**Cross-clustering**

Supposed to be superior for:

-dealing with outliers

-does not require a priori estimate of number of clusters

(-can detect when partitioning of a specific data set is not appropriate)

(-result does not depend on initialization)

Combines elements of:

Ward’s minimum variance

-Hierarchical agglomerative; start with each data point is its own cluster

-Group the two clusters that would lead to the least increase in within cluster variance

-clusters have centroids (multidimensional average of the points), within cluster variance measured by SSE (sum of squared distances from centroid)

-distance between clusters measured as increase in SSE when two clusters are merged

Complete-linkage

-Hierarchical agglomerative; start with each data point as own cluster

-join clusters of the shortest distance apart; distance defined by the two points in each cluster that are farthest away from each other