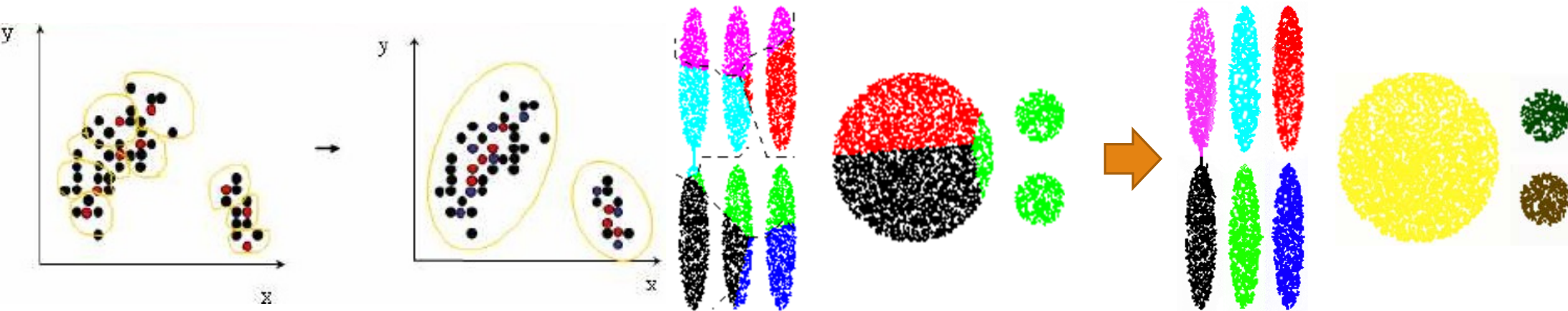


# CURE: Clustering Using Representatives

- **CURE** (Clustering Using REpresentatives) (S. Guha, R. Rastogi, and K. Shim, 1998)
  - Represent a cluster using a set of well-scattered representative points
- Cluster distance: Minimum distance between the representative points chosen
  - This incorporates features of both single link and average link
- Shrinking factor  $\alpha$ : The points are shrunk towards the centroid by a factor  $\alpha$ 
  - Far away points are shrunk more towards the center: More robust to outliers
- Choosing scattered points helps CURE capture clusters of arbitrary shapes



Courtesy: Kyuseok Shim@SNU.KR