1 Abbreviation of complex types

unabbreviated	**abbreviated**	**domain name**
$\langle e, t\rangle$	et	D_{et}
$\langle e, e\rangle$	ee	D_{ee}
$\langle e, \langle e, t\rangle\rangle$	$\langle e, et\rangle$	$D_{e,et}$
$\langle\langle e, t\rangle, t\rangle$	$\langle et, t\rangle$	$D_{et,t}$
$\langle\langle e, t\rangle, e\rangle$	$\langle et, e\rangle$	$D_{et,e}$
$\langle d, \langle e, t\rangle\rangle$	$\langle d, et\rangle$	$D_{d,et}$
$\langle\langle e, t\rangle, \langle e, t\rangle\rangle$	$\langle et, et\rangle$	$D_{et,et}$
$\langle\langle e, t\rangle, \langle\langle e, t\rangle, t\rangle\rangle$	$\langle et, \langle et, t\rangle\rangle$	$D_{et,(et,t)}$

2 Abbreviation of Lambda-expressions

fully written	**subscript type**	**no type**
$\lambda x \in D_e$. dog(x)	λx_e. dog(x)	λx. dog(x)
$\lambda y \in D_e$. walk(y)	λy_e. walk(y)	λy. walk(y)
$\lambda z \in D_e$. orange(z)	λz_e. orange(z)	λz. orange(z)
$\lambda x \in D_e.\lambda y \in D_e$. take(x)(y)	$\lambda x_e \lambda y_e$. take(x)(y)	$\lambda x \lambda y$. take(x)(y)
$\lambda x \in D_e.\lambda z \in D_e$. see(x)(z)	$\lambda x_e \lambda z_e$. see(x)(z)	$\lambda x \lambda y$. see(x)(z)
$\lambda a \in D_e.\lambda b \in D_e$. hire(a)(b)	$\lambda a_e \lambda b_e$. hire(a)(b)	$\lambda a \lambda b$. hire(a)(b)
$\lambda f \in D_{\langle e, t\rangle}.\lambda y \in D_e$. f(y)	$\lambda f_{\langle e, t\rangle} \lambda y_e$. f(y)	$\lambda f \lambda y$. f(y)
$\lambda f \in D_{\langle e, t\rangle}.\lambda g \in D_{\langle e, t\rangle}$. $\exists$x[f(x) = 1 & g(x) = 1]	$\lambda f_{\langle e, t\rangle} \lambda g_{\langle e, t\rangle}$. $\exists$x[f(x) = 1 & g(x) = 1]	$\lambda f \lambda g$. $\exists$x[f(x) = 1 & g(x) = 1]

3 Removal of = 1

(Abbreviate types and lambdas, while you're at it)

⟦*the*⟧	$\lambda f \in D_{\langle e,t\rangle}.\ \iota x \in C[\ f(x) = 1\ ]$	$\lambda f_{et}.\ \iota x[\ f(x)\ ]$
⟦*red car*⟧	$\lambda x \in D_e.$ red(x) = 1 & car(x) = 1	$\lambda x_e.$ red(x) & car(x)
⟦*happy dog*⟧	$\lambda x \in D_e.$ happy(x) = 1 & dog(x) = 1	$\lambda x_e.$ happy(x) & dog(x)
⟦*every*⟧	$\lambda f \in D_{\langle e,t\rangle}.\lambda g \in D_{\langle e,t\rangle}.\ \forall x[\ f(x) = 1 \rightarrow g(x) = 1\ ]$	$\lambda f_{et}\lambda g_{et}.\ \forall x[\ f(x) \rightarrow g(x)\ ]$
⟦*no*⟧	$\lambda f \in D_{\langle e,t\rangle}.\lambda g \in D_{\langle e,t\rangle}.\ \neg\exists z[\ f(z) = 1\ \&\ g(z) = 1\ ]$	$\lambda f_{et}\lambda g_{et}.\ \neg\exists z[\ f(z)\ \&\ g(z)\ ]$
⟦*some*⟧	$\lambda f \in D_{\langle e,t\rangle}.\lambda g \in D_{\langle e,t\rangle}.\ \exists x[\ f(x) = 1\ \&\ g(x) = 1\ ]$	$\lambda f_{et}\lambda g_{et}.\ \exists x[\ f(x)\ \&\ g(x)\ ]$