Spatial Summarization of Image Collections

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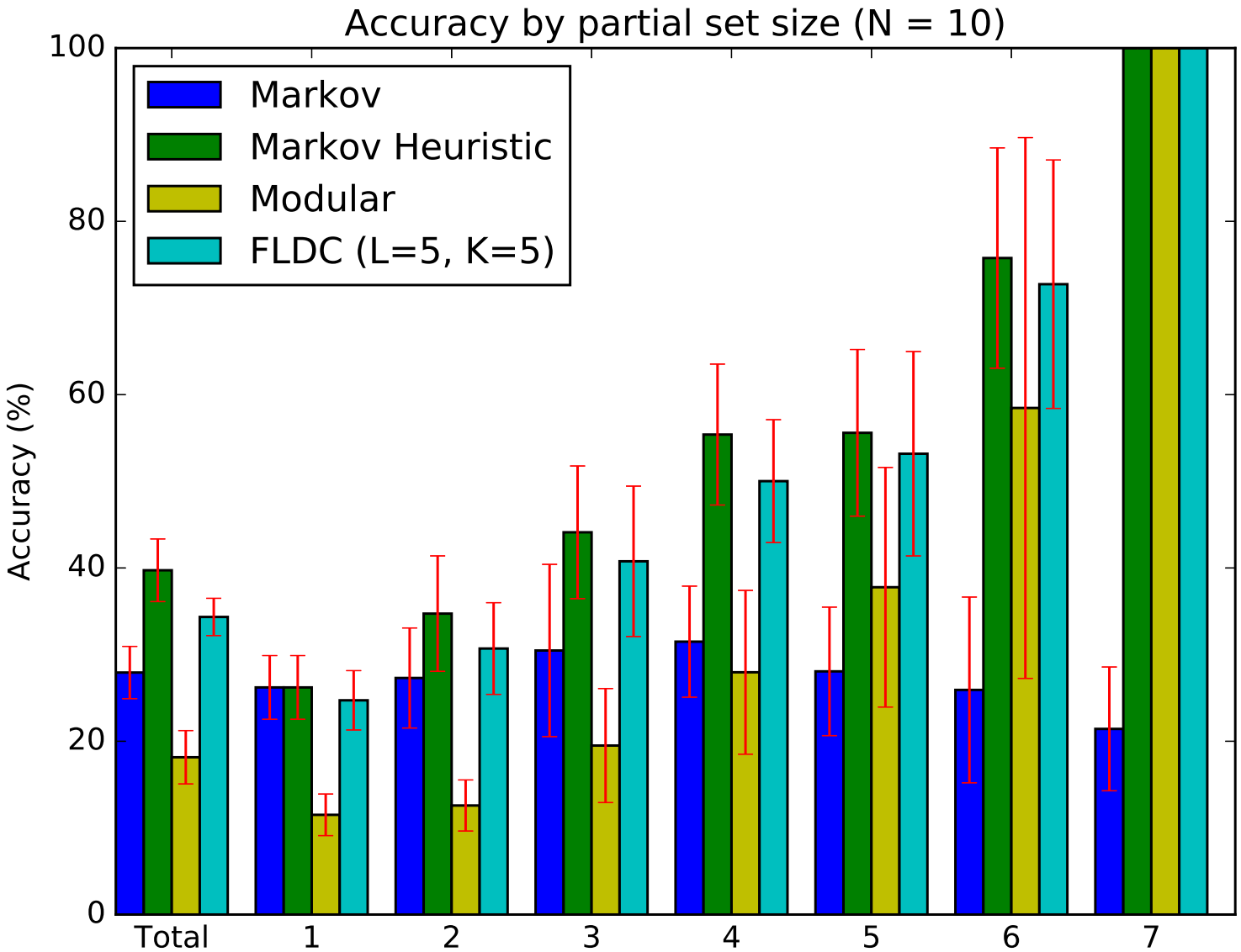
Outline

Strict evaluation for Markov model

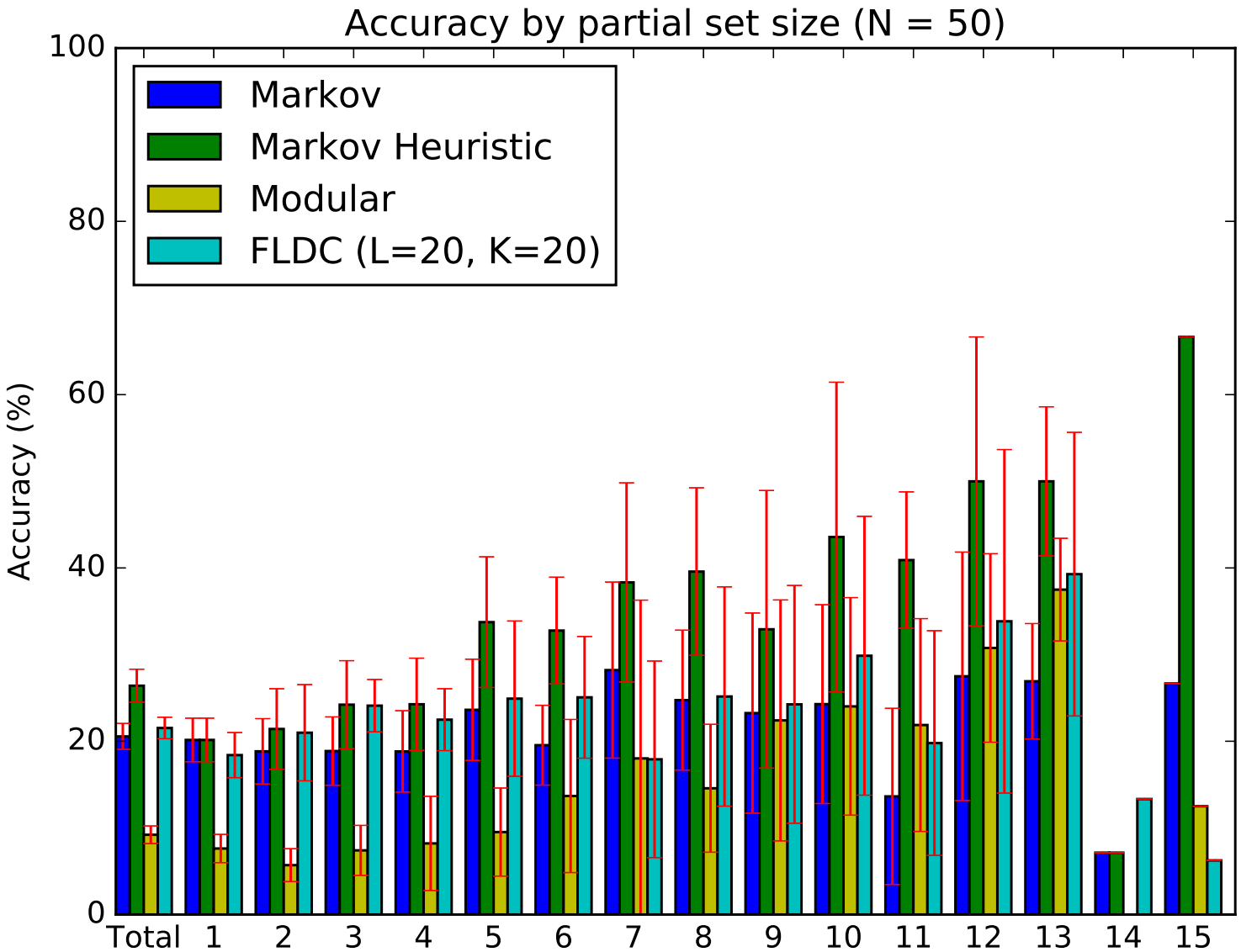
- The test set is generated ensuring that the last element is the element before the one that was removed from the set.
- Previously the order was not preserved and the ranking from the model was obtained summing the transition probabilities starting from each element in the partial set.
- This is the evaluation for the Markov model from now on.

Model ($N = 10$)	*Accuracy*	*MMR*
Markov	27.93 ± 3.02	51.03 ± 1.86
Markov (prev.)	32.07 ± 2.69	52.40 ± 1.76
Markov with heuristic	39.74 ± 3.62	60.64 ± 1.98
Markov with heuristic (prev.)	36.50 ± 3.10	57.91 ± 1.89

Evaluation over different partial set sizes



Evaluation over different partial set sizes



Outline

Learning from elements with at least 2 elements

- From now on the the number of items (i.e. mean-shift clusters) is 50.
- Removing all singletons from the data leaves 2832 paths/sets. Including singletons the count is 12614.
- For each fold the train set size is: 2548 and the test set size is: 284.

Results comparison