$$\sigma_{\lambda-1}(\sigma_\lambda^{-1}(\kappa_a^\ell)) \in V(\mathcal{S}_a^\ell) \setminus \{\kappa_a^\ell\} \text{ and} \sigma_{\lambda-1}(\sigma_\lambda^{-1}(\kappa_a^\ell)) \in V(\mathcal{K}^\ell)$$