

Logic and Language: Exercise (Week 6)

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1 Syntax

1.1

First, we define the rules of *rightward extraction* $\widehat{\alpha}_\diamond^r, \widehat{\sigma}_\diamond^r$:

$$\frac{f : A \otimes (B \otimes \diamond C) \rightarrow D}{\widehat{\alpha}_\diamond^r f : (A \otimes B) \otimes \diamond C \rightarrow D} \qquad \frac{f : (A \otimes \diamond C) \otimes B \rightarrow D}{\widehat{\sigma}_\diamond^r f : (A \otimes B) \otimes \diamond C \rightarrow D}$$

We can now proceed with the derivation of

$$n \otimes ((n \setminus n)/(s/\diamond \square np)) \otimes ((np/n) \otimes n) \otimes ((np \setminus s)/np) \rightarrow n$$

as follows:

[illegible]