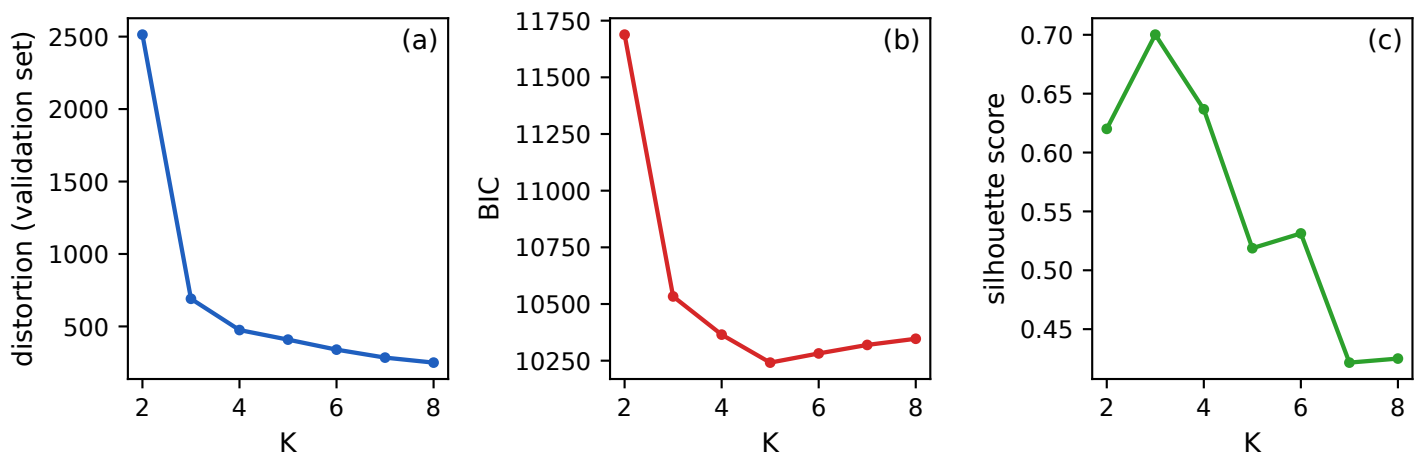

(a)
distortion (validation set)
2500
2000
1500
1000
500
2
4
6
8
K
(b)
BIC
11750
11500
11250
11000
10750
10500
10250
2
4
6
8
K
(c)
silhouette score
0.70
0.65
0.60
0.55
0.50
0.45
2
4
6
8
K