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# Social network analysis and social capital

This newsletter brings you information on social network analysis and social capital.

### **1.1** Social network analysis

Social network analysis has emerged as a key technique in various disciplines such as sociology, psychology, and organizational studies. In the last few years social network analysis also made its way into political science and international relations and security studies.

The renewed interest for social network analysis in international relations and security studies was due to the terrorist attacks of 11 September 2001. The method proved useful to elicit the social relationships inside and between terrorist groups, as well as to trace the connections between these and their financial donors.

Put simply, a social network is a social structure made of nodes which are generally individuals or organizations. The ties between the nodes represent the relationships between the actors in the network. The graphic display of the network serves to visualize ways in which the actors are connected.

Social network theory differs from traditional sociological studies, which assume that it is the attributes of individual actors that have the most effect on social interaction. Social network theory attributes less power to individuals than to the relationships and ties with other actors within the network.

### 1.2 Social capital

The characteristics of a social network determine the social capital of its individual actors. In contrast to physical and human capital, social capital focuses on relations between persons. "Social Capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together" (World Bank). It is a cultural resource characterized by norms of reciprocity and trustworthiness. It is also understood as social intelligence needed for successful interpersonal interaction.

The central premise of social capital is that individuals benefit from various norms and values that a social network fosters and produces, such as trust, reciprocity, information, and cooperation. These norms and values provide the necessary preconditions for collective action. Of central importance to the concept of social capital is the notion of trust. People are more likely to form social or economic

ties with others when they trust their communities. The World Bank therefore considers social cohesion and social capital as critical for poverty alleviation and sustainable human and economic development. Economists also recognize the important role social capital plays in economic growth.

In political science and sociology, social capital has become a crucial concept in conflict management. Societies and individuals possessing significant social capital tend to solve conflicts in a cooperative and peaceful manner. Such communities promote interaction across different social strata, foster intergroup identities, and thus, cultivate generalized trust. This produces a sense of belonging and reduces social exclusion and isolation. People trusting their society expect positive reactions to their actions and act according to this expectation. Thus, if persons have to take decisions in conflict situations, which are characterized by high risk and insecurity, a society based on dense networks of trust provides a safe environment. It prompts them to choose dialogue over violence and peace over polarization.

Patricia Moser, MA UZH ISN Editor

# 1.3 Research and academia

Program on Networked Governance, by the John F. Kennedy School of Government, Cambridge, MA, US

The objective of the Program on Networked Governance is to foster research on networked governance and to provide a forum to discuss the challenges of networked governance. Networked governance refers to the body of research on the interconnectedness of essentially sovereign units, which examines how those interconnections facilitate or inhibit the functioning of the overall system. This website provides information on the program, as well as research materials, news, and links.

Social Network Analysis, by the John F. Kennedy School of Government's Program on Networked Governance, Cambridge, MA, US

This sub-page of the Program on Networked Governance contains resources on social network analysis. The page includes information about events, news, and courses of researchers and scholars in the area, as well as on developments in social network analysis. There is a section on literature, such as introductory textbooks, bibliographies, and articles, as well as a methods and tool section, including software and related articles on network visualization. There is also a page with information about professional organizations in the field and corporate research centers applying social network analysis.

TAICON: The Trans-Atlantic Initiative on Complex Organizations and Networks, by the Swiss Federal Institute of Technology, Zurich, Switzerland and Harvard University, Cambridge, MA, US TAICON is a joint venture involving the Swiss Federal Institute of Technology and Harvard University. The aim of this initiative is to bring together researchers interested in complexity theory and social networks. This website provides information on the initiative's organization, the researchers involved, and its activities. Introduction to Social Network Theory

This research paper was published by Brandeis University in Waltham, US, in 2004. The author explains how to expand the concept of social network analysis in order to make it more useful for economic and cultural research.

Social Networks Among Return Migrants to Post-War Lebanon

This paper was published by the Center for Comparative and International Studies (CIS) in Zurich, Switzerland, in 2005. This paper seeks to contribute toward a better understanding of the dynamics of return migration. The author describes how migration has become more than just a one-way journey of permanent relocation, but rather has evolved into a complex and multi-phased procedure that often leads to the migrants' return to their home countries. The paper explains how a focus on the social ties of emigrants can often provide valuable insight into understanding the dynamics of return migration processes. The author also explains that unlike those emigrants moving away from their home countries, those returning home are not only migrating to a previously known destination, but also to a social network where they are likely to be more intuitively embedded. The paper uses the social networks among return migrants to post-war Lebanon as an example.

International Network for Social Network Analysis

The International Network for Social Network Analysis is an academic association of social network analysts. This website offers social networks information, reference sources, and links to related websites.

Social Network Analysis, by Semantic Studios, Ann Arbor, US This article uses social network analysis to find out about knowledge workers learning processes.

Social Network Size in Humans

This research report by the Evolutionary Anthropology Research Group at the University of Durham, UK, was published in Human Nature in 2003. This paper examines social network size in contemporary Western society based on the exchange of Christmas cards.

### Studying Online Social Networks

This report was published by the University of Toronto in Canada in 2001. After an introduction on social network analysis, the report uses this concept to study computer-mediated communication.

Social Network Analysis: Introduction and Resources

This paper was published by the University of Illinois in Urbana-Champaign, US, in 2001. It provides an introduction on social network analysis together with links and a bibliography.

#### Social Networks and Social Networking

This article was published in the IEEE Internet Computing journal in 2005. It provides a short insight into how social network analysis is used in the computing science industry.

Social Capital Gateway: Resources for the Study of Social Capital, by the University of Rome La Sapienza, Italy

This website collects research material on social capital such as PhD thesis, research reports, books, bibliographies, links, news, and information on events.

Social Capital in African Studies, by the Social Capital Gateway, University of Rome La Sapienza, Italy

This website provides crucial texts on social capital in connection with African Studies which are available online.

How to Build Social Capital Across Communities

This report by the Concord Project at the University of California School of Public Policy and Social Research in Los Angeles, US, was published in 2003. The aim of concord organizations is to build social capital spanning across communities. The authors propose ways for individuals to create concord organizations which serve to respond to conflicts over religion, ethnicity, race, and values. This handbook provides ten organizational lessons, which can be used as a starting point to build social capital across communities.

Building a Network Theory of Social Capital

This report was published by the Department of Sociology at Duke University in Durham, US. This report reviews the concept of social capital as discussed in literature and identifies controversies. The author proposes research strategies to build a theory, while arguing that such a theory must be based on the fundamental understanding that social capital is captured from embedded resources in social networks.

Social Capital and Civil Society, by Francis Fukuyama

This paper was presented to the International Monetary Fund by the political scientist Francis Fukuyama in 1999. Fukuyama discusses how social capital works in liberal societies and how it can be measured.

### 1.4 Non-governmental organizations

The Social Capital Foundation (TSCF), Brussels, Belgium

The Social Capital Foundation (TSCF) organization pursues the promotion of social capital and social cohesion. To achieve this goal TSCF organizes conferences, conducts research, and publishes "The International Scope Review" journal.

Govcom.org, Amsterdam, The Netherlands

Govcom.org is a foundation which creates and hosts political tools on the web. Much of the work involves mapping web-based issue networks. One of the tools Govcom.org developed is a software program that locates and visualizes networks on the web. The so-called Issue Crawler is used by NGOs and other researchers to answer questions about specific networks and effective networking more generally. The Issue Crawler software is freely available at http://issuecrawler.net. One of the Issue Crawler's functions is to map and visualize an organization's overall social network. The network map provides indications about which organizations are in the network (NGOs, media, governments, inter-governmental organizations, donors, corporations, scientific establishments, individuals, etc.). The map also provides indications of the organization's overall centrality in the network, and the cluster it finds itself in.

## 1.5 Government / governmental organizations

Conflict, Social Capital, and Managing Natural Resources: A West African Case Study This study report by the Virginia Polytechnic Institute and State University in Blacksburg, US was published in 2005. The report describes a six year program by research and development agents. The aim of the program was to provide social and biophysical technologies for the sustainable development of a local government unit in West Africa. Social capital as a factor of development within civil society was an important issue in this program.

Violent Conflict and the Transformation of Social Capital: Lessons From Cambodia, Rwanda, Guatemala, and Somalia

This report was published by the World Bank in 2000. This report analyzes the interactions between violent conflict and social capital. The authors investigated four conflict-affected countries: Cambodia, Rwanda, Guatemala, and Somalia and their changing social capital dynamics. The data for this report have been drawn from literature reviews and from eight community-level studies conducted in the four countries. On this basis, the report discusses changes in social capital resulting from violent conflict; the interaction between social capital, social cohesion, and violent conflict; and how civil society, governments, and international actors can nurture the social capital needed to strengthen social cohesion and so promote conflict prevention, rehabilitation, and reconciliation.