

16th BledCom | International Public Relations Research Symposium

A proof of concept for automated discourse analysis in support of identification of relationship building in blogs

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### Overview

- Large scale empirical evidence
- Advanced search and content analysis tools
- Identifying how relationships are formed, sustained and changed in public discourse
- Very far reaching for PR, but also all soc sciences, psychology, evolutionary science, political and economic theory.
- Some early evidence about the dynamic of relationships
- Exciting that PR has a fundamental breakthrough in societal research



- Reputation, trust, brand loyalty, lobbying, corporate license to operate depend on relationships
- PR is a relationship discipline.
- What do we know about the dynamics of relationships?
- Formation, Sustaining & Change



- Towards Relationships Management
  - Widely understood tokens
  - Values make up tokens
  - Actors have different perception of tokens
  - Common beliefs in values support relationships
  - Actors with different understanding of value invoke dissonance.



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- •There is considerable research about relationships.
- •Very few large scale observations to identify the actual building blocks in the formation sustaining and change in relationships
- Empirical research on a very large scale needed
- especially in discourse.





Personal blogs offer large scale discourse for social observation

Identifying actors

Over time

Tokens & values

Relationships



- Triangulated testing:
  - Hyperlink network analysis
  - Word map networks
  - Semantic concept networks



Values and tokens as integral parts of relationships

Hyperlinks can be more than just resource locators — tokens

The subjects actors talk about in blogs reflect actor tokens & values

## Our goals

- To explore the possibility of mapping both blogs and relationships between actors
- To draft a methodology for future research in mapping relationships online



- The tools
  - Urlnet
  - Pajek (large network analysis)
  - Latent Semantic Analysis
  - Word Density Analysis

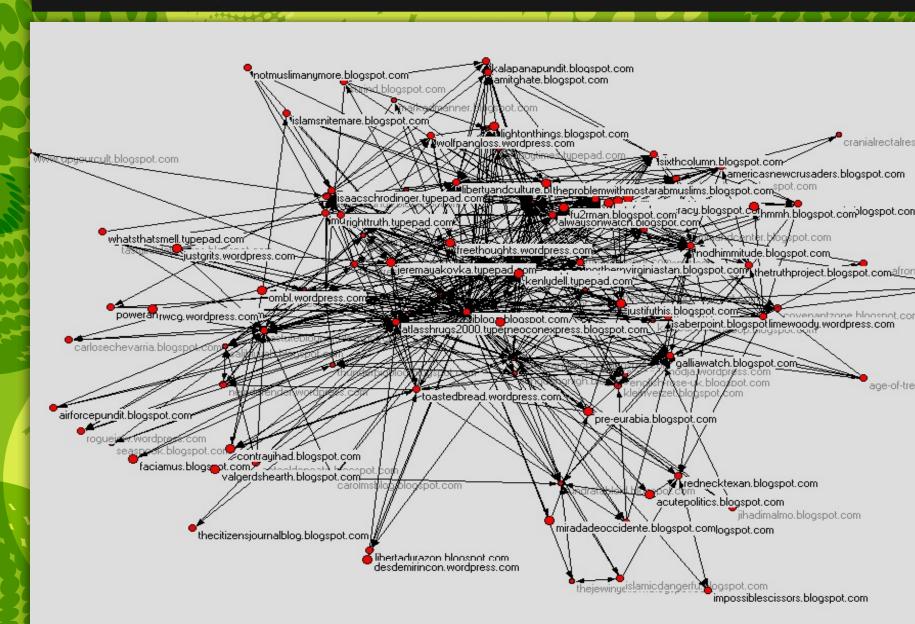


# Looking at networks

The next graph will show us the network around "the infidel bloggers' alliance" blog



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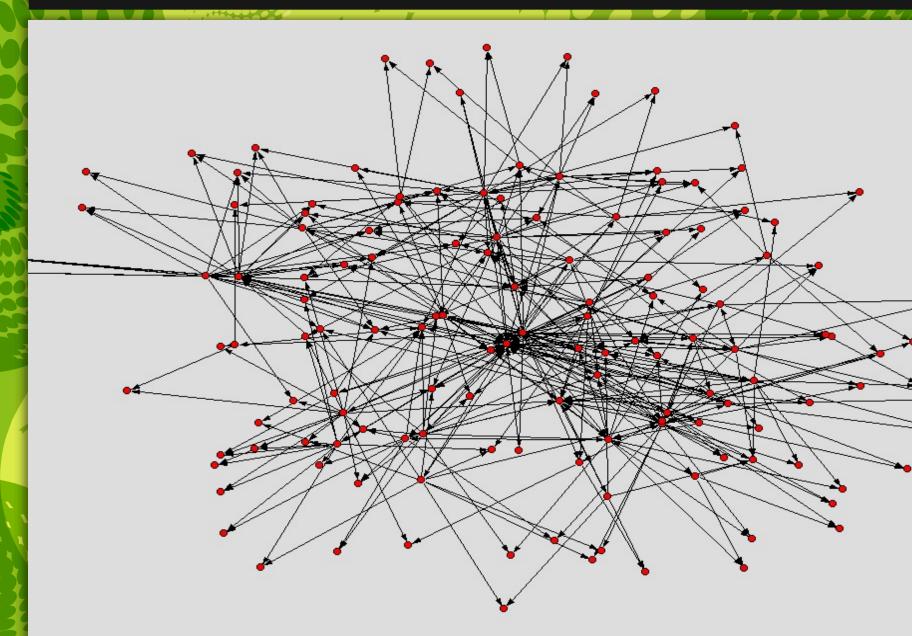
# Word frequencies in the LSA Results

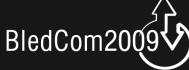
word	iraq	islam	gaza	palest	arab	muslim
number of occurrences in LSA	9	46	6	12	33	12



# Looking at networks

The next graph will show us the network around Jeremiah Grossman's blog





russ mcree

beta nvidia

linux x86

chris hoff

bank pins

arp spoofing

csrf

ddanchev.blogspot.com

fr3dc3rv.blogspot.com

dutcherstiles.blogspot.com

hackathology.blogspot.com

holisticinfosec.blogspot.com

loquens-caesu.bloqspot.com

myappsecurity.blogspot.com

preachsecurity.blogspot.com

rationalsecurity.typepad.com

securitycoin.blogspot.com

securityninja.blogspot.com

shoaibyousuf.blogspot.com

pentesterconfessions.blogspot.com

muchikon.blogspot.com

schmoil.blogspot.com

michaelcoates.wordpress.com

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- Special thanks to software developers who contributed to this research project:
  - Girish Lakshminarayana and his team of programmers in India – who developed a special Latent Semantic Analysis tool
  - Dale Hunscher Business Systems Analyst
     University of Michigan Medical School and
     Owner of South Wind Press who provided
     the software and online capability to explore
     blog networks.



- Bruno offers an approach for discourse research that goes to the heart of many areas of research in PR and beyond.
- We are beginning to see evidence that common values create relationships and probably publics
- Indications that values expressed in discourse on and offline are a dynamic in formation of relationships, networks and social groups.
- Potentially powerful theoretical proof for PR research and practice in relationship management



## Thank You