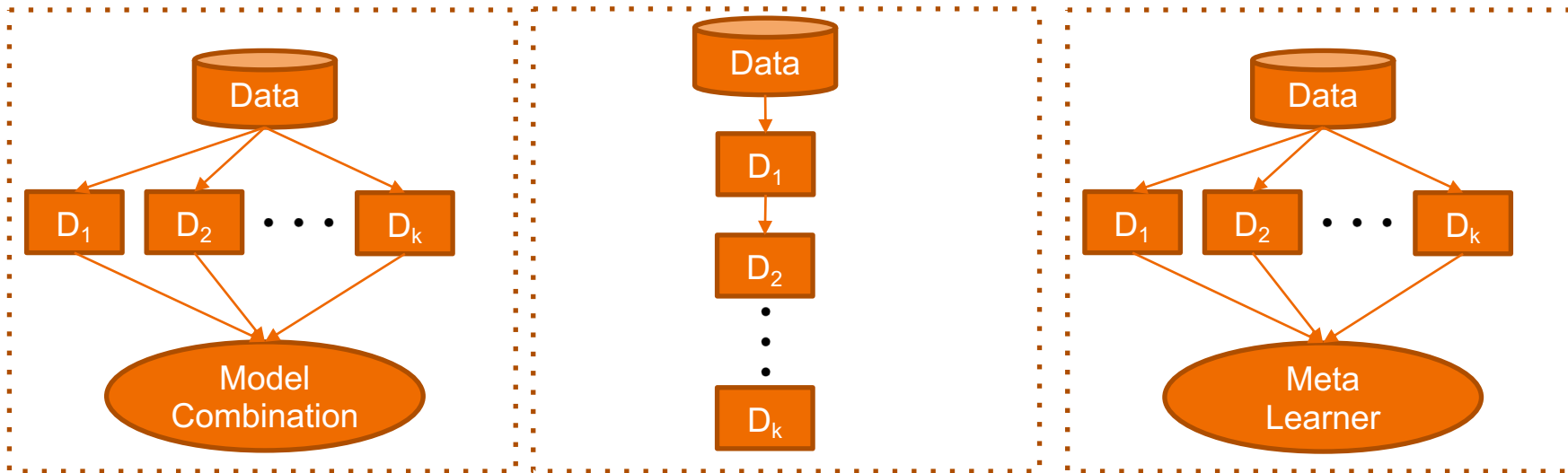


Outlier Ensembles

Outlier ensembles are designed to **combine** the results (scores) of either **independent** or **dependent** outlier detectors for better performance [1].

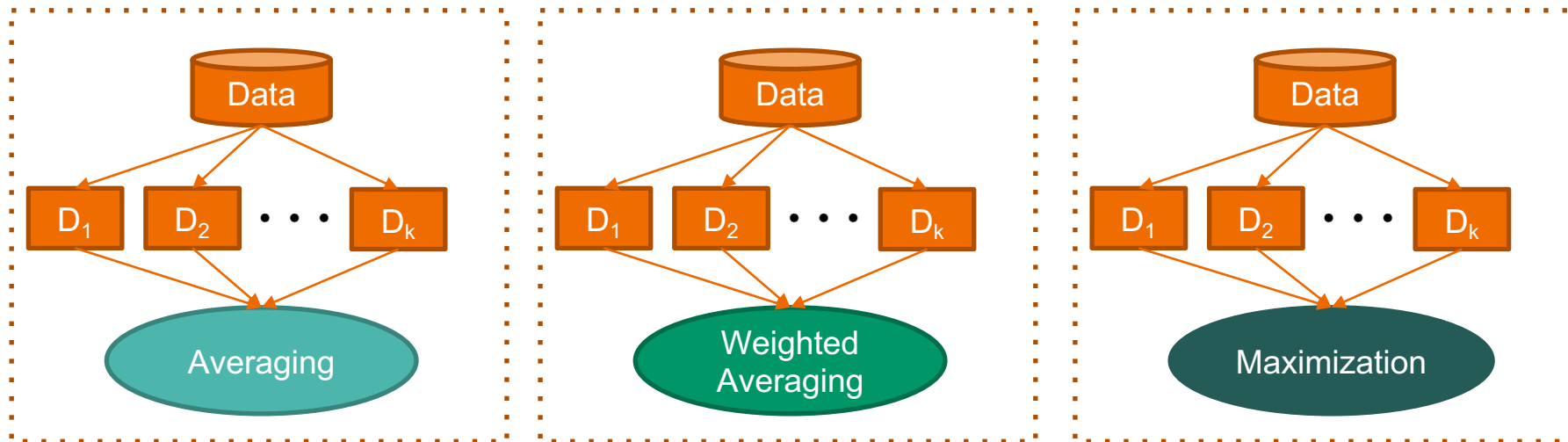


Parallel Learning (Bagging [2, 3]) Sequential Learning (Boosting [4, 5])

Stacking [6,7]

Parallel Combination Models

Due to their unsupervised nature, **most of outlier ensemble combination frameworks are parallel learning.**



Examples of Parallel Detector Combination

LSCP Flowchart

LSCP first generates a set of base detectors. For each test object X_j , LSCP (i) **defines the local region** $\Psi(X_j)$; (ii) creates **pseudo ground truth** on $\Psi(X_j)$ and (iii) evaluates, selects, and **combines most competent detector(s)**.

