Case 2.2 !   m had rejected w' proposal

~~w'' > w' in Lm~~

(Algo def) $w'' > w'$ in L_m

(Obs 1) $w > w''$ in L_m

$\Longrightarrow$ $w > w'$ in $L_m \Rightarrow$ contradiction!
~~Transitivity~~
of $>$

_____

$N \rightarrow 2N$

$N^d \rightarrow (2N)^d = 2^d \cdot N^d$