

$$\begin{aligned}
A &== [ns : \mathbb{F}\mathbb{N}_1] \\
AInit &== [A' \mid ns' = \emptyset] \\
New &== [\Delta A; n? : \mathbb{N}_1 \mid ns' = ns \cup \{n?\}] \\
MSF &== [\Xi A; m! : \mathbb{N}_1 \mid ns \neq \emptyset; m! = \max ns]
\end{aligned}$$

Injective seq ensures the 2 msf are unique.

$AM2SF$	
$\Xi A$	
$m1!, m2! : \mathbb{N}_1$	
$\# ns > 1$	
$m1! = \max ns$	
$m2! = \max (ns \setminus \{m1!\})$	

$C3$	
$cs : \text{iseq } \mathbb{N}_1$	
$(- < -) \circ cs \subseteq cs \circ (- < -)$	

$C3Init$	
$C3'$	
$cs' = \langle \rangle$	

$$LI3 == [A; C3 \mid ns = \text{ran } cs]$$

Note  $cs \setminus \langle ma! \rangle$  is not equivalent,  
because a sequence is a function, and the domain mapping of  $\langle ma! \rangle$  is different  
to  $cs$   
(You did it wrong this way before)

$C3MSF2$	
$\Xi C3; ma!, mb! : \mathbb{N}_1$	
$\#(\text{ran } cs) \geq 2$	
$ma! = \text{last } cs$	
$mb! = cs (\# cs - 1)$	