

**NETWORKED POLITICS: AGENCY, POWER, AND
GOVERNANCE**

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A century ago, during an earlier era of globalization, large hierarchical organizations dominated the international landscape. Nations-states hardened their borders, built up vast militaries, and extended their rule over far-flung territories. The earliest transnational corporations extracted oil and other natural resources, processed their products, and marketed them across the globe. Even the adversaries of these dominant powers accepted their hierarchical view of politics: the Bolsheviks broke with more moderate social democrats and forged an organizational model for revolution and rule that would influence most of the coming century.

Those hierarchical organizations have hardly disappeared from contemporary international politics. Networks now challenge their central place, however. Even before the terrorist attacks of 11 September 2001, open networks of non-governmental organizations had been joined by “dark networks” or clandestine transnational actors (CTAs), such as criminal and terrorist groups, as well as diasporic networks and other violent or potentially violent cross-border actors.¹ Transgovernmental networks—international

¹ The classic statement on transnational networks of non-governmental organizations is Keck and Sikkink 1998. On “dark networks,” Raab and Milward 2003; on CTAs, Andreas 2003; also Kenney 2005; diasporic networks are described by Watts 2004 and Wayland 2004. Adamson 2005 links the literature on non-violent networks to an examination of radical and violent transnational groups.

collaboration among agencies of national governments—are promoted as a form of international governance that more efficient and adaptable than the bureaucracies of international organizations.² Networked regional organization in Asia is contrasted with other regional models dominated by more conventional institutions.³ Global production networks have come to dominate the most dynamic sectors of the international economy, such as consumer electronics and information technology.

This new international landscape is reflected in a vocabulary of networks that is broader than international politics. Networks have become the intellectual centerpiece for a new era. If the contest between markets and state hierarchies was an organizing feature of the 1980s, network has emerged as the dominant social and economic metaphor in subsequent decades. The scope of networks expanded to include economic organization⁴, society as a whole⁵, as well as widening applications in the natural sciences.⁶

Although the network metaphor has become familiar in contemporary international relations, too often network has remained a metaphor rather than an instrument of analysis. This volume introduces two approaches to network analysis and applies them to international politics: networks as structures and

²² Transgovernmental cooperation was an important constituent of the original formulation of interdependence by Robert O. Keohane and Joseph S. Nye (1977). The revival of interest in transgovernmental networks is described by Eilstrup-Sangiovanni in this volume.

³Katzenstein and Shiraishi 1997.

⁴ Rauch and Casella 2001.

⁵ Castells 1996.

⁶ Barabási 2002.

networks as actors. In doing so, the authors emphasize the empirical leverage and new understandings generated by more systematic use of network analysis. Their research illuminates important sectors of international relations: international inequality, the emergence of the human rights movement, governance of the Internet, terrorist and criminal networks, and normative change.

Network analysis also contributes to a second aim of this volume: re-examining three theoretical debates in international politics: the relationship between structure and agency, competing definitions of power, and the efficacy of emerging forms of international governance. Agency and its exercise within international structures have been a perennial interest of theorists in international relations. Kenneth Waltz attempted to build a neorealist theory of international politics by abstracting a particular structural feature—the distribution of capabilities—from domestic attributes of states.⁷ Constructivists, often influenced by sociological theory, have placed agent and structure and particularly the relationship between states and their environment, at the center of their concerns.⁸ Network analysis delimits a field of international structures that shape and constrain agents. Most important, it also enables their empirical investigation. The characteristics and capabilities of new agents in international politics—networks defined as actors—can also be defined more precisely.

⁷ Waltz 1979.

⁸ Wendt 1999, Katzenstein 1996.

When applied to international politics, the lens of networks also forces re-evaluation of the concept of power. Power depends on structural position in a field of connections to other agents as well as actor capabilities or attributes. Simple dyadic measures of international influence appear inadequate in a world of networked states. The power of networks also requires assessment. Networked collective action, whether transnational networks of activists or illicit combinations of criminals or terrorists, may demonstrate greater capacity than its organizational competitors.

Finally, networked politics points to new forms of governance in international relations, distinct from more familiar types of intergovernmental collaboration. Network emergence in global governance does not mean that governments have been evicted from their traditional roles, however. As described by authors in this volume, governments may choose to delegate to networks, bargain and collaborate with them, or attempt to undermine them in key areas of world politics. Networked governance may incorporate governments as well as challenging them.

Insights from political analysis serve to enrich network analysis, a third aim of this examination of networked international politics. Politics asks how agents will behave if they are cognizant (or partially cognizant) of network structure and can act to manipulate that structure to their advantage. Network analysis has too often obscured or ignored questions of network power and power within networks, portraying networks as an antithesis of the hierarchical exercise of power that lies at the core of familiar political institutions. Under a

political lens, networked governance, too often represented as inherently consensual, reveals distributional and status conflicts that are often resolved through the introduction of centralization and hierarchy, within or outside the network. These insights from political analysis serve to revise network approaches to international relations and to expand their scope.

Defining networked politics: networks as structures and actors

Defined in simplest form, networks are ubiquitous: any set of interconnected nodes. The nodes can be individuals, groups, organizations, or states (as well as cells or Internet users); the connections or links can consist of personal friendships, trade flows, or valued resources.⁹ For social scientists, network analysis employs “concepts of location, or nodes, and the relations among these positions—termed ties, connections, or links—to argue that the pattern of relationships shapes the behavior of the occupant of a post, as well as influences others.”¹⁰ Two approaches to network analysis have been applied to international politics. The first is primarily interested in networks as *structures* that influence the behavior of network members, and, through them, produce consequential network effects. The second concentrates on networks as *actors*, networks as a specific organizational form in contrast to markets and

⁹ “In its simplest form, a network is nothing more than a set of discrete elements (the vertices), and a set of connections (the edges) that link the elements, typically in a pairwise fashion.” (Newman, Barabási, and Watts 2006, p. 2)

¹⁰ Smith-Doerr and Powell 2005, 380.

hierarchies. As actors, these networks also affect significant international outcomes.

Networks as structures

For the structural approach to international networks, relational structures or emergent attributes systematically influence the actions of network members and produce identifiable outcomes. Hafner-Burton and Montgomery, for example, examine the effects of networks of intergovernmental organizations (IGOs) on interstate conflict; Ingram et al. claim that IGO networks have discernible effects on trade flows, even when the IGOs in question are not dedicated to lowering trade barriers.¹¹ In defining structure, this approach to international networks often relies on social network analysis, a mainstay of sociological research; on network economics; and on the “new” science of networks that has been applied to topics ranging from the spread of contagious disease to the growth of the Internet to the metabolism of cells.¹²

The nodes in social network analysis can include individual members of terrorist organizations or countries linked by trade and investment.¹³ Like the even broader notions of network deployed in the natural sciences—a set of interconnected nodes—social network analysis emphasizes interdependent

¹¹ Hafner-Burton and Montgomer 2006; Ingram et al. 2005.

¹² Summaries of social network analysis are given in Wasserman and Faust (1994) and Scott (2000); Hafner-Burton and Montgomery deploy it in this volume. Network economics, used by Cowhey and Mueller in this volume, is described in Shapiro and Varian 1999 and Shy 2001. The “new” science of networks is described by Watts (2004) and Newman, Barabási, and Watts (2006). Lake and Wong in this volume make use of its structural vocabulary.

¹³ Sageman (2004) analyzes al-Qaeda using social network analysis; Cao (2006) describes networks created by international economic exchange.

actors and relational data rather than individual agents and their attributes. The ties or links among the actors (nodes) create a structure (a persistent pattern of relations) that in turn serves to constrain actors or provide opportunities for action.¹⁴ Social network analysis provides both a toolkit of concepts and a methodology for empirical research.

Network economics also emphasizes attributes of networks, such as scale or degrees of hierarchy, and the implications of those attributes for efficient operation and policy intervention. The “new” science of networks has introduced an interest in the dynamics of network development to an approach that has too often relied on static snapshots of network structure over time. Attention to network evolution and growth has introduced new structural variants, such as small-world and scale-free networks.¹⁵ All of these analytical approaches to networks and their structure rely on networks with relatively large numbers of nodes: states are characteristic networked agents, linked through IGOs or trade. The availability of very large-n databases was an essential prerequisite for the “new” science of networks.¹⁶

Networks as actors

The second, and more familiar, approach to network analysis in international politics captures networks as *actors*, forms of coordinated or collective action aimed at changing international outcomes and national policies.

¹⁴ Wasserman and Faust 1994, 4; Scott 2000, 2-3.

¹⁵ Watts 1999; Newman, Barabási, and Watts 2006.

¹⁶ Newman, Barabási, and Watts 2006.

Networks are not treated as an omnipresent feature of social life; instead, they are a specific institutional form that stands in contrast to the hierarchical organization of states and to the temporally limited exchange relations of markets. In the widely cited definition of Joel M. Podolny and Karen L. Page, a network is “any collection of actors ($N \geq 2$) that pursue repeated, enduring exchange relations with one another and, at the same time, lack a legitimate organizational authority to arbitrate and resolve disputes that may arise during the exchange.” In contrast to markets, network relations are enduring; in contrast to hierarchies, recognized dispute settlement authority does not reside with any member of the network.¹⁷ Other efforts to distinguish networks from hierarchies offer much less precision in defining the boundaries of networked politics: “fluidity,”¹⁸ “relative flatness, decentralization and delegation of decision making authority, and loose lateral ties among dispersed groups and individuals,”¹⁹ or “voluntary, reciprocal, and horizontal patterns of communication and exchange.”²⁰ As the contributions to this volume demonstrate, such features may characterize some, but not all, of the networks that have emerged as actors in international relations.

The network-as-actor perspective differs from the structural approach in incorporating links defined by exchange and created by agents; structure (beyond the existence of a network) is less central to the interests of

¹⁷ Podolny and Page 1998, 59.

¹⁸ Lin 2001 38.

¹⁹ Zanini and Edwards 2001, 33.

²⁰ Keck and Sikkink 1998, 8.

investigators. Instead, the relative advantages and disadvantages of networked organization, when compared to its institutional competitors, occupy a more prominent place. The nodes of these networked actors may be government agencies (transgovernmental networks described by Mette Eilstrup-Sangiovanni), human rights activists (the Amnesty International network investigated by David Lake and Wendy Wong), terrorist organizations (the al Qaeda network examined by Miles Kahler), or other international actors. The structural approach to networks abstracts structure from the characteristics of network nodes; for networked actors, however, agent characteristics may transform the aims and the effectiveness of these networks. The networks-as-actors approach lacks a common methodology, such as social network analysis. Its empirical methods have been eclectic and largely qualitative. Identifying the network as a network is the essential first step; assessing its organizational advantages and disadvantages, particularly in promoting collective ends, follows from that identification.

Distinguishing these two approaches to networked politics and their particular analytic and explanatory aims reduces the confusion that has often surrounded the use of networks in international relations. As several of the authors illustrate, however, both approaches may be required for a complete explanation of certain international outcomes. Zachary Elkins examines both a network structure and a set of network actors—transnational human rights networks—that have influenced the international diffusion of constitutional models. Peter Cowhey and Milton Mueller describe both a network with a

particular structure (the Internet) and networked actors that participate in Internet governance. National governments contemplating Internet governance choices must deal with both. In a second respect as well these approaches are complements rather than competitors. Networked actors may constitute a network structure at a higher level of analysis. For example, network actors, such as transnational networks of NGOs, may themselves be only one part of a larger network of international governance (network as structure) in a particular issue-area.

Structure and agency: a network perspective

Both approaches to networked politics, networks as structures and networks as actors, illuminate the relationship between structure and agency in international relations. A structural approach to international networks typically assumes that agents within the network are not aware of its overall structure and do not act to influence or change that structure. In other words, the actor-nodes of the networks may behave in a purposive way, but their actions are not directed to altering the structure itself. Governments that negotiate preferential trade agreements (PTAs) in the account of Hafner-Burton and Montgomery are likely to pursue relatively narrow economic gains or perhaps ancillary foreign policy goals. The social power or prestige that inheres in their network connections is unlikely to figure in their motivations. The physical infrastructure of the Internet, designed decades ago, has evolved to display the characteristics outlined by Cowhey and Mueller: network externalities, economies of scale and

scope, and elements of hierarchy. Individuals linking to the Internet each day, however, are unlikely to be aware of the network structure created by their links (apart from the ubiquity of certain hubs such as Google).²¹

Network analysis defines structure in a way that is measurable, allowing a more precise determination of the effects of structure on collective or systemic outcomes. Structure may be a redefinition in network vocabulary of familiar concepts from international politics, such as systemic polarization.²² Structural definitions may also be imported from other varieties of network analysis as a precursor to an investigation of the effects of network structure on international outcomes. Hafner-Burton and Montgomery, for example, have associated structural equivalence, a measure of whether two actors share the same ties to the same actors in a network, and prestige, measured by the degree of connectedness of an actor, with levels of international conflict.²³ In their investigation of the networks formed by Preferential Trade Arrangements (PTAs), this measure is supplemented by strength of ties between two states, measured by the number of shared memberships in PTAs.²⁴ Lake and Wong add a dynamic element to network structure by identifying the scale-free nature of the original Amnesty International human rights network. In scale-free networks,

²¹ On Internet structure, Barbási 2002, 79-92. Zeev Maoz (2001) distinguishes between discretionary and nondiscretionary networks in international relations. His distinction resembles on certain dimensions the network as structure and network as actor categories. For Maoz, discretionary networks are “created as a result of a decision of units to form such a connection.” Nondiscretionary networks result from “force of circumstances or by structural conditions beyond the control of units.” (148)

²² Maoz 2006.

²³ Hafner-Burton and Montgomery 2006. Prestige in this case is measured by degree centrality, a structural measure of connections to other nodes in a network.

²⁴ Hafner-Burton and Montgomery in this volume.

network connections follow a power law distribution: a large number of nodes enjoy few network links; a few nodes display many links. Networks with these properties are created by growth through a simple rule of attachment or network membership: new members will preferentially link to nodes that are already densely connected to other nodes.²⁵ Lake and Wong argue that many activist networks-in-formation follow similar laws of attachment for new members. Finally, in certain cases, the existence of an international network itself has political consequences; structural characteristics are of secondary importance. In Zachary Elkins's investigation of the networks that shape Latin American constitutional choices, the motivation for joining networks of different types—instrumental or function—are key in producing institutional diffusion, not the structural characteristics of the networks themselves.

Each of these structural accounts of networks and their formation begins with an assumption that networks emerge from the actions of their members (nodes). Networks and their structures are not, however, the result of intentional design on the part of those members. The large scale of many international networks renders this assumption plausible, as does a lack of empirical data, even for trained observers, on the actual structure and operation of many networks. Ronald Deibert and Rafal Rohozinski make clear that the ideology of an open network has obscured for many Internet participants the insertion of government intervention and controls, interventions that could only be revealed by careful testing, as they describe. Structure is also obscured by overlap and

²⁵ Barabási and Albert 1999.

competition among networks. Governments negotiate PTAs and thereby construct a web of social interaction that produces persistent patterns over time. They also negotiate a host of other international agreements or join international organizations, actions that produce different and potentially competing networks.

Many international networks are large, but not as large as the web of Internet users or the universe of all scholarly citations. In such cases, including several represented in this volume, at least some awareness of network structure seems a more realistic assumption. The introduction of such awareness may also transform the relationship between network and agent. In his description of the effects of international networks on the cross-border diffusion of constitutional models, for example, Elkins describes two distinct avenues of network influence on diffusion, one offering network benefits, the other offering information about the actual policy under consideration. The sources of affinity with one or another network type become important determinants of the ways in which networks influence national outcomes. Agents may not influence the structure of networks, but their choices over linking to particular networks may have a significant influence on the constitutional outcomes described by Elkins.

The early history of Amnesty International (AI) and the international human rights network, as described by Lake and Wong, produced a structure that influenced human rights activists and was also the target of their actions. Network norms are a structural outcome, not the choice of any single set of

actors. From an existing pool of normative understandings of “human rights,” AI crystallized around one alternative: an emphasis on prisoners of conscience and, more broadly, civil and political rights. As activists linked rapidly (and cross-nationally) to this original core in networked fashion, AI’s original normative choice gained dominance within the emerging human rights movement and within human rights discourse, at least in the liberal industrialized democracies. In similar fashion to the constitutional principles that filter through Elkins’s networks, dominant human rights norms are determined by agent choices over linkages to particular networks, and those choices are determined by the availability of networks and the attractiveness of those choices. The network’s scale-free structure arose from a bias among activists toward joining highly connected nodes, such as (AI), reinforcing its dominance in the network.

AI and the human rights network, however, bridge the divide between networks as structure and networks as actors. Actors within the network (such as the AI secretariat) made strategic choices that influenced network structure, choices that were intended to confirm their position within the network and reinforce the attraction of AI’s human rights alternative for prospective activist-members. When networks themselves are considered as agents, such design choices, often taken without full information on the outlines of an emerging network, are critical. The consequences—although not always the intended ones—determine the network’s attraction for new members and for its effectiveness in organizing collective action.

In the cases of constitutional networks in Latin America and the nascent Amnesty International, network structure influenced competition between norms, in both cases by influencing the decisions of governments or individuals in their decisions to affiliate to networks. In both cases, provision of information about the network was one means for actors to insure their success within the network. The campaign networks described by Helen Yanacopulos-- Jubilee 2000 (J2K) and Make Poverty History (MPH)--were highly successful mobilizers of political support for norms of international justice that were far from dominant when their campaigns began. Both network structure and the strategy that it supported differed from either the constitutional or the AI networks. The J2K and MPH coalitions were networks of networks. The need for individual activists and incentives for linkage by those activists was lower: the “work” of networking was carried out by individual organizations that made up the coalition. The strength of individual network ties-- wearing a colored armband or watching a Live 8 concert—was lower than the links established by AI through adoption of prisoners of conscience.

This network of networks was far less centralized than AI, and member organizations resisted even the limited degree of hierarchy asserted by the network leadership. A more significant distinction lay in the deployment of norms: the normative shift produced by the J2K and MPH coalitions did not emerge from the network; existing norms were wielded instrumentally to forge the coalition and broaden its appeal. Nevertheless, despite their differences with AI in network structure, the two networked coalitions were successful in

organizing mass collective action and producing policy change, more clearly in the case of debt relief than poverty reduction.

The Active Learning Network for Accountability and Performance (ALNAP) described by Janice Stein is a final example of a network that produced normative change through a networked structure, a result of bargaining between governments and NGOs. Aid agencies, which provide a large share of the funding for humanitarian non-governmental organizations (NGOs), became increasingly concerned with the politically charged issue of accountability during the 1990s. Rather than wielding their budgetary clout to impose normative change on their NGO clients, the aid agencies chose a less costly route: networking with the NGOs. The network structure of ALNAP permitted a more gradual and consensual normative shift within the humanitarian community through a structure that incorporated both governmental and NGO actors and preserved the effectiveness of the larger network of organizations engaged in humanitarian relief.

In each of these cases, actors created network structure, though not always as they intended. In other settings, network actors have produced structural change as key actors learned from their failures in dealing with hostile environments. Two clandestine networks investigated by Michael Kenney and Miles Kahler—Colombian drug trafficking networks and the terrorist network centered on al Qaeda—shared certain characteristics: transnational illicit activities, a willingness to use violence as an instrument, and unwanted attention from their governmental adversaries. Their environment was competitive in two

respects: competition with government agencies that were seeking their suppression and competition with rivals who were seeking to displace them in the larger universe of drug-trafficking and terrorist organizations.

As Kenney describes, effectiveness of drug-trafficking networks is highly correlated with adaptability to a harsh environment. Network strategies—such as political corruption—are significant instruments for carving out political space in the face of pressure from law enforcement agencies. Network structure also influences survival: centralized wheel networks were more easily targeted by government agencies. Transition to decentralized chain networks—more “diffuse and self-organizing” and flatter in organizational design—enabled the Colombian drug-trafficking trade to continue. Kahler also associates shifts in al Qaeda’s network structure with its changing environment of adversaries and competitors, the United States and its allies as well as other violent Islamist groups. In this case, the environment was shaped in part by the purposive targeting by al Qaeda of the American “far enemy” rather than the “near enemy” favored by other Islamist activists in the region. Unlike the drug traffickers or many insurgent groups, al Qaeda expanded its aims, an expansion under clandestine conditions that imposed more hierarchy within the networked organization. Hierarchy, like centralization in the Colombian drug networks, made al Qaeda more vulnerable to counter-measures by the United States and its other adversaries after 9/11. The network responded to that crushing response with an imposed segmentation and decentralization, an organizational

shift that weakened but did not eliminate its ability to conduct terrorist operations.

Network analysis allows empirical investigation of structures that are both the products of purposive action and at the same time constrain that action. Networked actors, whether NGOs or clandestine terrorist and criminal networks, reveal the relationship between networks as an organizational form and success in collective action. The two approaches complement one another and also share two shortcomings. The structural approach must accept that network nodes may become partially cognizant of the network's structure--even if that knowledge is imperfect—and with that understanding, they will act to further their interests by changing that structure. Those who emphasize networks as actors must also take structure seriously, connecting structure with success in both collective action and in the achievement of their goals. Both approaches spend too little time considering the links within the networks and what those links convey, whether resources, information, or other content. In the contest between a view of network links as “girders” and their identification as “pipes,” the former, structural view too often dominates over the latter, connectionist perspective.²⁶ Related to this neglect of the content of network links is an under-specification of network effects. The microfoundations of the

²⁶ On this distinction, Borgatti and Foster 2003, 1002-1003; also Smith-Doerr and Powell 2005, 394.

consequences of networks—how network position influences behavior and, through behavior, international outcomes, is often obscure.²⁷

Power and international networks

A networked perspective challenges conventional views of power in international relations. At the same time, attention to the exercise of power refreshes network analysis by questioning its overly consensual and trust-laden view of networks. Rather than the narrowly dyadic and behavioral view of power common to international relations and political science, a structural approach to networks relates power *within* networks to network position, to persistent relationships *among* states rather than individual attributes *of* states.²⁸

Networked structure inverts the neorealist view of international structure as a distribution of capabilities; capabilities in the networked view rely on connections to other members of the network. The perspective of networks as actors also undermines certain simple definitions of capabilities. Networking of agents contributes to their relative success at collective action vis-à-vis other international actors.

²⁷ For example, Ingram et al. 2005 claim strong effects on trade from networked membership in social and cultural IGOs. Their explanation relies on the effects that membership may have at the level of citizens, without any demonstration of how citizens might be affected by such memberships. (p. 830)

²⁸ “A position’s power—its ability to produce intended effects on the attitudes and behaviors of other actors—emerges from its prominence in networks where valued information and scarce resources are transferred from one actor to another.” (David Knoke, cited in Smith-Doerr and Powell 2005, 380.)

Power within networks can be defined using measures of connectedness or centrality, the approach employed by Hafner-Burton and Montgomery. In their analysis of PTA membership networks, power is “determined by the relative prestige created by ties with other states in the international system.”²⁹ Their choice of degree centrality as an indicator awards greater social power to states that are more connected. This measure, based on network position, does not track closely other measures of power, such as military capability or economic weight: the United States, in the social network of PTAs investigated by Hafner-Burton and Montgomery, is a middling power; European states rank higher in the hierarchy of social power. Is social power fungible? Hafner-Burton and Montgomery argue that poorer and militarily less powerful states may offset their material disadvantages through the accumulation of social power. Measures of inequality on material dimensions seem to have increased globally over the past decades, as measures of social power have displayed convergence. The transformation of social power into gains on other measures of influence is central to any projection of trends in international inequality.

In networks that provide informational or normative links, social power, defined as overall connectedness, may be an appropriate measure of power within the network. Normative influence will be greater as the number of links to other actors grows, a conclusion that can be drawn from the case of AI as well as the constitution-making networks of Elkins. The analogy to soft power in international politics is relatively close; network centrality across many

²⁹ Hafner-Burton and Montgomery in this volume.

dimensions may well be a measurable indicator of soft power. In circumstances in which bargaining or exchange takes place between network actors, however, simple measures of connectedness may not capture all dimensions of network power.

Bargaining power or leverage—in contrast to social power—may increase with links to network partners that are otherwise weakly connected or those that have few outside options.³⁰ States that are the sole link between clusters of highly connected states might gain influence as brokers within the network. Lake and Wong present this second perspective on network power, as leverage or bargaining power, in the strategies pursued by Amnesty International. Agents can pursue strategies to increase their network power by increasing their centrality within the network (defined, like prestige in the PTA networks, as being more connected than other nodes) and by increasing the attractiveness of network connections by making the network more efficient and valuable to present and prospective members. A powerful node in the human rights network, such as the AI secretariat, exercises influence through both the first face of power--leverage gained through the threat to sever links or promise network expansion--and through its second face, setting the network's agenda through structural control of information.

The Internet, a layered network of infrastructure and users, also presents structural features that permit the exercise of bargaining power. In the chapters on Internet power derives from a network position that permits the exploitation

³⁰ Bonacich 1987 makes a similar distinction.

of network structure. As Cowhey and Mueller warn, assumptions of flatness and decentralization may obscure the hierarchy that emerges in networks. That hierarchy provides opportunities for those outside the network (governments) or agents within the network to exercise power. In similar fashion, Deibert and Rohozinski label the Internet a network of “filters and chokepoints,” entry points for states that wish to reassert territorial power over the Internet and to control its transmission of objectionable information.

A final form of power within networks may set them apart from other organizational forms: the power of *exit* or de-linking. On this dimensions, most networks are closer to markets than hierarchies (and certainly states), which may attempt to constrain exit. Strategic efforts within the network to exploit bargaining power may result in threats to exit by those who are its targets. The existence of outside options becomes critical in assessing network power on either side. In a conventional imperial network, for example, exit was constrained by coercion and by the absence of political “space” that was not colonized (exit from one empire risked capture by another). In the emerging AI network, incentives to join were necessary for the network’s rapid growth, because prospective members could easily exit. Expert networks, whose central role in Internet governance is described by Cowhey and Mueller, often magnified the leverage granted by their professional standing through the existence of options outside the network. Although clandestine criminal and terrorist networks are more likely to exert coercion to prevent exit, their behavior

suggests both the presence of competition for members among networks and the high reputational costs associated with obstructing exit.

As agents within networks comprehend the power that inheres in network structure, they will attempt to influence that structure over time. Lake and Wong claim such a long-term strategy on the part of AI's secretariat. Cowhey and Mueller describe strategies of delegation that are deployed by governments that wish to reduce their vulnerability to the exercise of network power by other governments. Even in cases where such network-shaping activities are less apparent, such as the PTA networks of Hafner-Burton and Montgomery or the uncoordinated networks of Elkins, a goal of network power favors agent strategies that differ from those in conventional international politics. If social power is based on connectedness or centrality, then strategies of membership in international institutions may reflect more than simple calculations of interest in a particular organization or its benefits. The access that international institutions grant to larger networks—for example, the EU's bilateral trade partnerships with non-members—may be as important as the individual agreement itself. Unilateralism, which sacrifices the social power of networks, may appear less attractive as a strategy. If networks provide information that fosters learning, and if that learning can be biased in ways favorable to other agents in the network, international networks may be targets of influence by governments and other actors. As suggested in Elkins's chapter on constitution-making, power within networks of this kind would be multiplied many times over, through replication of norms and practices in the domains of other states.

Identification of power within networks calls into question conventional views of power in international politics. Estimating the power of networks as international actors undermines standard views of capabilities. Political networks succeed as actors if they can promote and sustain collective action on the part of their constituent agents. For the authors in this volume, that success is often dependent on two features of networked organizations: *scalability* and *adaptability*.

Scalability, a concept based in the technical literature on networks, captures the ability of political networks to grow rapidly at relatively low cost without altering the fundamental form of the organization. For both the transgovernmental networks analyzed by Eilstrup-Sangiovanni and the non-governmental AI and justice networks, the ability to add new members quickly and at low cost was a significant organizational asset. The ill-defined membership rules of transgovernmental networks awarded them advantages in comparison to more formal intergovernmental organizations (IGOs). New members were easily incorporated as issues were redefined or added to the agenda. Equally attractive was the ability to exclude troublesome prospective members who might force their way into an IGO. The relatively “loose coupling” that characterizes TGNs also permits members of these networks to opt out in particular instances without endangering the larger cooperative endeavor.

A more dramatic example of the benefits of scalability were the Jubilee 2000 (J2K) and Make Poverty History (MPH) networks that campaigned to redefine the policies of rich countries toward debt cancellation and development

aid. As Yanacopulos demonstrates, the explosive growth of these networks, enabled by the weak network ties of their individual supporters, was critical to their political impact. Scalable networks were particularly suited to the campaign strategy—a clearly defined target for which mass mobilization provides a critical political resource. AI also possessed scale-free properties, but the strength of network ties among its activists was greater, as expected for an organization that aimed for longer run rather than episodic effectiveness. AI was also concerned with its power to define the normative content of the network, which could be undermined by growth that was too rapid for a clear definition of normative identity to take hold. The ALNAP network was in an even more tenuous situation, balancing between its governmental and NGO members and aiming for a new normative consensus on accountability. Its networked form proved a successful vehicle for this task, but paradoxically, the network was hierarchical (centered on a relatively small number of nodes), not inclusive (restrictive of the number of full members), and non-transparent. In contrast to open and licit political networks, clandestine networks are seldom scalable: growth may be desirable, but the cost of adding new members is high, risking suppression by government agents and dilution of ideological identity (for networks in which identity is a core attribute).

Adaptability, the second characteristic of successful network actors, is associated with scalability and the ability to add (and subtract) network participants easily over time. Adaptability in organizational form over the *life cycle of the network*, however, is another key dimension of successful

adaptation explored in these chapters. Successful networked organizations often demonstrate an ability to incorporate elements of hierarchy and centralization into their networked structure. In effect, they can become more or less “networked” as political demands shift or their environments change. Counter to much of the overdrawn rhetoric that surrounds networks, their ability to “hybridize” with hierarchical forms when necessary has often been part of their organizational repertoire.

Al Qaeda and the Colombian drug cartels both demonstrate life cycle adaptability, even though they moved in opposite organizational directions. As the drug trafficking cartels adopted a decentralized chain network form, they also adapted through a strategy of learning enabled by the network form. Even in the clandestine world of drug trafficking, wider social networks and the network structure of the cartels encouraged information-sharing and further promoted network adaptability under pressure. With much more mixed success, al Qaeda adapted its networked organization by awarding a larger role to its hierarchical core rather than expanding its earlier role in the larger terrorist network—an ability to serve as a broker between less connected parts of the network and its provision of valuable resources to network members.

Over its life cycle, Al, a legal organization in an open political environment, displayed a changing mix of network and hierarchy. Its early network, crucial to the rapid expansion of its membership, eventually evolved into a conventional hierarchical organization. An “organizational paradox,” it remained “hierarchical and heavily bureaucratic,” and, at the same time,

struggled to maintain its networked origins through an inclusive membership and volunteer base. Eventually—at the next stage in its evolution—it became one influential node in a much larger international human rights network. AI moved from “pure” network to a more hierarchical form to participation as one (central) node in a larger human rights network. Its organizational transformation over its life cycle promoted both its own success and the successful adoption of human rights norms that it espoused.

Scalability and organizational adaptability over time are associated with more effective collective action on the part of networked organizations. Rather than offering explanations for network power under all circumstances, however, the authors in this volume deviate from contemporary network triumphalism and present conditions under which network characteristics produce more or less influence over international outcomes. As Eilstrup-Sangiovanni points out, adaptability may enhance power in certain environments, but for situations requiring highly credible commitments, that feature may be less beneficial. Introduction of hierarchy may increase efficiency, but it can also provide a target for adversaries outside the network, as both the Colombian cartels and al Qaeda discovered. Such nuanced accounts of network attributes and their effects on network power are an important next step in applying network analysis to international relations.

Networked governance: not the next wave

The rise of networked governance in international relations has been touted as a panacea to the problems of cumbersome multilateralism and slow-moving and inefficient international organizations. The advantages of networks have been heralded as a solution to the “globalization paradox” (an expansion of capacity without an increase in centralization). Networks have been promoted for “their general virtues of speed, flexibility, inclusiveness, ability to cut across different jurisdictions, and sustained focus on a specific set of problems.”³¹ Networked governance is portrayed empirically as the next wave in global and regional governance as well as the optimal solution to the dilemmas of international institutional design. With both hope and alarm, non-governmental networks have also been pitted against states as rivals for international influence and possible substitutes in domains previously monopolized by IGOs and other more hierarchical forms of interstate collaboration.

In assessing networks and international governance, the authors discover, once again, a variety of relations between networks and national governments. In the case of TGNs, the constituents of networks are government agencies, collaborating informally across a range of issue-areas. The outcome in this case suggests a role for networks in sustaining interstate cooperation through delegation or choice by governments. Governments retain power over networks in these cases and set the parameters for governance institutions. In other instances, non-governmental networks collaborate with governments and bargain with them over the terms of that collaboration. Finally,

³¹ Slaughter 2004, 167. For a more cautious assessment, see Raustiala 2002.

in some instances, governments compete directly with networks for influence over international governance. These alternative relationships are not given by the mere existence networked organizations, however. The relationship between governments and networks may not be inherently competitive or prone to conflict. Nor, as Milton Mueller has observed, is the presence of networks within a governance arrangement a necessary sign that they are the only means of governance in a particular issue-area.

Transgovernmental networks (TGNs) and the governance of the Internet call into question sweeping claims for networked governance as the next, unstoppable wave in global governance. As Eilstrup-Sangiovanni points out, changes in the international environment have made TGNs more appealing than IGOs, but only under certain circumstances. The choice of TGNs by governments is highly dependent on network structure and the value of certain network characteristics. In the cases of two TGNs, the Proliferation Security Initiative and the Missile Technology Control regime, and an IGO, the Chemical Weapons Convention, Eilstrup-Sangiovanni suggests that governments will delegate to TGNs in the face of environmental uncertainty, potential domestic political conflict, and, perhaps most important, when clubs of like-minded governments seek a flexible means to realize their convergent interests. In other circumstances, the instrument of an IGO is both more effective and more politically palatable.

Governance of the Internet has produced similar choices between different modes of governance. Rather than a calculus of government choice

between TGNs and ITOs, Cowhey and Mueller frame their central question as a decision by governments to delegate to networked and often private entities in Internet governance. Conflicts over governance create a need for collective action in order to sustain the many benefits of a key global communications network). In two cases, standard-setting and resource allocation (assignment of domain names), governments delegated authority to non-governmental networks. In the first instance, expertise was decentralized and networked; transparency of the professional network produced the conditions for successful delegation. In the second, delegation was a more surprising outcome, since hierarchy was built into the characteristics of the network. Here once again, the networked agent, ICANN, was nongovernmental, expert, and transparent in its operations. As in the case of TGNs, the advantages of particular networked organizations, in this case expert networks, produced choices by governments to delegate authority over key dimensions of Internet governance.

Conflict over Internet securitization has introduced competition between networks and governments over the legitimacy of government actions to “re-territorialize” the Internet. The portrait of governance offered by Deibert and Rohozinski is very different from the delegated and collaborative relationship described by Cowhey and Mueller. Outside arenas of governance that are in the firm control of the industrialized democracies, networked activists have come into conflict with authoritarian governments that assert norms of sovereignty against the competing norms of a transnational activist network. Networked researchers and activists are linked to the OpenNet Initiative (ONI); users of

psiphon software form a parallel cross-border network. Internet governance in this account is not established through open decisions to delegate by governments. Rather, government measures lack transparency and must first be researched and revealed by their networked political opponents. Networked governance is, in this case, not a description of Internet governance. Networks are instead instruments for the promotion of a particular, contested model of Internet governance. That model competes with government-backed alternatives that aim to circumscribe the role of private and non-governmental actors and the realm of choice awarded to Internet users.

Networked governance has not evicted national governments or IGOs from their role in global governance. Competition is one of several relationships between networks and these traditional, dominant actors in global governance. Membership in IGOs creates new networks in international politics; how those networks affect governance in the future and how their effects reinforce IGOs in other domains is a significant question for the future. TGNs may also reinforce IGOs and other formal and legalized means of international collaboration rather than substituting for them.³² Non-governmental networks may serve as the instruments of governments, through relations of delegation, and as their collaborators. In some cases, governments and non-governmental organizations may partner in a networked form of governance. ALNAP was just such as creation, serving the purposes of aid agencies and their NGO clients.

³² Raustiala 2002.

Networked governance is not equivalent to governance by networks—or governance without governments and IGOs.

Conclusion: Networked international politics

The emergence of networks in international politics is hardly new, and investigation of cross-border networks is now decades old.³³ Analysis of networks in international relations has paralleled an earlier trajectory in the study of international institutions: first, international institutions were redefined as a category broader than formal international organizations; their significance to international relations was then established (do international institutions matter?); and finally, variation among those institutions and the effects of that variation became a focus of research. In similar fashion, networks are moving from the phase of definition and agreement on their significance to a more rigorous examination of their variation and the effects of that variation on consequential international outcomes.

Although network analysis will continue to justify itself through its ability to explain significant features of contemporary international politics, its theoretical contribution should not be overlooked. Networks offer a means to investigate the relations between agents and structure in an empirically convincing manner. Networks force attention to dimensions of power that conventional views of international politics neglect. Networked governance is

³³ Keck and Sikkink (1998) describe international campaigns with network characteristics in the nineteenth and early twentieth century. Cross-border economic networks date to even earlier periods.

an alternative to hierarchies and markets with its own roster of strengths and weaknesses.

The claims made by the authors in this volume are ultimately claims of theoretical innovation and empirical utility—the value of network analysis as a tool for understanding international politics. In the last decade networks and networked actors have produced a new form of flexible, just-in-time political agency that has led some to claim that networks may displace states and other hierarchies as a dominant institutional form. The contributors to this volume sharply qualify such claims. A final contribution of rigorous network analysis may be a more realistic assessment of the role of networks in international political life.

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