My notes

Patrick D. Elliott

April 7, 2020

(1) someone :=
$$\lambda k \cdot \exists x [k \ x]$$
 (e \rightarrow t) \rightarrow t

Let's try the obvious way of lifting an existential quantifier into a dynamic setting:

(2) someone[†] :=
$$\lambda k \cdot \lambda \omega \omega' \cdot \exists x [k \ x \ \omega \ \omega']$$
 (e \rightarrow T) \rightarrow T

Now let's apply Gennaro's Discourse Referent (DR)-lift function to a one-place predicate:

(3)
$$\operatorname{swim}^{\Delta_n} := \lambda x \cdot \lambda \omega \omega' \cdot \omega \stackrel{n/x}{=} \omega' \wedge \operatorname{swim} x$$
 $e \to T$

Applying the lifted quantifier to the lifted predicate gives us something sensible, namely an indeterministic update:

(4)
$$\lambda \omega \omega' \cdot \exists x [\omega \stackrel{n/x}{=} \omega' \wedge \text{swim } x]$$

What about if we try the same thing with a universal? Observe that, if the cardinality of the domain is greater than 1, the result is an inconsistent update.

(5)
$$\lambda \omega \omega' \cdot \forall x [\omega \stackrel{n/x}{=} \omega' \wedge \text{swim } x]$$

This seems reminiscent of **demirok2019**'s explanation for why indefinites but not universals take exceptional scope.