Backus' notation of secondary functions

AND-ALL: $x \equiv$ x is a list of all Ts $\rightarrow T$;

$\quad\quad\quad\quad$ x is a list of atleast one non T $\rightarrow F$;

$\quad\quad\quad\quad$ $\perp$

EQUAL-ALL: $x \equiv$ x is a list of equal objects $\rightarrow T$;

$\quad\quad\quad\quad$ x is a list of non equal objects $\rightarrow F$;

$\quad\quad\quad\quad$ $\perp$

MMINUS: $z \equiv$ $z = <x,y>$ and x,y are matrices of the

$\quad\quad\quad\quad$ same shape $\rightarrow$ matrix difference of x and y,

$\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad$ defined as $x-y$;

$\quad\quad\quad\quad$ $\perp$

SQUARE?: $x \equiv$ x is a matrix of equal no. of rows and columns

$\quad\quad\quad\quad$ $\rightarrow T$;

$\quad\quad\quad\quad$ $x \neq \perp \rightarrow F$;

$\quad\quad\quad\quad$ $\perp$