

**w-es**<sup>0,22</sup>

$ES(the\_w)$   
 $\equiv_{\text{def}} \langle E$   
  , product-deq(Id;N;IdDeq;NatDeq)  
  , ( $\lambda e. w\text{-pred}(the\_w;e)$ )  
  , ( $\lambda e. w\text{-info}(the\_w;e)$ )  
  , (TERMOF{w-order-axioms:ObjectId, 1:l, i:l}(the\_w,p))  
  , the\_w.T  
  , the\_w.TA  
  , the\_w.M  
  , ( $\lambda i, x. s(i;0).x$ )  
  , ( $\lambda i. 1\text{of}(2\text{of}(w\text{-machine}(the\_w;i)))$ )  
  , ( $\lambda e. \text{val}(e)$ )  
  , ( $\lambda i. 2\text{of}(2\text{of}(w\text{-machine}(the\_w;i)))$ )  
  , ( $\lambda i. 1\text{of}(w\text{-machine}(the\_w;i))$ )  
  , (TERMOF{world-es-val:ObjectId, 1:l, i:l}(the\_w,p))  
  , (TERMOF{world-es-atom:ObjectId, 1:l, i:l}(the\_w,p))  
  ,  $\cdot$   
   $\rangle$

*clarification:*

$w\text{-es}\{i:l\}$   
  ( $the\_w; p$ )  
 $\equiv_{\text{def}} \langle w\text{-}E(the\_w)$   
  , product-deq(Id;N;IdDeq;NatDeq)  
  , ( $\lambda e. w\text{-pred}(the\_w;e)$ )  
  , ( $\lambda e. w\text{-info}(the\_w;e)$ )  
  , (TERMOF{w-order-axioms:ObjectId, 1:l, i:l}(the\_w,p))  
  , the\_w.T  
  , the\_w.TA  
  , the\_w.M  
  , ( $\lambda i, x. w\text{-}s(the\_w; i; 0; x)$ )  
  , ( $\lambda i. 1\text{of}(2\text{of}(w\text{-machine}(the\_w;i)))$ )  
  , ( $\lambda e. w\text{-eval}(the\_w; e)$ )  
  , ( $\lambda i. 2\text{of}(2\text{of}(w\text{-machine}(the\_w;i)))$ )  
  , ( $\lambda i. 1\text{of}(w\text{-machine}(the\_w;i))$ )  
  , (TERMOF{world-es-val:ObjectId, 1:l, i:l}(the\_w,p))  
  , (TERMOF{world-es-atom:ObjectId, 1:l, i:l}(the\_w,p))  
  ,  $\cdot$   
   $\rangle$