```
\llbracket \ \langle \mathtt{id},\ \mathtt{mc}_{in},\ \mathtt{v}
angle \ 
rbracket = spawn (fn \_ => loop v) ; (v, \mathtt{c}_{out})
   where c_{in}, c_{out} = port mc_{in}, mailbox ()
            eid = port eventNotify
            loop prev =
               let msg = if recv eid == id then Change (recv c_{in})
                                                           else NoChange prev
               in send cout msg; loop (bodyOf msg)
\llbracket \mathsf{lift}_n \ f \ s_1 \ ... \ s_n 
rbracket = \mathsf{spawn} \ (\mathsf{fn \_} => \mathsf{loop} \ \mathsf{v}) \ ; \ (\mathsf{v}, \ \mathsf{c}_{out})
   where (v_1, c_1), ..., (v_n, c_n) = [s_1], ..., [s_n]
            v, c_{out} = f v_1 \dots v_n, mailbox ()
            loop prev =
               let (m_1, \ldots, m_n) = (recv c_1, \ldots, recv c_n)
                     msg = if exists change [m_1, ..., m_n] then
                                  Change (f (bodyOf x_1) ... (bodyOf x_n))
                               else NoChange prev
               in send c_{out} msg; loop (bodyOf msg)
\lceil \text{foldp } f \ v \ s_{in} \rceil = \text{spawn (fn } \_ \Rightarrow \text{loop v)} ; (v, c_{out})
   where (_, c_{in}), c_{out} = \llbracket s_{in} \rrbracket, mailbox ()
            loop acc = let msg = case recv c_{in} of
                                                | NoChange _ -> NoChange acc
                                                      Change v \rightarrow Change (f v acc)
                             in send cout msg; loop (bodyOf msg)
[\![ 	ext{let} \ x = s_{in} \ 	ext{in} \ s_{out} ]\!] = 	ext{spawn loop} ; ( 	ext{let} \ x_v, x_{ch} = 	ext{v,mc}_{out} \ 	ext{in} \ [\![ s_{out} ]\!])
   where (v, c_{in}), mc_{out} = [s_{in}], mChannel ()
            loop () = send mc_{out} (recv c_{in}); loop ()
[x] = (x_v, port x_{ch})
\llbracket \texttt{async} \ s_{in} \rrbracket = \texttt{spawn loop} \ ; \ \llbracket \ \langle \texttt{id}, \ \texttt{c}_{out}, \ \texttt{v} \rangle \ \rrbracket
  where (v, c_{in}), c_{out}, id = [s_{in}], mChannel (), guid ()
            loop () = case recv c_{in} of
                               | NoChange _ -> loop ()
                                     Change v \rightarrow send c_{out} v;
                                                        send newEvent id ; loop ()
```

Figure 6: Translation from Signal Values to CML