

LEVERAGING COMPUTATIONAL SOCIAL SCIENCE BY COMBINING HYPERLINK, TEXTUAL, & FEATURE ANALYSES:

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The case of online anti-human trafficking networks

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Journal of Information, Technology & Politics Annual Conference, Seattle, WA, May, 2011

Overview

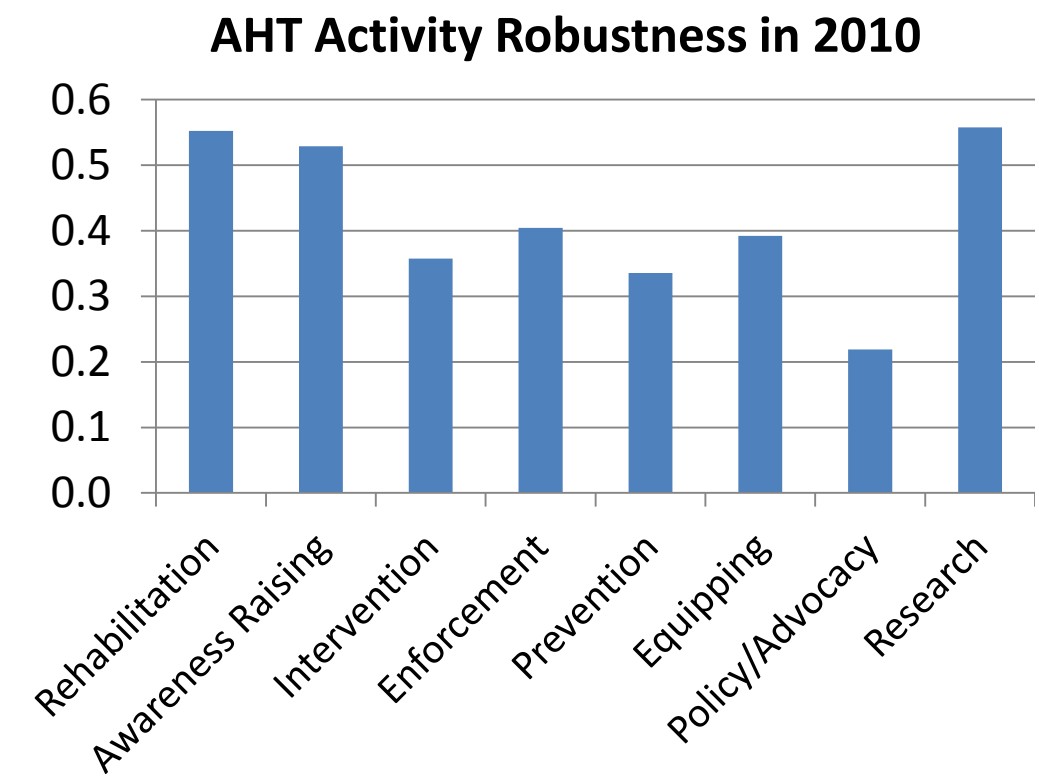
Three primary methods have become prominent in research on online issue movements: text, feature, and hyperlink analyses. Textual analysis of website content allows researchers to focus on a variety of rhetorical and discursive elements, including the narrative dimensions of collective action. Feature analysis affords insight into actors' web production strategies and the types of participation they enable. Computational network analysis of hyperlink formations enables understanding of the structural-relational architecture of an issue movement. However, few studies of large-scale online issue networks have combined computational link analysis with methods that require human interpretation, such as web real estate analysis, narrative, or feature analysis. The combination affords better insights into the online dynamics of issue movements by enabling inquiry into a broad range of research questions.

Illustrative Findings from Analyses of Link + Text and/or Feature Data

Assessing the level of web real estate devoted to a focal issue and related issues affords more nuanced interpretations of a complex issue network.

Web Real Estate Devoted to Human Trafficking in 2010, on Co-Linked URLs				
	N	% of coded sites	% of AHT sites	
Anti-Trafficking Sites	999	73%		
Mentioned AHT	442	32%	44%	
> 1 page about AHT	353	26%	35%	
Site dedicated to AHT	204	15%	20%	
Social Justice	153	11%	-	
Non-Social Justice	134	10%	-	
Non-Functional	87	6%	-	
Total	1373	100%	99%	

When human-coded, website features enabling online actions and reports of offline action can be analyzed by activity robustness, producer type, geographical base of actor & location of activity.



Case & Aims

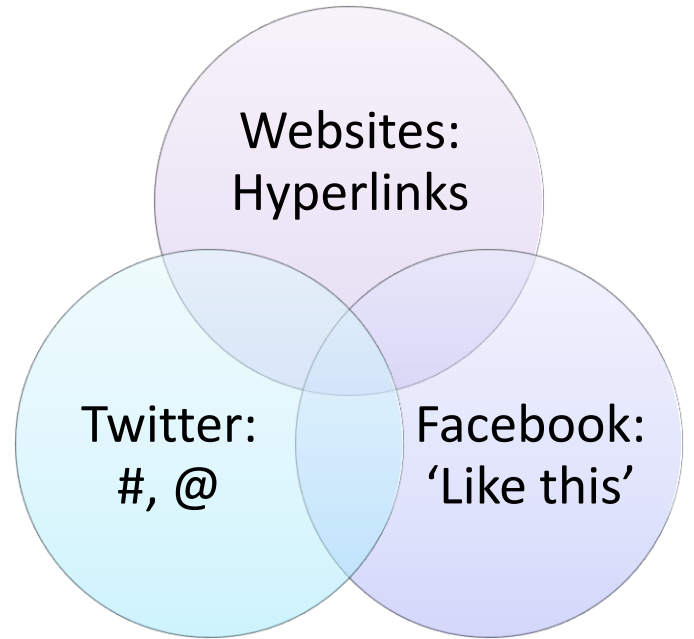
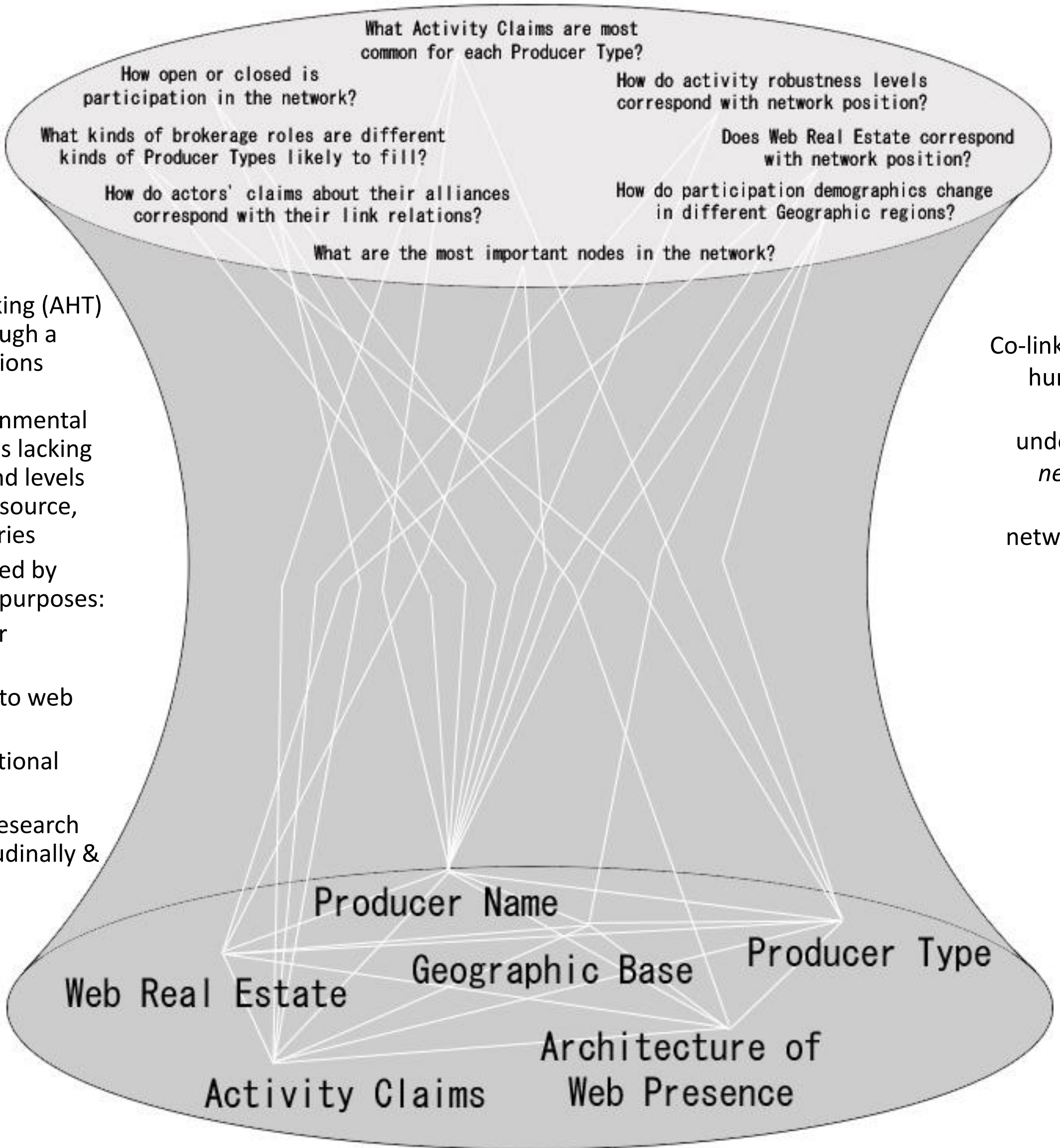
The global anti-human trafficking (AHT) movement is constituted through a variety of actions and interactions between NGOs, businesses, governmental, and intergovernmental bodies. It has been assessed as lacking coordination across sectors and levels of intervention, and between source, transit, and destination countries

Web technologies are employed by many AHT actors for multiple purposes:

- To organize, promote, and/or coordinate AHT efforts;
- To communicate AHT efforts to web users, and solicit support;
- To represent actors' organizational identities & affiliations.

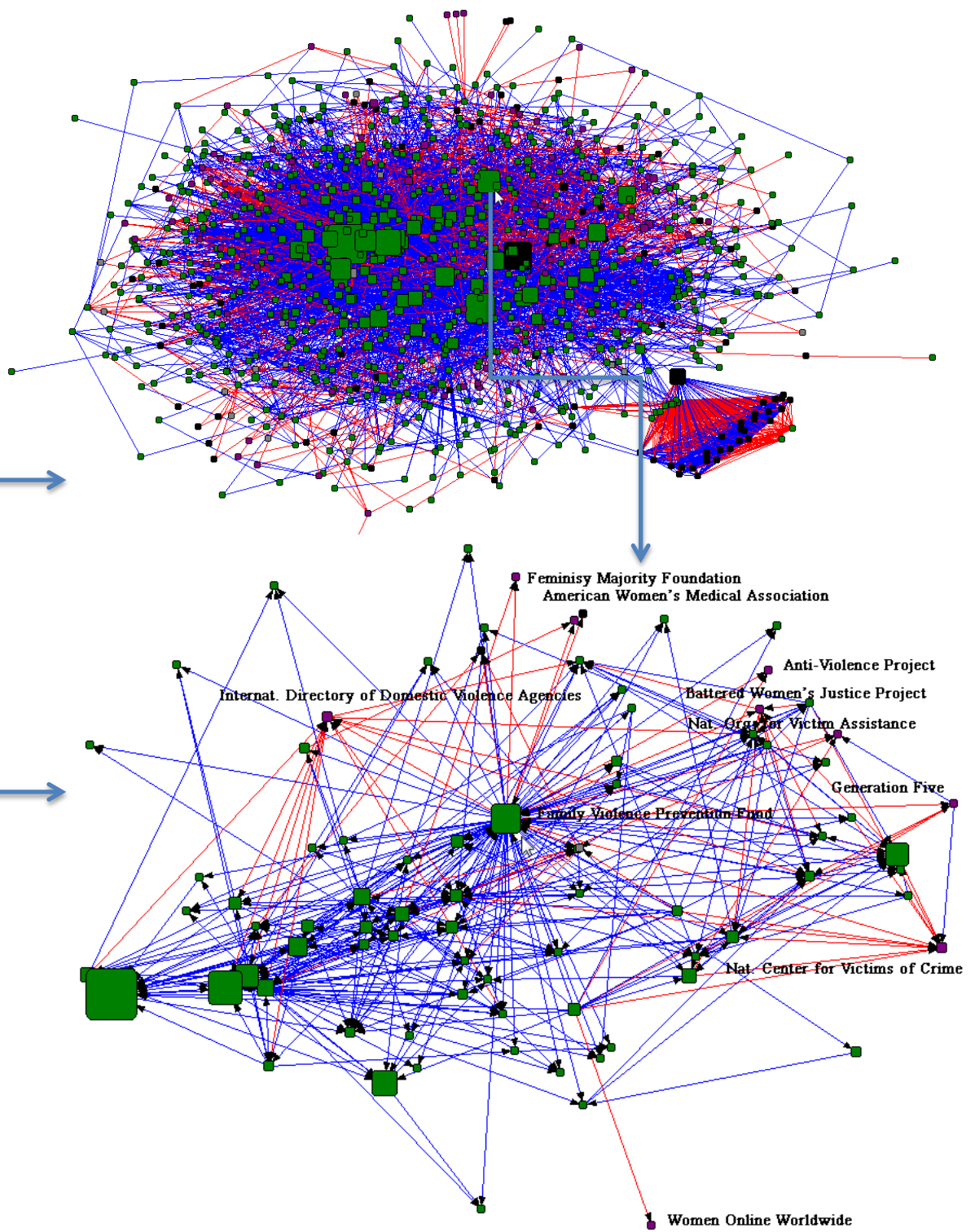
The overarching aims of this research are to map AHT efforts longitudinally & developmentally, and to trace collaboration attempts.

Research Questions



Human coding of the producer name for each web object allows aggregation of multiple platforms (multiple URLs, presence in multiple social media applications, etc.), facilitating the connection of *network ties across networking platforms* from data harvested via software apps such as Issue Crawler and DiscoverText.

Co-link networks of AHT actors' sites, generated by Issue Crawler, are difficult to interpret based on machine-generated data alone.



Co-link data analyzed in combination with human-generated producer name and web real estate data affords better understanding of the multiple *issue link neighborhoods* that comprise and/or adjoin the AHT issue network-of-networks, such as the domestic violence link neighborhood.

Summary

The multilevel, multi-method approach presented here enables examination of the relationship between hyperlink network configurations (such as density, centrality, indegree/outdegree, and brokerage roles) and AHT website producers' attributes, such as the primacy of the issue for the producer as represented by the web real estate the producer devotes to the issue, website production strategies manifested in particular constellations of site features, producers' textual claims about network/alliance/coalition relationships, and the prevalence and robustness of issue-relevant activities reported by producers.

By triangulating textual characteristics, features, and hyperlink network relations, we suggest that researchers are better equipped to make sense of complex movement dynamics and understand more deeply how transnational issue networks make use of digital tools to build social movements.