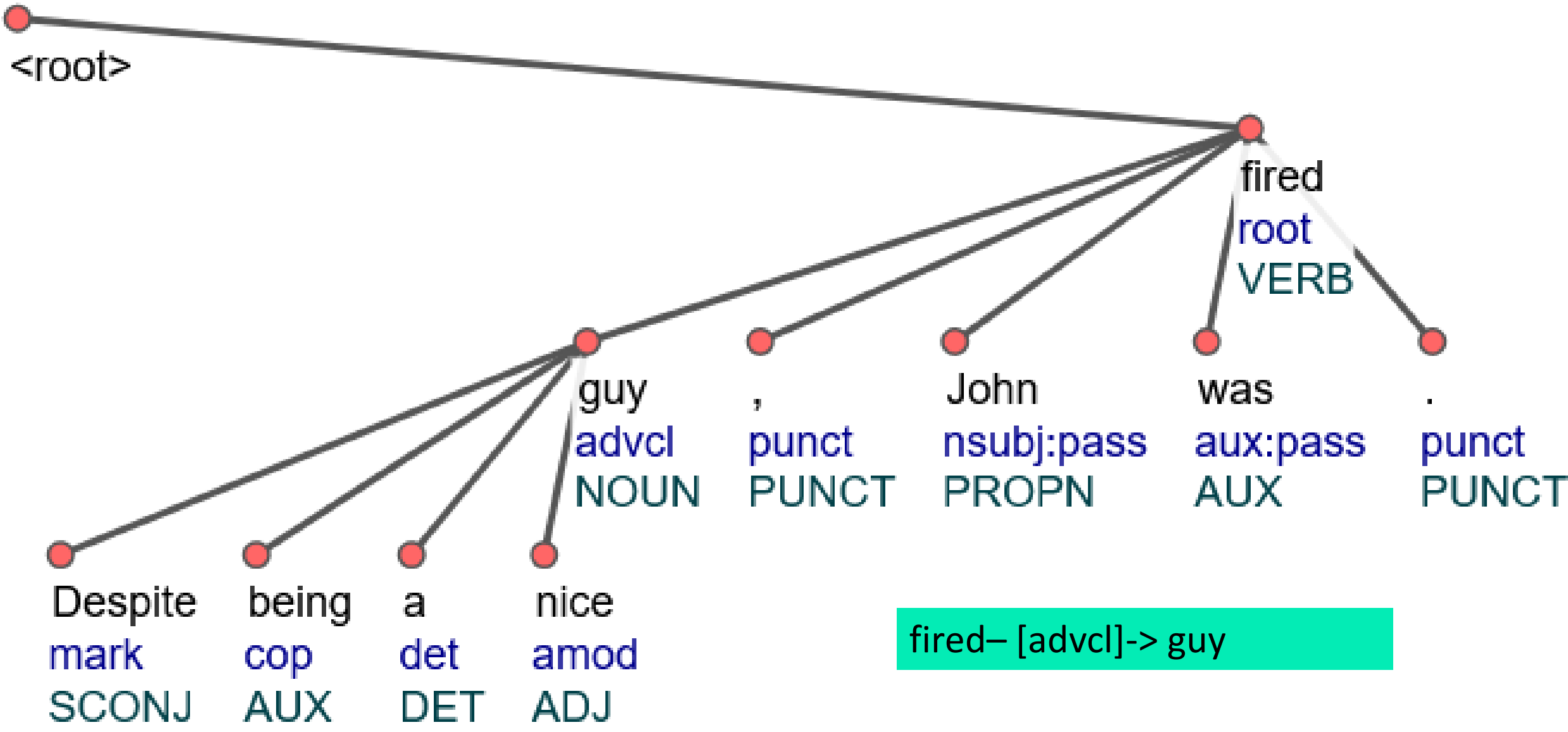
Adverbials

- adverb: advmod
- adverbial clause: advcl

good– [advmod]-> very

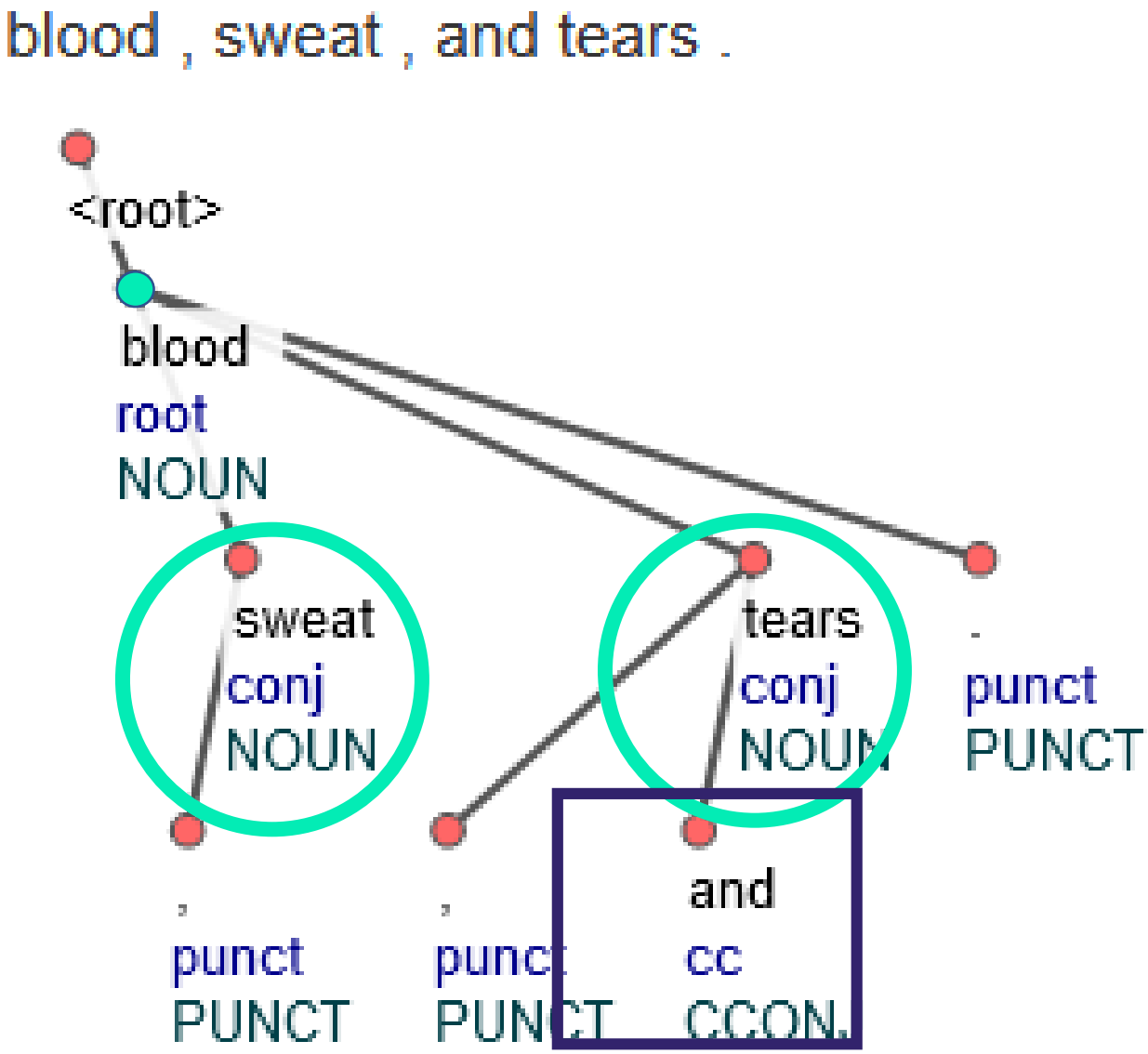


Despite being a nice guy , John was fired .



fired– [advcl]-> guy

Coordination



- coordinating conjunctions depends on the member that follows

Those small auxiliary words

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- preposition (case)
- subordinating conjunction (mark)
- infinitive marker (mark)
- determiner (det)
- copula verb (cop)
- auxiliary verb (aux)

Multiword expressions

- `fixed`
  - grammaticalized function-word MWEs *(in spite of)*
- `flat`
  - proper names MWEs, other MWEs with no clear head (*Mr. John Smith*)
- `compound`
  - compound nouns (*power plant manager*)
- In `fixed` and `flat`, the head is the first word and rules all other words.
- In `compound`, we preserve the dependency structure

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Playtime!

https://quizlet.com/705591952/live?type=checkpoint

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Work time!