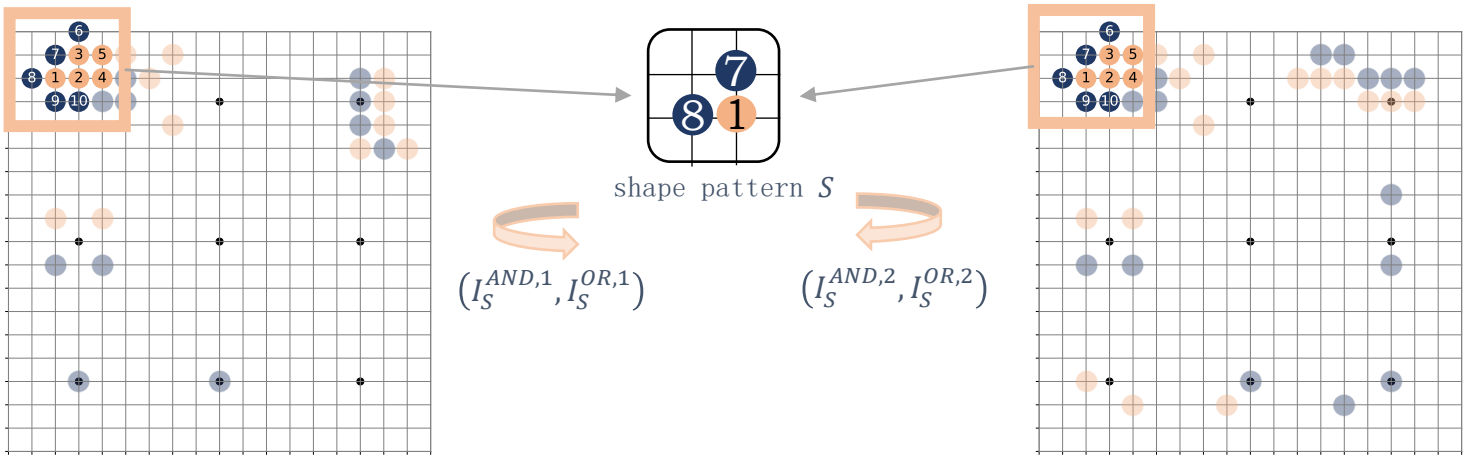

Let us put the same shape pattern S into two different contextual board states. $(I_S^{AND,1}, I_S^{OR,1})$ and $(I_S^{AND,2}, I_S^{OR,2})$ denote the AND-OR interaction extracted under the first context and those under the second context, respectively.

The generalization rate of m-order interactions is computed as $R^{(m)} = \frac{\#\ of\ generalized\ interactions}{\#\ of\ all\ salient\ interactions}$.

$$\#\ of\ all\ salient\ interactions = \sum_{S\subseteq N:|S|=m} 1(|I_S^{AND,1}| > \xi) + 1(|I_S^{OR,1}| > \xi)$$

$$\#\ of\ generalized\ interactions = \sum_{S\subseteq N:|S|=m} 1(|I_S^{AND,1}| > \xi\ and\ |I_S^{AND,2}| > \xi) + 1(|I_S^{OR,1}| > \xi\ and\ |I_S^{OR,2}| > \xi)$$

	$R^{(0)}$	$R^{(1)}$	$R^{(2)}$	$R^{(3)}$	$R^{(4)}$	$R^{(5)}$	$R^{(6)}$	$R^{(7)}$	$R^{(8)}$	$R^{(9)}$	$R^{(10)}$
case 1	0	0.89	1	0.80	0.83	0.64	0.43	0.61	0.78	1	1
case 2	0	1	0	0	0.71	0.67	0.68	0.36	0.62	0.76	0.50
case 3	0	1	0	0	0.60	0.71	0.50	0.46	0.77	0.75	1