Let $T[\underline{X}]$ be a type where $\underline{X}$ contains all the free variables of T. Let $\underline{U}$ be a sequence of types of the same length; then we can define a type $T[\underline{U}/\underline{X}]$ by simultaneous substitution of types. Let $PAR\mathscr{C}[\![U_i]\!]_k^\theta$ and $PAR\mathscr{V}[\![U_i]\!]_k^\theta$ be the parametrised value and parametrised computational interpretations of the type U. Let $\underline{R}$ stand for the candidates of reducibility (C.R.) for the sequence of types. Then we define the set $PAR\mathscr{V}[\![T]\!]_k^\theta[\underline{R}/\underline{X}]$ and $PAR\mathscr{C}[\![T]\!]_k^\theta[\underline{R}/\underline{X}]$ for terms of type $T[\underline{U}/\underline{X}]$ as follows :

- $T = X_i$, then $PAR\mathscr{C}[\![T]\!]_k^\theta[\underline{R}/\underline{X}] = R[U_i]_k^\theta$
- $T = Unit$
  $PAR\mathscr{V}_k^\theta[\underline{R}/\underline{X}] = \{()\}$
- $T = A + B$
  $PAR\mathscr{V}[\![T]\!]_k^\theta[\underline{R}/\underline{X}] = \{inl\ v | v \in PAR\mathscr{V}[\![A]\!]_k^\theta[\underline{R}/\underline{X}]\} \bigcup \{inr\ v | v \in PAR\mathscr{V}[\![B]\!]_k^\theta[\underline{R}/\underline{X}]\}$
- $T = A@\theta'$
  $PAR\mathscr{V}[\![T]\!]_k^L[\underline{R}/\underline{X}] = \{box\ v | v \in PAR\mathscr{V}[\![A]\!]_k^{\theta'}[\underline{R}/\underline{X}]\}$
- $T = A^{\theta'} \to B$ then,
  $PAR\mathscr{V}[\![T]\!]_k^L[\underline{R}/\underline{X}] = \{rec\ f\ x.a | .\vdash^L rec\ f\ x.a : T[\underline{U}/\underline{X}]\ and\ \forall j \leq k,\ if\ v \in PAR\mathscr{V}[\![A]\!]_j^{\theta'}[\underline{R}/\underline{X}]\ then\ [v/x]a \in PAR\mathscr{C}[\![B]\!]_j^L[\underline{R}/\underline{X}]\}$
  $PAR\mathscr{V}_k^P[\![T]\!][\underline{R}/\underline{X}] = \{rec\ f\ x.a | .\vdash^P rec\ f\ x.a : T[\underline{U}/\underline{X}]\ and\ \forall j < k,\ if\ v \in PAR\mathscr{V}[\![A]\!]_j^{\theta'}[\underline{R}/\underline{X}]\ then\ [v/x][rec\ f\ x.a/f]a \in PAR\mathscr{C}[\![B]\!]_j^P[\underline{R}/\underline{X}]\}$
- $T = \mu\alpha.a$
  $PAR\mathscr{V}[\![T]\!]_k^P[\underline{R}/\underline{X}] = \{roll\ v | .\vdash^P roll\ v : \mu\alpha.a[\underline{U}/\underline{X}]\ and\ \forall j < k,\ v \in PAR\mathscr{V}[\![[\mu\alpha.a/\alpha]A]\!]_j^P[\underline{R}/\underline{X}]\}$
  $PAR\mathscr{V}[\![T]\!]_k^L[\underline{R}/\underline{X}] = \phi$
- $T = \forall\alpha.A$
  $PAR\mathscr{V}[\![\forall\alpha.A]\!]_k^\theta[\underline{R}/\underline{X}] = \{t | \forall V : type\ s.t.\ R[V]_j^\theta\ is\ C.R.\ of\ V,\ tV \in PAR\mathscr{C}[\![A]\!]_k^\theta[\underline{R}/\underline{X}, R[V]_j^\theta/\alpha]\}$

And parametrised computational interpretations are defined as :

$$PAR\mathscr{C}[\![T]\!]_k^P[\underline{R}/\underline{X}] = \{a | .\vdash^P a : T[\underline{U}/\underline{X}]\ and\ \forall j \leq k,\ if\ a \rightsquigarrow {}^j v\ then\ v \in PAR\mathscr{V}[\![T]\!]_{k-j}^P[\underline{R}/\underline{X}]\}$$

$$PAR\mathscr{C}[\![T]\!]_k^L[\underline{R}/\underline{X}] = \{a | .\vdash^P a : T[\underline{U}/\underline{X}]\ and\ a \rightsquigarrow {}^* v \in PAR\mathscr{V}[\![T]\!]_k^L[\underline{R}/\underline{X}]\}$$

Now, for the case $T = \forall\alpha.A$

$$PAR\mathscr{V}[\![\forall\alpha.A]\!]_k^\theta[\underline{R}/\underline{X}] = \{t | \forall V : type\ s.t.\ R[V]_j^\theta\ is\ C.R.\ of\ V,\ tV \in PAR\mathscr{C}[\![A]\!]_k^\theta[\underline{R}/\underline{X}, R[V]_j^\theta/\alpha]\}$$

We need the candidates of reducibility to fulfill conditions :

- $R[A]_k^\theta$ needs to be Strongly Normalizing (atleast in L, what about P?)
- If $t \rightsquigarrow t'$ and $t' \in R[A]_j^\theta,\ then\ t \in R[A]_j^\theta$.

Now we need to define reducibility candidates for each type :

- T=Unit : $R[Unit]^{\theta}_{k} = ()$
  CR1 and CR2 hold trivially.

- T=A+B : $R[A+B]^{\theta}_{k} = \{inl\ a|a \in R[A]^{\theta}_{k}\} \cup \{inr\ b|b \in R[B]^{\theta}_{k}\}$
  CR1 : By I.H. both $R[A]^{\theta}_{k}$ and $R[B]^{\theta}_{k}$ are SN.
  CR2 : from I.H. if $a \in R[A]^{\theta}_{k}$ then $a \in R[A]^{\theta}_{j}$ by CR2. Similarly $b \in R[B]^{\theta}_{j}$ by CR2. Hence $\{inl\ a|a \in R[A]^{\theta}_{k}\} \cup \{inr\ b|b \in R[B]^{\theta}_{k}\} \in R[A+B]^{\theta}_{j}$.

- T=$A^{\theta'} \rightarrow B$: $R[A^{\theta'} \rightarrow B]^{L}_{k} = \{t|t \rightsquigarrow {}^{*}v \wedge irred(v) \wedge \forall j \leq k,\ if\ a \in R[A]^{\theta'}_{k}\ then\ ta \in R[B]^{L}_{j}\}$
  CR1:by def.
  CR2: let $a \in R[A]^{\theta'}_{i}$ where $i \leq j \leq k$ then if $t \in R[A^{\theta'} \rightarrow B]^{L}_{k}$ then $ta \in R[B]^{L}_{i}$, which is true also when $t \in R[A^{\theta'} \rightarrow B]^{L}_{j}$