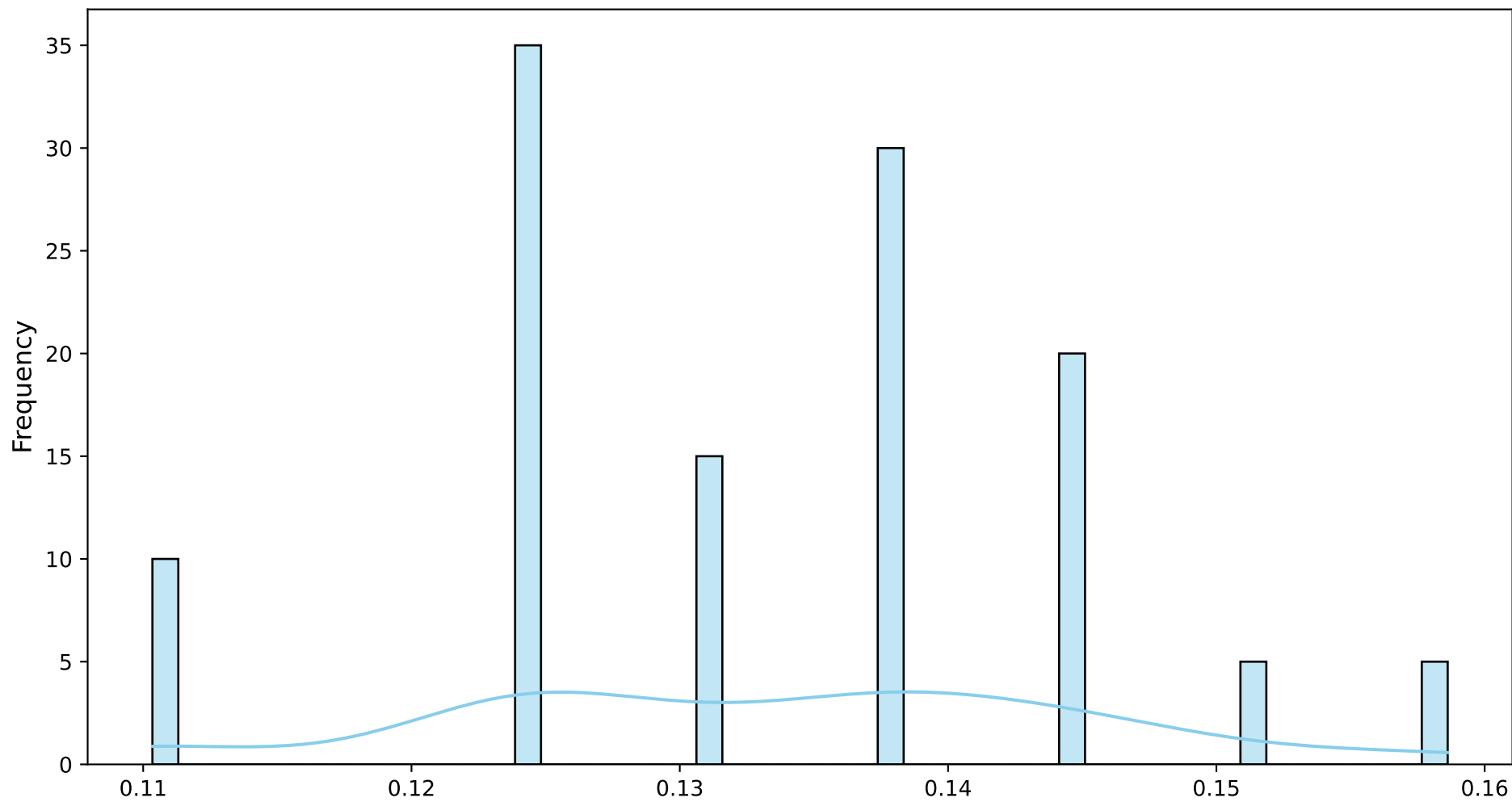
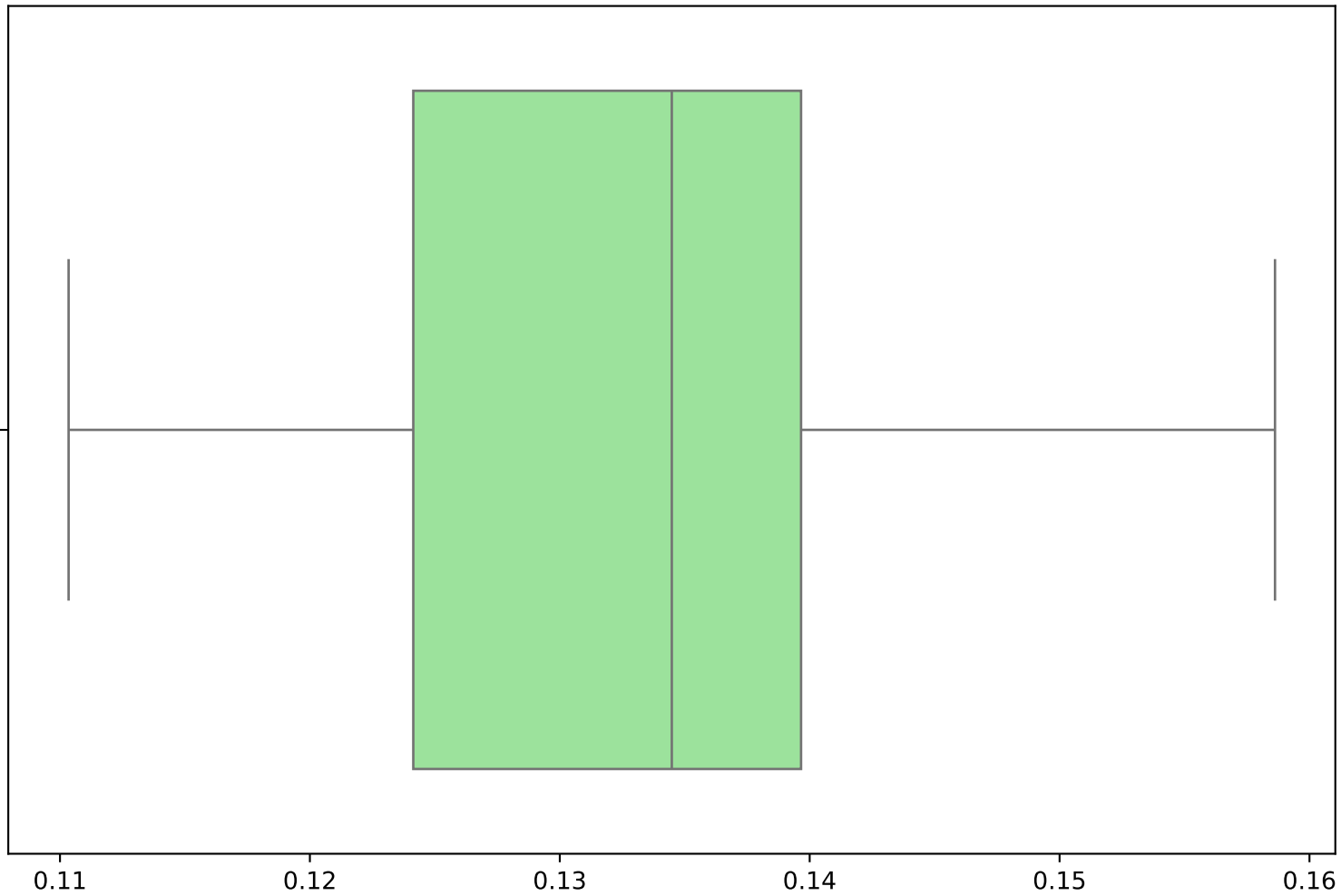


Distribution of Distances Across Permutations



Histogram showing how distances vary across all permutations.

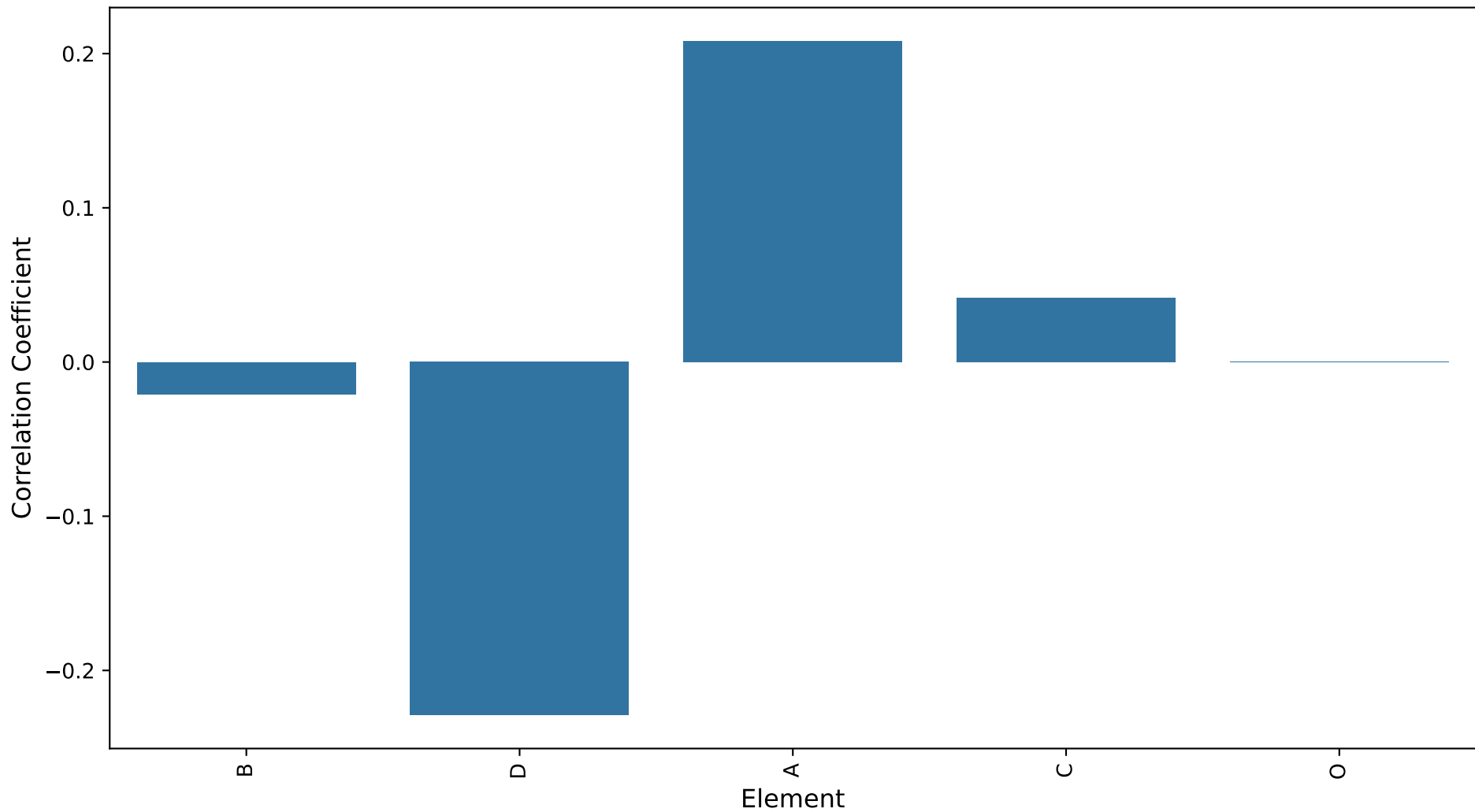
Summary Statistics of Distances



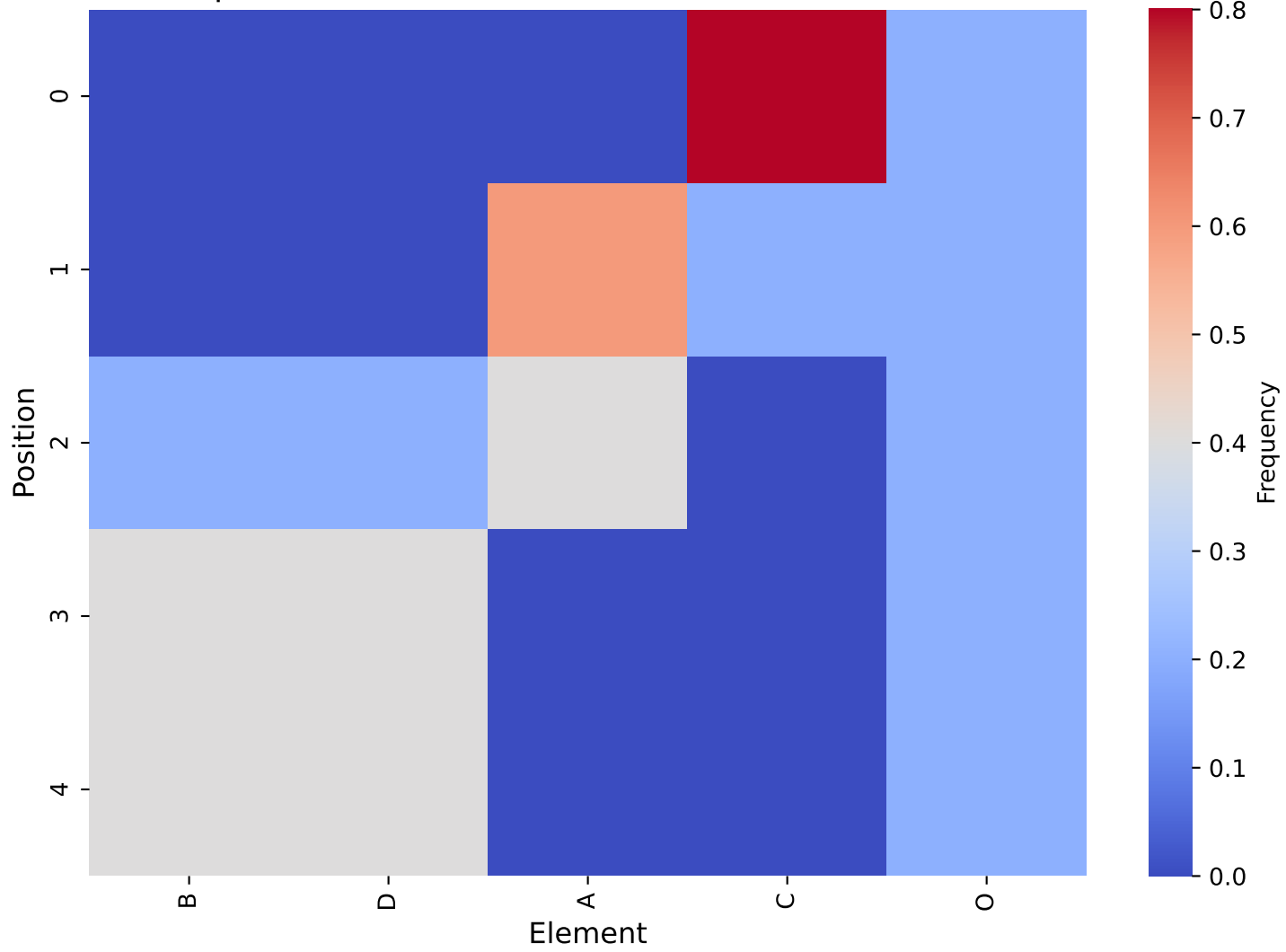
Distance

Boxplot illustrating the central tendency and dispersion of distances.

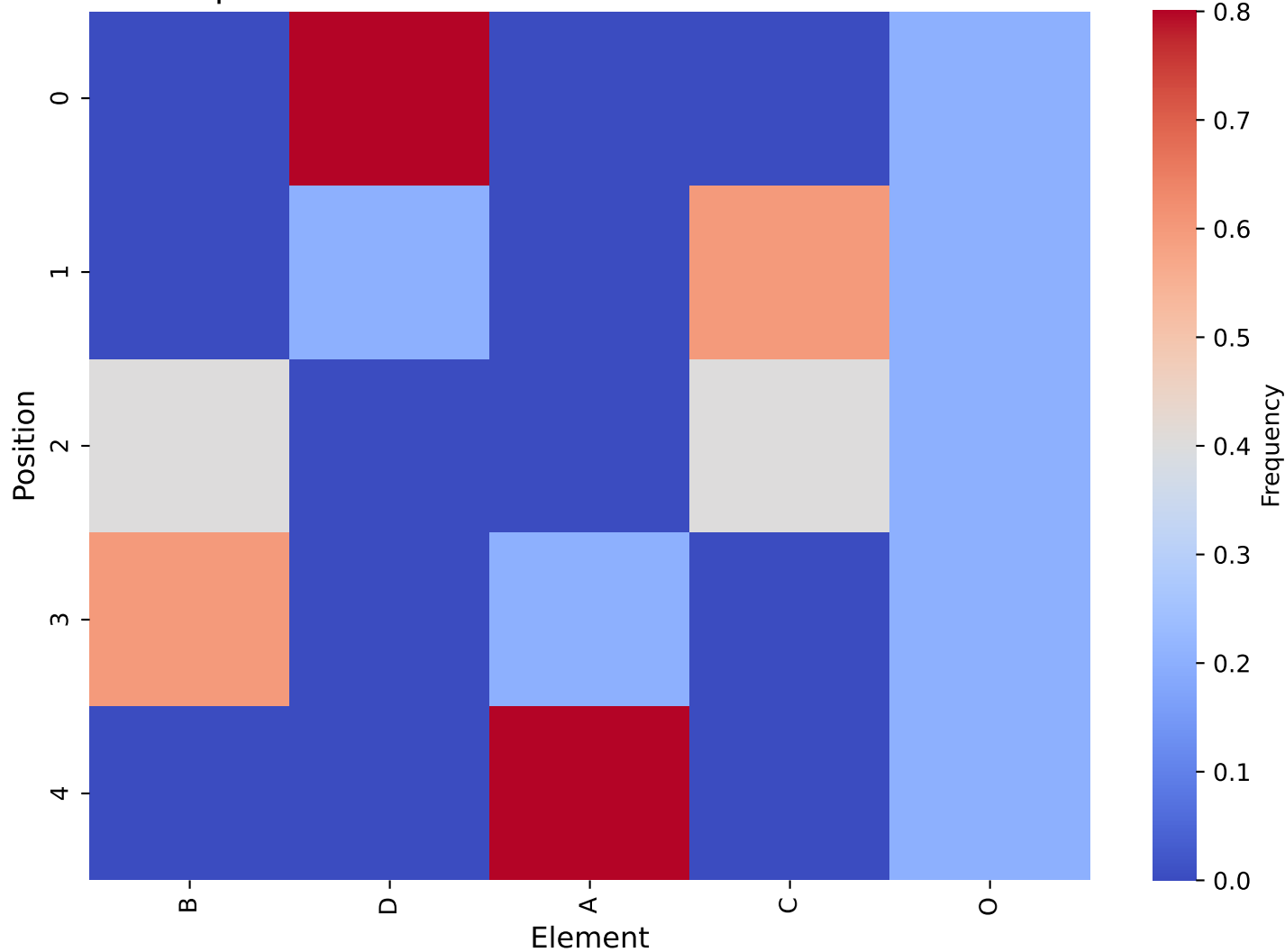
Correlation between Element Positions and Distance



Element Frequencies at Positions for Distance 0.11034482758620691



Element Frequencies at Positions for Distance 0.15862068965517243



Statistical Summary of Distances

	Value
Mean	0.133333
Median	0.134483
Standard Deviation	0.011722
Variance	0.000137
Minimum	0.110345
Maximum	0.158621

Shapiro-Wilk Normality Test Results:

	Test	Statistic	p-value
Shapiro-Wilk		0.936781	0.000026

Permutations with Minimal Distance: 0.11034482758620691

C, A, B, O, D
C, A, O, D, B
C, O, A, B, D
O, C, A, B, D
C, A, D, B, O
C, A, B, D, O
C, O, A, D, B
C, A, O, B, D
C, A, D, O, B
O, C, A, D, B

Permutations with Maximal Distance: 0.15862068965517243

D, C, B, A, O
D, C, B, O, A
O, D, C, B, A
D, O, C, B, A
D, C, O, B, A

Permutations resulting in the maximal total distance among trees.