

P2P Content Search: Give the Web Back to the People

Outline of the Talk

- 1. Feasibility of P2P Web Search**
- 2. Problem Statement**
- 3. Learning from Queries**
- 4. Exploiting Correlation**
- 5. Experiments**



Santa Barbara, California, USA

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P2P and Web Search: Marriage in Heaven

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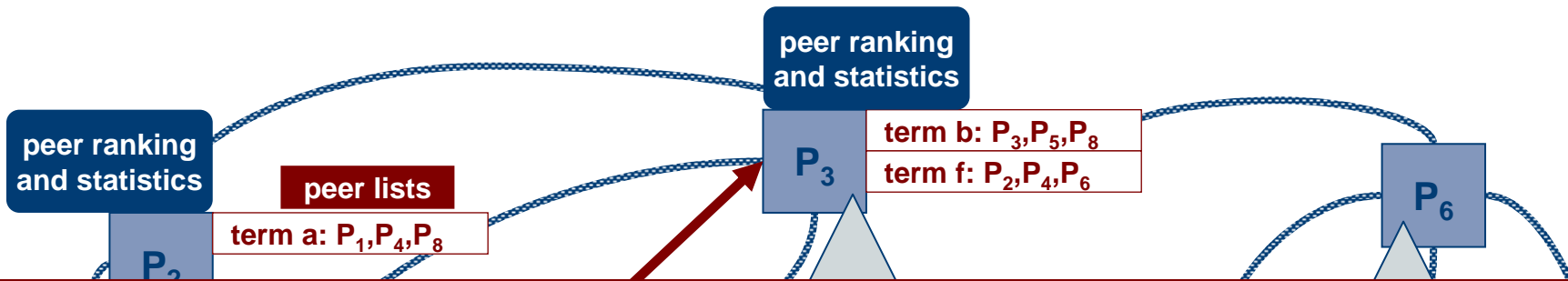
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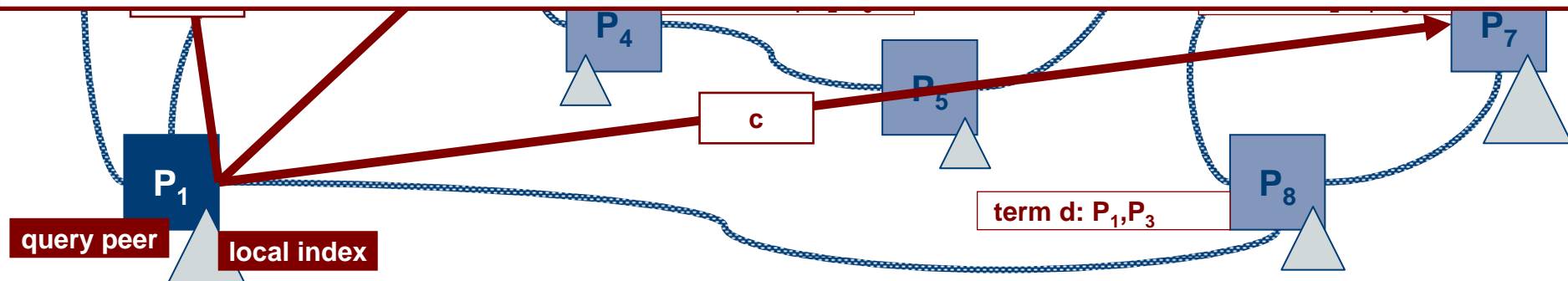
Architectural Model



Minerva System Architecture



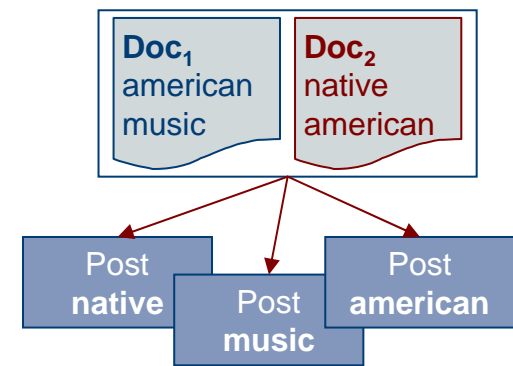
Query Routing driven by statistics on peer quality



Problem Statement

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Problem: Term Correlations

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Consider correlated termsets for query routing!

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Critical Issues...



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Possible Approaches

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Our Approach...

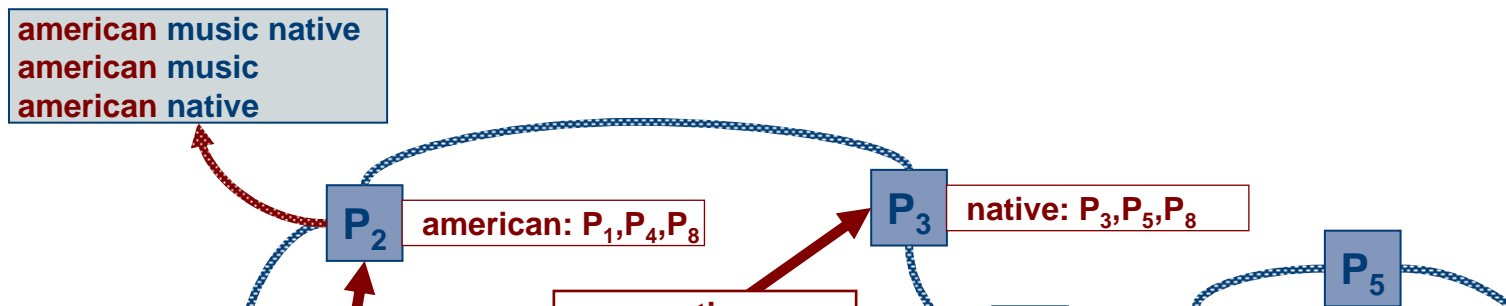
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Queries are a gold mine!

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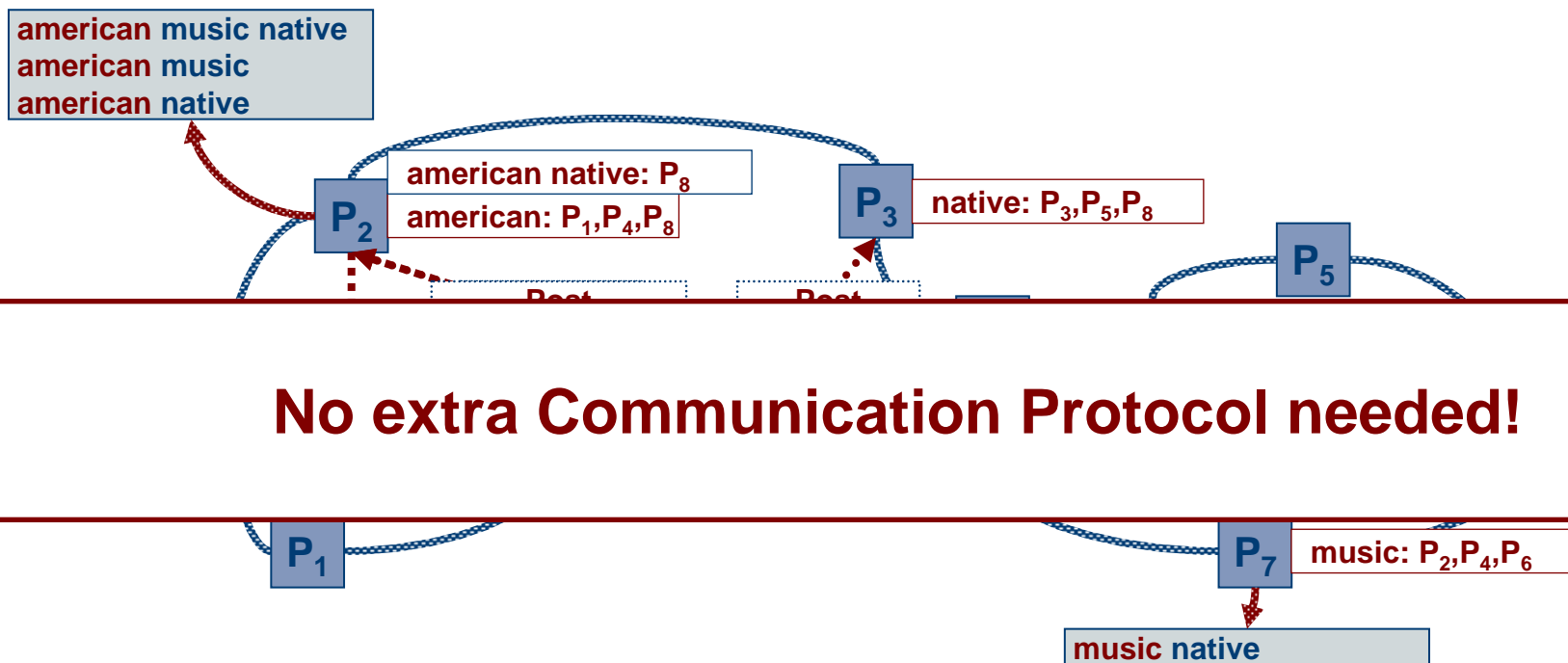
Learning Correlated Termsets from Queries



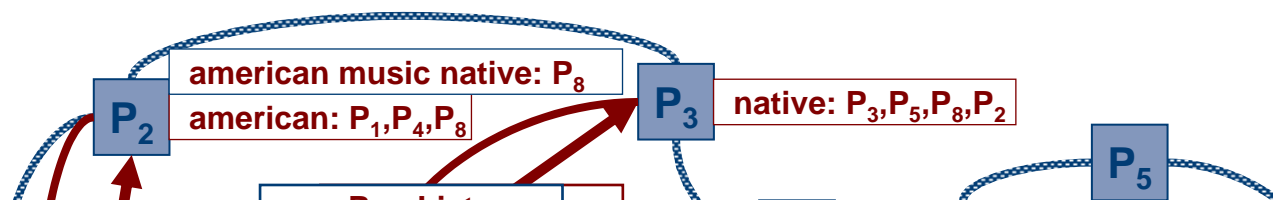
Learning included in Query Routing



Collecting and Storing Termset Posts



Exploiting Termset Postings



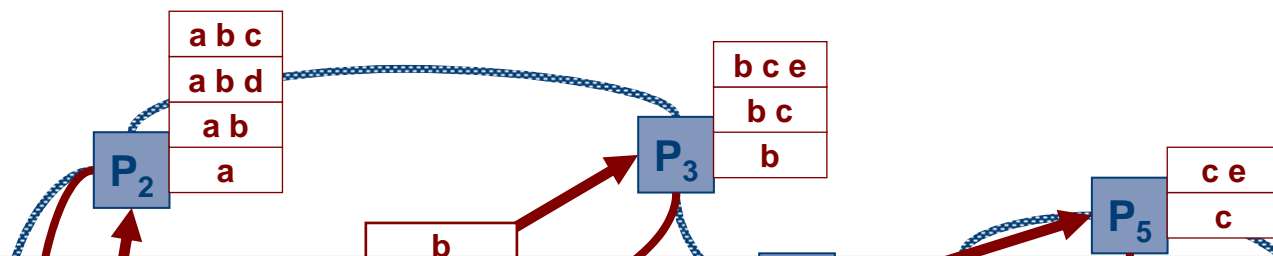
No additional Communication Round!



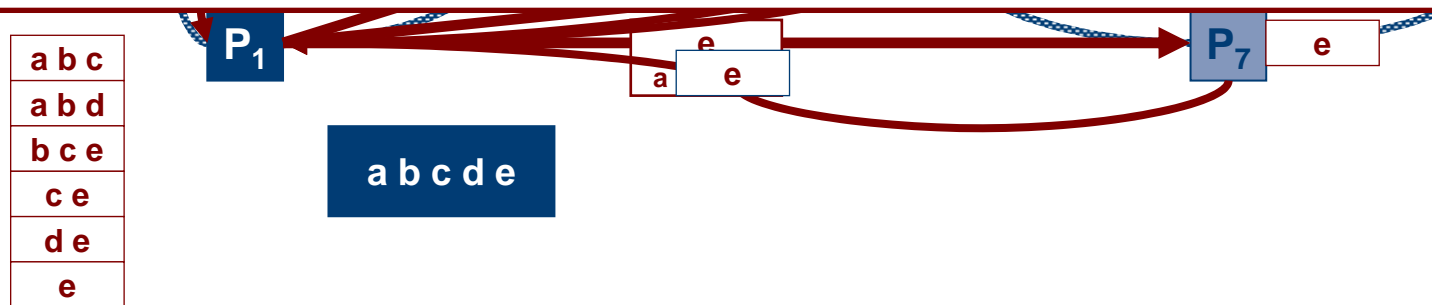
PeerList for complete query



No Termset for Complete Query



Integrated into Query Routing!



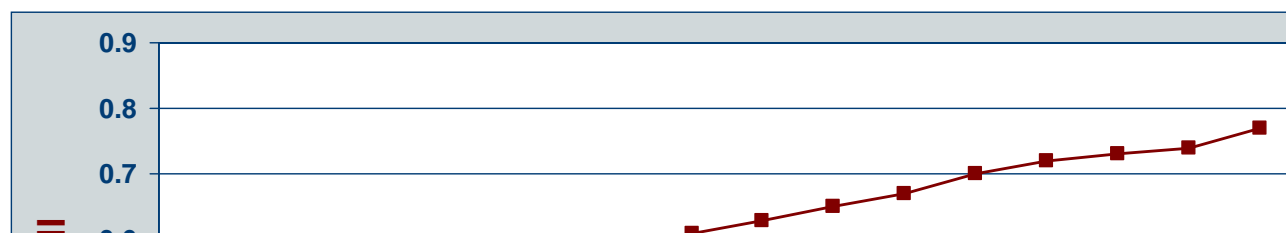
What about Networking Costs?

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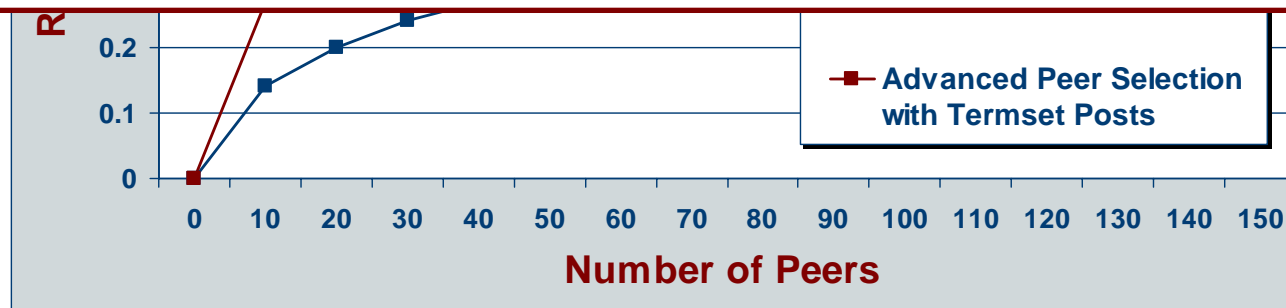
... It's all free!!



Experimental Evaluation



Major Gain in Benefit / Cost



Conclusion and Future Work

Thank You for Your Attention!

