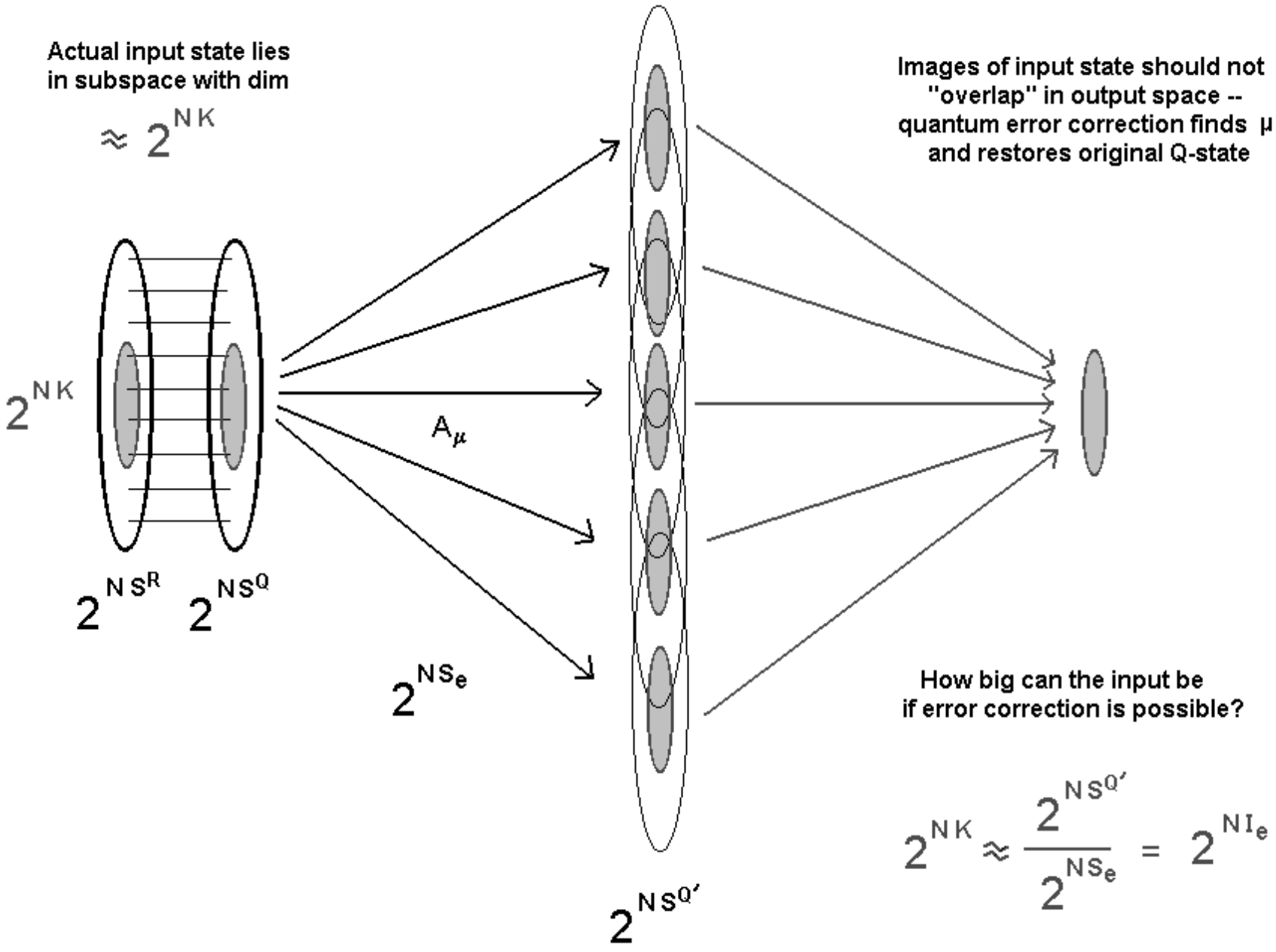
Actual input state lies in subspace with dim
$\approx 2^{NK}$
2^{NK}
2^{NS^R}
2^{NS^Q}
A_μ
2^{NS_e}
$2^{NS^{Q'}}$
Images of input state should not "overlap" in output space -- quantum error correction finds μ and restores original Q-state
How big can the input be if error correction is possible?
$2^{NK} \approx \frac{2^{NS^{Q'}}}{2^{NS_e}} = 2^{NI_e}$