

1. The arrow $b : X \rightarrowtail Y$ satisfies $J!_Y \odot b = J!_X$.
2. Precomposing $b : X \rightarrowtail Y$ preserves the greatest fixed point of Ψ . Namely, if $f : Y \rightarrowtail 1$ is the greatest fixed point of Ψ_Y , then $f \odot b : X \rightarrowtail 1$ is the greatest fixed point of Ψ_X .
3. Precomposing $b : X \rightarrowtail Y$ preserves the largest mediating arrow. Namely, if $l_{\mathbf{max}} : Y \rightarrowtail Z$ is the largest mediating arrow from a cone $(Y, (\delta_i : Y \rightarrowtail \overline{F}^i 1))$ to a weak 2-limit $(Z, (J\pi_i : Z \rightarrowtail \overline{F}^i 1))$, then $l_{\mathbf{max}} \odot b : X \rightarrowtail Z$ is the largest mediating arrow from a cone $(X, (\delta_i \odot b : X \rightarrowtail \overline{F}^i 1))$ to the weak 2-limit.