$$\{\kappa_a^\ell, \sigma_{\lambda-1}(\sigma_\lambda^{-1}(\kappa_a^\ell))\} \subset \sigma_{\lambda-1}^{-1}(V(\mathcal{K}^{\ell-1})) \setminus (V(\mathcal{P}_a^{\ell-1}) \cup V(\mathcal{P}_b^{\ell-1}))$$