Network Dynamics of Interorganizational Cooperation: The Croatian Civil Society Movement

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Throughout the world, social cause organizations and independent media organizations work together, despite their differences and competition with each other for resources, toward creating civil society. This paper assesses the network dynamics of a system of cooperative competitors in Croatia. The research is framed from the theoretical perspectives of resource dependency, cooperation competition, and structural holes with results that describe the roles of various organizations in the development of civil society. Network relationships are described among 18 civil society organizations from their initial participation in the Croatian transformation in the year 2000 to a democratic nation to two years later. Results identify benefits and drawbacks of the general system structure, specific organization’s network roles, and reputations associated with networking activities. Theoretical implications address the complementary contributions of using multiple theoretical perspectives to approach interorganizational relationships and their pragmatic utility with respect to building stronger networks among civil-society partners.

Keywords: Interorganizational Communication; Resource-Dependency Theory; Cooperation Competition; Structural Holes; Civil Society; Network Analysis

In early 2000, the former communist nation, Croatia, experienced its first successful democratic election. With the election of President President Stjepan (Stipe) Mesic, Croatia became a fledgling democracy (Freedom Forum, 2002). Croatia’s political transformation may be attributed to a variety of internal characteristics such as its economic potential and its highly educated homogenous population. Additionally,
Croatia has benefited from a prodemocratic grass roots movement encompassing independent media, nongovernmental organizations (NGOs), and international nongovernmental organizations (INGOs). These organizations joined together in the 2000 elections because of their common purpose to see a fair and free election. Yet, these NGOs and independent media face challenges beyond their shared interest in seeing the fruition of democracy. In order to accomplish their short- and long-term goals, they rely on funding and support from many of the same grantors, such as USAID, Soros, and the British Civil Society Initiatives Fund. Thus, they not only cooperate toward similar goals but also compete for similar resources.

The elections of 2000 were a major political movement that followed a devastating civil war among the Croats, Bosnians, and Serbs. The spirit of the times—marked by an atmosphere of political tensions and civil unrest—was ripe for cooperation among independent media, INGOs, and NGOs (Taylor & Doerfel, 2003). Since then, although these organizations continue to share a goal of maintaining democracy, the motivation to cooperate is not as imperative as during the major political movement of 2000. Two years later, these organizations have come to rely on the existence of democracy and thus have returned to a focus on their more special interest goals, such as women’s issues, human rights, and the environment. With motivation to maintain themselves comes the constant need for these grass roots organizations to obtain funds and emotional support. So, two years of democracy leaves the context in Croatia as one comprised of cooperative competitors. Though they worked together to see democracy in their nation, now they draw limited resources from a dwindling number of funding organizations.

This paper analyzes interorganizational communication in a climate of political rest from the perspective of resource dependence, cooperation competition, and social-networks theories. These theories form the framework for the hypotheses and research questions. The paper then reviews network analysis as the method, presents the results of an analysis of an interorganizational network among NGOs, INGOs, and the media, and then offers discussion and implications of the study’s findings for communication theory development as well as practical application of communication theory by civil-society partners.

Civil Society as a Global Concept

Traditionally, civil society has been discussed and studied within the context of political science. Barber (1998), Gellner (1994), and Putnam (2000) have written extensively about public participation and how this participation (or lack thereof) influences policy decisions. Hauser (1998) traced civil society through the Greek and Roman concept of the public sphere. Civil society as a concept can also be seen as what the Enlightenment philosophers considered responsibility and in our current ideals of democracy. According to Hauser (1998), civil society has replaced the enlightenment concept of civic virtue. Civil society can be understood as “the network of associations independent of the state whose members, through social interactions that balance conflict and consensus, seek to regulate themselves in ways
consistent with a valuation of difference” (Hauser, 1998, p. 26). In fact, the parties to a civil society include different forms of cooperative social relationships. Relationships between private and public organizations foster trust in a society (Alexander, 1998). Bennett (2000) acknowledged that both new and traditional media facilitate the development, maintenance, and possible decline of civil society. Indeed, NGOs are helping governments to change the way they communicate with citizens. Civil society can be understood as the “evolution of cooperation and trust among citizens” (Hadenius & Uggla, 1996, p. 1622).

Current communication research also contributes to our understanding of civil society. Media researchers Splichal, Calabrese, and Sparks (1994) provided one of the first attempts to address the relationship between information, media control, and civil society. Splichal et al. linked the access to information as a foundation for civil society. More recently, Moy and Pfau (2000) examined media influences on public confidence in American institutions. They found that the media, through both tone and content, can undermine confidence in civil institutions.

The development and maintenance of civil society can be best understood, for the theoretical goals of this study, by studying relationships among three sectors: (1) grass roots organizations that seek to participate in the public sphere, (2) the media organizations that inform the public about social and political issues, and (3) international donor organizations. Organizations such as the United States Agency for International Development (USAID), George Soros Open Society Institute (Soros), the United Nations, and the British Civil Society Initiatives Fund (British Fund) are all active throughout the world in funding civil-society projects. The following section describes a context in which the donors, NGOs, and media came together to work toward the development of civil society in the nation of Croatia.

**Civil Society Development in Croatia**

In Croatia, the three sectors of civil society face daunting challenges. Howard (2002) noted that in the postcommunist world, mistrust between organizations, the persistence of friendship networks, and public disappointment with transitional governments and social institutions all weaken the development of civil society. Croatia is currently experiencing all of these conditions. Yet, a civil society movement is emerging, and a network of Croatian organizations, independent of state control, are working together in that context. Civil society initiatives in Croatia include civic education, media development, training in conflict resolution, and efforts to create and sustain responsible, accountable, and transparent local governance. Part of the Croatian success in civil society is due to the large amounts of international aid that were devoted to election reform in the late 1990s (USAID, 2000). With this massive international support, nations in the Balkans, such as Bosnia and Croatia, emerged as major components of the global civil-society movement (Shiras, 1996). But even the best intentions can have negative outcomes. Competition over donor dollars, infighting, and lack of agreement all were apparent in the 2000 civil-society effort (USAID, 2000). Nevertheless, according to Jasic (2000) and Taylor and Doerfel
M. L. Doerfel & M. Taylor (2003), Croatian NGOs were able to cooperate with other NGOs to share financial assistance, strategic communication, and expertise. Their cooperative efforts led to the first free and fair election in Croatia's history (Jasic, 2000; Taylor & Doerfel, 2003; USAID, 2000).

Key themes that underlie civil-society theory and research include what Hauser (1998) referred to as consensus and conflict. Elaigwu, Toyo, and Ade-Odutola (1999) suggested that fostering a competitive spirit, through both cooperation and competition among NGOs, is mandatory for achieving a positive impact on civil society. Moreover, they emphasized that instead of serving merely familial or clientelistic interests, donors should demand that their resources be used to "network around key issues of national or regional policy" (p. 30). The following section discusses resource dependency and cooperation competition theories that also address the nature of such tenuous relationships.

Resource Dependency and Cooperation Competition Theory

Competition for financial resources from international donor organizations had previously weakened civil-society efforts in many nations in Eastern Europe. Gibson (2001) studied the development of civil society in Russia and found that low levels of trust, between individuals and between different types of organizations, have impaired political and social reform. The resources of international donors are finite, and not all NGOs can be supported by donors. This zero sum game mentality can prevent organizations from communicating, cooperating, and sharing resources and information. Resource dependency theory, however, posits that organizations that are more reliant on others for resources are more likely to cooperate with those others (Pfeffer & Salancik, 1978). Meanwhile, the resource-wielding organizations become more central in their interorganizational networks, and more central organizations benefit because of their higher profile positions (Brass & Burkhardt, 1990; Galaskiewicz, 1979; Mizruchi, 1993). Following the resource dependency model, then, it is expected that those organizations on the periphery will be seen as more cooperative than the more central organizations, whereas the more central organizations will be depicted as more competitive. In other words, peripheral organizations emerge as cooperators due to their need for resources, while the central resource-wielding organizations are winning the zero sum game and are thus seen as more competitive.

H1a: Organizations that are more central in the 2002 communication networks are considered by other organizations in the network as more competitive than peripheral organizations.

H1b: Organizations that are more peripheral in the 2002 communication networks are considered by other organizations in the network as more cooperative than the more central organizations.

The initial communication contacts among NGOs and media organizations during 2000 in Croatia began the history of cooperation and competition for scarce
resources. Deutsch's (1973, 1985) competition-cooperation theory addresses the emergent and circular relationship between actions and their consequences. Competitive behaviors that involve deceitful, coercive, threatening, and suspicious communication beget more of the same, whereas cooperative climates recreate supportive, empathetic, trusting, and open communication (Allen, 1995; Deutsch, 1994; Pettit, Goris, & Vaught, 1997; Vanderslice, 1995). This conceptualization of competition is also prevalent in interorganizational research that considers the coexistence among competitors in cooperative situations (Burt, 1992a) and how competitive situations are transformed into cooperative ones (Axelrod, 1984). For example, Lindskold, Betz, and Walters (1986) found that they could quickly transform competitive situations to cooperative, and cooperative to competitive situations, with communication exemplified by the opposite. Their experiments illustrated the transformation from cooperative relationships that were depicted by supportive, empathetic, and trusting communication to competitive relationships with the introduction of distrusting and deceitful messages. Even seemingly distrustful relationships can be transformed if cooperative acts such as empathetic, supportive, and open communication are initiated.

By virtue of establishing initial relationships of support during the 2000 election, Croatian interorganizational relationships that were assessed as positive in 2000 (Taylor & Doerfel, 2003) are expected to continue—and consequently be considered cooperative—among civil-society partners. Thus, the following hypotheses are framed from a resource dependency perspective that is complemented by Deutsch's conceptualization of the emergence of cooperation and competition.

H2: Positive NGO and media relations in 2000 will predict current positive NGO and media relations.

a: Organizations identified as more important in the civil-society movement in 2000 will be considered more cooperative in 2002.

b: Organizations identified as more important in the civil-society movement in 2000 will be considered more important in maintaining civil society in 2002.

c: Organizations identified as more important in the civil-society movement in 2000 will be considered more influential in maintaining civil society in 2002.

Cooperation versus competition research has its roots in game theory. Such research conceptualizes the cooperation competition continuum as a socially created concept. This cooperative approach to relationship building was also applied to the organizational behavior literature with work such as Burt's (1992a, 1992b) research on cooperative competitors. Because cooperation-competition theory considers perceptions of organizational context, the following section draws on network theory to conceptualize and measure context in terms of relational ties. Social influence theories (Burt, 1987; Krackhardt, 1992; Mizruchi, 1993; Rice, 1993) and, particularly, Burt's (1992b) theory of structural holes help to explain the benefits of enacting connections among various organizations in a system. As Deutsch (1985, 1994) describes it, the norm of cooperative (or competitive) communication begets more
of the same. Turning to how the structure of cooperative relationships emerge and change over time can provide further insight about the norms and perceptions associated with the recurring patterns of cooperation competition. In other words, using Deutsch’s more communication and reputation-focused theory with social network theories, we develop a more in-depth understanding of the civil-society relationships developed, both communicatively and structurally.

Social Network Theory

Centrality

Coalitions are created out of interorganizational linkages and thus have the potential to play important roles in networks. In Taylor and Doerfel (2003), Croatian coalition organizations emerged as some of the most important and most centrally connected. By virtue of their centrality and perceived impact, these organizations were perceived important to the overall campaign by other organizations. Coalition organizations can coordinate the efforts of many different types of organizations. The highly central positioning echoes research on social influence that has identified a strong, positive association between centrality and reputational influence (Benson, 1975; Brass & Burkhardt, 1992; Flanagin, Monge, & Fulk, 2001; Galaskiewicz, 1979; Krackhardt, 1992; Laumann & Pappi, 1976; Mizruchi, 1993).

Consistent with the association between centrality and social influence, Flanagin et al. (2001) found that there are long-term advantages associated with being founding members in a federation, such as having access to key information and resources. Gulati (1995) found that history matters when firms decide with whom to ally. Moreover, Stuart (1998) also found that organizations with many previous alliances benefit from a social capital that provides them with access to future potential exchange partners (p. 694). Thus, it is expected that the more central organizations in 2000 (Taylor & Doerfel, 2003) will continue to reap the benefits associated with their high profiles they had during the 2000 election. It is hypothesized that this inertia will be particularly evident two years later with a specific type of centrality, namely, betweenness centrality, because organizations with high betweenness centrality control the flow of information in a network (Freeman, 1979; Krackhardt, 1992). That is, they have long-established relationships and a position in the network that allow them access to and control over the dissemination of required information. Uzzi (1997) found that embedded ties create opportunities for actors in a network.

H3: Highly central organizations in 2000 will have high betweenness centrality in 2002.

H4: Highly central communicators in 2000 will enjoy the foundational benefits of these relationships in 2002.

a: Central organizations in 2000 will be perceived as more influential in maintaining civil society in 2002.

b: Central organizations in 2000 will be perceived as more important in 2002.
Extending Flanagin et al. (2001) and Taylor and Doerfel’s (2003) research on interorganizational relationships, it is expected that these foundation organizations will continue to be highly central and therefore influential and valued even during maintenance. That is, their initial reputation established during political upheaval and turbulence in 2000 will feed their reputation, thus continuing their ability to wield greater social influence in 2002 (Krackhardt, 1992; Mizruchi, 1993; Rice, 1993). Two years later, though the impetus for these organizations to cooperate is less obvious, the balance between cooperation and competition should continue to favor the founding members. Nevertheless, because the current status of the nation is one of civil-society maintenance rather than social transformation, the existing system is expected to reflect system change associated with information flows and relationship maintenance.

Density and Structural Holes

The years following the 2000 elections were marked by a time of maintenance and a relatively placid environment. The civil-society partners are likely to return to their immediate missions such as human rights and the environment, so it seems inevitable that the system network will reflect such change. System density is a way of describing the overall communication links in a network and thus represents how information flows among organizations. Kauffman’s (1993, 1995) research on biological systems suggests that density offers evidence of emergent order in a formerly chaotic system and idealizes that a moderate density of about 50% indicates a transition to order. In terms of organizational networks, Brown and Ashman (1996) suggest that dense networks of local organizations indicate high levels of social capital. Burt (1997) notes that social capital refers to opportunity gained through relationships. Prior to the 2000 elections, however, there was no existing and stable network of civil-society partners. Such a network only started to form in early 1999 (USAID, 2000), and by 2000, the reported density of this civil-society network was 43% (Taylor & Doerfel, 2003). Thus, density will help indicate the extent to which social capital created from the initial cooperation among organizations exists today.

Following Brown and Ashman (1996) and Kauffman (1993, 1995), it is hypothesized that the density in 2002 will be moderate. In other words, given the relatively recent successes the organizations shared, they will retain contact with each other for required information. Because the 2000 elections were a time when the organizations actively mobilized their efforts, however, the density of the 2002 network will be lower, reflecting more stable times.

H5: The interorganizational network density in 2002 will be less dense than in 2000.

Density offers a general picture of the network, whereas structural holes provide more specific details about the nature of connections among entities. Structural holes theory (Burt, 1992a, 1992b; Monge & Contractor, 2000) complements Meyer’s (1997) description of capacity building and human capital. Structural holes theory highlights the valuable benefits associated with making contacts that offer links to
additional resources without the costs associated with having more contacts than needed. Ahuja (2000) found that structural holes may actually expose organizations to potential risk and malfeasance. Yet, networking among NGOs is seen as crucial to nation building because these interorganizational networks give voice to the public, provide information, and offer a forum for civil discussions. The interorganizational network provides a context-sensitive description of these relationships and identifies opportunities (or lack of) that organizations might have by virtue of their connections (Barley, Freeman, & Hybels, 1992). Organizations can experience opportunities that are mutually beneficial because of the nature of their ties. Such remunerative opportunities can be in the form of human, social, or financial resources (Brown & Ashman, 1996; Burt, 1992a, 1992b; Susskind, Miller, & Johnson, 1998). As Burt (1992a) explains, such ties are the organizations' investment in increasing the potential of reaping benefits. In the tie's absence, this potential is lost. Burt refers to its absence as a structural hole. The presence of a structural hole creates an opportunity for a third party to benefit by linking the unconnected others. Borrowing from Simmel's (1950) "the third that benefits (tertius gaudens)," Burt sees those connections as entrepreneurial network activities (Burt, 1992b, pp. 30-34). Although forging these links is important, Burt also warns that excessive and redundant ties are disadvantageous.

Following Burt (1992a), the Croatian interorganizational network provides a case that can illustrate the advantageous outcomes of the networked relationship as social capital. In 2000, there were few structural holes and many redundancies in the network (Taylor & Doerfel, 2003). It is hypothesized that the interorganizational network two years following the democratic transformation will be more efficient and effective because there is not an urgent need for maintaining contacts except with those that offer the most beneficial financial, human, and informational resources.

H6a: With structural holes as the orientation, the network will be more efficient and effective during times of civil-society maintenance.

Taylor and Doerfel (2003) extended the work of Flanagin et al. (2001) on the benefits associated with creator or foundational organizations. Extending Taylor and Doerfel's (2003) normative model that foundational organizations bridge structural holes, it is expected that the 2000 foundational organizations will emulate this role. Specifically, the network is expected to be structured in a way that a focal organization is connected to as few other organizations (efficiency of links) as possible while obtaining indirect access to other organizations in the network (effectiveness of links).

H6b: Foundational organizations from 2000 will have more efficient and effective network links in 2002 than nonfoundational organizations.

Finally, as a reflection of the earlier discussion and hypotheses on cooperation competition, the two theories are linked by hypothesizing that the emergence of cooperative reputation is related to the extent to which an organization fills
structural holes. Put differently, the tertius gardens argument is extended from arguing that such organizations will reap informational benefits, to proposing that by virtue of filling structural holes in a system, those organizations will also be perceived as more cooperative.

H6c: Organizations that fill structural holes will be perceived as more cooperative.

Resource dependency, cooperation competition, and structural holes theories together, provide the theoretical framework for the proposed hypotheses. One of the best places to study the process of relationship building in civil-society efforts is in a context that involves conditions of cooperation, influence, importance, various communication partners, and competition for scarce resources. The former Yugoslavia was the model social state during the Cold War. The transition to democracy embodies concepts like competitive organizations working together, a climate of distrust, and a shared goal of seeing the fruition of democracy. The following section describes the site, participants, variables of focus, and the rationale for conducting a network analysis of organizational relationships associated with the system of organizations that participate in the development and maintenance of civil society.

Method

Independent Variables

Participating organizations

Organizations for inclusion in the Taylor and Doerfel (2003) study were identified through interviews with USAID, IREX Pro-Media (1999), Soros, and the British Fund. These international donors identified active organizations in the 2000 parliamentary campaign that were also continuing to work on civil-society projects. The organizations in this study included all of the organizations that are still intact from Taylor and Doerfel (2003), in addition to Soros, British Fund, CCN, a national television station, Hrvatski Pravni (Law Center), Zeleni Forum (Forum), Youth Democratic Initiative (DIM), and Hrvaski Helsinski Odbor (HHO, Helsinki Human Rights Watch). Some 2000 organizations were not included in the 2002 study because they are now defunct, they were not considered part of the system in 2000, or they have been absorbed by other organizations. Eighteen organizations were used to construct 2002 network and attribute measures. Eleven organizations are represented in both 2000 and 2002 datasets. In sum, the organizations are (1) GONG, an election monitoring organization; (2) The Women’s Ad Hoc Coalition (Ad Hoc), a network of single issue groups devoted to children’s and women’s issues; (3) Zelena Akcija (Green Action), a national environmental organization of several thousand members; (4) Women’s Infoteka, dedicated to helping women; (5) Zarez, an NGO to increase participation; (6) Radio 101, a prominent media outlet in Zagreb; (7) Attack Newsletter, a provocative investigative news sheet; (8) CJA, the Croatian Journalists Association; (9) USAID; (10) HRT, the public television station that was
formerly state-controlled; (11) HHO, a Croatian–Helsinki human-rights organization; (12) Green Forum, an environmental organization; (m) Law Center, a legal rights organization; (n) Nomad, an organization that promotes youth culture and democracy; (13) British Fund; (14) Soros; (15) DIM; and (16) CCN. Organizational relationships were analyzed in the context of this network and how network relationships related to the emergence of reputation and influence.

In the summer of 2002, the researchers contacted the leadership of each organization to discuss their organization’s role since the 2000 parliamentary election. The researchers asked the interviewees to fill out the interorganizational survey as a way to measure the relationships between NGOs and media in the years following the 2000 election. Surveys were completed by 17 of the 18 organizations for a response rate of 94%. Although the 18th organization did not complete the survey, two of the organizational representatives did participate in a 45-min interview during which key communication links and their attitudes about the nature of those links were determined. Thus, the information was used from the interview to determine that assuming reciprocation was a reasonable way to manage their data.

Organizations in the Taylor and Doerfel (2003) study were classified in two ways, as foundational organizations of the movement and according to organizational type. Foundational organizations were identified as having greater centrality and control of information during the 2000 campaign. As a result, the organizations in Taylor and Doerfel’s study were classified according to the core/periphery analysis found in the UCINET network analysis computer program (Borgatti, Everett, & Freeman, 1992). Two measures derived from 2000 data include positive relations and communication core/periphery.

Positive relations
Data from 2000 included a roster of the organizations, and respondents rated each organization in the system based on the request, “On a scale from 0 (not at all important) to 10 (very important), rate the value of your organization’s communication relationship with each organization listed below.” Answers to this question were used for creating the network of relations based on organizational importance. This network of relations was analyzed using the categorical core/periphery analysis in the UCINET computer program (Borgatti et al., 1992), which provides a list of which organizations have stronger relationships and are therefore included in the core, whereas those whose relationships are relatively more distant in the network are categorized in the periphery. Thus, positive relations are defined as core organizations (consistently identified as a relatively important communication partner at time-1). Positive relations are used for testing H2a, H2b, and H2c.

Communication core/periphery
The 2000 communication network was constructed based on organizational communication partners. The categorical core/periphery of the 2000 communication network provides two groups of organizations at time-1, those organizations with more regular communication contacts are in the core, and the relatively more distant
organizations are in the periphery. Communication core/periphery is used for testing H1a, H1b, H4a, and H4b.

**Foundational/creator organizations**
The 2000 system included three organizations that were defined as creators, or foundational organizations, including Glas99, GONG, and Radio 101. Glas99 is now defunct; however, GONG and Radio 101 remain in the data set and are considered creator organizations for H6b.

**Dependent Variables and Network Measures**
The survey included open-ended and close-ended questions, allowing for the derivation of measures for cooperation and competition, importance, influence, as well as the communication network. Variables include: (1) Organizational importance in maintaining civil society, (2) Organizational influence in maintaining civil society, (3) Cooperation, (4) Competition, (5) In-degree centrality, (6) Betweenness centrality, (7) Structural holes, and (8) Network density. Measures of these variables are discussed subsequently, and a final subsection describes the procedure used for the structural holes hypothesis.

**Organizational importance**
Prior to seeing the roster of participating organizations, respondents were asked to identify the most important organizations in the Croatian civil-society initiative. Following Taylor and Doerfel (2003), this open-ended question confirmed our initial derivation of active, participating, system members in that no single organization beyond the initially identified 18 organizations was listed by more than any one single organizational respondent. Answers were entered into an organization-by-organization matrix in which each cell $ij$ represents whether or not organization $i$ reported organization $j$ as a most important organization in the civil-society initiative. This matrix was then analyzed using in-degree centrality in the UCINET computer program to obtain importance values for each organization $j$ based on all other organizations' assessment of organization $j$.

**Organizational influence**
Respondents were asked to rate the listed organizations based on the extent to which they have influence in maintaining civil society, on a scale from 1, indicating the organization has very little influence, to 7, indicating the organization has a great influence during 2001–2002. Organizational influence was then derived with the same procedures used for the organizational importance measure.

**Cooperation and competition**
Respondents were given a roster of all 18 organizations in the system and rated each of the other organizations on a scale from 1 (strongly disagree) to 5 (strongly agree) for various organizational characteristics. The questions are based on Deutsch’s
Table 1 Factor Analysis for Cooperation and Competition Survey in 2002

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
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<tbody>
<tr>
<td><strong>Cooperation dimension: 40.20% variance accounted for</strong></td>
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<tr>
<td>This organization helps my organization:</td>
<td></td>
<td></td>
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<tr>
<td>accomplish our goals</td>
<td>.77</td>
<td>-.36</td>
<td>.23</td>
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<tr>
<td>have access to useful information</td>
<td>.75</td>
<td>-.39</td>
<td>.10</td>
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<tr>
<td>This organization:</td>
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<td></td>
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<tr>
<td>engages in respectful activities</td>
<td>.69</td>
<td>-.05</td>
<td>-.29</td>
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<tr>
<td>collaborates with my organization</td>
<td>.72</td>
<td>-.41</td>
<td>.19</td>
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<tr>
<td>overall, provides important information</td>
<td>.71</td>
<td>-.03</td>
<td>-.16</td>
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<tr>
<td>My organization:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>relies on this organization for important info.</td>
<td>.72</td>
<td>-.13</td>
<td>.06</td>
</tr>
<tr>
<td>trusts information from this organization</td>
<td>.82</td>
<td>.11</td>
<td>-.16</td>
</tr>
<tr>
<td>can be confidential with this organization</td>
<td>.86</td>
<td>.16</td>
<td>-.03</td>
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<tr>
<td>Information from this organization is:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>accurate</td>
<td>.82</td>
<td>.13</td>
<td>-.24</td>
</tr>
<tr>
<td>truthful</td>
<td>.77</td>
<td>.32</td>
<td>-.13</td>
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<tr>
<td><strong>Competition dimension: 15.87% variance accounted for</strong></td>
<td></td>
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<td></td>
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<tr>
<td>This organization:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>hinders my org's access to funding</td>
<td>.10</td>
<td>.67</td>
<td>-.06</td>
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<tr>
<td>should be achieving more than it is</td>
<td>-.03</td>
<td>.64</td>
<td>.41</td>
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<tr>
<td>provides misleading information</td>
<td>.31</td>
<td>.64</td>
<td>.10</td>
</tr>
<tr>
<td>is deceptive</td>
<td>.49</td>
<td>.70</td>
<td>.03</td>
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<tr>
<td><strong>Rival dimension: 7.38% variance accounted for</strong></td>
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<tr>
<td>This organization helps my organization:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gain access to funding</td>
<td>.49</td>
<td>-.34</td>
<td>.50</td>
</tr>
<tr>
<td>is a rival of my organization</td>
<td>.09</td>
<td>.21</td>
<td>.66</td>
</tr>
</tbody>
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Note. Values loading onto the respective factors are underscored.

(1973, 1985) characteristics of cooperative versus competitive actions. A principal-components analysis yielded three factors that are best described as (1) cooperative, (2) competitive, and (3) rival. As the loadings reported in Table 1 indicate, three factors emerged, accounting for 40%, 16%, and 7%, respectively. The first two factors include questions that reflect Deutsch's characteristics associated with cooperation and competition. Thus, questions that loaded onto factor 1 were used to construct an index (the mean) measure of cooperation, questions that loaded onto factor 2 were used to construct an index (the mean) of competition, and factor 3 was not used. A cooperation matrix was constructed in which each cell \( ij \) represents the mean cooperation rating organization \( i \) reported about organization \( j \). Similarly, a competition matrix was constructed in which each cell \( ij \) represents the mean competition rating organization \( i \) reported about organization \( j \). These two matrices were then analyzed using the in-degree centrality measure in the UCINET computer program to attain (1) mean cooperation and (2) mean competition values for each organization \( i \) based on all other organizations' evaluations of organization \( i \).
Network Dynamics

In-degree centrality
Among the various measures of centrality, degree centrality was used in the UCINET network analysis program (Borgatti et al., 1992). Freeman (1979) describes a communicator with relatively high degree centrality as one who is in the thick of things, whereas one with low degree centrality is said to be peripheral, such that the communicator is relatively isolated from active participation in communication processes. UCINET centrality calculation provides information about the number of communication ties received by an organization (in-degree centrality) and the number of ties initiated by an organization (out-degree centrality). The in-degree centrality measure can also take into account valued relationships. The focus of the first, second, and fourth series of hypotheses is on the extent to which organizations are identified and rated by other organizations in the system, so the normalized in-degree centralities of organizational importance, influence, cooperation, and competition are used. It is important to note that the in-degree centralities are based on valued information (e.g., Likert scales or frequencies of mention), so in-degree centralities can be much larger than merely the number of other actors (less one) in the network.

Betweenness centrality
To answer H3, the UCINET betweenness centrality measure was used because it is an indication of the extent to which an organization lies on the shortest paths between all pairs of actors (Borgatti et al., 1992; Freeman, 1979). An actor with “high betweenness is in a position to act as gatekeeper for information that flows through a network … betweenness is an indication of the nonredundancy of the source of information” (Krackhardt, 1992, p. 223).

Density
H5 requires a description of the overarching structure of the interorganizational network. Density is computed by dividing the number of actual ties (measured as present or absent) by the number of total possible ties among all members of the network (Borgatti et al., 1992). Density ranges from 0 to 1, where 0 means that there are no communication links between any two organizations, and 1 means that each organization reported that it has a tie with every other organization in the network.

Structural holes
The structural holes option in the UCINET computer program reports measures of effective size, efficiency, constraint, and hierarchy (for extended discussion, see Burt, 1992a). These variables provide information about structural holes in the network (H6a–c). An effective link provides access to organizations beyond the initial contact, and effective size can range from zero to the possible number of other actors in the network (in this case, 17 others). Efficiency refers to a contact that connects an actor to a subgroup by way of a single member of that subgroup (as opposed to having multiple contacts to the same subgroup) and is proportionate to the total number of contacts. Constraint is the extent to which the focal organization is invested in
organizations that are invested in the others of the focal organization's alters (Borgatti et al., 1992). Scores vary from 0 to 1, where scores closer to 0 indicate many redundant contacts, and 1 means only one contact. Susskind et al. (1998) explain that constraint is "positively related to the formation of structural holes, as high constraint indicates more structural holes" (p. 36). Hierarchy indicates the extent to which constraint on the focal organization is concentrated in a single other organization (Borgatti et al. 1992). Its algorithm includes the constraint measure and ranges from 0 to 1, where 0 means equal constraint from all contacts, and 1 means that constraints come from just one contact. Although we do not explicitly use constraint and hierarchy in the hypotheses of this paper, we define and report them, since they contribute to the interpretation of structural holes.

Results

H1a and H1b predicted that more central organizations in the communication network in 2002 will also be considered more competitive, and the more peripheral will be seen as more cooperative. The 2002 in-degree centrality of cooperation for core members $M \ (n = 9) = 290.99, \ SD = 40.77, \ d = .35$ is greater than that of the periphery $M \ (n = 9) = 277.67, \ SD = 34.46, \ d = .35$. There were no statistically significant differences between the core and periphery for in-degree competition, and thus, H2a and H2b are not supported. H3 predicted that highly central organizations at 2000 will have a high betweenness centrality at 2002. These variables were correlated $r = .48, \ p < .05$; thus, H3 is supported.

The second series of hypotheses proposed positive relationships during the election year (2000) with the nature of current relationships (2002) in terms of cooperation, importance, and influence. Results indicate that the 2000 core (the more important organizations; $M = 299.38, \ SD = 40.68$) are more cooperative in 2002 than the 2000 periphery (the less important organizations; $M = 284.81, \ SD = 38.39$), but the differences were not statistically significant. Thus, the hypotheses are not supported.

The fourth series of hypotheses predicted that highly central communicators in 2000 will enjoy the foundational benefits of these relationships in 2002. The fourth set of hypotheses are partially supported with 2000 core members ($M = 341.17, \ SD = 39.90$) having a greater influence than 2000 peripheral members ($M = 232.35, \ SD = 52.45$), $t(9) = 3.8, \ p < .005$ and 2000 core members ($M = 24.7, \ SD = 19.24$) having a greater importance than 2000 peripheral members ($M = 6.86, \ SD = 8.66$), $t(9) = 2.05, \ p = .07$.

H5 considers the interorganizational communication network density at 2002 and compares it to the density at 2000. The 2002 density was moderate to low at 24%, which is almost half of the 43% density from 2000 (Taylor & Doerfel, 2003). H6a predicted that structural holes measures will reveal a more efficient and effective network at 2002. Table 2 provides the structural holes measures of efficiency, effectiveness, constraint, and hierarchy for each of the 2002 organizations. Results indicate that except for effectiveness, the system's overall structural holes from 2000
to 2002 increased, with (1) efficiency at time 1 ($M = .60, SD = .09$) increasing at 2002 ($M = .80, SD = .10$), $t(17) = 7.04, p < .001$; (2) constraint at 2000 ($M = .32, SD = .09$) increasing at 2002 ($M = .54, SD = .23$), $t(17) = 3.88, p < .001$; and (3) hierarchy in 2000 ($M = .12, SD = .07$) increasing at time 2 ($M = .51, SD = .28$), $t(17) = 5.64, p < .001$. These results reveal that the overall network at 2002 is more efficient, constrained, and hierarchical, but no more effective than at 2000. Taken together, these scores indicate that there are more structural holes at 2002 than at 2000, so H6 is not supported. The result that there are more structural holes comes from joint interpretation of the four measures of structural holes. Take two extremes for an illustration. Green Action has an effective measure of 9.58, an efficiency of .96, a constraint of .19, and a hierarchy of .25; whereas Green Forum has scores of 1.0 for all four measures. Green Action is enjoying the benefits of structural holes more than Green Forum, because Green Action has more ties spanning a greater variety of others in the system without having to rely on any particular organization for access to the network beyond that particular contact (a high effectiveness and efficiency with a low constraint and hierarchy). On the other hand, Green Forum, although their efficiency is excellent—their one contact provides them access to any other organization in the network—their constraint and hierarchy measures show that this outcome is actually undesirable, because the type of information they have access to relies completely on that single organization to which they are linked. Thus, this system of organizations leaves more gaps. Instead of enacting a strategically linked network, they are more vulnerable to resource dependency.

H6b predicted that creator organizations from 2000, specifically GONG and Radio 101, would continue to wield efficient and effective structural holes. Specifically, both organizations had similar efficiency scores (GONG = .89; Radio 101 = .80), but
their effectiveness scores differed with GONG's score (7.14), being much higher than Radio 101's score (4.79). Neither organization ranked highest, and Radio 101, in particular, was in the bottom one-third of the system's effectiveness scores. Thus, H6b is only partially supported.

H6c predicted a relationship between the extent to which organizations fill structural holes and their relative cooperative reputations. The correlation results indicate a positive, statistically significant relationship between cooperation and efficiency, \( r = .55, p < .009 \) (one-tailed) and cooperation and effectiveness, \( r = .45, p < .05 \) (one-tailed). The hypothesis is only partially supported because there were no statistically significant correlations between cooperation and the constraint or hierarchy measures.

**Summary of Results**

The results indicate that since the 2000 elections in Croatia, the interorganizational system of NGOs, INGOs, and media has evolved into a relatively unconnected, inefficient network of relations. Organizations more central in terms of the communication networks and perceived importance in 2000, however, are considered more important and influential in the maintenance of Croatian civil society in 2002. The more important organizations from 2000, however, are seen as less cooperative than the less important 2000 organizations by 2002. This finding is inconsistent with what cooperation competition theory predicts about the cyclic nature of positive relations. Although these core organizations wielded influential reputations, they were not seen as cooperative with their fellow organizations. On the other hand, organizations that bridge or fill structural holes in terms of efficient and effective links in the 2002 network were rated as relatively more cooperative. The following section discusses these findings and their implications.

**Discussion**

**Resource Dependence and Cooperation Competition**

The peripheral organizations in 2000, such as Nomad, Zarez, Infoteka and Attack, were rated as more cooperative in 2002. Their more cooperative reputation is consistent with resource-dependency theory—organizations that have a greater dependence on their network connections for required resources like information and support are more likely to be cooperative (Pfeffer & Salancik, 1978). Organizations that were considered more important in 2000 were less cooperative in 2002 than the peripheral 2000 organizations. Although the finding is consistent with a resource-dependency model, this result is inconsistent with cooperation-competition theory, which predicts that communication partners who engage in positive acts will continue the cycle. Cooperation-competition research, however, has seen cooperative relationships changed by an event involving competitive acts. This study illustrates what happens in the cycle of seeking resources, experiencing the contact
directly, then seeking out same or different contacts. These results extend a theoretical understanding of how resource-dependency theory and cooperation-competition theory can, in tandem, offer a more robust understanding of the emergent communication network.

This analysis also shows the complex interplay between network structure and cooperation competition. Though the organizations in the periphery had motivation to cooperate by virtue of their need for informational and financial resources as resource-dependency theory proposes, the core is not similarly motivated. For this reason, in the civil-society system, a cooperative network that has effective and efficient structural holes is even more important because organizations are likely spending more of their energies on their own issues, so their communication ties need to provide maximum information with minimum effort. The concept of the third that benefits has stronger effects when there are none or very few organizations connecting the structural holes in the network. As Burt (1992a, 1992b) points out a balance of structural holes in the network enables information flows without excessive redundancy. Yet, a network with structural holes that expose organizations to risk can undermine the civil-society organizations to access required information in an efficient and effective way (Ahuja, 2000).

**Maintenance Roles for Donors and Creator Organizations**

This study included two additional donors into the research design—Soros and the British Fund—in addition to the major 2000 donor, USAID. One interest in this study was the network relationships among the civil-society organizations and these donors. Though Soros has been operating in Croatia for a number of years and is a well-recognized donor in the civil-society community, the British Fund is a much more recent entry. These organizations' relative relationships in the networks indicate that they are not yet fully integrated into the civil-society network, despite the fact that they add to the pool of resources the NGOs can access. Nevertheless, the structural-holes analysis indicates that although the British Fund has the least effective and efficient links in the network, Soros fills structural holes by having more effective and efficient links. USAID played an important role in the preelection campaign in 1999 and 2000 (Taylor & Doerfel, 2003). Soros and the British Fund also play an important role in maintaining civil-society organizations. The density of the 2002 Croatian civil-society network has decreased to half its value in 2000. Moreover, the system lacks a balance in structural holes. This result indicates a weakening network which could have serious implications for civil society in Croatia. Despite the imbalance of structural holes, there was a positive, significant correlation between the extent to which organizations had efficient and effective structural holes and their relative cooperation. This finding indicates a relationship between the history of the organizational relationships and subsequent organizational choices for obtaining resources. From a structural-holes perspective, donors can bring the cycle of relationships full circle: donors can foster efficient and effective
relationships—fill/bridge structural holes and eliminate redundancy—among the NGOs and media in the network during this maintenance period.

The relative efficiency and effectiveness measures for the creator organizations, GONG and Radio 101, indicate a similar decay of social capital in 2002. Like many of the periphery organizations, GONG and Radio 101 have returned to their primary organizational missions. Despite the return to their organizational missions, as creator organizations they hold the system memory of the 2000 elections. Thus, they can continue to work with the peripheral organizations as mentors in maintaining democratic social capital (Meyer, 1997).

During times of intense transition and social mobilization, there is a natural impetus for organizations to cooperate. In Croatia during 1999 and 2000, the network members worked together against the HDZ and a corrupt political system. Today, a new political system is in place, and the motivation for organizations with very different missions to cooperate is not so evident: rather, they must compete for a small pool of valuable resources. But GONG, Radio 101, and the large donor organizations, those who have and control the financial and informational resources, can ensure that the moderately connected network that emerged from the 2000 elections does not die. Donor and creator members’ impetus, then, is to bring single issue organizations together for the same type of intense relationship building that occurred in 2000.

**Foundational Organizations Reap Network Benefits**

GONG, USAID, Green Action, Radio 101, and CJA were core organizations in the communication network in 2000. By 2002 GONG, USAID, and Green Action also emerged as core organizations in the communication network. These three organizations have a high betweenness centrality and a strong influence on others in the network, and appear to be the organizations that others want to cooperate with for programs and activities. Flanagin et al. (2001) measured the benefits that foundational or creator organizations reap when they invest early in cooperative networks. This work is consistent with both Gulati’s (1995) and Stuart’s (1998) findings that organizations with previous alliances and an established history benefit because they gain access to new allies. The high scores of GONG, USAID, and Green Action on all of the network measures suggest that these organizations have the ability to influence the direction of the civil-society movement in Croatia.

**Rehabilitation of Formerly Government-Controlled Media**

The media in the former Yugoslavia, and throughout most of Eastern Europe, are in a fragile stage of transition. Government-run media have a history of lack of credibility and objectivity (Taylor & Kent, 2000). In Croatia, the formerly government-run media, HRT, was no different. It was used by the Tudjman government for over a decade. No other national media outlet has ever been able to compete with HRT on audience size, distribution of programming, and hiring of talented journal-
ists. Yet, in 2000, HRT was in the periphery of the network, and the nature of their connections revealed that organizations scrutinized them carefully (Taylor & Doerfel, 2003). In 2000, shortly after the election of the new parliament, HRT ended its long affiliation with the HDZ and devolved to a less partisan editorial policy. HRT has now become a fully fledged member of the Croatian civil-society movement by its documentaries about NGOs, programming about public agenda issues, and nonpartisan reporting. HRT has evolved into a stronger network position with high importance, influence, and cooperation scores. Moreover, HRT's structural holes have improved from second last in terms of effectiveness and efficiency to top six. HRT's rehabilitation shows that today it is a trusted news source and, according to the data in this study, a valuable information resource to civil-society organizations.

Implications

This research has implications for both social capital and civil society. It can help communication theorists, international donor organizations, NGOs, and media training organizations to enhance their understanding of, and participation in, civil society.

Theoretical implications

Taken together, resource-dependency, cooperation-competition, and social-network theories provide a robust and prescriptive framework for examining the nuances of interorganizational communication. The conceptual analysis illustrates how the four theoretical frameworks contribute jointly to an understanding of the dynamic nature and emergence of interorganizational relations. Resource dependency helped explain changes in the emergent network of cooperative organizations, which seems related to cooperation competition theory. But the data in this study challenge some of the assumptions of cooperative-competitive theory. Important organizations at 2000 were actually perceived as less cooperative in 2002, and they expended enormous personal and organizational resources during the parliamentary campaign (USAID, 2000). The organizations that were once important to the election campaign now struggle to find financial and social support for their original cause. Thus, this tension may be seen as the initial competitive act that Deutsch (1985, 1994) considered a way to ruin cooperation, thus leading to an ever-changing and dynamic network. The findings describe the cyclic nature of partnering, reputation building, and subsequent partnering. The structural holes prescribe the path that organizations can follow, with respect to subsequent partnering, to become more influential in the network.

Donor implications

The civil-society transition in Croatia is considered a success story for international donors, but there are some lessons for future transitions (Jasic, 2000; USAID, 2000). Although donors took a very active role in financing and mentoring civil society and
media groups during the election campaign, paradoxically they are now less connected to the movement. It is reasonable for donors to let local leaders emerge, yet it is also necessary for donors to continue to support fledgling organizations as they enact new civil-society roles. It is through these new civil-society roles that social capital will be created and maintained. The low network density and the inefficient structural holes during this time of civil-society maintenance indicate a weakening system. Therefore, now the donor role is to create opportunities for organizations to meet, fostering tertius gaudens situations.

**NGO implications**
Flanagin et al. (2001) and Taylor and Doerfel (2003) have highlighted the benefit for organizations that step forward early in network formation. These early organizational entrants become important and influential in their networks. Leader organizations can strategically network by considering which of the other organizations are linked to organizations beyond the focal NGO’s own contacts. They can maximize such linkages by connecting to those that effectively and efficiently offer access to others. Partnering or merely obtaining resources is not enough, however. The nature of relationships is a reminder that reputation will have an impact on subsequent alliances and partnerships.

**Limitations**
Like much research that uses a social networks approach, this study is limited by the fact that it is a case study. In addition, the interorganizational network is relatively small, so statistical power and generalizability are challenged. Also, the data offer only limited evidence for some of the proposed interpretations. This limitation is balanced, however, by the fact that the context of a case—a transitional democracy—offers a robust analysis of the relationships and provides a longitudinal investigation of a natural situation.

**References**


