

Natural language 27/11/81.

PN: proper noun
CN: common noun

A toy lexicon:

I, Robin, Hilary: PN

book, table, cat: CN

the, this: $\frac{PN}{CN}$ PN/CN

small, grey, angry: $\frac{CN}{CN}$

sleep, speak: $\frac{S}{PN}$ S\PN

read, kick, like: $\frac{S}{\frac{PN}{PN}}$

that: $\frac{S}{S}$

and: $\frac{X}{XX}$ 2 (NX)/X

Some toy sentences:

Robin spoke.
PN S\PN
S

Robin likes Hilary.
PN (S\PN)/PN PN
S\PN
S

I read the book.
PN (S\PN)/PN PN/CN CN
PN
S\PN
S

give: $\frac{S}{\frac{PN}{\frac{PN}{PN}}}$

say: $\frac{S}{\frac{PN}{S}}$

sadly: $\frac{S}{\frac{S}{\frac{S}{PN}}}$

on: $\frac{PN}{\frac{PN}{\frac{PN}{PN}}}$

((S\NP)/NP)/NP

S₂ S/S
either S/S or S/S

An exercise for the reader:

Provide derivations for the following sentences; try to use each of the four notations at least once.

1. Tigers eat postmen.

2. The large hungry tiger from the zoo ate our postman.

3. We gave our postman several letters.

4. Unfortunately, the tiger ate the postman and our letters.

5. Michael and Christopher believe that postmen like tigers.