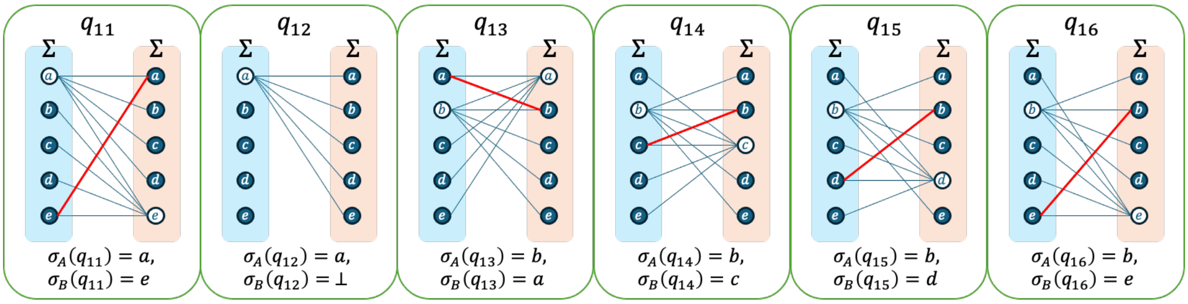

Figure 1: Let $\Sigma = \{a, b, c, d, e\}, Q = \{q_{11}, q_{12}, q_{13}, q_{14}, q_{15}, q_{16}\}$. From these figures, we get $\ell_A = 4$, $\ell_B = 1$, $Q^{(\perp,\perp)} = Q^{(\perp,\cdot)} = \emptyset, Q^{(\cdot,\perp)} = \{q_{12}\}$, and $Q^{(\cdot,\cdot)} = \{q_{11}, q_{13}, q_{14}, q_{15}, q_{16}\}$. From Proposition **??**, we note again that for example, even if $p\{x := cb\} \preceq q_{14}$ holds, it does not imply that $p\{x := xy\} \preceq q_{14}$.

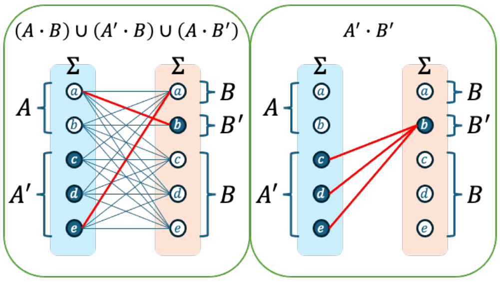

Figure 2: In the left and right figures, we aggregate all of the edges corresponding to $(A \cdot B) \cup (A' \cdot B) \cup (A \cdot B')$ and $A' \cdot B'$ in Fig. 1, respectively. From these figures, we get $Q_1^{(\cdot,\cdot)} = \{q_{11}, q_{13}\}$ and $Q_2^{(\cdot,\cdot)} = \{q_{14}, q_{15}, q_{16}\}$. Then, $\mathcal{L}_1 = 0$ and $\mathcal{L}_2 = 3 \leq \min\{\sharp A' + \ell_B, \sharp B' + \ell_A\} = 4$ holds.

Example 1

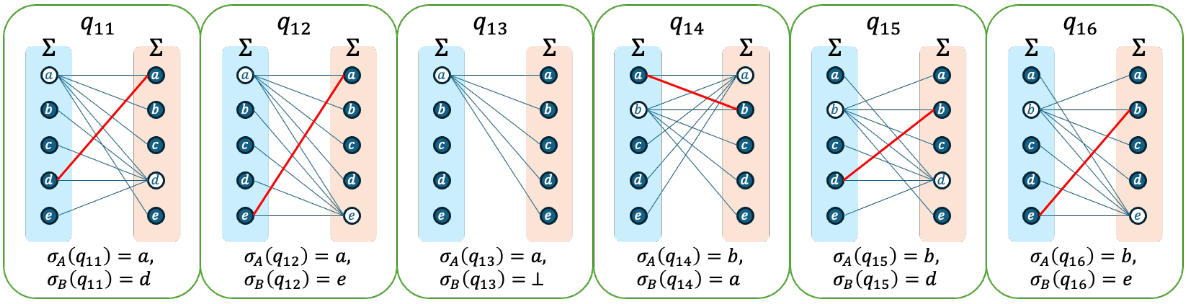

Figure 3: Let $\Sigma = \{a, b, c, d, e\}, Q = \{q_{11}, q_{12}, q_{13}, q_{14}, q_{15}, q_{16}\}$. From these figures, we get $\ell_A = 2$, $\ell_B = 2$, $Q^{(\perp,\perp)} = Q^{(\perp,\cdot)} = \emptyset, Q^{(\cdot,\perp)} = \{q_{13}\}$, and $Q^{(\cdot,\cdot)} = \{q_{11}, q_{12}, q_{14}, q_{15}, q_{16}\}$. From Proposition **??**, we note again that for example, even if $p\{x := db\} \preceq q_{15}$ holds, it does not imply that $p\{x := xy\} \preceq q_{15}$.

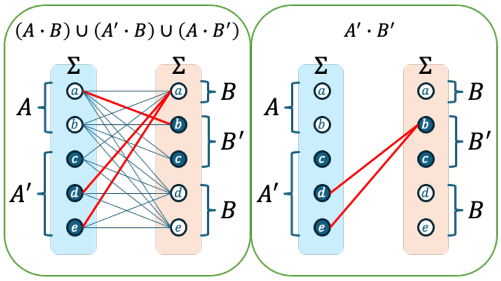

Figure 4: In the left and right figures, we aggregate all of the edges corresponding to $(A \cdot B) \cup (A' \cdot B) \cup (A \cdot B')$ and $A' \cdot B'$ in Fig. 3, respectively. From these figures, we get $Q_1^{(\cdot,\cdot)} = \{q_{11}, q_{12}, q_{14}\}$ and $Q_2^{(\cdot,\cdot)} = \{q_{15}, q_{16}\}$. Then, $\mathcal{L}_1 = 0$ and $\mathcal{L}_2 = 2 \leq \min\{\sharp A' + \ell_B, \sharp B' + \ell_A\} = 4$ holds.

Example 2