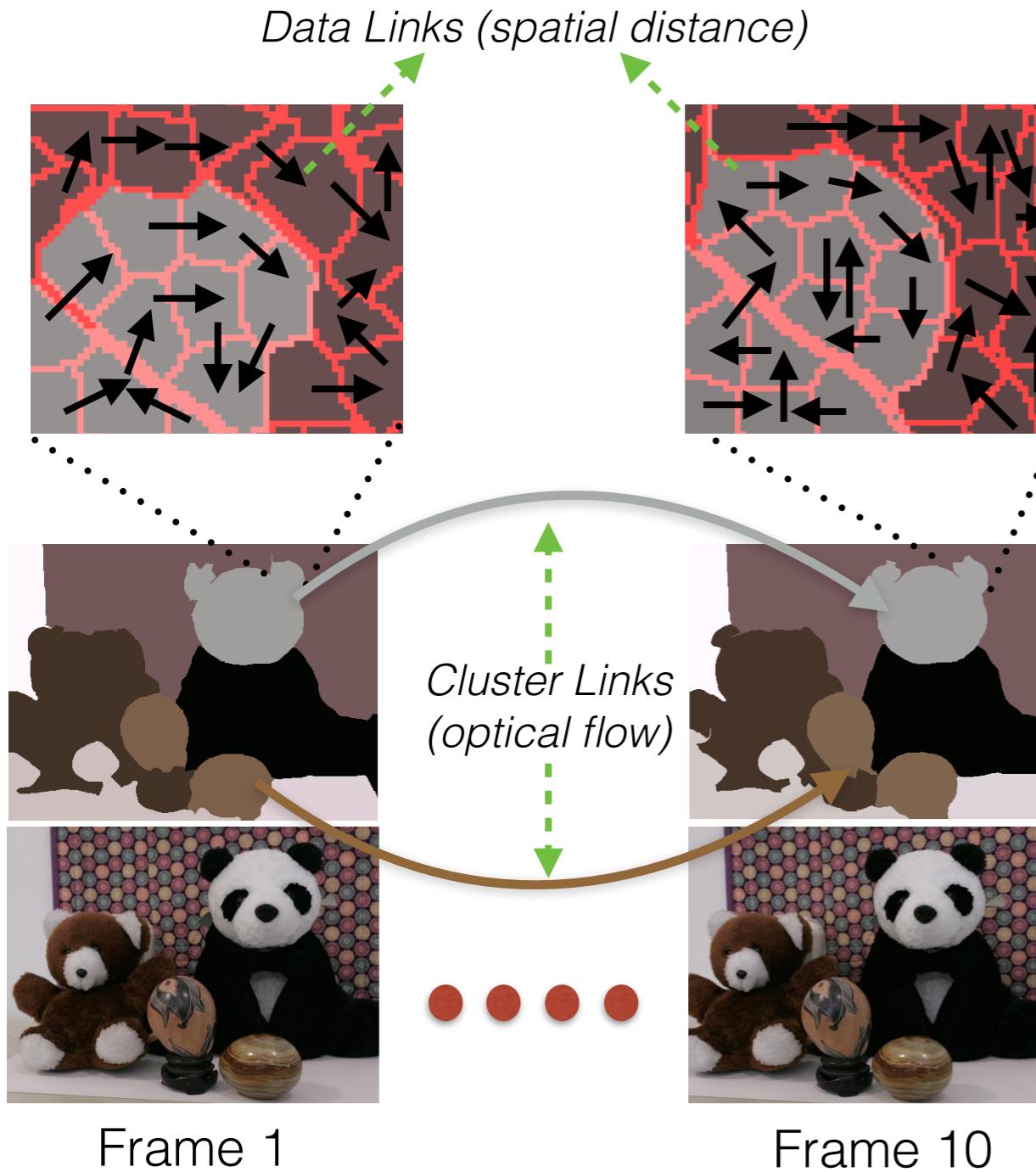


Nonparametric Clustering with Distance Dependent Hierarchies

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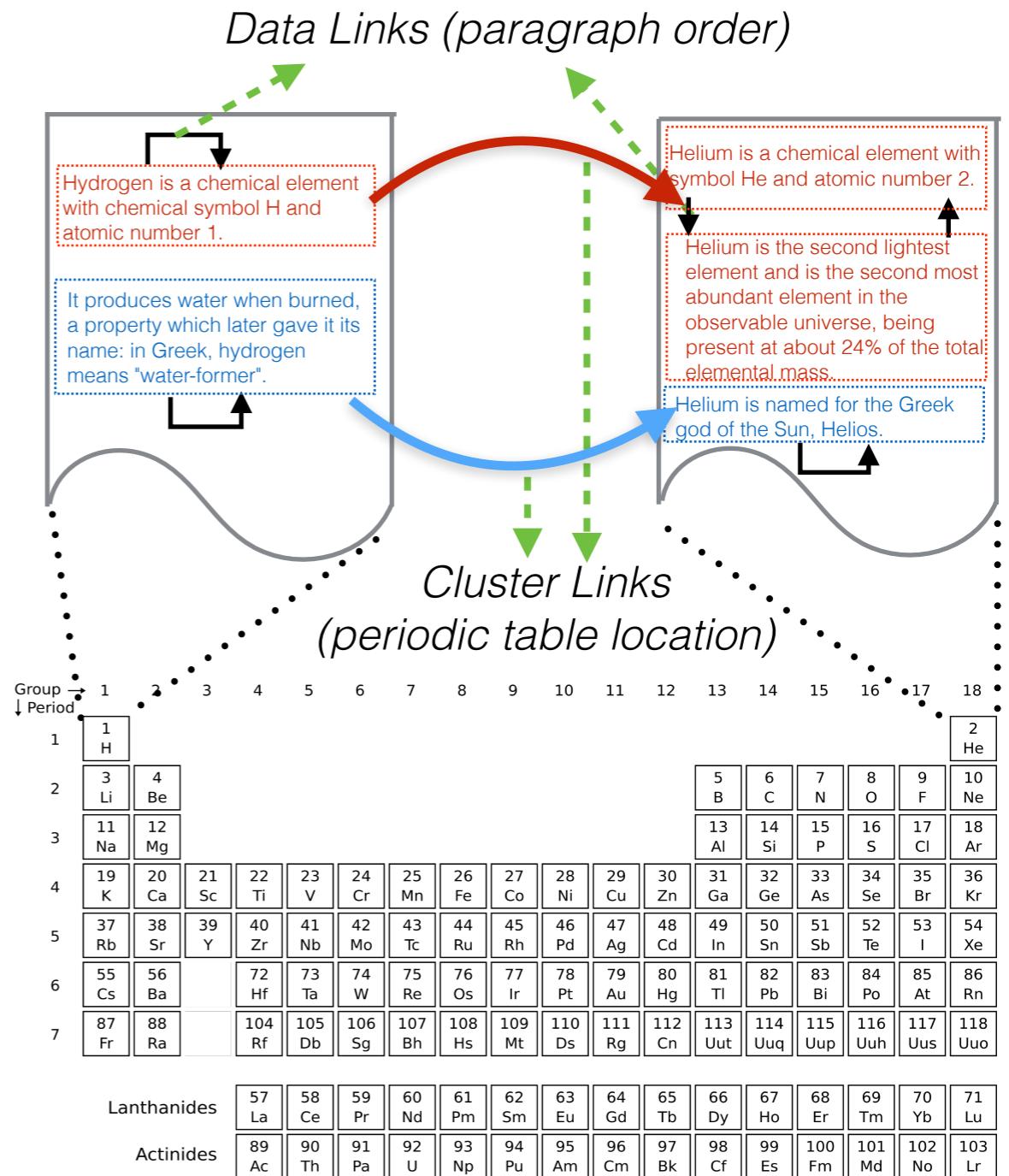


Video Segmentation

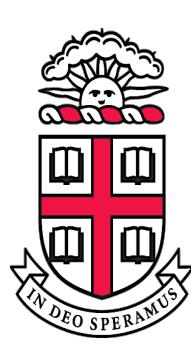


MIT Human-Assisted Motion Annotation Database (Liu et al., 2008)

Discourse Analysis



Wikipedia Articles on Chemical Elements (Chen et al., 2009)

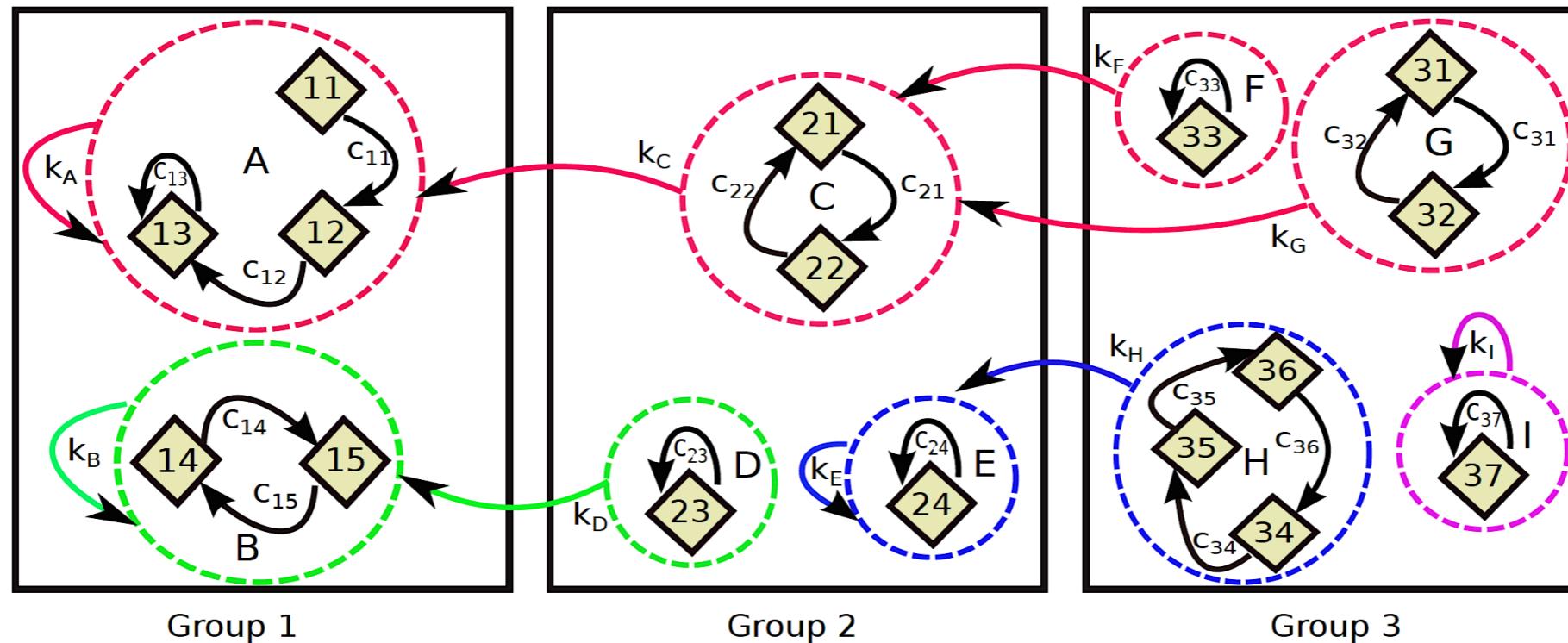


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- Hierarchical Distance dependent Chinese restaurant process (hddCRP) for modeling grouped non exchangeable data.
 - User specified affinities allow modeling of complex dependencies.



- MCMC algorithm for posterior inference; large changes in partition space.
 - No hand crafting of split/merge moves
- Competitive results on diverse tasks: video segmentation and discourse analysis.

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