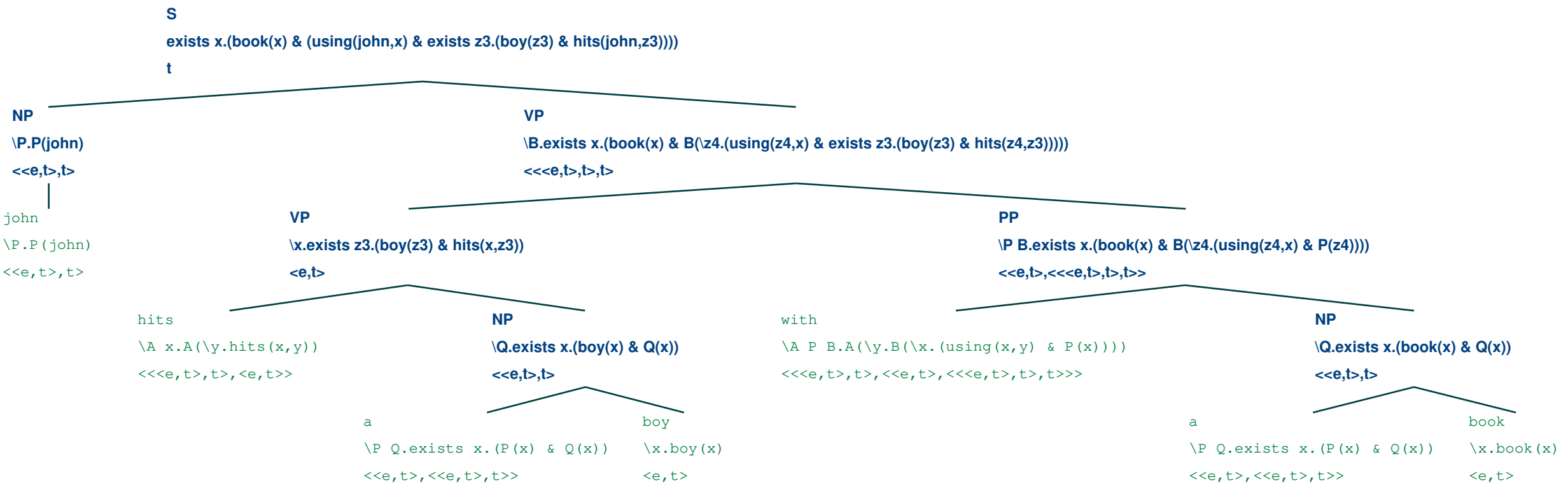
S
exists x.(book(x) & (using(john,x) & exists z3.(boy(z3) & hits(john,z3))))
t
NP
\P.P(john)
<<e,t>,t>
john
\P.P(john)
<<e,t>,t>
VP
\B.exists x.(book(x) & B(\z4.(using(z4,x) & exists z3.(boy(z3) & hits(z4,z3)))))
<<<e,t>,t>,t>
VP
\x.exists z3.(boy(z3) & hits(x,z3))
<e,t>
hits
\A x.A(\y.hits(x,y))
<<<e,t>,t>,<e,t>>
NP
\Q.exists x.(boy(x) & Q(x))
<<e,t>,t>
a
\P Q.exists x.(P(x) & Q(x))
<<e,t>,<<e,t>,t>>
boy
\x.boy(x)
<e,t>
PP
\P B.exists x.(book(x) & B(\z4.(using(z4,x) & P(z4))))
<<e,t>,<<<e,t>,t>,t>>
with
\A P B.A(\y.B(\x.(using(x,y) & P(x))))
<<<e,t>,t>,<<e,t>,<<<e,t>,t>,t>>>
NP
\Q.exists x.(book(x) & Q(x))
<<e,t>,t>
a
\P Q.exists x.(P(x) & Q(x))
<<e,t>,<<e,t>,t>>
book
\x.book(x)
<e,t>