Social Media and the Jasmine Revolution

Fei-Yue Wang, Chinese Academy of Sciences

Our November/December 2010 issue focused on social media, and its publication arrived just in time for the current turmoil in the Middle East. That special issue, dedicated to social media analytics and intelligence, attracted almost 100 submissions. I would like to thank Guest Editors Daniel Zeng, Hsinchun Chen, Robert Lusch, and Shu-Hsing Li for their hard work and great success.

The Tunisian revolts were called the Jasmine Revolution by the news media, but I prefer the former Tunisian prime minister’s assertion that this was “a revolution of Facebook and Twitter,” or to be technically exact, a revolution of social media.

Hope for a Glorious Revolution

Revolution is a difficult subject. As someone who grew up amid the Great Proletarian Cultural Revolution, I am quite sensitive and disdainful of the term. The difference between what constitutes a revolution and what is only evolutionary is confusing, vague, and possibly nonexistent. It used to be much clearer; revolutions were mostly confined to the battlefield and muskets and cannons were involved, as in the American Revolution. Or as Chairman Mao famously and concisely stated: “Political power grows out of the barrel of a gun.”

Today’s revolutions are much more tricky. There has been a progression toward civility and tolerance. Color revolutions—prettily named Rose, Cedar, and Tulip—swept across the Balkan states. But the recent violence in the Middle East threatens this peaceful evolution of revolutions. Clearly, the Tunisian Jasmine is no longer pure white; it has been stained. Perhaps we should revisit history and learn something from the Glorious Revolution of 1688, also known as the Bloodless Revolution—albeit an inaccurate label, it is still a goal we should strive for.

There is one revolution I have always liked, the Information Revolution. As a researcher, I have tried to investigate and evaluate the impact of new information technology on our society. I have always expected that IT advances would revolutionize our economical productivity and efficiency. Now I think that their impact on social aspects, especially stability and security, is a more urgent and pressing matter. Social media has provided a particular example, causing an economic revolution in the West by dramatically changing traditional means of publication and communication. In the Middle East, it has incited a political revolution, which has already thrown, and continues to throw, several countries into turmoil.
Cybermovement Organizations

A study of the impact of social media on societal stability can begin with various cybermovement organizations (CMO, a term I coined for social computing many years ago) as well as their formation, structure, development, and internal and external dynamics. We have witnessed several CMOs emerging from Facebook and Twitter that have played significant roles in social change, serving as grassroots campaigns in political elections and as an organizational tool in the recent Middle East revolution. To deal with the huge amount of Web data involved, many AI methods and tools addressed by our magazine, such as social networking, data mining, machine learning, language processing, and text and content analysis, are essential for the success of such a study.

A special kind of CMO is a cyber-enabled social movement organization (CeSMO); human fresh search engines (HFSE) in China and crowdsourcing in the US are two typical examples. Within a particular CeSMO, a few netizens using minimal effort and in a short amount of time are able to attract huge crowds creating enormous momentum within cyberspace. The release of this gathered energy into the physical space then in turn is capable of causing great turmoil. This social phenomenon has been repeatedly observed all over the world, and its process and significance must be further investigated.

CeSMOs can also be interpreted as cyber-enhanced social movement organizations. These organizations begin traditionally but are then enhanced with new tools in social media and cyberspace. The key differences between traditional movement organizations and CMOs is their speed and size of influence. Traditional organizations are intrinsically limited by their contact capacity and bogged down with bureaucratic procedure and document-driven communication. Their cyberspace counterparts, on the other hand, can disseminate information and calls for action...
immediately and pervasively. This extreme imbalance and asymmetry between the traditional and the new should be cause for great concern in any society.

The Future Society Online
We need to find a balance, perhaps a dynamic one, between the speed and scale of social and information revolutions. Otherwise, civilized revolutions might end up in tragic disasters. New intelligent systems and technology as well as CMO tools such as HFSE, crowdsourcing, and social-media-based emergency maps might help prevent some such situations. However, to find a long-term solution for the stability of future societies online, we must invest in an open society, a concept originally developed by philosophers Henri Bergson and Karl Popper. Going forward, we need to redesign and reconstruct the open society concept to consider and include novel, smart technologies.

I hope in this future society online, CMOs will become a lifestyle, a new way of living, studying, and working motivated only by humanitarian interests, nothing political.

Now let me welcome three new members to the IEEE Intelligent Systems editorial board: Raymond Perrault of SRI International, Wenji Mao of the Chinese Academy of Sciences, and Alessandro Sperduti of the University of Padova to our IEEE Intelligent Systems editorial board. I look forward to working with you all in our very own society online.