

Social Network Theories

Theories and methods of **social network analysis** can be applied to any social system, including terrorist organizations, to explain their actions.

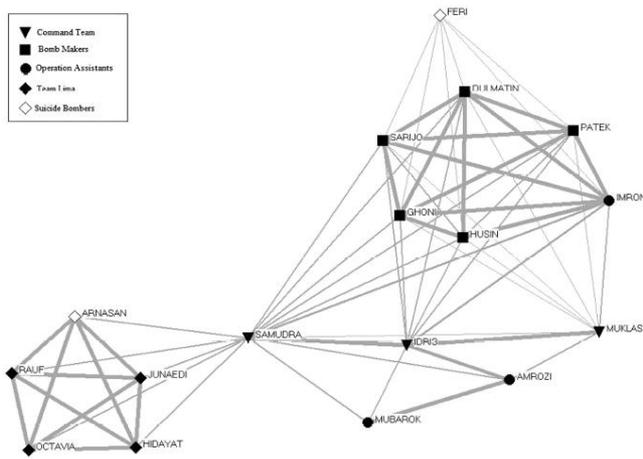


Figure 1. Jemaah Islamiyah Graph—Bali Operation October 6, 2002–October 11, 2002.

As a neutral technique, SNA can be used both by terrorists to improve their chances for success and by CT orgs to detect and disrupt a “dark network’s” operations.

Drawing the **social map** of a network may reveal indirect links among participants. At left is Jemaah Islamiyah’s network for 2002 Bali, Indonesia, nightclub bombing.

How can terrorist orgs use personal networks to recruit new members?

What are clandestine cell structures and “sleeper cells”?

Are terror networks less efficient than other organizational forms such as bureaucratic hierarchy? Are they more vulnerable to detection & disruption?

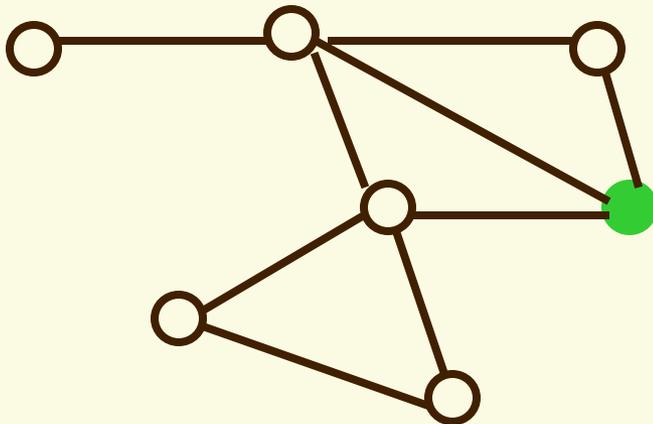
Are transnational advocacy networks (TANs) & the “boomerang effect” applicable to terrorist orgs as well as to nonviolent humanitarian NGOs?

Network Concepts

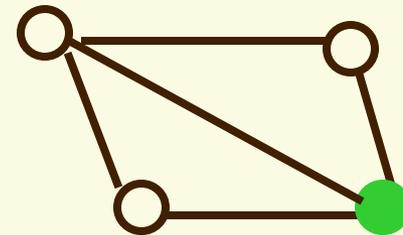
Any small, closed social system may be treated as a **complete network** of social relations among a set of actors (persons, groups, or organizations). (“Small” = half-dozen to a few hundred actors)

Egocentric network - one focal actor (*ego*) and its direct ties to a set of others (*alters*), plus all the links among those alters

Both complete and egocentric network can be graphed (diagrammed) as a set of points and lines representing the actors and their relations:



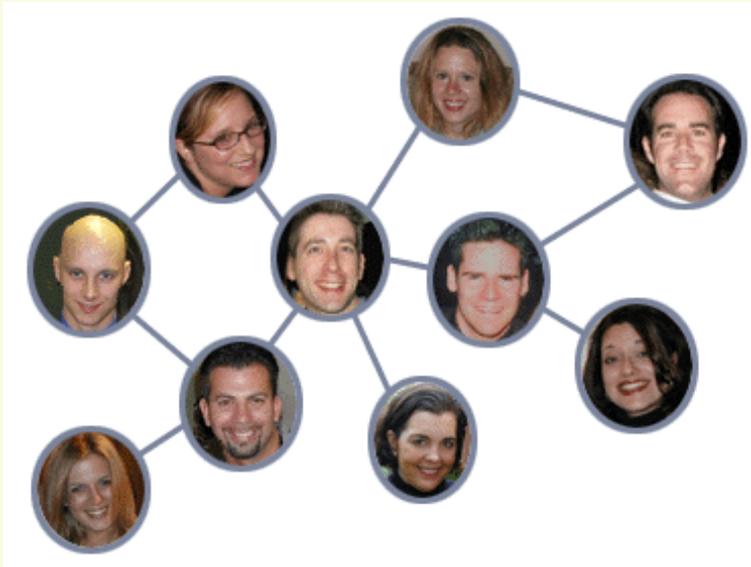
Team – a complete network



Ego net – friends of ego

Network Relational Contents

Drawing a diagram of any network requires reports about **dyadic ties** (all pairwise links among actors), for a specific **relational content** (e.g., friendship, helping) connecting them to the other network actors.



Relation - ties of one specific type

- ✓ A network tie is a direct connection or interaction among dyad members
- ✓ An absent tie between a dyad can be as relevant as a present tie
- ✓ Multiple relational contents may connect a dyad (friend, advisor,...)

Relational content - a network tie's particular substantive meaning, the relatively homogeneous linkages connecting pairs of network actors.

The varieties of contents, both positive and negative, are potentially unlimited: friendship, work with, advise, dislike, distrust, consult, lend \$\$\$, house-sit, play golf with, walk the dog for, collaborate in a terror operation,

Diagram YOUR Ego Network

1. Around a circle, write your name (EGO) and as many as 5 people (ALTERS) with whom you might “discuss political or public policy matters”
2. Draw a **line** from your name to each alter. Label each line with that person’s **primary relation** to you: family, friend, supervisor, coworker, classmate, teacher, etc.
3. Draw lines between alters showing only their **strongest tie** to one another and label: kin, close friend, friend, acquaintance (no line = strangers)
4. How **connected** is your political ego-net? Are all your alters directly linked (**strong clique**)? Or are you the central **star** in your own constellation?

Clandestine Cell Networks

Undergrounds, espionage rings, CT special ops, and terrorist orgs use a **clandestine cell network** to avoid detection & decapitation by opponents.



- ✓ Cells deliberately kept very small (3 to 6 members)
- ✓ Sparse ties: most members only know cell mates' identities
- ✓ Only cell leader knows & communicates with other leaders
- ✓ Limited damage if a member is captured & interrogated

In a videotape found in Afghanistan, Osama bin Laden described a classic cell structure for 9/11: “Those who were trained to fly didn’t know the others. One group of people did not know the other group.”

Cell structures often embedded in top-down command-and-control hierarchy. But, a cellular network may evolve towards a **decentralized, fragmented structure**, which is only loosely coordinated, or not at all.

Broken up under increased pressures from counterterror orgs, the remnant cells may regroup and launch independent operations.

Wannabes might become self-starters: the 7/7/05 London bombers?

Chasing the Sleeper Cell

Sleeper cell - isolated group of agents that infiltrates a community and may stay dormant in place for months or years, awaiting orders or deciding on its own to activate and launch a sabotage or terror attack



In 2001, six U.S. citizens of Yemeni descent from Lackawanna, NY, traveled to Afghanistan, trained in an Al-Qaida camp, and met Osama bin Laden. The Lackawanna Six – whom the CIA called “the most dangerous terrorist cell in the country” – were arrested in 2002 & pled guilty to material support of terrorism. They were sentenced to between 7- and 10-year prison terms.

In a 2003 interview, Sehim Alwan explains why he went to the camp, his meeting with bin Laden, and the events leading up to his arrest.

What social network ties connected the cell members? How were those ties used to recruit them for training & indoctrination, and to persuade them to work for Al-Qaida against their country’s interests?

What did the Lackawanna cell expect to do after returning to the U.S.?

Did the cell pose a “clear & present danger”? Did the FBI have to act so quickly, or could it monitor them to find other network connections?

Assessing Dangers of Illicit Networks

Eilstrupp-Sangiovanni & Jones argued that the power of networks is over-estimated. Networks are susceptible to several “structural disadvantages.”



Faisal Shahzad sentenced to life

Terrorists networks key characteristics are “limited central control, local autonomy, and informal, flexible interaction based on direct, personal relations”

Alleged advantages of networks over hierarchies are:

Efficient communication & information processing

Scalability– grow by adding “sideways links” to new actors

Adaptability to environmental change (e.g., counterterror)

Resilience – resistant to infiltration & fragmentation

Learning capacity – quick bottom-up learning, innovation

- Compartmentalization of terrorists can be barriers to effective info-sharing
- Local cell decisions to act are not reviewed for excessive risk and cost-benefits
- Distrust beyond kin & ethnic group slows network’s ability to expand rapidly
- Decentralized, autonomous units can erupt in-fighting among rival factions
- Susceptibility to infiltration and dismantlement by counterterror orgs

If terror networks are so vulnerable, why are they so widespread? What alternative organizational form could be superior? Under what conditions?

Transnational Advocacy Networks

Interorganizational networks facilitate terror's globalization through multiple relations: fund-raising, logistics (smuggling people & weapons), publicity, ...



Transnational Advocacy Network - nongovernmental organizations (NGOs) that are “working together on an international issue that are bound together by shared values, common discourse, and dense exchanges of information and services.” (Keck & Sikkink 1998)

Boomerang effect is leverage occurring when NGO inside a country channels info about human rights violations to TAN orgs, that in turn badger & shame their governments to pressure the offending regime. Examples include Amnesty International & anti-landmine campaigns.

Asal et al. argue that TAN concept usefully applies to terrorist orgs

1. Comparison to nonviolent TANs allows application of such concepts as boomerang effect “to help understand them better.”
2. Contrasting terrorist & nonviolent TANs allows researchers “to ask why some TANs turn to violence and others do not.”

Asal et al. compared of six cases, concluded that terrorist TANs closely resemble nonviolent TAN in methods of change the international system.

Table 1
Comparing TANs and terrorist TANs

Networks/characteristic	Human Rights Campaigns	The Anti-Deforestation Movement	The International Campaign to Ban Landmines	Al Qaeda	Hezbollah	The Liberation Tigers of Tamil Eelam
Characterized by voluntary, reciprocal, and horizontal patterns of communication and exchange	Yes	Yes	Yes	Yes	Yes	Yes
Cooperation between actors from different countries	Yes	Yes	Yes	Yes	Yes	Yes
Sharing of information integral to the network	Yes	Yes	Yes	Yes	Yes	Yes
Use of leverage, symbolic and accountability politics	Yes	Yes	Yes	Yes	Yes	Yes
Use of the boomerang effect	Yes	Yes	Yes	Yes	Yes	Yes
Level of structure	Varies	Medium	High	Low	High	High
Use of violence	No	No	No	Yes	Yes	Yes

Does applying TAN label to terrorists confer unwarranted legitimacy?

Are their similarities on six networks/characteristic only superficial?

Does use of violence by terrorist TANs render them so different from nonviolent TANs as to cast doubt on the usefulness of this concept?