

$$\begin{array}{ccccccc}
& \text{1st block} & \text{2nd block} & (a_1+\dots+a_{i-1}+j)\text{-th block} & (a_1+\dots+a_n)\text{-th block} & & \\
& \overbrace{(1, 2, \dots, k_{1,1}, 1', 2', \dots, k_{1,2}, \dots, 1', 2', \dots, k_{i,j}, \dots, 1', 2', \dots, k_{n,a_n})} & & & & & \\
& \downarrow \rho_{1,1} & \dots & \downarrow \rho_{i,j} & \dots & \downarrow \rho_{n,a_n} & \\
(\underbrace{\rho_{1,1}(1), \rho_{1,1}(2), \dots, \rho_{1,1}(k_{1,1})}_{\text{1st block}}, \dots, \underbrace{\rho'_{i,j}(1)\rho'_{i,j}(2), \dots, \rho'_{i,j}(k_{i,j})}_{(a_1+\dots+a_{i-1}+j)\text{-th block}}, \dots, \underbrace{\rho'_{n,a_n}(1), \rho'_{n,a_n}(2), \dots, \rho'_{n,a_n}(k_n, a_n)}_{(a_1+\dots+a_n)\text{-th block}})
\end{array}$$