

Study twitter-maps new world order

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(PhysOrg.com) -- A new study of tweets spreading news from The New York Times finds that the Internet, while creating an open line of communication across continents, may at the same time be strengthening walls that separate users into ideological camps, and more.

Researchers for the study, "An Exploration of Social Identity: The Geography and Politics of News-Sharing Communities in Twitter," collected 521,733 tweets posted by 223,950 unique users -- all of them posting or retweeting at least three links referring to NYT articles over a fifteen day period, September 14 - 29, 2011. The tweeters were clustered by who communicates with whom, and groups were characterized by the topics they posted most, tweeters' location, and their biography key words.

What the research team found were obvious and not so obvious connection points along with revelations that challenge easy assumptions about Twitter communities.

While liberal and conservative national political subgroups were identified, other dynamics were teased out in the mathematical modeling performed by the research team.

"A person who is cosmopolitan associates with others who are cosmopolitan, and a US liberal or conservative associates with others who are US liberal or conservative, creating separated social groups with those identities," said Yaneer Bar-Yam, president of New England Complex Systems Institute (NECSI), where the research was done.



The clusters revealed not only local and national but also global (cosmopolitan) associations. The national group has subgroups specifically political (liberal and conservative) and one that is broadly interested in business, arts and sports. Contrary to frequent media portrayals, said Bar-Yam, the findings in turn suggest that online readers of The New York Times can have competing priorities and are not uniformly liberal.

"A significant fraction of the population has become so strongly identified with ideological camps that those identities drive their social associations," said Bar-Yam. "For those who are concerned about the polarization of society into liberal and conservative camps, the results have both positive and negative connotations. There are specific subgroups that are polarized into opposing camps, but often associations are local, national and cosmopolitan."

The study found these dominant clusters in this sample:

- The cosmopolitan Global Political Group those interested in international topics, who live in various cities around the world, including New York and Washington DC, are focused on human rights and politics, and may themselves be journalists.
- The New York Scene A New York City-oriented group interested in a diverse set of topics including world news, US news, business, arts, fashion and sports.
- National Business a group with the strongest focus on business, but also interest in world news, sports, fashion and the arts. It is geographically spread across the US.
- Two clusters that are also US-based but are specifically liberal and conservative in their political orientation.



The study is available free at www.necsi.edu/research/social/nyttwitter/.

The authors note that more than 100 million tweets are posted each day, and that a significant portion includes links to online information.

Bar-Yam, in assessing the study, noted that "<u>Twitter</u> cannot be ignored in how peer-to-peer and mass media are connecting people separated in space and time—and what that means in the behavior of social systems."

In a scientific context, each user, he said, "can be thought of as a node in a network, and the relationships as links between them."

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