The Selective Synthesis of Competing Logics

Katherine K. Chen

William Paterson University

chenk2@wpunj.edu

Siobhan O'Mahony

Harvard University

somahony@hbs.edu

March 3, 2007

This research was supported by the Social Science Research Council Program on the Corporation as a Social Institution, the Stanford School of Engineering Center for Work, Technology and Organization, the Harvard Graduate School of Arts and Sciences, and the Harvard Business School Division of Research. We are grateful for the comments and guidance of Steve Barley, Beth Bechky, Fabrizio Ferraro, Neil Fligstein, David Frank, Joseph Galaskiewicz, Mark Granovetter, Doug Guthrie, Richard Hackman, Michael Lounsbury, Peter Marsden, Jason Owen-Smith, Woody Powell, Robert Sutton and Huggy Rao in the formulation of these ideas and to Clare Flaherty and Alyssa Razook for their assistance in preparing this manuscript. Both authors contributed equally to this work. All errors are ours.

Abstract

Prior social movement and organizational research has shown the difficulty of maintaining participatory processes or social movement agendas. But, little research has examined how such groups select organizing practices, given competing logics about how to organize. With ethnographic studies, we compare how the Burning Man and Open Source production communities addressed two competing logics of production and expression. By tracing the organizing practices that these communities integrated, rejected, and contested, we show how competing logics were selectively synthesized to support rather than impede organizing efforts. This research shows how the presence of co-existing but competing logics helps members to mindfully select organizing practices that avoid either extreme.

Abstract Word Count = 107

This research examines how informal social groups create formal organization by focusing on members' justifications for selecting and enacting certain organizing practices. A formal organization has the authority to hold assets and represent its members (Etzioni 1959; Coleman 1974; Kieser 1989). Formal organizations offer several benefits, from improved coordination of collective action to enhanced efficiency. However, to obtain such benefits, members must relinquish some of their individual autonomy and transfer authority to the organization (Harrison 1960; Coleman 1974; Perrow 1991). Thus, many social groups find the transition to a formal organization challenging, as organizing involves trade-offs between individual versus collective control.

These trade-offs are particularly complex for social groups that rely upon participatory processes or social movement agendas. Social groups with a "social movement orientation" or groups "oriented towards goals of social and personal change" (Rothschild and Whitt 1986: 128; Zald and Ash 1966) rely upon volunteers to sustain organizing efforts, and they often practice participatory processes such as decision-making by consensus. Given their dependence upon voluntary contributions of time and effort, such groups must heed their members' organizing preferences, for the loss of members' support can lead to organizational closure (Knoke 1981; Duckles, Hager, and Galaskiewicz 2005). Thus, such social groups often try to align how they organize (their form) with what they produce (their function) to sustain volunteers' commitment (Knoke 1981). In doing so, organizers typically do not follow conventional templates about how to produce or organize (e.g. D'Aunno, Succi, and Alexander 2000). Thus, members must select from a broader set of organizing choices, some of which may conflict. In aligning form and function and in deviating from conventional forms, voluntary participatory organizations confront dueling criteria. Both conditions intensify organizing dilemmas germane to all

developing organizations (Jasper 2004), as forming an organization requires members to reduce equivocality and narrow the range of possibilities for action (Weick 1979, 1995).

In conventional organizations, such organizing decisions often assume a taken-for-granted quality as members draw from culturally available toolkits (Swidler 1986; Lounsbury 1997) to select organizing practices. For nascent organizations that depend on volunteers, have social movement aims, or attempt to cohere form and function, organizing dilemmas may involve more conflict as members try to balance member and organizational interests. In such organizations, decision-making dilemmas are more observable than in organizations where members implement standard practices without much discussion or question. Thus, examining the creation of organizations with explicit organizing dilemmas helps shed insight into the development of all organizations.[1] By analyzing the 'back stage' conflict and debate of organizing decisions, we develop a more nuanced understanding of how new organizations are created (Suddaby and Greenwood 2005: 62) by those on "the front lines" (Rao, Morrill, and Zald 2000: 276).

To contribute to a theoretical understanding of how new organizations are created, we used a comparative, ethnographic approach to examine two social groups that are concerned with both the form and function of their developing organizations: the Burning Man and Open Source production communities. A production community is a form of collective action, whereby members collaborate to produce goods or services for either public or private benefit. In doing so, they aim to expand available systems of production. For example, the Burning Man production community manages the annual Burning Man event in which laypersons create and share art alongside credentialed artists, thus expanding the production and distribution of art beyond museums, galleries, and commercial fairs. Similarly, the Open Source production

[1] Thanks to the anonymous reviewer who helped articulate this link between our settings and other organizations. See also Starbuck (1993, 1998).

community's distributed and public approach to developing open source software allows potential contributors to not only download code for free, but to also learn and participate alongside more expert programmers. This model offers an alternative to closed source code developed with corporate controls and proprietary methods.

Unlike production communities of the past (Jackall and Levin 1984; Rothschild and Whitt 1986; Rothschild and Russell 1986; Whyte and Whyte 1988; Clemens 1993; Thomas 1999), most members of the Burning Man and Open Source production communities serve as volunteers and do not depend upon their production communities for financial or employment support. However, like other production communities, Burning Man and Open Source members have debated how to best align form and function in their formal organizations. Production demands, such as deadlines and coordination with other organizations, can make efforts to align organizational form and function more difficult and thus exacerbate organizing dilemmas. Given these issues, organizing decisions in these settings are likely to be observable for study. Thus, analyzing these settings provides insight on the understudied political processes (Clemens 2005) behind the selection or justification of new formal organizing practices within a community.

If we examine members' debates about how to organize in such settings, then we can understand how members use logics to select or justify organizing practices (Suddaby and Greenwood 2005). Logics focus attention to particular problems, suggesting "appropriate" resolutions and, by extension, affecting an organization's ability to adapt (Thornton 2004: 3-4; Friedland and Alford 1991; Hoffman and Ventresca 1999, 2002). Prior studies have examined the transition from one type of logic to another (Bacharach, Bamberger, and Sonnenstuhl 1996; Scott, Ruef, Mendel, and Caronna 2000; Rao, Monin, and Durand 2003; Thorton 2004), but recent research has shown that logics can compete but still co-exist (Lounsbury, Geraci, and

Waismel-Manor 2002; McGinn and Keros 2002; Townley 2002) and inspire "new" forms (Stark 1996, 1999; Rao, Monin, and Durand 2005; Lounsbury 2005). Haveman and Rao (1997) found that in the presence of competing logics, hybrid forms that combine properties of competing models can emerge. Stark (1996, 1999) theorized that co-existing but competing market and socialist logics helped Eastern Europeans recombine new and old ways of organizing into more robust organizational solutions.

However, most of these studies have focused on macro-level shifts in logics at the field level (Jackall 1988; Friedland and Alford 1991; Rao et al. 2003; Thornton 2004) without examining how organizing logics are developed or applied by actors within organizations.[2] We therefore focus on organizational logics (e.g. Karpik 1978) that may not be shared at the field level. Organizational logics provide a coherent framework for action by linking members' organizing practices with their goals (Bacharach et al. 1996; Karpik 1978). An organizational logic conveys "the implicit relationship between means and ends underlying the specific actions, policies and activities of organizational members" (Bacharach et al. 1996: 478).

Although "collective action and contention" are predicted to "underlie the construction of new organizational forms" (Rao et al. 2000: 238; also Stinchcombe 1997; Suddaby and Greenwood 2005), little empirical work shows how members synthesize or recombine competing logics to create organizations. Weick (1979) theorized that organizing consists of an on-going process of enactment, selection, and retention, yet research has not parsed how or why groups select some organizing practices and not others. Since we know little about the internal workings of emerging organizations (Rao et al. 2000; Ganz 2000; Clemens and Minkoff 2004), we do not know how actors apply competing logics and, in doing so, generate change (e.g.

[2] Suddaby and Greenwood's (2005) study of Big Five accounting firms present one exception.

Campbell 2005). More detailed analyses of micro-level action would help explain organizational-level change (Hirsch and Lounsbury 1997; Suddaby and Greenwood 2005).

Our analyses show, at the micro-level, how social groups use co-existing but potentially competing logics to create formal organization. We found that the Burning Man and Open Source production communities developed formal organizations through *selective synthesis*: *selectively* adopting certain organizational practices and *synthesizing* these practices with existing ad hoc practices. By identifying the organizing practices that members integrated, rejected, and contested, we trace how the resulting synthesized organizations addressed both logics of production and expression. The former logic emphasized the need to coordinate production, while the latter logic emphasized the need to exemplify members' interests. Rather than impeding organizing efforts or contributing to either group's demise, as prior research might suggest, the tensions between these two logics enabled members to evaluate the consequences of organizing practices associated with either logic's extreme. Our comparative data suggests that the presence of competing logics stimulated members' active deliberation of organizing alternatives. With such deliberation, members not only avoided mindlessly adopting standard practices, they also avoided making the extreme choices suggested by either logic on its own.

This research contributes to our understanding of how new organizations emerge (Romanelli 1991; Daft and Lewin 1993; Aldrich 1999) by showing how members balance competing logics so that organizing practices support rather than undermine either logic. By focusing on competing logics, we highlight the dynamic possibilities for organizing and explicitly link individual action to organizing decisions (Lounsbury 2005). Our analyses support earlier predictions that the construction of new organizations is a political project involving collective action (Rao et al. 2005: 238). By examining how production communities with

participatory social movement agendas navigate competing logics in the creation of formal organization, we contribute to a deeper theoretical understanding of the processes behind the creation of new organizations more generally. While the forms we studied may be considered extreme cases (Starbuck 1993, 1998), the process of selective synthesis may not be limited to such organizations. We conclude with grounded theoretical propositions to help generalize these findings to more traditional settings, including non-profit and for-profit organizations.

The Challenge of Creating Formal Organization

To explain how production communities create formal organization, we draw upon recent efforts to bridge organizational and social movement theories (Davis, McAdam, Scott, and Zald 2005; McAdam and Scott 2005; Campbell 2005; Haveman, Rao, and Paruchuri 2007). We include a review of an older literature on organizations with less conventional forms, such as co-operatives, communes, kibbutzim, and democratic or collectivist organizations (Kanter 1968; Rothschild-Whitt 1979; Swidler 1979; Miller 1981; Rothschild and Russell 1986; Rothschild and Whitt 1986; Simons and Ingram 1997; Ingram and Simons 2000). Such forms shunned bureaucratic practices such as hierarchy and an authoritative division of labor. They instead adapted practices that reflected members' values of self-actualization, self-development, or social change. Many studies (e.g. Greenwood and Santos 1991; Kanter 1972; Milofsky 1988; Oerton 1996; Rothschild and Whitt 1986; Simons and Ingram 1997; Swidler 1979; Zwerdling [1978]1980; Whyte and Whyte 1988; Ingram and Simons 2000) have demonstrated that, over time, such organizational forms disbanded or adopted practices incongruent with espoused beliefs. Researchers attribute these findings to two types of pressures: external and internal.

External Pressures. All organizations face institutional pressures to adopt accepted organizing practices in exchange for more legitimacy, power, and resources (Fligstein 1990; Meyer and Rowan 1977; DiMaggio and Powell 1983; Scott 1995, 1998). Organizations are embedded in fields in which regulatory agencies, resource providers, competitors, and clients impose constraints on an organization's ability to create a unique form (Scott 1995). In general, organizations are more likely to conform to the demands of those who hold power over needed resources (Pfeffer and Salancik 1978; Emerson 1962). Thus, the greater an organization's dependence on others for resources, the more likely it will abandon unconventional practices in favor of accepted practices.

While organizations can strategically respond to these pressures (Oliver 1991), organizations with unconventional practices face greater pressure to adopt conventional practices (Fligstein 1990; Meyer and Rowan 1977; DiMaggio and Powell 1983; Scott 1995, 1998) that could undermine their participatory values. For example, studies have shown that when cooperative organizations became more dependent upon bank loans, they were more likely to reject their collectivist principles and adopt capitalist principles (Mintz and Schwartz 1981; Simons and Ingram 1997). However, macro-social, political, or economic conditions also matter (Rao 1998; McCarthy and Zald 1977). For instance, social movements can help deinstitutionalize an accepted logic and institutionalize a new logic, thus generating conditions that help diffuse new organizational forms (Haveman et al. 2007). Organizations that have goals and frames that are more "resonant" with society are more likely to survive than organizations that have dissimilar frames (Rao 1998; Cress and Snow 2000). The degree to which an organization is dependent on others and diverges from society's standards can both affect its ability to retain its distinct form and practices.

Internal Pressures. Two types of internal pressures threaten an organization's ability to both survive and continue to represent its members' interests. First, the appointment of formal leaders or professional managers can foster goal displacement. Michels ([1911] 1962) theorized that as newly appointed leaders become invested in retaining their power, they spend more effort 'organization building' and less effort pursuing goals that reflect members' interests (also Piven and Cloward [1977]1999). Much research has disputed the precision as well as the inevitability of Michels' "iron law of oligarchy" argument (Lipset, Trow, and Coleman 1956; Zald and Ash 1966; Jenkins 1977; Sirianni 1984; Clemens 1993; Minkoff 1999; Voss and Sherman 2000; Ganz 2000; Clemens and Minkoff 2004). These studies show that democratic organizations are not destined to abandon their goals as they grow or appoint professional leaders. Rather, the effect of professional leaders on an organization's goals for social change is conditional and depends upon such factors as leaders' prior experience (Voss and Sherman 2000; Ganz 2000). For example, professional management reinvigorated the National Council of Churches' goals in a more radical rather than a more conservative direction (Jenkins 1977). Likewise, professional staff helped pro-choice social movements form and maintain coalitions, improving their ability to realize their policy goals (Staggenborg 1988).

Second, because alternative forms of organizing permit a wider range of organizing practices than a conventional form would allow, members may develop competing ideas about the best way to organize (Weick 1979, 1995; Kieser 1989). Internal pressures can intensify as members introduce bureaucratic practices intended to solidify ambiguous policies or accommodate newcomers. While bureaucratic practices can enhance decision-making efficiency, such practices may also unintentionally decrease members' willingness or ability to participate in organizing efforts (Milofsky 1988). Studies (Freeman 1973; Polletta 2002) show

how collectivist organizations stalled because some members resisted changes that could have improved organizational performance on the grounds that the proposed practices were antithetical to their interests. For example, some feminist collectives rejected formal leadership positions, incorporation, or top-down decision-making as counter to their ends of self-development and empowerment (Borland 2005; Clemens 1993). At the same time, collectivist practices designed to widen participation can also inadvertently silence or disenchant members and hasten the demise of alternative organizational forms (Freeman 1973; Mansbridge 1983; Rothschild and Whitt 1986).

On the other hand, resource mobilization theory posits that formal organizations should enable rather than repress the mobilization of social change (McCarthy and Zald 1977). Recent research supports the view that formal organizations can facilitate capacity for collective action (Sampson, McAdam, MacIndoe, and Weffer-Elizondo 2005), but some social movement theorists remain ambivalent about the effects of formal organization (Clemens and Minkoff 2004). Clemens and Minkoff argue that to move beyond Michel's controversial claims, we need to uncover the "black-boxes" of organizational dynamics, which are currently depicted as "constant, opaque and static" (2004: 156; also Ganz 2000). To heed this call, we examine how two production communities create formal organization, with a focus on how members engaged competing logics. Instead of examining whether internal or external pressures 'trigger' the introduction of formal organization, we identified the logics members used when selecting new organizing practices. Such a focus places greater emphasis on the actions of individuals and their rationale for change. By comparing how participatory production communities selected new practices and synthesized them with old organizing practices, we provide a grounded theory of the underlying processes by which such groups create formal organizations.

Two Emergent Organizing Efforts: Burning Man and Open Source

To expand our limited knowledge of the internal workings of organizations, Rao and colleagues recommend that researchers undertake "comparative case studies on new forms" that "capture individual- and group-level adaptations and resistance to such processes" (2000: 276). The Burning Man and Open Source settings are ideal for examining how competing logics affect the creation of formal organization for three reasons. First, both communities are concerned with exemplifying their members' values as well as coordinating the production of goods or services – suggesting the presence of competing logics. Second, both communities have adopted a mode of production not widely accepted at the field level – suggesting the potential for innovation. Third, both communities have faced rapid growth and increasing external scrutiny from the media, governments, and corporations – suggesting pressures to conform. These three conditions can exacerbate the tensions of organizing (e.g. Weick 1979). Taken together, these settings provide an opportunity to examine how competing logics affect organizing. After introducing our field settings,[3] we describe our data collection and analytical approach.

The Burning Man Production Community. The Burning Man community coordinates the annual Burning Man event, an arts festival located in the Nevada Black Rock Desert. Every year, for a week, this community creates the evanescent "Black Rock City," which closes with its eponymous bonfire of a wooden figure. Over 35,500 attendees revel in the event's distinctive art, activities, and norms that emphasize community, participation, and a gift economy. About 2,000 volunteers help construct the city's lay-out and shelters for infrastructural services, place artists' installations, interface with media who cover the event, welcome arriving event attendees, staff an information booth, patrol the event for medical, fire, and other emergencies, teach environmentally-conscious practices, and maintain IT and web services for the

[3] These descriptions are informed by field data collected in each setting.

organization and event. Some members work year-round to plan and coordinate the Burning Man event. They collaborate online through email lists and participate in meetings, trainings, workshops, and mixers. We use the term *members* to include leaders, staff, and volunteers, but exclude those who attend the Burning Man event but do not volunteer. We also use the term *organizers* for production community leaders, the terms *coordinators* and *managers*[4] for department or committee leaders, and the term of *participants* for event attendees. When referring to Burning Man informants, we report their actual names.

When the event first started as a small bonfire on a San Francisco beach in 1986, it required minimal organizing. However, several changes intensified coordination challenges: the event's relocation to a remote Nevada desert, its expansion from 20 to over 35,500 participants, and its transformation from an evening bonfire to a week-long participative arts community. To address these challenges, members experimented with various organizational practices and forms. For guidance, they examined the practices of other voluntary organizations and alternative events such as the Oregon Country Fair, but concluded that they had to develop their own model of organizing, given their unusual output of a large-scale temporary arts community. The Black Rock City Limited Liability Company, hereafter referred to as the Burning Man organization, constitutes their most recent legal form. Event ticket sales and donations fuel the $7 million budget that covers production fees, expenses, and organizational overhead.

The Open Source Software Production Community. The Open Source software community arose from a faction within the free software community founded by Richard Stallman (Stallman 1999). This community has, with the help of Linus Torvalds (Lee and Cole 2003; Moody 2001; Moon and Sproull 2002; Stallman 1999; Torvalds 1999), created a free

[4] Some members coined creative titles to describe their positions, while others relied upon standard titles of "coordinator" or "manager" to help others comprehend their responsibilities. For example, one organizer's email signature listed her titles as: "Naked Fire Goddess by Night; Director of Art Management by Day."

operating system known as the Linux or GNU/Linux system. This system's public license (GNU GPL) allows users to modify, copy, or distribute source code if they agree to distribute any derivations under the same terms. While legal terms enabled participation by allowing access to source code, of equal importance was the creation of a new approach to software development: the community development model.

Under this model, technical requirements and release dates are publicly and collectively negotiated through volunteers' contributions to online project forums. Individuals can contribute at different levels. Anyone can participate in online forums to seek guidance, provide help, or acquire updates on the project; some interact face-to-face via user group meetings, working groups, and technical conferences. Some test the code, report problems, submit ideas for fixes, or submit new code features code for review. More experienced individuals are entrusted with commit access, which allows them to change the source code without others' approval (von Krogh, Spaeth, and Lakhani 2003). Firms that profit from the community's work by selling related products and services, often sponsor contributors and donate in-kind resources. We use the term *members* to refer to individuals, both volunteer and sponsored, who were involved in project decisions and who typically, but not always, had commit access. This term excludes those who use the software produced without contributing to its development. Because all Open Source informants were promised anonymity, we use pseudonyms for quoted respondents.

The community development model diffused rapidly, inspiring thousands of community software projects and new commercial entrants (Weber 2004; von Hippel 2005). The model's success in attracting contributors and users also introduced new challenges. First, projects struggled to acculturate newcomers who were unfamiliar with the open source model's unconventional norms and practices. Second, projects grappled with how to manage commercial

participation in open source development and distribution – a welcomed change, but one that could also violate community norms and values. Community organizers realized that they needed more formal structures to manage not only more contributors, but also increasing pressures from commercial adopters of their work.

Field Setting Commonalities. Because both studies took place at the same time, we can control for differences in the macro social, economic and political environment. Table 1 summarizes commonalities between these two settings.

----Insert Table 1 here----

Both communities organize around common values and missions devoted to creating alternative, collective systems of production that widen rather than exclude participation. The Burning Man mission is to support a participative community that allows both amateur and professional artists to produce and display artwork, thus expanding a cultural production field otherwise dominated by a select few. The mission of most Open Source projects is to enhance, if not supplement, commercial software offerings in a market dominated by Microsoft, a federally declared monopoly.[5] Both production communities are geographically distributed and rely on volunteers to coordinate organizing activities using online forums and face-to-face meetings. Members who participate in both communities have noted similarities in their organization of collective production (DiBona, Cooper, and Stone 2006). As one informant reported in an interview with the press, "Burning Man is all about artwork built by a collective, and open source is all about software built by a collective. They're both activities built by groups of people, where the results are always better than the sum of the parts" (Duffy Marsan 2005).

[5] 97 F. Supp. 2d 59 (Lexis Citation: 2000 U.S. Dist. LEXIS 7582). The Court entered Findings of Fact on November 5, 1999 and Conclusions on Law on April 3, 2000. The official order (to which the citation corresponds) was issued on June 7, 2000.

Data Collection. This research was guided by an inductive approach using ethnographic methods. This method is particularly apt for examining phenomena that are emergent or poorly understood (Strauss and Corbin 1990; Edmondson and McManus forthcoming). Furthermore, qualitative methods are most suitable for grounded theory building – the goal of this research. To collect data on the Burning Man production community, the first author recorded field notes on observed organizing activities, meetings, volunteer trainings and mixers, email lists, and other activities. These intensive observations covered regular three to eight month periods from July 1998 to January 2001. She also volunteered for three departments and participated in seven Burning Man events between 1998 and 2005. These observations and participant-observations covered a critical shift from ad hoc organizing to a year-round, formal organization with a San Francisco-based headquarters and Nevada offices. In addition, the first author interviewed 81 organizers and members about their organizing activities, motivations, and perspectives. Interviewees included active and retired volunteers and staff from different departments. Archival research of print and film materials supplemented interviews and observations.

----Insert Table 2 here----

Theoretical sampling guided the selection of four community managed software projects within the Open Source production community. These projects, described in Table 2, were in different stages of formalization, thus allowing for a more thorough examination of organizing practices. The second author spent over 90 hours observing and meeting informants at 27 different events, including project meetings, user group meetings and conferences, between April 2000 and April 2001. She also conducted 70 interviews about the membership, sponsorship, decision-making, and the governance of projects during 2000 - 2001 and 12 follow-up interviews in 2003 - 2004. Interviewees included both volunteer and sponsored contributors in the open

source and free software communities. In addition, the second author collected project data from online archives. These included documents such as mission statements, charters, bylaws, meeting minutes, mailing list archives, and databases of developers and members.

Analytic Approach. While independently collecting our field data, we found that our respective field settings faced similar challenges as they formalized. Thus, we collaborated on developing a theoretical explanation applicable to both settings. In the first phase of analysis, we coded our data independently. To achieve construct validity and greater depth and accuracy, we triangulated multiple sources of evidence (Yin 1994), which helped validate theoretical constructs (Glaser and Strauss [1967] 1999). In the second phase, we compared how each production community formally organized, which helped develop theoretical categories. In refining these categories, we identified two distinct logics used by members in their discussions of organizing practices: the logic of production and the logic of expression. In the third phase of analysis, we compared key developments in both settings and identified organizing practices that members rejected, integrated, or contested. We created tables to indicate where specific organizing practices met these criteria in both settings. Constant comparison between the settings facilitated the development of constructs and categories robust to both settings. With this analytic approach, we realized that the two logics helped guide the selective synthesis of new organizing practices. We iterated between the theory and our data to refine a grounded theory of how members contended with competing logics in the creation of formal organization.

Organizing Logics

Articulation of Logics. Within the Burning Man and Open Source production communities, discussions about how to organize often invoked preferences about how *not* to

organize. Consistent with prior research (Bacharach et al. 1996), organizing logics were most apparent in situations where people tried to justify one organizing practice over another. Burning Man and Open Source members offered two different logics for organizing, which we coded as the logic of production and the logic of expression. The logic of production emphasized an efficient and effective means of achieving an end, while the logic of expression advocated that organizing practices express or exemplify members' beliefs and values. Members of both communities argued that too much focus on the production logic could lead to overly rationalized practices that disenfranchised members. On the other hand, members also recognized that if they completely rejected practices that coordinated production, they might jeopardize their communities' abilities to survive amidst internal and external pressures.

After showing how each community articulated competing logics of organization, we examine how consideration of these logics fostered their selective synthesis. We discovered that the two communities struggled to develop organizing practices that could reconcile the trade-offs implied by these different logics. At times, contention over how to choose practices could lead to dissension or deadlocks, which threatened the organization's cohesiveness and production. However, mindful consideration of how the two logics could simultaneously serve their enterprises helped our communities to avoid subjugating one logic to the other. We show this by identifying the organizing practices each community integrated, rejected, or contested in selectively synthesizing new organizing practices with old.

Logic of Expression. A logic of expression respected differences in members' motivations, abilities, timeliness, and accountability and encouraged broad participation. As indicated in Table 3, analysis of our data revealed three components emphasized by members: collective interests, participation, and individual discretion.

----Insert Table 3 here----

Collective interests. Both communities emphasized that the focus of organizing should fulfill members' interests alongside substantive goals. This was manifested in organizational missions and in members' beliefs and behaviors. For example, Burning Man volunteer Leslie Bocskor lauded how community and individual interests, rather than financial concerns, guided his efforts: "With Burning Man, the guiding principle is … what's going to be best for the community and for myself and other members of the community." Similarly, at a public forum, Open Source Webserver project leader Harry Stanton stressed that their efforts were "about fostering the notion that people can gather together on the basis of their own individual needs and work on a common goal toward something that they are very interested in accomplishing, but yet satisfies some portion of the overall communities' needs."

Participation. Second, both communities encouraged members to actively participate in organizing activities as well as production efforts. Organizer Harley Dubois characterized the Burning Man decision-making process as one that depended upon everyone's participation: "we try and work hard to come together to find a solution that is going to satisfy everybody's needs in the best way possible." Boris Evans, a Webserver project leader, echoed this emphasis on participation when he explained why Open Source projects should not limit the entry of new contributors: "Serendipity still is an important component. You still need to plan for somebody you have not anticipated even playing a role - you need to create the opportunity for that to happen…[otherwise] you are turning away the possibility that somebody who is motivated to contribute actually would." If their organizing practices did not support participation, members risked losing the volunteers that sustained their communities. For example, Dubois stated that

without participatory decision-making, "[I] might as well as go work for a big corporation and have some boss that breathes down my neck, and get paid the big bucks!"

Individual discretion. A third aspect of the expression logic addressed how work should be conducted: it espoused ad hoc processes and flexibility and permitted variability due to individual discretion. For instance, Open Source contributors emphasized their desire to work at their own pace on areas of interest to them, rather than on activities that furthered commercial success. As Ralph Becklestein, a GUI Desktop project leader, explained, "I'm not interested in corporate bonding and PR and all this corporate stuff. I just like coding; I write programs, and people can use it. What you do with it is your business." The expression logic recognized that members' interests were more important to guiding the community's work than external criteria. When asked why he hoped that amateurs, rather than professional event-planners would run the annual event, volunteer Eric Pouyul noted the possibilities of allowing for variability: "Burning Man is about spontaneous things… if you put professional people, people who do know what they're doing [in control], then it tends towards borders and limits about how to do things. If it's kind of chaotic, where anything can happen, [then] the worst can happen, but as well as the best." Since both communities thrived on the efforts of committed volunteers, organizing practices that diminished individual discretion were perceived as counter to their aims.

Availability of the Expression Logic. In discussing and enacting organizing practices, members of the Burning Man and Open Source production communities drew, in part, upon organizing toolkits that were culturally available (Swidler 1986; Lounsbury 1997). Members did not explicitly identify the origins of all of their organizing ideas, suggesting the taken-for-granted nature of some organizing practices. Nevertheless, in some discussions, Burning Man and Open Source members referenced organizing practices associated with particular social groups, such as

anarchists, the Rainbow Gathering, or Deadheads (followers of the Grateful Dead), or professions, such as artists, programmers (namely, the Internet Engineering Task Force, IETF), and even academics. Such alternative ways of organizing included participatory and hierarchy-less practices that tapped the experiences of communes, worker cooperatives, and 1960s-1970s social movement organizations. In addition, participatory decision-making practices have become increasing popular in the workplace (Cappelli and Neumark 2001), suggesting a growing awareness of participatory practices in more mainstream organizations.

Logic of Production. In many instances, members of the Burning Man and Open Source communities also sought the efficiency of the production logic. This logic endorsed rationalized, bureaucratic practices, such as a division of labor and rules (Weber [1946] 1958). Both communities used the production logic when discussing coordination activities such as allocating resources, assigning tasks, acculturating newcomers, or managing relations with outsiders. Our analyses showed that the production logic emphasized stability, accountability, and standardization (Table 3).

Stability. The production logic focused on organizing as a means of stabilizing members' efforts and outcomes. Creating a stable entity with predictable and efficient procedures could enhance the communities' long-term sustainability as well as facilitate interactions with other entities, such as regulatory agencies or corporations. For instance, Burning Man organizer Larry Harvey reported that "We had the grand idea that we should re-found the LLC every year, as Burning Man is destroyed every year, but, of course, we realized that that ruined our credit and credibility." While the initial plan emphasized the expression logic's desire to align form with function, organizers later tempered this plan to create a stable community. Similarly, Open Source members struggled to determine how to represent a project. For example, when pressed

for the Webserver project's opinion about software licenses at a public gathering, Ray Miller answered, "that is my opinion, I can't speak for the project. I have no way of knowing what their opinion is as a whole." Projects had similar difficulties when determining who could sign legal agreements on a collective's behalf. Some project members argued that more formal mechanisms to represent a project in public and legal settings could increase not only their project's stability but also their project's legitimacy.

Accountability. The production logic also posited that members should take on certain responsibilities based on their skills and expertise, rather than just their interests, and that they should be accountable for those responsibilities. Open Source members frustrated by decision-making delays, called for more accountability and leadership to expedite progress, complaining that decisions do "not get resolved by consensus. Stuff gets resolved by exhaustion." Pieter Andrews, a GUI Desktop project member, explained, "It's important to have a leader who has the ultimate authority, otherwise you're just standing around… arguing." Likewise, Burning Man organizers sought to reduce volunteer variability and increase control over production. When volunteers refused to cooperate or were too picky about tasks, organizer Marian Goodell groused that "the problem is the accountability issue" and advocated drawing upon formal authority, rather than just normative control, to direct wayward members' activities.

Standardization. A third aspect of the production logic claimed that work should be conducted by standardizing policies and processes, with the aim of enhancing expediency, reliability, or quality. Since volunteers in both communities contributed as their time permitted, production sometimes suffered. Some members thought that if they standardized procedures, they could level out uneven production. For example, Dan Stone, a contributor to the Linux Distribution Project, called for a policy to help determine when to assume ownership of

someone's abandoned code, a possible vulnerability to the project's code base: "If this was a company, [it would be] 'look, do it now.' We have maintainers who go away for a month or two, or their life gets messy… Sometimes they disappear. Do I take their package?" Without an explicit policy, he worried that such decisions would appear arbitrary. Burning Man organizers also advocated for standardization to facilitate decision-making. For instance, at several meetings, organizers tussled over how to allocate rented Recreational Vehicles (RVs) among personnel during the Burning Man event. Organizer Harley Dubois worried that if personal influence appeared to sway decision-making, it would "erod[e] the confidence the staff[6] has in us - it could be considered a perk, favoritism, it could undermine our process, so that's why we're setting a policy." By making the implicit explicit, leaders hoped to standardize resource allocation and thus free decision-making of politicking.

Availability of the Production Logic. In articulating the production logic, members occasionally referred to their prior experiences with bureaucracy in either work or voluntary organizations; they also referenced common organizing stereotypes. Bureaucratic practices are often used to enhance productivity and profitability and solidify managerial control (Scott 1998). Weber ([1946] 1958) documented the rise of bureaucratic practices, such as rules and division of labor, and attributed the bureaucratic form's spread to its superior efficiency; Powell and DiMaggio (1983) later attributed contemporary bureaucracy's dominance to isomorphism rather than technical efficiency. Historically, two types of managerial rhetoric have shaped the organization of American workplaces: one emphasizing Taylorism, efficiency, and scientific management, another focusing on human relations, welfare capitalism, and organizational culture (Barley and Kunda 1992). Knowledge entrepreneurs, such as management consultants,

[6] Dubois used the word *staff* to refer to volunteers – both compensated and uncompensated.

and the popular press have helped to diffuse both types of organizing practices (Abrahamson and Fairchild 1999), which were widely available to our informants.

Competing Logics. When discussing organizing options, members used the production logic to advocate more efficient and effective ways of organizing. At the same time, members also used the expression logic to ensure respect for collective interests, participation, and individual discretion. For instance, Burning Man members like volunteer Molly Ditmore understood the expression logic's value of participation. Nevertheless, she was exasperated with the time that participation took and called for greater accountability and standardization:

> There were times when I just don't want to be a total bitch, but I just want to say, "…you have all of these opinions, but you're not on any committees, you're not coming to help anybody work, stop wasting all of our time. Please!" …I understand that everyone has input on Burning Man, but not everybody does work for Burning Man.

Similarly, Michael Joss, a lead contributor on the Webserver project, voiced his frustration when participation-oriented practices became unwieldy and inefficient as more members joined:

> In terms of the decision-making machinery,…who gets to vote? If you have 150 developers with 30-40 packages, should they all vote on everything? Every little thing? … Yes, it [decision-making by consensus] fits with the mission, *but*…

Like many other informants, Ditmore and Joss acknowledged that while decision-making by consensus fit with the Burning Man and Open Source missions, it was difficult to sustain with more members. Yet, members also realized that if they selected practices that only supported the production logic, their ability to attract and retain volunteers would diminish. Members in both communities regularly confronted the dilemma of competing logics when evaluating whether to select or reject possible organizing practices.

Selective Synthesis

With the tensions posed by production and expression logics, members could have adopted organizing practices that fostered one logic to the exclusion of the other. Instead, we found that competing logics stimulated members to continually assess the consequences of their organizing choices and furthered the *selective synthesis* of organizing practices. When members explored the consequences of enacting one logic versus another, they mindfully selected some organizing practices, and rejected or contested others. Organizers *integrated* formal organizing practices that they believed supported production efforts without compromising their goals for expression. Members *rejected* practices that they perceived as incongruent with organizational means and ends. However, some practices remained *contested*, spurring unresolved discussion and conflict. This framework does not imply that members could comprehensively forecast results: organizing often involved experimentation, occasional setbacks, and constant revisiting of issues.

Integrating Organizing Practices. Members of both communities integrated several organizing practices in ways that balanced logics of production and logics of expression. We categorized the rationales that our informants offered to support particular practices in Table 4.

-----Insert Table 4 here-----

Burning Man. As the Burning Man production community encountered new coordination challenges, leaders deliberated whether they should formally organize, and if so, what form and practices to adopt. For ten years, organizers relied upon ad hoc planning. By 1995, three organizers established a legal partnership to facilitate logistics such as securing equipment rentals. Co-founder Larry Harvey recalled his skepticism about how a partnership fit with their community-oriented mission: "…I couldn't figure out how… I could get people to work for our partnership. What had always made it work was that building the burning of the Man was a gift,

and that was what attracted resources." Although the partnership facilitated coordination with outsiders, thus supporting a production logic, Harvey worried that the community would view private ownership as incompatible with an expression logic's emphasis on collective interests and participation.

Conflicts with governmental agencies, explosive event growth, chaos, injuries, and a death during the 1996 event forced Burning Man organizers to re-evaluate their organizing efforts. Compounding woes, a lawsuit filed by a severely injured event attendee demonstrated that a legal partnership still exposed organizers to liability. The legal partnership dissolved over an internal disagreement about whether to continue the event, and the remaining organizers reincorporated as a Limited Liability Company (LLC) in 1997. The LLC form afforded greater protection of members' assets than the partnership, thus enhancing organizational stability. However, some members wanted more financial accountability than the LLC form required. As volunteer Jim DeLaHunt explained, "I want [the Burning Man organization] to own up to the fact that they're a big time operation now…it's worthwhile to follow the money and ask hard questions about who's making decisions and why..." As ticket prices increased, some volunteers demanded explanations of organizational revenues and expenditures; these demands drew on the expression logic's emphasis on collective interests.

To quell suspicions about misappropriated resources, organizers modified the LLC's agreement. Organizers publicly agreed that departing LLC members could not transfer their stake in the organization, checking the redistribution of collective assets for personal gain. As Larry Harvey explained, this modification "divested [the Burning Man organization] of property interest" to assure members that organizers were not "building masses of equity" for personal gain. In 2001, organizers added a non-profit arm with 501(c)(3) status, the Black Rock Arts

Foundation, to manage donations. By 2002, organizers agreed to publish their financial expenses and a detailed record of organizing activities, disclosures that were not required by the LLC form but were requested by members. By integrating the LLC form with practices that increased accountability to the Burning Man community, the community gained enough legal protection and external legitimacy to foster the production logic's emphasis on stability without overriding the expression logic's emphasis on collective interests.

Organizers also integrated formal placement practices in ways that balanced expression and production logics. As volunteer Joe Fenton explained with a hypothetical exchange, people used to assume responsibilities based on their interests: "'Have you ever done the gate?' 'No.' 'Have you ever collected money before?' 'No.' 'Have you ever torn tickets before?' 'No.' 'Have you ever been to the desert before?' 'No.' 'But you want to do it, fucking A.' … Whatever you wanted to do, you could do…You can't do that now." In the late 1990s, organizers professionalized accounting, human resources, administrative and legal aid functions with paid positions. To justify hiring professionals, organizers used the production logic's focus on accountability, arguing that these areas demanded more expertise than volunteers could provide.

However, organizers continued to support the expression logic's emphases on participation and collective interests by assigning other responsibilities to volunteers based on their interests. Molly Tirpak described how she and other coordinators worked to maximize volunteer opportunities: "Burning Man has devoted itself to volunteering so that even though…you could … pay somebody, more often than not, Burning Man says 'no, let's create this opportunity for volunteers.'" Tirpak wanted coordinators to place as many volunteers as possible, rather than limit volunteer intake: "'you need five volunteers, but could you take ten?'" Organizer Harley Dubois affirmed that in such cases, the expression logic's concern for participation overrode the

production logic's focus on efficiency: "…it's not about being efficient, it's about making people a part of something."

Organizers and coordinators helped individuals develop roles that furthered their interests and contributed to the collective mission, even when this customization required more effort. Members reported that they appreciated these efforts, as they enjoyed choosing their assignments, determining how to conduct their work, and contributing in a meaningful way. In comparing Burning Man with organizations that limit volunteer opportunities, a volunteer commented, "[at Burning Man], it's a very different kind of experience - you feel that you're doing something that's much more vital to the organization and if you want to take on any kind of a project, [the organizers are] probably willing to go along." Observations revealed that organizers supported volunteers' experimentation with new roles. Such efforts showed how organizers' selectively applied the production logic to the division of labor while protecting the expression logic. Organizers integrated selected staffing positions based on technical expertise while tailoring other volunteer positions to suit members' interests. This integration helped to simultaneously reinforce the expression logic's emphasis on individual discretion and the production logic's concern with standardization and accountability.

In managing volunteers, Burning Man organizers also integrated limited monetary incentives with non-financial incentives. Although most managers relied upon normative control to motivate members, they identified tasks that involved handling financial transactions, hard physical labor, concentrated stints, and round-the-clock accountability as candidates for compensation. Remuneration, when adopted, was token, as a person might receive $500 or less for a year's worth of work. Two departments that depended on hard labor and professional skills, the Black Rock Rangers and the Dept. of Public Works (DPW), standardized stipends.

Black Rock Ranger manager Joseph Pred explained that these incentives were not a primary source of income for volunteers, but were intended to cover some of their costs: "It [the stipend] is to cover the week that they're gone, that portion of their rent, their expenses, a few items…it makes it a little easier psychologically, and they feel like, 'I'm being paid.'" DPW managers like Will Roger claimed that compensation (about $10 to $75 a day), afforded them more control over the labor-intensive and hazardous production of the event's infrastructure than was possible with volunteer labor.

> …I work in such a way that volunteers actually hurt me more than help me because they're not dedicated, and I can't make them do things, where[as with] a paid person, I can. And I don't pay well. None of us get paid well actually, compared to what we do and the responsibility that we have. I run heavy equipment and power tools and a lot of dangerous things.

He explained that volunteers did not have realistic expectations about DPW work: "Volunteers often want to live the Burning Man experience, but what they want to do is take acid and go to the hot springs, well, they're not going to run my forklift after a day of doing that…" Limited financial incentives simultaneously supported the production logic's concern for accountability without undercutting the expression logic's concern for collective interests.

Open Source. Like Burning Man, out of concerns for stability and accountability, all four Open Source community projects integrated a corporate form with their communal structure. Members worried about how a project could live beyond its founder, or what they called 'the Linus (Torvalds) question': 'what happens if Linus gets hit by a bus?' Organizers also worried about protecting contributors from liability. Jason Bass, a contributor to the Linux Standard project charter explained that, "Either we hold copyrights as individuals, or we have a company holding copyrights. There's liability protection that comes from being a corporation." Furthermore, members recognized that a more formal governance structure could improve areas

where the consensus model of decision-making was strained. Evan Reilly, a Webserver project volunteer, explained, the need for formal governance beyond certain individuals' informal leadership. "What is the on-going governance going to be for this group? And, how do we make it so it lasts longer than just a few strong personalities?...We wanted something much more like a republic where people didn't have to be there forever."

With firms wanting to participate in Open Source projects, community members also faced a more pressing push to form formal organizations. As Adam Nelson, a leader on the GUI Desktop project, recounted, "several of those companies are involved at great expense, and everybody cares about the release date and what the technology looks like." With new demands from market-focused constituents, organizers realized that their informal organization no longer sufficed. "It's like you woke up one morning and you're like, 'oh my god, this is really hosed [messed up]!' We have no real organization here, and no one knows what is going on. Our old infrastructure did not scale." Nelson further noted that, "In a very short time, we have gone from two people to 10 to 50, now it's like several hundred people and 15 companies." As corporate interest in selling open source software grew, informants argued that they needed more formal means to support production, enhance marketplace legitimacy, and ease coordination.

Open Source members discussed the idea of incorporation on project mailing lists for several years. Three of the four projects (Webserver, GUI Desktop, and Linux Standard) incorporated with prompting from firms interested in collaborating with them. Firms that sold commercial products incorporating a project's code wanted a more stable governance structure as well as more predictable development cycles. As Evan Reilly, recounted, "[Fortune 500 firm X] acted as a catalyst, [they] forced us to make the decision to go and do it. [They] also assisted on the legal side." Because a group of individuals could not sign formal agreements to represent

a project, firms were eager to help projects create a legally recognized entity. All four projects incorporated as non-profit foundations. More importantly, the act of creating a foundation established an institutional rather than personal basis for leadership. This helped solve the 'hit by a bus' dilemma of leadership succession that worried many about project accountability.

To win over those who preferred the status quo, supporters of incorporation emphasized that its protective and enabling attributes furthered a logic of expression. For example, the GUI Desktop project charter justified incorporation as helping to not only scale the project to include new constituents but also to support expanded goals: "As [the project] has grown, so have our goals. …To achieve our goals in a timely manner, the project will need more focus than the current structure can offer. When [we] were a smaller project, [the founder] was able to make most of the key decisions. Today, there is a need for a forum that can provide [us] with the structure and the support needed to continue to grow." Community leaders emphasized that a more formal structure could help "to more smoothly integrate new citizens into the community," thus upholding the expression logic's tenet of participation. In this manner, community leaders emphasized that even if the decision to incorporate was instigated by growth, they could still selectively introduce organizing practices in ways that enhanced participation.

To allay concerns of members who feared 'corporatization' and the loss of control over production, three projects (Webserver, Linux Distribution, Linux Standard) explicitly limited their foundation's authority to areas that did not concern technical production, thus preserving the expression logic's concerns for collective interests, participation, and individual discretion. As one of the charter drafters of the Webserver Foundation explained, "We try to keep it [the foundation structure] simple, because none of us really want to be…a bureaucratic organization. We don't want to run an organization, we don't consider that to be fun. We are just doing that

because we need the Foundation for the background for our fun projects." Only one project granted their foundation the authority to coordinate software releases: essentially the right to determine what went into the code and when it would be released. Limits on foundation control supported the expression logic's concerns for collective interests, participation, and individual discretion while providing enough stability to further a production logic.

All projects adopted the philosophy that any formal organizing practices introduced should only reflect current processes without prescribing action. This implicit principle helped projects to avoid "adding more structure than we need." A second emergent principle held that practices that encouraged standardization could be introduced only if those practices also supported the expression logic's concern for participation. For example, Franz Weimer viewed his organizing work as mirroring back practices that already existed: "I am trying to…pick out the organization as it works today and present that to [the community] so that new people can orient themselves quicker, and can figure out where they want to fit in, and …contribute more easily." His observation dovetailed the dual integration of the production and expression logics: reflect and clarify structures to provide just enough structure for members to participate.

Likewise, Max Green, a lead organizer for the Linux Standard project, portrayed new organizing practices, such as weekly conference calls, meeting agendas and action item lists, as not only helping to "move the project forward," consistent with the production logic, but also as orienting potential contributors, consistent with the expression logic. "You need that formality so that when people…say, 'Hey, I want something to do,' we have it all laid out, and they know where to start. [The project]'s been organized and charted out a little bit, so you know where you can jump in." He rationalized that these practices, previously foreign to the community development model, helped the project to absorb volunteers. However, as Brett Vaughn an

organizer on the GUI Desktop project observed, members initially did not take efforts to start meetings on time with an agenda seriously.

> So the first time, people show up half an hour late, and they're like, …'if I show up half an hour late then half the meeting is gone, and those guys already made decisions, then I can't complain about it afterwards.' So you … gently add structure, and now we're a couple of months into it and it's totally working. So people now know that if you don't show up at the meetings, decisions get made [without you]…

Vaughn could have emphasized the production logic's concerns for stability and standardization to prompt meeting attendance. Instead, he encouraged compliance through the expression logic, emphasizing members' opportunity to participate in decision-making. Thus, members integrated organizing practices if they not only reduced variability, but also acclimated others to the project. The former rationale fulfilled the production logic's emphasis on standardization, while the latter rationale fulfilled the expression logic's concern for participation.

When members introduced formal organizing practices, they often advocated the production logic's concern for accountability and standardization. For example, the GUI Desktop project asked project heads to submit status reports to their newly established board, and the Linux Distribution project designed coordination mechanisms to help recruit people to work on specific bugs or packages. By specifying everything from the proper format for a bug report to the proper indentation of a code contribution, members aimed to reduce variability in how volunteers carried out their work. However, informants justified these practices as also making their operations understandable to newcomers. By making norms explicit, members hoped to reduce newcomers' learning curves, thereby fulfilling their project's mission of broad and open participation. Thus, the expression logic's concerns for collective interests and participation affected the way in which formal organizing practices were designed, enacted, and eventually integrated with existing practices.

Rejecting Organizing Practices. Members of the Burning Man and Open Source communities also rejected several organizational practices and forms that either did not serve the production logic or that detracted from the expression logic, as summarized in Table 5. We classified an organizing practice as rejected if members considered, debated, or proposed the practice, but decided against it.

-----Insert Table 5 here-----

Burning Man. The Burning Man production community could have continued with ad hoc, informal organizing, or they could have formed a non-profit. Leaders rejected these two paths as insufficient for supporting the kind of stability they desired. Larry Harvey argued for formal organization: "I made the case…of how do we expect us to make [Burning Man] to scale unless we form a more organized group." Harvey and others stated that they decided against organizing as a non-profit because this required establishing a separate board of "disinterested parties," and they feared losing control of the community's direction with such oversight.

However, in incorporating as a for-profit, organizers and members explicitly rejected the logic of maximizing profits, shareholder value, and expediency. Harvey joked that the LLC operated as a "no-profit," as it did not intend to make money. Michael Mikel admitted that the organizers' lack of formal training made for suboptimal business: "as a business, we're very inefficient and poorly run." He was willing to sacrifice some efficiency to avoid a rational extreme: "If we were so efficient, if we were so effective at managing our business and spending money, it might be like a train going down the track, we couldn't get off in time. The Third Reich was very effective – maybe we don't want to go there. Maybe it's ok to be wasteful." Like Mikel, other members accepted inefficiency to support collective interests. One volunteer speculated that a budget-oriented focus would detract from creating an inclusive art event: "You

would be thinking more about the budget [rather] than about giving people an opportunity to do whatever the hell they want..." Members recognized that without judicious application, the logic of production's focus on stability and standardization could squash opportunities for expression.

The Burning Man community eschewed corporate sponsorship and advertising as detrimental to collective interests, even though these practices could have subsidized production costs and lowered ticket prices. Organizers and members were observed repeatedly refusing attempts by corporations and individuals to sponsor the event and advertise, vend, or give away commercial goods and services in exchange for advertising and sponsorship rights. Members monitored commercial markets, such as the online auction eBay, and the media for unauthorized use of Burning Man imagery and logos. They confronted offenders by explaining how such activities were counter to the Burning Man ethos and threatened legal action against those who did not desist. Thus, members defended the expression logic's emphasis on collective interests from being expropriated by outsiders, even though cooperating with commercial partners could have advanced a production logic's interest in stability.

Burning Man organizers also rejected some standards imposed by government agencies on the grounds that these regulations were inapplicable or counter to their event's mission. Harley Dubois recalled how the Health Department first tried to apply conventional campground regulations to the Burning Man site, which lacked electrical grid and paved areas:

> [the Health Department] wanted us to show them a map where we had every single solitary lot for a person blocked out, KOA [Kampgrounds of America] style, with numbers for each camp site. And they wanted lighting, so they wanted us to put up power poles for the whole city, what are they thinking? The KOA campground was the only standard that they had, so they tried to apply it to us.…we had to educate them...

Dubois and others worked with the Health Department and other agencies to develop feasible standards. By rejecting such externally imposed standards, organizers protected collective interests in the event.

Similarly, leaders rejected law enforcement requests that they formally endorse a "zero drug tolerance zone" for the 2000 event. Organizers argued that the event's "no vending" policy conveyed their stance against drug trafficking. Although this vending prohibition validated authorities' arrests of drug dealers, organizers were unwilling to extend the zero drug tolerance endorsement that officials desired. Furthermore, organizers educated event attendees on their legal rights should they encounter law enforcement. By using the respected "no vending" rule to demonstrate partial compliance with authorities' demands, organizers avoided adopting externally imposed policies that could inhibit individual discretion. This served both the production logic's concern for stability by addressing external constituents' demands and the expression logic's emphases on collective interests and individual discretion.

Open Source. While a small faction of each Open Source community studied did not want a corporation, all four projects rejected the prospect of remaining as a mailing list or webpage as problematic for their project's stability. They also rejected the idea of profiting from the code they created as undercutting collective interests. When asked why they did not attempt to collect money for their work, Ryan Perriman explained, "that is what the '[Linux Distribution project] is about, to create a distribution, and that is it. It is not to make money selling a distribution. It is not to exploit a market niche." Members did not want to have to manage the sale of their work. However, unlike the Burning Man community, they did allow third party firms to redistribute the works they created for profit. While this enhanced project stability and

furthered the community's goal of diffusing their code to the broadest possible market, it also created new stakeholders with an interest in project affairs.

For example, firms and market analysts pressured all four projects to be more accountable in communicating software release schedules. Members almost universally resisted these requests. When Webserver project leader, Ray Miller, was questioned at a public forum about the next release date, he responded with: "I hate to say, 'we are going to distribute 2.0 at the next [conference],' we might do that, but the fact is, it will be distributed when it is ready." Despite corporate pressure, members rejected organizing practices standard to proprietary software development, such as a formal process for determining technical requirements and externally imposed deadlines, to preserve individual autonomy. Allan Banks, a leader in the Webserver project, stated: "you don't have the same restrictions that you have inside a business, like…deadlines. I don't have anybody laying out milestones for me, saying you have to have this piece done by this date." Blaster, a contributor to the GUI Desktop project viewed deadlines as incompatible with his desire for quality: "I will not put out release dates because that suddenly puts this pressure to get it done by a certain time, and I may have to cut corners and do things incorrectly just for speed." These practices allowed contributors to focus on what mattered to them, rather than areas deemed critical by the market or a product manager. By continually rejecting the need for deadlines or requirements, members reinforced the expression logic's emphasis on individual discretion over any externally imposed desire for accountability.

Like the Burning Man community, Open Source communities were inundated with requests from firms to sponsor their projects: some wanted to become official members or sponsors, others wanted to exert explicit control, such as acquiring representation on key governing bodies. These ideas were not attractive to members at large who wanted to preserve

their individual discretion. Explained Marshall Fleinkman: "There were fears that SUN would buy us up, or that we had some sort of contract with them and we were selling [GUI Desktop Project] down the river. People were scared…and then they realize it's only going to have good effects and they get on with it." Open Source community members were not opposed to corporate sponsorship, but they wanted control over its terms.

To limit corporate influence, members on three of the four projects stipulated that firms could not become members of a project - only individuals could become members. To preserve participation, members emphasized that donations of labor, hardware, and bandwidth could not 'buy' a firm influence. Brett Vaughn characterized increasing corporate contributions as "wonderful" but added the caveat that "these companies are contributing because it's in their business interests, so they bring an agenda, and you need to be aware of that." To ensure that no one corporation dominated a project, several projects sought to diversify sources of corporate support. When the founder of one project started a firm that would profit from the community's work (and help the project in the process), several project members asked him to step down from his leadership position on the project. Howard Mickle, a leader on the project argued that: "there are major pressures and conflicts of interests. If you're going to be the founder of a project and the founder of a company that's betting its existence on the project, then you cannot be the sole leader of both at the same time." When project independence was threatened, members favored the expression logic's concern for collective interests and participation over the production logic's emphasis on stability. By reinforcing a project's independence from external influence, members simultaneously enhanced the organization's accountability to its members and its goals.

Members understood that if they introduced practices that overly favored a production logic, they risked their ability to attract new volunteers to the community. As Ralph Tinley,

the founder of the Linux Distribution project explained, "…Linux exists…because of this community that has formed around it…if you have to throw those things out the window, then you are pretty much throwing out the qualities that made Linux what it is." From his perspective, if the community did not reject some corporate practices, they would lose what made their production model successful. Members thus rejected practices that favored the production logic without benefiting collective interests embraced by the expression logic.

Contested Organizing Practices. Neither community could reconcile all tensions between logics when determining which organizing practices were appropriate for their organizations. As depicted in Table 6, some practices remained contested, fueling on-going debates about how to organize during the time of our study.

-----Insert Table 6 here-----

Burning Man. Burning Man members contested three organizing issues: the extent to which the organization operated as a democracy, the domains in which members should participate, and the degree to which the organization should adapt to external regulators' demands. At a public talk, organizer Larry Harvey explained how both consensus and hierarchy helped organize the Burning Man community:

> It started with me, and then it was me and a little band, and then it was me and a little band and a group underneath them, and then it's a group underneath them, and at every level, we operate on a consensus. You have to have hierarchy, because someone always has to get up and look down at the big picture.

With this claim, Harvey simultaneously drew upon both the production logic's emphases on stability and standardization and the expression logic's concerns for participation and collective interests. Observations revealed that the organizers provided guidelines and a chain of

command, thus setting up an enabling but bounded context for members to participate (e.g. Adler and Borys 1996; Hackman 2002).

But, some Burning Man members reasoned that since the organization used decision-making by consensus in some areas, then the entire Burning Man event should operate as a democracy. On one email list, volunteer Fiona Essa questioned whether organizers' decisions adequately represented collective interests and allowed for participation: "I'm…curious as to how much of a democracy… Black Rock City really is. It seems as though some of the ideals and philosophies of the [Burning Man organization] are in direct opposition to the desires of our participants." This extreme application of the expression logic was refuted by an organizer's email response. Organizer Marian Goodell wrote that although organizers took suggestions into consideration, not all issues were up for communal determination: "[can] anyone find me anything that indicates Black Rock City is a democracy? …. that's never been part of the structure...it's an assumption made due to our size and dominant paradigm....it's a democracy as far as it asks for people to contribute...if that even constitutes a democracy...."

As organizers reinforced the need for their authority over selected domains, they also stressed that members had other opportunities to participate. If members wanted changes, they should take action themselves, rather than rely upon the organizers to dictate changes. Organizers called Burning Man a "do-ocracy" that depended on its members to identify a "civic need" and spearhead an activity or project that the organization might later absorb. For example, one group critiqued Burning Man's top-down allocation of grants for proposed art projects. They organized BORG2 to raise funds and designed a democratic process to award grants to applicants. With the Burning Man organizers' consent, they hosted a friendly competition to determine whether they or the Burning Man organization better supported art at the 2005 event.

By allowing dissenting views to be expressed, organizers substantiated the expression logic's focus on individual discretion and participation.

Burning Man organizers also contested governmental agencies' attempts to enforce regulations. During the 2000 event, law enforcement officers, many of whom were patrolling the event for the first time, made 38 arrests in comparison with no arrests in prior years. Participants also reported instances of entrapment and search and seizure without warrants. In addition, officials attempted to curb "unauthorized" bonfires. Burning Man organizers contested bonfire monitoring as an impractical attempt at standardizing an event known for spontaneous fire performances. Furthermore, organizers argued that law enforcement's activity was incongruent with the event's ethos of individual discretion. However, organizers like Larry Harvey recognized federal, state, and local agencies' concerns about performing their duties when under public scrutiny: "they're going to justify their mission and protect their reputation for doing their duty." With this in mind, organizers worked with agencies to reduce criminal charges against event attendees and offered sessions to orient officers new to event. These activities supported the expression logic's concerns for maintaining individual discretion and collective interests, while discreetly adapting practices to allow for external constituents' demands for the production logic's emphasis on standardization.

Open Source. Similarly, Open Source community members contested three organizing practices: how to improve the consistency and quality of volunteer contributions, the degree to which corporate participation was acceptable, and the degree of control which foundations should assume. First, members struggled to improve the consistency and quality of contributions from volunteers without resorting to coercion or financial incentives. Howard Moore, a contributor to the Linux Standard project acknowledged that "we're taking a very long time to

get this done… because those of us working on [the project] have other jobs and have to do this on nights and weekends, and sometimes our family likes to see us instead." To speed up uneven production, they considered hiring people: "we have had a…continuity problem. People will have 20% one week and then 0% for two weeks and then 40% one week, that slows us down a lot. It takes concentrated effort, especially for multiple people working on something, for extended periods of time, to get these things done. We want to hire developers and editors and engineers to push these things out faster." Despite these desires to increase stability, standardization, and accountability, none of the projects hired labor at the time of this study.[7] Follow-up interviews revealed that recruiting volunteers remains more important than improving production, as members have been reluctant to introduce differential treatment that could threaten collective interests, participation, and individual discretion.

Perceived 'interference' by corporate volunteers sparked a second area of contestation – the degree to which corporations could legitimately influence a project without compromising the community's independence. Corporate sponsors often accelerated their volunteers' contributions to advance a project's progress. While this could improve project stability and benefit production, it also introduced new concerns about whether such practices upheld participation and collective interests. For example, if collocated, sponsored volunteers worked on the same project, other project members would not be privy to dialogue that would otherwise be available online. As one informant complained at a board meeting, "people are very focused on a single project usually within the boundaries of their companies. It also doesn't help the 'hacking together' mentality, which is one of the forces of the project." Internal, undocumented discussions within firms contravened community norms of public and transparent discussions

[7] After the study was completed, the Linux Distribution project experimented with compensating their release team. This change generated protracted conflict within the project, a threatened slow down on the project from volunteers, and members' unsuccessful recall of their project leader.

about software development decisions. Long-time contributors saw corporate influence as promoting insularity, even though they helped the project in other ways. They worried that a disproportional influx of sponsored contributors could destabilize the community's democratic aims and undercut the expression logic's concern for collective interests.

Finally, Open Source contributors contested the role that their non-profit foundations should assume in making decisions about production. Most informants, like Marshall Fleinkman, stated that for a project to be successful, the foundation needed to play a very limited role. "I think it [the foundation] probably is useful, so long it doesn't overstep…. you want to have an organization that can say "This is [the project]" or "That's not [the project]." But they try to get into strategy…and it's not really their place... they're interfering in technical matters." In contrast, those who valued the support of commercial partners were more inclined to let the foundation have more control over production. These different conceptions illustrated how members differed in their emphases on stability and accountability versus collective interest and individual discretion. Such differences likely led to the continued contestation of these domains.

We traced the organizing practices selected and rejected in the Burning Man and Open Source communities, but not all of the tensions associated with competing logics were resolved – some organizing practices remained contested. Espousing the need for expression, some Burning Man members demanded more democratic decision-making, while organizers reinforced their authority over matters they viewed critical to sustaining production. Concerned about release delays and quality concerns, Open Source members debated how to stabilize volunteers' efforts while managing an influx of corporate support, which could facilitate production, but also compromise a project's independence. Although our data does not allow for the systematic identification of temporal patterns of integration, rejection, and contestation that

one might use to propose an organizing "life cycle," it does allow us to identify the specific role that logics played in the selective synthesis process. Future research should consider how patterns of integration, rejection and contestation unfold over time at micro and macro levels.

Conclusion. In summary, we found that members of the Burning Man and Open Source production communities espoused co-existing, but competing, logics of expression and production. The logic of expression emphasized organizational responsiveness to collective interests, individual discretion, and participation. The logic of production emphasized coordinating activities by increasing stability, accountability, and standardization. These logics' different emphases could generate incompatible organizing practices. Previous studies also suggest that over time, one logic will replace the other (Bacharach et al. 1996; Rao et al. 2003; Thorton 2002; Thorton 2004; Suddaby and Greenwood 2005). In contrast, our analyses do not predict whether a particular logic will ultimately dominate organizing practices; rather, our contribution is to show how members use logics to guide the selection of organizing practices. By comparing and contrasting the implications of opposing logics (e.g. Rao et al. 2005), members selectively synthesized formal organizing practices with informal, ad hoc organizing practices. In doing so, these two communities adapted their communal forms to create formal organizations that could help meet the challenges posed by growth and new external constituents.

Discussion

By examining how groups engage in selective synthesis, this article contributes to the call for more problem-driven research (Davis and Marquis 2005; Scott 2005) and empirical work that elucidates the mechanisms and process behind the creation of organizations (Campbell 2005). Both organizational and social movement researchers have lamented the lack of grounded theories that explain the emergence of new organizations (Romanelli 1991; Daft and Lewin

1993; Aldrich 1999), particularly regarding organizational decision-making about forms and practices (DiMaggio and Anheier 1990; Jasper 2004; Minkoff and McCarthy 2005). Although we operationalized this study with a comparative examination of a particular type of organization – one that was voluntary, participatory, and dedicated to aligning its form and function, our findings contribute to a theoretical understanding of the creation of new organizations more generally. Specifically, these findings pertain to organizations that depend on participatory practices, such as teams and quality circles, organizations that are introducing more production-oriented practices to join their extant expression-oriented practices, and organizations that depend upon their members' contributions to further knowledge production.

Mindful Creation of New Organizations. Institutional accounts of organizing have traditionally focused on the durability of organizational forms and practices. In contrast, recent neo-institutional theories articulate possibilities for innovation (Zucker 1977; DiMaggio and Powell 1991; Clemens and Cook 1999) and emphasize actors' capacity for agency (Oliver 1991; Fligstein 1996, 1997, 2001; Hirsch and Lounsbury 1997; Rao 1998; Rao et al. 2005). Institutional entrepreneurs (DiMaggio 1988) pursue social or economic change by engaging in purposive action. They tap available cultural repertoires (Clemens 1993) or tool kits (Swidler 1986; Lounsbury 1997) to construct new models for action (Fligstein and Mara-Drita 1996; Fligstein 1996, 1997, 2001; Rao 1998; Rao et al. 2000). Their efforts are affected by their position in social networks, their exposure to other organizational models, their ability to build coalitions, and their access to resources (Fligstein 1996).

The Value of Competing Logics. By examining how members actually use logics when constructing an organization, we delve into the previously under theorized 'black box' of organizational dynamics (Ganz 2000; Clemens and Minkoff 2004; Campbell 2005) and show

another type of strategic response to institutional pressures (e.g. Oliver 1991). In drawing upon competing logics, members in both production communities integrated, rejected, and contested organizing practices. Members integrated formal organizing practices by selecting only those practices that furthered the stability of their community and enhanced their ability to pursue collective interests. They adapted practices that enhanced accountability while sustaining opportunities for participation. They also introduced new standards to their organizing practices while protecting individual discretion. Organizing practices that could not balance such trade-offs were rejected. However, neither production community resolved all organizing issues, often vacillating between logics of expression and production. Such contestation of particular organizing practices highlights the on-going reflexivity and mindful deliberation involved in the selective synthesis of competing logics.

The Burning Man and Open Source members' efforts comprise a more deliberative form of what some have called bricolage: a process by which members draw on previous organizing experiences (Fligstein 2001) to patchwork new configurations of organizational practices (Campbell 2005; Levi-Strauss 1966; Weick 1993). Rather than engage in the boot-strapping approach that defines bricolage, the two communities in this study organized in a more purposive manner; they deliberately modified organizing practices to align with avowed goals. Our findings show how competing logics help stimulate mindfulness when creating an organization. Mindfulness, or the "process of drawing novel distinctions," can help individuals incorporate multiple viewpoints and new information (Langer and Moldoveanu 2000: 1-2; Langer 1989).

Previous literature has shown that, over time, new organizations select practices that allow them to scale, acquire resources, and enhance legitimacy (Fligstein 1990; Meyer and Rowan 1977; DiMaggio and Powell 1983; Scott 1995, 1998). Although such practices impart stability

and efficiency, they can inadvertently displace member interests and goals (Kanter 1968; Rothschild-Whitt 1979; Rothschild and Whitt 1986; Rothschild and Russell 1986; Swidler 1979). These studies predict that growing collectives either dissolve or conform to a production logic at the expense of their expression logic. In contrast, our research suggests that the duality of co-existing but competing logics can serve an important purpose. In our communities, deliberative reflection on the means and ends associated with competing logics helped members evaluate the impact of new organizing practices on their organization's form and function. Consideration of both logics helped check either logic from becoming an end, rather than just a means of reaching the end. Thus, we propose that competing logics help prevent the inversion of means and ends.

> Proposition 1: If social groups allow both expression and production logics to persist during the process of selective synthesis, they will be less likely to invert means and ends when selecting organizing practices.

Prior research suggests that reconciling competing logics without inverting means and ends is not an easy task. For instance, non-profit organizations such as museums, theaters, and hospitals that introduced production-oriented practices often did so at the expense of expression-oriented practices, and members' assessment of work quality and involvement correspondingly declined (e.g. Oakes, Townley, and Cooper 1998; Voss, Cable, and Voss 2000; Weinberg 2003). In such cases, members did not sufficiently engage with their extant logic while introducing a new logic. Their organizations thus underwent a transformation that privileged the new logic at the expense of the extant logic (Forssell and Jansson 1996). Thus, identifying the conditions that can enable a process of selective synthesis is important to extending these findings.

Conditions that foster selective synthesis. Consistent with the principles of grounded theory (Glaser and Strauss [1967]1999), we iterated between our findings and prior literature to identify conditions that may impact an organization's ability to engage in the selective synthesis

of competing logics. We use this analysis to offer theoretical propositions that can generalize our findings. In comparison with prior literature, our analyses suggest that communities selecting organizing practices may be better able to engage in the selective synthesis of competing logics given the following conditions: 1) a lack of applicable organizing templates; 2) a limited domain; and 3) goals that are assessable.

Applicability of Organizing Templates. Much literature describes how organizations either conform or resist institutional pressures (e.g. Oliver 1991) and in doing so, often abandon their extant organizing practices. In contrast, our research indicates that actors can selectively reconfigure practices, a strategy that breaks new ground in Oliver's continuum (1991). Our results may differ from the literature due to the degree to which an organization's field has achieved agreement on shared organizing templates (Meyer and Rowan 1977; DiMaggio and Powell 1991) and the degree to which those templates are considered relevant. For example, worker cooperatives that competed with conventional firms or needed to secure resources from banks or the state were less able to sustain their participatory organizing practices (e.g. Rothschild and Whitt 1986; Cheney 1999). These cooperatives produced conventional goods in areas where well established organizing templates already existed and could be applied to them. In contrast, the Burning Man and Open Source production communities found few comparable organizing templates that could be applied to them and may have thus been more able to engage in the process of selective synthesis.

Based on this comparison, we suggest that the selective synthesis of competing logics may be more possible for social groups in less established fields. When the "means-ends recipes around which behavior can be regularized, formalized, organized" (Scott 1998: 117) has yet to be defined, experimentation can persist and mature in the absence of agreement about proper

organization. Groups that operate in such fields and may be able to create sustainable organizations with less "push back" from pre-existing institutions (Holm 1995: 400).

> Proposition 2: In fields with less agreement on organizing templates, social groups will be more likely to selectively synthesize competing logics when selecting organizing practices than social groups in fields with greater agreement on organizing templates.

Limited domain. Much of the literature on collective forms of production focuses on organizations that operated as total institutions (Goffman 1961), such that members depended upon these communities for their livelihood and were subject to rules that governed their overall conduct. This broad domain likely intensified internal and external pressures, making the reconciliation of competing logics more difficult. In contrast, the Burning Man and Open Source communities limit their domain to organizing and production activities, leaving members free to engage in other activities on their own terms. This suggests that a limited domain may shield organizations from some of the internal and external pressures that test more all-encompassing communities. Furthermore, unlike production communities such as communes and worker co-operatives, the Burning Man and Open Source communities' members were not concentrated in one geographic area; this dispersion curbed the expansion of their domain of organizing (e.g. Schunn, Crowley and Okada 2002). Thus, we propose that organizations with a limited domain can more easily reconcile competing logics.

> Proposition 3: Social groups with a limited domain will be more likely to selectively synthesize competing logics when selecting organizing practices than those with a more encompassing domain.

Assessable goals. The literature also suggests that social groups with diffuse goals have difficulty assessing their efforts. This difficulty can inhibit the creation of a sustainable organization (Gamson 1990; Giugni 1998). Our two communities differed from such groups in that their production goals were relatively easy to assess - members could periodically gauge the

results of their organizing decisions. For example, the Burning Man community could evaluate event attendance and experiences, volunteer contributions, and developed art projects. Similarly, Open Source projects could evaluate mailing list activity, features contributed, bugs fixed, and downloaded code. In comparison with groups with more diffuse goals, assessable goals helped members to more readily evaluate how competing logics might affect organizing practices; they thus could adjust practices when one logic threatened to overwhelm the other.

> Proposition 4: Social groups that have assessable goals will be more likely than groups with more diffuse goals to selectively synthesize competing logics when selecting organizing practices.

Implications. This research is relevant not just to production communities and social movements, but also applies to non-profit and for-profit organizations that draw upon "principles of employee involvement" (Cappelli and Neumark 2001: 753). Organizations increasingly have adopted participatory practices, such as quality circles, teamwork, and employee ownership, to improve the production of goods and services. The 1996 National Organizations Study showed that 37% of surveyed for-profit establishments and more than 60% surveyed nonprofits relied upon teams; a smaller proportion of these teams were responsible for "deciding on tasks and methods, solving problems, or selecting leaders" (Kalleberg, Marsden, Reynolds, and Knoke 2006: 283). For example, auto manufacturing plants (notably, NUMMI and Saturn) and steel mills have transitioned from hierarchically-managed assembly lines to quality circles and teams (Heller, Pusic, Strauss, and Wilpert 1998). Research documents that the introduction of such "high performance work practices" are associated with positive workplace outcomes. For instance, Hodson and Roscigno's (2004) analysis of 204 organizational ethnographies showed that employee involvement in decisions such as changes to work processes are associated with heightened worker effort (i.e. extra time, effort, and more pride in work) and peaceful

management-employee relations. We would expect that workplaces dependent upon participatory processes may also experience the tensions posed by co-existing logics of expression and production (e.g. Barker 1993; Martin, Knopoff, and Beckman 1998; Hodson 2001). Future research should determine the degree to which logics of expression and production as defined here are relevant to these settings.

While the presence of competing logics of production and expression may be robust to many settings, we would expect that members' ability to engage in selective synthesis may be more constrained in a for-profit setting. In settings where the production logic dominates, production goals can constrain the effective implementation of practices that support a logic of expression. Furthermore, participatory practices in traditional bureaucratic organizations may not adequately empower individuals and redistribute decision-making authority (Rothschild and Ollilainen 1999). In contrast, the Burning Man and Open Source communities were founded with the explicit goals of broadening participation in the production of software and the arts, so members were especially attuned to whether practices supported the expression logic.

Future opportunities to examine how organizations negotiate logics of production and expression could help substantiate this study's findings in more settings. As Barry and Rerup (2006) claim, "Competition between aesthetic orientations appears to be a particularly important consideration for understanding design dynamics" (273) in knowledge-intensive organizations. If the economy increasingly relies on the production of knowledge and ideas (Powell and Snellman 2004), then it may be more important for organizations to offer opportunities for expression in order to generate and refine those ideas (e.g. Amabile, Conti, Coon, Lazenby, and Herron 1996). If so, an organization's ability to manage the tensions implicit in logics of expression and production is likely to be even more critical to innovation and growth.

Table 1: Commonalities of Two Field Settings

	Burning Man Production Community	**Open Source Production Community**
Mission	To develop and support a community's annual event that emphasizes the arts, expression, and participation	To develop software in a public and collective way and produce software that is freely available and modifiable
Membership	Anyone can participate, predominantly volunteer with a small salaried staff	Anyone can participate, volunteer and sponsored contributors
Production Context	Largely distributed and supported by online interactions and some face to face contact	Largely distributed and supported by online interactions with occasional face to face contact

Table 2: Open Source Project Descriptions

	Linux Distribution	Webserver Project	Linux Standard Project	GUI Desktop Project
Mission/Goal	To develop a free non-commercial operating system	To create a commercial grade freely available webserver	To develop and promote standards to increase compatibility among Linux distributions	To build a free and easy to use desktop environment for Linux
Date Founded	August, 1993	February, 1995	June, 1995	August, 1997
Date Incorporated	June, 1997	June 1999	May, 2000	August, 2000
Non-Profit Status	501(c)(3)	501(c)(3)	501(c)(6)	501(c)(3)
Companies as Members	No	No	Yes	No

Table 3: Competing Logics of Organization

Organizing Emphasis	Expression Logic	Production Logic
What should be the focus of organizing?	*Collective interests* – Carry out mission based on collective and individual aims	*Stability* - Create a stable, efficient, and effective entity
Who should do the work?	*Participation* - Encourage members to contribute based on their interests	*Accountability* - Hold qualified (by skills or experience) members responsible
How should the work get done?	*Individual discretion* - Rely upon ad hoc, flexible processes; permit variability	*Standardization* - Depend on set, rationalized procedures; seek predictability

Table 4: Integrated Organizing Practices

	Organizing Practices Justified by the Expression Logic	**Organizing Practices Justified by the Production Logic**
Burning Man Production Community	▪ To respond to *collective interests*, modified LLC distribution agreement, increased financial transparency, and added a non-profit arm ▪ To increase opportunities for *participation* and support *collective interests*, continued to rely upon volunteers for most organizing work ▪ To accommodate *individual discretion*, created and customized roles ▪ To reinforce commitment to *collective interests*, kept remuneration symbolically token	▪ To facilitate *stability* with outsiders and protect against liability, formed limited liability company (LLC) ▪ To improve *accountability*, professionalized certain functions (book keeping, HR, IT) ▪ To initiate *standardization* and heighten *accountability*, designated formal positions ▪ To improve *accountability*, offered pay for some roles
Open Source Production Community	▪ To increase opportunities for *participation* and protect *collective interests*, created non-profit foundation ▪ To preserve *collective interests*, *participation*, and *individual discretion*, restricted the authoritative reach of the foundation ▪ To enhance *participation*, formalized policies and recorded practices	▪ To facilitate *stability* with outsiders and protect against liability, created a legal entity (non-profit foundation) ▪ To facilitate *accountability* beyond a founder's tenure, created a formal governance structure ▪ To facilitate *stability* and initiate *standardization*, formalized policies and recorded practices

Table 5: Rejected Organizing Practices

	Organizing Practices Rejected by the Expression Logic	**Organizing Practices Rejected by the Production Logic**
Burning Man Production Community	▪ Rejected business rationale's narrow focus as endangering *collective interests* and *expression* ▪ Rejected corporate sponsorship and advertising as antithetical to *collective interests* ▪ Rejected governmental agencies' demands as incompatible with *collective interests* and *individual discretion*	▪ Rejected continuing with ad hoc organizing as not promoting sufficient *stability* ▪ Rejected the non-profit form as an undesired type of *stability* ▪ Rejected governmental agencies' push for *standardization* as inapplicable to the production context
Open Source Production Community	▪ Rejected for-profit form as incongruent with *collective interests* ▪ Rejected externally defined technical requirements and deadline driven releases as curtailing *individual discretion* ▪ 3/4 rejected corporate memberships as antithetical to *collective interests, individual discretion* and *participation*	▪ Rejected remaining a non-legal entity ('a mailing list') as not promoting sufficient *stability* ▪ Rejected relying on a single corporate sponsor as endangering project *accountability* ▪ Rejected excluding corporate participation completely as it could enhance project *stability*

Table 6: Contested Organizing Practices

	Organizing Practices Contested under the Expression Logic	**Organizing Practices Contested under the Production Logic**
Burning Man Production Community	▪ All decisions should be made by consensus to fully respect *participation* and *collective interests* ▪ Oppose governmental activities that are counter to *individual discretion* and *collective interests*	▪ Limit collective decision-making to ease *stability* and *standardization*, but have members fully participate in production to respect *participation*, *individual discretion*, and *collective interests* ▪ Work with governmental agencies to develop applicable *standardization*
Open Source Production Community	▪ Remain a volunteer run organization to reinforce *collective interests*, *participation*, and *individual discretion* ▪ Corporate support and influence can detract from *participation* and *collective interests* ▪ The Foundation should play a limited role to respect *collective interest* and *individual discretion*	▪ Hire employees to increase *stability*, *standardization*, and *accountability* ▪ Corporate support can improve project *stability* and improve quality of code produced ▪ The Foundation should manage production to increase *stability* and *accountability*

Bibliography

Abrahamson, Eric, and Gregory Fairchild. 1999. "Management Fashion: Lifecycles, Triggers, and Collective Learning Processes." *Administrative Science Quarterly* 44(4):708-740.

Adler, Paul S., and Bryan Borys. 1996. "Two Types of Bureaucracies: Enabling and Coercive." *Administrative Science Quarterly* 41: 61-89.

Aldrich, Howard. 1999. *Organizations Evolving.* London: Sage.

Amabile, Teresa M., Regina Conti, Heather Coon, Jeffrey Lazenby, and Michael Herron. 1996. "Assessing the Work Environment for Creativity." *Academy of Management Journal* 39: 1154-1184.

Bacharach, Samuel B., Peter Bamberger, and William J. Sonnenstuhl. 1996. "The Organizational Transformation Process: The Micro-politics of Dissonance Reduction and the Alignment of Logics of Action." *Administrative Science Quarterly* 41(3):477-506.

Barker, James R. 1993. "Tightening the Iron Cage: Concertive Control in Self-Managing Teams." *Administrative Science Quarterly* 38:408-37.

Barley, Stephen R., and Gideon Kunda. 1992. "Design and Devotion: Surges of Rational and Normative Ideologies of Control in Managerial Discourse." *Administrative Science Quarterly* 37(3):363-399.

Barry, David, and Claus Rerup. 2006. "Going Mobile: Aesthetic Design Considerations from Calder and the Constructivists." *Organization Science* 17(2):262-276.

Borland, Elizabeth. 2005. "Central Dilemmas for the Survival and Growth of Social Movement Organizations." Presented at the annual meeting of the American Sociological Association, Aug. 15, Philadelphia, Penn.

Calhoun, Craig. 1995. "'New Social Movements' of the Early Nineteenth Century." Pp. 173-216 in *Repertoires & Cycles of Collective Action*, edited by Mark Traugott. Durham, N.C.: Duke University Press.

Campbell, John L. 2005. "Where Do We Stand? Common Mechanisms in Organizations and Social Movements Research." Pp. 41-68 in *Social Movements and Organization Theory*, edited by Gerald F. Davis, Doug McAdam, W. Richard Scott, and Mayer N. Zald. New York: Cambridge University Press.

Cappelli, Peter, and David Neumark. 2001. "Do "High-Performance" Work Practices Improve Establishment-Level Outcomes." *Industrial Labor Relations Review* 54(4):737-775.

Cheney, George. 1999. *Values at Work. Employment Participation Meets Market Pressure at Mondragón*. Ithaca, N.Y.: ILR Press.

Clemens, Elisabeth S. 1993. "Organizational Repertoires and Institutional Change: Women's Groups and the Transformation of U.S. Politics, 1890-1920." *American Journal of Sociology* 98(4):755-798.

Clemens, Elisabeth S. 2005. "Two Kinds of Stuff: The Current Encounter of Social Movements and Organizations" Pp. 351-365 in *Social Movements and Organization Theory*, edited by Gerald F. Davis, Doug McAdam, W. Richard Scott, and Mayer N. Zald. New York: Cambridge University Press.

Clemens, Elisabeth S., and James M. Cook. 1999. "Politics and Institutionalism: Explaining Durability and Change." *Annual Review of Sociology* 25:411-466.

Clemens, Elisabeth S., and Debra C. Minkoff. 2004. "Beyond the Iron Law: Rethinking the Place of Organizations in Social Movement Research." Pp. 155-170 in *The Blackwell Companion to Social Movements*, edited by David A. Snow, Sarah A. Soule, and Hanspeter Kriesi. Malden, Mass.: Blackwell.

Coleman, James S. 1974. *Power and the Structure of Society*. New York: W. W. Norton & Company Inc.

Cress, Daniel M., and David A. Snow. 2000. "The Outcomes of Homeless Mobilization: The Influence of Organization, Disruption, Political Mediation, and Framing." *American Journal of Sociology* 105:1063-1104.

D'Aunno, Thomas, Melissa Succi, and Jeffrey A. Alexander. 2000. "The Role of Institutional Market Forces in Divergent Organizational Change." *Administrative Science Quarterly* 45:679-703.

Daft, Richard L., and Arie Y. Lewin. 1993. "Where are the Theories for the "New" Organizational Forms? An Editorial Essay." *Organization Science* 4:i-vi.

Davis, Gerald F., Doug McAdam, W. Richard Scott, and Mayer N. Zald, eds. 2005. *Social Movements and Organization Theory*. New York: Cambridge University Press.

Davis, Gerald F., and Christopher Marquis. 2005. "Prospects for Organizational Theory in the Early 21st Century: Institutional Fields and Mechanisms." *Organization Science* 16:332-343.

DiBona, Chris, Danese Cooper, and Mark Stone. 2006. "Introduction." Pp. xxv-xl in *Open Sources 2.0 The Continuing Evolution*. Sebastopol, Calif.: O'Reilly Media.

DiMaggio, Paul J. 1988. "Interest and Agency in Institutional Theory." Pp. 3-21 in *Institutional Patterns and Organizations: Culture and Environment*, edited by Lynne G. Zucker. Cambridge, Mass.: Ballinger.

DiMaggio, Paul J., and Helmut K. Anheier. 1990. "The Sociology of Nonprofit Organizations and Sectors." *Annual Review of Sociology* 16:137-159.

DiMaggio, Paul J., and Walter W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48:147-160.

DiMaggio, Paul J., and Walter W. Powell, eds. 1991. *The New Institutionalism in Organizational Analysis.* Chicago: The University of Chicago Press.

Duckles, Beth M., Mark A. Hager, and Joseph Galaskiewicz. 2005. "How Nonprofits Close. Using Narratives to Study Organizational Processes." Pp. 169-202 in *Qualitative Organizational Research. Best Papers from the Davis Conference on Qualitative Research,* edited by Kimberly D. Elsbach. Greenwich, Conn.: Information Age Publishing.

Duffy Marsan, Carolyn. 2005. "Q&A: The Future of Open Source in the Enterprise. Open Source Visionary Brian Behlendorf Talks about OSS in the Enterprise." *TechWorld.* Accessed on March 31, 2006. http://www.techworld.com/opsys/features/index.cfm?featureid=1652.

Edmondson, Amy C., and Stacy E. McManus. Forthcoming. "Methodological Fit in Management Field Research." *Academy of Management Review*.

Emerson, Richard M. 1962. "Power-Dependence Relations." *American Sociological Review* 27(1):31-41.

Etzioni, Amitai. 1959. "Authority Structure and Organizational Effectiveness." *Administrative Science Quarterly* 4(1):43-67.

Fligstein, Neil. 1990. "The Transformation of Corporate Control - Introduction." Pp. 1-33 in *The Transformation of Corporate Control*, edited by Neil Fligstein. Cambridge, Mass.: Harvard University Press.

Fligstein, Neil. 1996. "Markets as Politics: a Political-Cultural Approach to Market Institutions." *American Sociological Review* 61(4):656-673.

Fligstein, Neil. 1997. "Social Skill and Institutional Theory." *American Behavioral Scientist* 40:397-405.

Fligstein, Neil. 2001. "Social Skill and the Theory of Fields." *Sociological Theory* 19:105-25.

Fligstein, Neil, and Iona Mara-Drita. 1996. "How to Make a Market: Reflections on the Attempt to Create a Single Market in the European Union." *American Journal of Sociology* 102(1):1-33.

Forssell, Anders, and David Jansson. 1996. "The Logic of Organizational Transformation: On the Conversion of Non-Business Organizations." Pp. 93-115 in *Translating Organizational Change*, edited by Barbara Czarniawska and Guje Sevon. New York:

Walter de Gruyther & Co.

Freeman, Jo (Joreen). 1973. "The Tyranny of Structurelessness." Pp. 285-299 in *Radical Feminism*, edited by Anne Koedt, Ellen Levine and Anita Rapone. New York: Quadrangle Books.

Friedland, Roger, and Robert R. Alford. 1991. "Bringing Society Back In: Symbols, Practices, and Institutional Contradictions." Pp. 232-263 in *The New Institutionalism in Organizational Analysis*, edited by Walter W. Powell and Paul J. DiMaggio. Chicago: University of Chicago Press.

Gamson, William. 1990. *The Strategy of Social Protest,* 2nd ed. Belmont, Calif.: Wadsworth.

Ganz, Marshall. 2000. "Resources and Resourcefulness: Strategic Capacity in the Unionization of California Agriculture, 1959-1966." *American Journal of Sociology* 105(4):1003-1062.

Giugni, Marco G. 1998. "Was it Worth the Effort? The Outcomes and Consequences of Social Movements." *Annual Review of Sociology* 91:371-93.

Glaser, Barney G., and Anselm L. Strauss. [1967] 1999. *The Discovery of Grounded Theory; Strategies for Qualitative Research, History and Development of Organizational Behavior*. Chicago: Aldine.

Goffman, Erving. 1961. *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates.* Garden City, N.Y.: Anchor Books.

Greenwood, Davydd J., and José Luis González Santos. 1991. *Industrial Democracy as Process. Participatory Action Research in the Fagor Cooperative Group of Mondragón.* Assen, Sweden: Van Gorcum & Comp B.V.

Hackman, J. Richard. 2002. *Leading Teams. Setting the Stage for Great Performances*. Boston: Harvard Business School Press.

Harrison, P. M. 1960. "Weber's Categories of Authority and Voluntary Associations." *American Sociological Review* **(**25)2:232-237.

Haveman, Heather A., and Hayagreeva Rao. 1997. "Structuring a Theory of Moral Sentiments: Institutional and Organizational Coevolution in the Early Thrift Industry." *American Journal of Sociology* 102:1606-1651.

Haveman, Heather A., Hayagreeva Rao, and Srikanth Paruchuri. 2007. "The Winds of Change: The Progressive Movement and the Bureaucratization of Thrift." *American Sociological Review* 72(1):117-142.

Heller, Frank, Eugen Pusic, George Strauss, and Bernhard Wilpert. 1998. *Organizational Participation: Myth and Reality*. Oxford: Oxford University Press.

Hirsch, Paul M., and Michael Lounsbury. 1997. "Ending the Family Quarrel: Toward a Reconciliation of "Old" and "New" Institutionalisms." *American Behavioral Scientist* 40(4): 406-418.

Hodson, Randy. 2001. *Dignity at Work*. New York, N.Y.: Cambridge University Press.

Hodson, Randy, and Vincent J. Roscigno. 2004. "Organizational Success and Worker Dignity: Complementary or Contradictory?" *American Journal of Sociology* 110(3): 672-708.

Hoffman, Andrew J., and Marc J. Ventresca, eds. 2002. *Organizations, Policy, and the Natural Environment. Institutional and Strategic Perspectives*. Stanford, Calif.: Stanford University Press.

Holm, Peter. 1995. "The Dynamics of Institutionalization: Transformation Processes in Norwegian Fisheries." *Administrative Science Quarterly* 40:398-422.

Ingram, Paul, and Tal Simons. 2000. "State Formation, Ideological Competition, and the Ecology of Israeli Workers' Cooperatives." *Administrative Science Quarterly* 45:525-46.

Jackall, Robert. 1988. *Moral Mazes. The World of Corporate Managers*. New York: Oxford Press.

Jackall, Robert, and Henry M. Levin, eds. 1984. *Worker Cooperatives in America*. Berkeley, Calif.: University of California Press.

Jasper, James M. 2004. "A Strategic Approach to Collective Action: Looking for Agency in Social-Movement Choices." *Mobilization: An International Journal* 9(1):1-16.

Jenkins, Craig J. 1977. "Radical Transformation of Organizational Goals." *Administrative Science Quarterly* 22(4):568-586.

Kalleberg, Arne L., Peter V. Marsden, Jeremy Reynolds, and David Knoke. 2006. "Beyond Profit? Sectoral Differences in High-Performance Work Practices." *Work & Occupations* 33(3): 271-302.

Kanter, Rosabeth Moss. 1968. "Commitment and social organization: A study of commitment mechanisms in utopian communities." *American Sociological Review* 33(4):499-517.

Kanter, Rosabeth Moss. 1972. *Commitment and Community. Communes and Utopias in Sociological Perspective*. Cambridge, Mass.: Harvard University Press.

Karpik, Lucien. 1978. "Organizations, Institutions and History." Pp. 15-68 in *Organization and Environment: Theories, Issues and Reality*, edited by Lucien Karpik. London: Sage.

Kieser, Alfred. 1989. "Organizational, Institutional, and Societal Evolution: Medieval Craft

Guilds and the Genesis of Formal Organizations." *Administrative Science Quarterly* 34: 540-564.

Knoke, David. 1981. "Commitment and Detachment in Voluntary Associations." *American Sociological Review* 46:141-158.

Langer, Ellen. 1989. *Mindfulness*. Reading, Mass.: Addison-Wesley, 1989.

Langer, Ellen J., and Mihnea Moldoveanu. 2000. "The Construct of Mindfulness." *Journal of Social Issues* 56(1):1-9.

Lee, Gwendolyn, and Robert. E. Cole. 2003. "From a Firm-Based to a Community-Based Model of Knowledge Creation: The Case of the Linux Kernel Development." *Organization Science* 14(6):633-49.

Levi-Strauss, Claude. 1966. *The Savage Mind*. London: Weidenfeld and Nicholson.

Lipset, Seymour Martin, Martin A. Trow, and James S. Coleman. 1956. *Union Democracy. The International Politics of the International Typographical Union*. Glencoe, IL: Free Press.

Lounsbury, Michael. 1997. "Exploring the Institutional Tool Kit: The Rise of Recycling in the U.S. Solid Waste Field." *American Behavioral Scientist* 40:465-477.

Lounsbury, Michael. 2005. "Institutional Variation in the Evolution of Social Movements: The Spread of Recycling Advocacy Groups." In *Social Movements and Organization Theory*, edited by Gerald F. Davis, Doug McAdam, W. Richard Scott, and Mayer N. Zald. Oxford: Oxford University Press.

Lounsbury, Michael, Heather Geraci, and Ronit Waismel-Manor. 2002. "Policy Discourse, Logics, and Practice Standards: Centralizing the Solid-Waste Management Field." Pp. 327-345 in *Organizations, Policy, and the Natural Environment. Institutional and Strategic Perspectives*, edited Andrew J. Hoffman, and Marc J. Ventresca. Stanford, Calif.: Stanford University Press.

Mansbridge, Jane J. 1983. *Beyond Adversary Democracy*. Chicago: University of Chicago Press.

Martin, Joanne, Kathleen Knopoff, and Christine Beckman. 1998. "An Alternative to Bureaucratic Impersonality and Emotional Labor: Bounded Emotionality at The Body Shop." *Administrative Science Quarterly* 43(2):429-469.

McAdam, Doug, and W. Richard Scott. 2005. "Organizations and Movements." Pp. 4-40 in *Social Movements and Organization Theory*, edited by Gerald F. Davis, Doug McAdam, W. Richard Scott and Mayer N. Zald. New York: Cambridge University Press.

McCarthy, John D., and Mayer N. Zald. 1977. "Resource Mobilization and Social Movements: A Partial Theory." *American Journal of Sociology* 82(6):1212-1241.

McGinn, Kathleen L., and Angela T. Keros. 2002. "Improvisation and the Logic of Exchange in Socially Embedded Transactions." *Administrative Science Quarterly* 47:442-473.

Meyer, John, and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83:333-363.

Michels, Robert. [1911] 1962. *Political Parties. A Sociological Study of Oligarchical Tendencies of Modern Democracy*. New York: The Free Press.

Miller, David. 1981. "Market Neutrality and the Failure of Co-Operatives." *British Journal of Political Science* 11(3):309-329.

Milofsky, Carl. 1988. "Structure and Process in Community Self-Help Organizations." Pp. 183-216 in *Community Organization. Studies in Resource Mobilization and Exchange*, edited by Carl Milofsky. New York: Oxford University Press.

Minkoff, Debra C. 1999. "Bending with the Wind: Strategic Change and Adaptation by Women's and Radical Minority Organizations." *American Journal of Sociology* 104(6): 1666-1703.

Minkoff, Debra C., and John D. McCarthy. 2005. "Reinvigorating the Study of Organizational Processes in Social Movements." *Mobilization* 10(2):289-308.

Mintz, Beth, and Michael Schwartz. 1981. "Interlocking Directorates and Interest Group Formation." *American Sociological Review* 46(6):851-869.

Moody, Glyn. 2001. *Rebel Code: Inside Linux and the Open Source Revolution*. New York: Harper Collins.

Moon, Jae Yun, and Lee Sproull. 2002. "Essence of Distributed Work: The Case of the Linux Kernel." Pp. 381-404 in *Distributed Work*, edited by Pamela Hinds, and Sara Kiesler. Cambridge, Mass.: MIT Press.

Oakes, Leslie S., Barbara Townley, and David J. Cooper. 1998. "Business Planning as Pedagogy: Language and Control in a Changing Institutional Field." *Administrative Science Quarterly* 43(2):257-293.

Oerton, Sarah. 1996. *Beyond Hierarchy: Gender, Sexuality, and the Social Economy*. London; Bristol, Penn.: Taylor & Francis.

Oliver, Christine. 1991. "Strategic Responses to Institutional Processes." *Academy of Management Review* 16(1):145-179.

Perrow, Charles. 1991. "A Society of Organizations." *Theory and Society* 10:725-62.

Pfeffer, Jeffrey, and Gerald Salancik. 1978. *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper and Row.

Piven, Frances Fox, and Richard A. Cloward. [1977] 1979. *Poor People's Movements: Why They Succeed, How They Fail.* New York: Pantheon Books.

Polletta, Francesca. 2002. *Freedom Is an Endless Meeting: Democracy in American Social Movements*. Chicago: University of Chicago Press.

Polletta, Francesca, and James M. Jasper. 2001. "Collective Identity and Social Movements." *Annual Review of Sociology* 27:283-305.

Powell, Walter W., and Kaisa Snellman. 2004. "The Knowledge Economy." *Annual Review of Sociology* 30:199-220.

Rao, Hayagreeva. 1998. "Caveat Emptor: The Construction of Nonprofit Consumer Watchdog Organizations." *American Journal of Sociology* 103(4):912-961.

Rao, Hayagreeva, Philippe Monin, and Rodolphe Durand. 2003. "Institutional Change in Toqueville: Nouvelle Cuisine as an Identity Movement in French Gastronomy." *American Journal of Sociology* 108(4):795-843.

Rao, Hayagreeva, Philippe Monin, and Rodolphe Durand. 2005. "Border Crossing: Bricolage and the Erosion of Categorical Boundaries in French Gastronomy." *American Sociological Review* 70(6):968-991.

Rao, Hayagreeva, Calvin Morrill, and Mayer N. Zald. 2000. "Power Plays: How Social Movements and Collective Action Create New Organizational Forms." *Research in Organizational Behavior* 22:237-281.

Romanelli, Elaine. 1991. "The Evolution of New Organizational Forms." *Annual Review of Sociology* 17:79-103.

Rothschild-Whitt, Joyce. 1979. "The Collectivist Organization: An Alternative to Rational-Bureaucratic Models." *American Sociological Review* 44(4):509-527.

Rothschild, Joyce, and Marjukka Ollilainen. 1999. "Obscuring but not Reducing Managerial Control: Does TQM Measure Up to Democratic Standards?" *Economic and Industrial Democracy* 20:583-623.

Rothschild, Joyce, and Raymond Russell. 1986. "Alternatives to Bureaucracy: Democratic Participation in the Economy." *Annual Review of Sociology* 12:307-328.

Rothschild, Joyce, and J. Allen Whitt. 1986. *The Cooperative Workplace. Potentials and Dilemmas of Organizational Democracy and Participation*. New York: Cambridge University Press.

Sampson, Robert J., Doug McAdam, Heather MacIndoe, and Simón Weffer-Elizondo. 2005. "Civil Society Reconsidered: the Durable Nature and Community Structure of Collective Civic Action." *American Journal of Sociology* 111:673-714.

Schunn, Christian, Kevin Crowley, Takeshi, Okada. 2002. "What Makes Collaboration Across a Distance Succeed? The Case of the Cognitive Science Community." Pp. 407-430 in *Distributed Work*, edited by Pamela Hinds and Sara Kiesler. Cambridge, Mass.: MIT Press.

Scott, Richard W. 1995. *Institutions and Organizations,* 1st ed. Thousand Oaks, Calif.: Sage.

Scott, Richard W. 1998. *Organizations, Rational, Natural, and Open Systems,* 4th ed. New Jersey: Prentice Hall.

Scott, Richard W. 2005. "Theory Matters: The Future of OMT." Paper presented at the Academy of Management Conference, Honolulu. Accessed on January 8, 2006. http://www.aom.pace.edu/omt/newsletter/scottfall05.html.

Scott, Richard W., Martin Ruef, Peter J. Mendel, and Carol A. Caronna. 2000. *Institutional Change and Healthcare Organization: From Professional Dominance to Managed Care.* Chicago: University of Chicago.

Simons, Tal, and Paul Ingram. 1997. "Organization and Ideology: Kibbutzim and Hired Labor, 1951-1965." *Administrative Science Quarterly* 42(4):784-814.

Sirianni, Carmen. 1984. "Learning Pluralism: Democracy and Diversity in Feminist Organizations." Pp. 554-576 in *Critical Studies in Organization & Bureaucracy*, edited by Frank Fischer, and Carmen Sirianni. Philadelphia: Temple University Press.

Staggenborg, Suzanne. 1988. "The Consequences of Professionalization and Formalization in the Pro-Choice Movement." *American Sociological Review* 53(4):585-605.

Stallman, Richard. 1999. "The GNU Operating System and the Free Software Movement." Pp. 53-70 in *Open Sources. Voices from the Open Source Revolution*, edited by Chris DiBona, Sam Ockman, and Mark Stone. Sebastopol, Calif.: O'Reilly.

Starbuck, William H. 1993. "Keeping a Butterfly and an Elephant in a House of Cards: The Elements of Exceptional Success." *The Journal of Management Studies* 30(6):885-921.

Starbuck, William H. 1998. "Learning from Extreme Cases." Accessed on December 16, 2005. http://pages.stern.nyu.edu/~wstarbuc/extreweb/Extreweb.htm.

Stark, David. 1996. "Recombinant Property in East European Capitalism." *American Journal of Sociology* 101(4):993-1027.

Stark, David. 1999. "Heterarchy: Distributing Intelligence and Organizing Diversity." Pp. 153-179 in *The Biology of Business: Decoding the Natural Laws of Enterprise,* edited by John Clippinger. San Francisco, Calif.: Jossey-Bass.

Stinchcombe, Arthur L. 1997. "On the Virtues of the Old Institutionalism." *Annual Review of Sociology* 23:1-18.

Suddaby, Roy, and Royston Greenwood. 2005. "Rhetorical Strategies of Legitimacy." *Administrative Science Quarterly* 50(1):35-67.

Strauss, Anselm, and Juliet Corbin. 1990. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques.* Newbury Park, Calif.: Sage.

Swidler, Ann. 1979. *Organizations Without Authority*. Cambridge, Mass.: Harvard University Press.

Swidler, Ann. 1986. "Culture in Action: Symbols and Strategies." *American Sociological Review* 51(2):273-286.

Thomas, Jan E. 1999. ""Everything about US is Feminist:" The Significance of Feminist Ideology in Organizational Change." *Gender and Society* 13(1):101-119.

Thornton, Patricia H. 2004. *Markets from Culture: Institutional Logics and Organizational Decisions in Higher Education Publishing.* Stanford, Calif.: Stanford University Press.

Thornton, Patricia H. 2002. "The Rise of the Corporation in a Craft Industry: Conflict and Conformity in Institutional Logics." *Academy of Management Journal* 45(1):81-101.

Torvalds, Linus. 1999. "The Linux Edge." Pp. 101-112 in *Open Sources. Voices from the Open Source Revolution,* edited by Chris DiBona, Sam Ockman, and Mark Stone. Sebastopol, Calif.: O'Reilly.

Townley, Barbara. 2002. "The Role of Competing Rationalities in Institutional Change." *Academy of Management Journal* 45(1):163-179.

von Hippel, Eric. 2005. *Democratizing Innovation.* Cambridge, Mass.: MIT Press.

von Krogh, Georg, Sebastian Spaeth, and Karim Lakhani. 2003. "Community, Joining, and Specialization in Open Source Software Innovation: A Case Study." *Research Policy* 32(7):1217-1241.

Voss, Glenn B., Daniel M. Cable, and Zannie Giraud Voss. 2000. "Linking Organizational Values to Relationships with External Constituents: A Study of Nonprofit Professional Theaters." *Organization Science* 11(2):330-347.

Voss, Kim, and Rachel Sherman. 2000. "Breaking the Iron Law of Oligarchy: Union Revitalization in the American Labor Movement." *American Journal of Sociology* 106(2):303-349.

Weber, Max. [1946] 1958. *Bureaucracy*, edited by Gerth Hans and C. Wright Mills. New York: Oxford University Press.

Weber, Steven. 2004. *The Success of Open Source*. Cambridge, Mass.: Harvard University Press.

Weick, Karl E. 1979. *The Social Psychology of Organizing*. (*Topics in Social Psychology Series*), 2nd ed. Reading, Mass.: Addison-Wesley.

Weick, Karl E. 1993. "The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster." *Administrative Science Quarterly* 38:628-652.

Weick, Karl E. 1995. *Sensemaking in Organizations*. Thousand Oaks, Calif.: Sage.

Weinberg, Dana Beth. 2003. *Code Green: Money-Drive Hospitals and the Dismantling of Nursing*. Ithaca, N.Y.: ILR Press.

Whyte, William Foote, and Kathleen King Whyte. 1988. *Making Mondragón. The Growth and Dynamics of the Worker Cooperative Complex*. Ithaca, N.Y.: ILR Press.

Yin, Robert K. 1994. *Case Study Research Design and Methods*. Thousand Oaks, Calif.: Sage.

Zald, Mayer N., and Roberta Ash. 1966. "Social Movement Organizations: Growth, Decay, and Change." *Social Forces* 44(3):327-341.

Zucker, Lynne G. 1977. "The Role of Institutionalization in Cultural Persistence." *American Sociological Review* 42(5):726-43.

Zwerdling, Daniel. [1978] 1980. *Workplace Democracy. A Guide to Workplace Ownership, Participation, and Self-Management Experiments in the United States and Europe*. New York: Harper & Row.