Sticky Ties and Bad Attitudes

Relational and Individual Bases of Resistance to Change in Organizational Structure

KATHLEEN L. VALLEY
TRACY A. THOMPSON

Dictating formal structure is a critical medium of control in complex organizations. Through prescribed reporting and production structures, management compels certain ways of getting the work of the organization accomplished and imposes certain constraints on the other ways of completing that same work. Although management

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has the legitimate power to dictate and change formal organizational structure, employee resistance to change can hinder management's structuring and restructuring efforts. In this chapter, we investigate the extent to which management's power to set a new organizational structure is checked by employee resistance, and we explore both individual and relational sources of resistance. Several questions form the basis of our inquiry: Will the emergent, task-based social structure after a restructuring be more closely related to management's ideal or to the social structure in place prior to the restructuring efforts? In addition, we explore specific individual and relational sources of resistance to structural change: What individual and relational forces determine resistance? How do the forces at the individual level interact with those at the relational level?

Scholars of organizational structure have long debated the relationship between formal, prescribed structure and informal, emergent structure (Blau, 1955; Giddens, 1977; March & Olsen, 1976; Ranson, Hinings, & Greenwood, 1980; Weick, 1976). Early research on structure was often founded in Weber's (1947) treatise on bureaucracy and offered formal structure as the determining influence on organizational functioning. Little, if any, attention was given to the emergent structure arising out of the day-to-day operations of the organization. Alternatives to the Weberian view (Blau, 1955; Crozier, 1964; Merton, 1940) pointed out the extent to which emergent patterns of interaction differed from formal structure, reflecting instead the wills and preferences of individual members. Bringing the two views into one frame, Weick (1976) and March and Olsen (1976) argue that the actual pattern of interaction within an organization results from a complex recursive relationship between formal (prescribed) structure and the informal (emergent) behavior of the organization's members.

Although inroads have been made, the views are not yet fully reconciled or integrated beyond general agreement that (a) the two forms of structure influence and are influenced by one another and (b) longitudinal, empirical work is needed to clarify the complex interweaving of prescribed and emergent structure. In this chapter, we use longitudinal data from one organization to explore the "constituted and constitutive" (Ranson et al., 1980, p. 3) connection between prescribed and emergent structures.
Individual and Relational Sources of Resistance

Resistance can result from either active opposition or passive friction. Although some resistance is conscious and intentional (Barbalet, 1985), other types of resistance may occur without active intent simply because of the difficulty in changing "routine-based and history-dependent" behavior (Levitt & March, 1988). Diamond (1986, p. 544) argues that human behavior in times of change is "compulsive, repetitive, security-oriented, and self-sealing." Building from these observations, we argue that active and passive resistance can stem from both individual and relational variables.

Resistance at the individual level can come from at least two sources: attitudes toward the change and the extent to which a person's new job includes new task demands. Diamond (1986) argues that resistance is ignited when attitudes are negative, or competence and security are threatened. Although organizational research has explored how social interaction and structure influence attitudes (Berger & Cummings, 1979; Dean & Brass, 1985; Erickson, 1988; Ibarra & Andrews, 1993; Salancik & Pfeffer, 1978) and how attitudes affect behaviors (Bell & Staw, 1989), this research provides little guidance as to how held attitudes will affect social structure. An early social psychological theory sheds some light on the question: Sarnoff, Katz, and McClintock (1965) assert that individual attitudes serve as the link between a person's feelings and perceptions regarding a change or novel object and the behavior displayed toward that change or object. Attitudes help people make sense of new facets of their environment, linking each new item into a belief set that transmits value and drives behavior. This view of attitudes suggests that in times of change, if members of the organization embrace the change or believe the change will benefit them, they may quickly adapt to new working systems in line with management's dictate. Negative attitudes toward the change should have the opposite effect, decreasing the likelihood that the new social structure will be adapted as prescribed.

The extent to which an individual is subjected to new task demands can also create resistance. Some people's jobs are objectively more affected by an organizational restructuring than are others'. The
more an individual’s tasks are altered, the more likely skills will be underdeveloped and the greater the need for acquiring competence. Tichy (1983) and Diamond (1986) both argue that these conditions will increase the likelihood of individual resistance to change. Resistance as ego defense is tapped into when one is faced with new tasks, decreasing the likelihood of compliance in individuals facing major job changes.

In addition to individual level sources of resistance, we also explore two relational influences on resistance: previous ties that run counter to management’s planned structure—“sticky ties”—and previous ties that are congruent with management’s planned structure—“greasy ties.” Resistance at the relational level is founded in the ingrained habits of past social interaction. Mandating changes in social ties create passive resistance or inertia—that is, resistance that results naturally whenever attempts are made to change the pattern of interacting away from the currently stable social structure. Prescribed changes demand alterations or adaptations in social routines, which normally evolve very slowly. In many organizational routines, people rely on one another for successful completion of individual tasks; they interact with certain people in certain ways during the passage of a workday. Trust and reliability are built up over time, and even when management dictates otherwise, people may continue to “stick” to their old task-based social ties to help them get things done rather than turning to new, untried partners for support. Thus, resistance results to the extent that the new organizational structure requires people to sever existing task-based relationships.

Not only are the old relations hard to let go, it is also difficult to develop new ones. If the new formal structure builds on existing task-based ties, this existing “social grease” will make it easy for workers to increase the frequency or strength of interaction within those ties. In contrast, if the new structure requires interaction where there was no previous task-based relationship, the initial passive resistance may be substantial as individuals take time to test the reliability of new relations.

There is likely to be an interaction between the individual and relational sources of resistance, but it is difficult to predict the direction of these effects. Organizational research provides strong evidence of the effects of social interaction and structure on attitudes (Berger &
Cummings, 1979; Dean & Brass, 1985; Hartman & Johnson, 1989; Ibarra & Andrews, 1993; Rice & Aydin, 1991) but gives little guidance for predicting the potential interaction between the two levels of variables and the resultant effects on compliance with organizational change. Studies investigating the effects of individual variables in strong versus weak situations provide some insight, suggesting that group influence on behavior will be more influential in strong situations than in weak situations, in which individual attributes will be more determinate (Mischel, 1977). In times of organizational restructuring, however, the social structure and social demands of the situation are changing. It is difficult to ascertain, a priori, how strong the situation is likely to be. We therefore treat the investigation into interaction effects as exploratory: We expect individual and relational sources to have interactive effects on resistance but make no predictions regarding directionality.

To summarize our approach, the research questions addressed in this chapter concern the tension between management’s power to prescribe organizational structure and individual and relational sources of resistance. We attempt to answer these questions through longitudinal field research in a metropolitan newspaper undergoing a change in organizational structure—a move from traditional hierarchical departments to more focused “teams.”

**Study Background**

We investigate the attempts of one organization to alter its organizational routines and structures. To examine our questions about resistance to change, we use data from a longitudinal field study of a newspaper called *The Range,* a metropolitan newspaper with a daily circulation of approximately 130,000 and an additional 20,000 readers on Sunday. *The Range* is owned by a large, publicly traded newspaper group. Although there is no direct newspaper competition in the metropolitan area, management is concerned with other competitive media products and the decline of readership penetration (percentage of the adult population in the area that subscribes). In the year prior to the reorganization, circulation growth had not kept up with population growth.
We took advantage of a "natural experiment" at The Range, in which, literally overnight, members of the newsroom were placed into a new organizational structure. Management established "topic teams" and eliminated the traditional "desks" or "beats" that had constituted the organizational structure since the birth of the newspaper. The stated goals of this shift to a team-based production model were to democratize content decisions and to encourage reporters and editors to think more strategically. In the words of the executive editor, the restructuring was an attempt to help reporters "think more like publishers." In this way, the restructuring efforts represent a philosophical change as well as a structural change.

The restructuring efforts at The Range mirror those at many other newspapers across the country. Revolutions in technology and changing consumer tastes have led newspapers to adopt new, more reader-oriented strategies. Newspapers are gradually moving from a journalism model, in which the reporters and editors decide what the reader "should" want, to a marketing model, in which customer tastes and preferences drive the selection and placement of news stories. In the spirit of Chandler's (1962) "structure follows strategy" model, newspapers have begun to change the production process of news, presumably in an attempt to better execute a new, more reader-oriented strategy.

The Change Process

The process of planning the changes in structure began 6 months prior to the final restructuring. A majority of employees in the newsroom participated, studying structural changes in other newsrooms and making recommendations regarding the substance of topic teams' coverage. Social psychology research (Coch & French, 1948; Lewin, 1965) provides unambiguous evidence that active group participation in decisions regarding change facilitates successful adaptation. The high level of participation in the planning process should decrease the aggregate level of resistance to the change because the substance of the change will reflect more of the preferences of those affected and because the process of the change is likely to be viewed more positively. The active participation of newsroom members was a process consciously chosen by management to increase buy-in and to help ensure that the policies chosen were optimal.
There was general, although not universal, agreement among the members of the newsroom that the new topic teams better reflected reader interests than did the traditional beats. Despite active engagement in the planning process, however, many of the newsroom employees, especially reporters, were skeptical of the move toward a marketing-based strategy. Left largely unsaid during the planning process was the reality that restructuring into teams would take away much of the coveted individualism of the reporters within the newsroom.

Viewed from an external perspective, resistance to the change in formal structure was to be expected, but the sources and extent of that resistance were not immediately clear. Our theoretical investigation into the issue and our observation of the newsroom suggested that a member's resistance to the change in formal structure would be influenced by his or her individual attitude toward the change, the extent to which his or her tasks were altered in the change, and the structure of his or her prior task-based ties.

**Changes in Structure and Work Flow**

Before the restructuring, the executive editor oversaw two managing editors, who, in turn, oversaw the reporting desks and functional departments. The newsroom had four desks, each composed of one to three layers of desk editors (supervisors) and reporters covering a basic type of news story—metropolitan news, business, features, and general assignment. In addition, there were three functional departments—copyediting, art, and photography.

The work flow was sequential across desks and functional departments. Within a desk, the reporter received an assignment from a desk editor, wrote the story with input from the editor, and then passed it back to the editor. At this point, when the editor sent the text to the copy department, the story left the reporter and the desk. Copy editors worked in isolation from the desk as they tightened prose and added headlines. The copy department also included page designers who added graphics and photos and formatted the article onto the page. Assistant managing editors were then responsible for getting the paper to production by deadline. Overall, decisions at each step were made independently by whomever was controlling the story at that stage.
In the new formal structure, the newsroom is overseen by two "coordinators" who report to the executive editor. The layers of desk editors have been eliminated and replaced with one supervisory layer, "topic team leaders." The functional departments still exist, but copyediting has been split into two distinct teams—presentation and editing.

The traditional content areas were modified to focus the reporters on the interests of local readers. Nine new topic teams were created to sharpen this focus. Each team is assigned a specific type of story and point of view to emphasize. For example, one team is assigned to report on jobs, employment, and work in the metropolitan area, and its charter is to focus on issues of interest to a consumer (i.e., a reader) rather than report generally about the larger economy.

Work flow in the newsroom was modified so that the emphasis is on integration rather than sequential access. Reporters are more involved with the production of the story and are encouraged to work collectively with their team members and functional staff when making decisions about stories. Similarly but to a lesser degree, functional staff are expected to make their decisions about editing and presentation in concert with reporters and team leaders. Concurrent with the dictate of a new organizational structure, members of the newsroom moved into a new seating arrangement so that the members of each team were in close proximity to one another.

A critical feature of the work in this newsroom, as in all daily newspapers, is the extreme time sensitivity of most tasks. At the beginning of the 10-hr shift in which a newspaper is produced, only advertisements are already produced and placed; at the end of the shift, more than 100,000 copies of the paper are shipped out across the distribution area. A few news stories and editorials are complete before a shift begins, but the vast majority of the editorial content of a newspaper is created within a single shift. (Observing this rate of production is a humbling experience for academics used to 2-year turnarounds.) There are numerous deadlines within a shift: photo deadlines, color deadlines, "wire" deadlines, inside story deadlines for reporters and for copy editors, front page deadlines for reporters and copy editors, layout deadlines, and production deadlines. Content and placement of stories are discussed or argued by editors and representatives of each team in two daily news meetings, but final decisions are often made
minutes before each deadline. Although there is a general mood of congeniality in the newsroom studied, there is little idle conversation.

Design and Data Collection

The findings presented in this chapter are part of a larger longitudinal study of relational and individual influences on organizational functions across time. The data used in answering the questions presented in this chapter were gathered through observation, interviews with management, attitude surveys, and sociometric surveys. Employees were surveyed at two points in time: 2 weeks before the organizational restructuring (Time 1) and 2 months after the change (Time 2).

Sixty-four people were physically present in the central part of the newsroom at the time of the study. This number excludes those whose primary office was outside the central newsroom and those who operated solely out of satellite offices. Survey response rates at Times 1 and 2 were 94.9% and 86.5%, respectively. Responses from the executive editor and the coordinating editors were omitted from the analyses because these editors were the management representatives dictating the change and would not be expected to resist. Two reporters worked as rovers and did not have clearly prescribed interaction structures; their data were also not used in the analyses. Because the analyses require data from both time periods, we include only those observations in which all survey data are complete at both collection periods; thus, 14 observations were removed. In the final analyses, we use data from 46 observations or 76.7% of the central newsroom employees.

Independent Measures

We develop independent measures at two levels to operationalize the individual and relational constructs in our theoretical arguments. At the individual level, we create measures of the attitudes regarding the change and of the extent to which the tasks carried out by each individual were altered in the reorganization. At the relational level, we develop two measures reflecting the prechange social structure of the newsroom.
Data on individual attitudes were collected via a survey given to members of the newsroom 2 weeks prior to the reorganization. The members responded to the following statements:

1. "In your opinion, the change to a team structure in the newsroom is a good idea" (1-7 scale, where 1 = strongly disagree, 4 = neutral, and 7 = strongly agree).

2. "In your opinion, the change to a team structure in the newsroom will result in" (1-7 scale, where 1 = a much worse news product, 4 = no noticeable change in news product, and 7 = a much better news product).

3. "In your opinion, the change to a team structure in the newsroom will result in" (1-7 scale, where 1 = a much worse working environment, 4 = no noticeable change in working environment, and 7 = a much better working environment).

A Cronbach's alpha test showed the three statements could reliably be treated as one scale (α=.858). Therefore, we averaged the responses from the three statements to produce one measure of attitude regarding the upcoming change. The resulting measure of attitudes toward the change in organizational structure varies from 1 (consistent and strong negative attitudes toward the change) to 7 (consistent and strong positive attitudes toward the change). We expect resistance to the new formal structure to be negatively associated with individual attitudes regarding the change—that is, more positive attitudes toward the change will decrease resistance.

To measure individual job change, we created an individual level measure of the extent to which the tasks required for a person's job prior to the restructuring matched those required subsequent to the change. Job change is a trichotomous measure, where 1 is no change in job assignment; 2 is a moderate change in job, such as shifting to a new and unfamiliar reporting beat; and 3 is a significant change in job, such as moving from being a reporter to being a team leader. These data were gathered through personnel records and interviews with the coordinators prior to the reorganization, after all job assignments had been determined. Of the 64 newsroom staff, 12 faced significant job change subsequent to the reorganization, and 25 faced moderate job change. Because significant job change decreases feelings of compe-
tence and increases ego-enhancing defenses, we expect greater job change to result in higher levels of resistance.

The relational-level independent variables were derived from self-reports of interaction with others in the newsroom. In sociometric surveys distributed 2 weeks prior to and 2 months after the reorganization, each person was asked to consider his or her interaction with others in the newsroom and then to answer the following questions:

1. "At work, in person, how often do you interact with this person on job-related issues?"
2. "How often do you rely on this person for task-related support?"
3. "How significant is this person to your overall productivity in the newsroom?"\(^5\)

The first two questions were answered on a 1 to 7 Likert scale, where 1 = never, 3 = a few times weekly, 5 = a few times daily, and 7 = constantly. The third question was answered on a 1 to 7 Likert scale, where 1 = not at all and 7 = critical. Thus, the sociometric data are valued (i.e., scores vary by the strength of the relationship) rather than dichotomous (i.e., scores = 1 if a tie is present and = 0 if no tie is present). Across both time periods, the data revealed high correlations between task-based interaction, helping interaction, and critical work interaction (Cronbach’s alpha = .932 at Time 1 and .941 at Time 2). Therefore, at each time period we averaged the scores from these three measures into a single measure reflecting task-based ties.

The two relational independent variables were derived from this three-item average of task-based ties. The first measure, sticky ties, uses a modified form of a centrality measure and thus operationalizes the overall structure of an individual’s relationships prior to the change. To calculate sticky ties, we summed each worker’s task-based ties with all others in the newsroom, excluding task-based ties with those who will be in the actor’s team subsequent to the change. A high value indicates that the individual is closely tied with a relatively large number of others outside his or her new team, whereas a low value indicates few strong ties to others outside the new team. This measure is called sticky ties to indicate that we expect strong ties to people other than one’s new team members to increase resistance to the change. Sticky ties present a source of friction to the prescribed structural change, making compliance less likely. Subsequently, we predict that
resistance to the new formal structure will be positively associated with the value of sticky ties.

The second independent measure at the relational level, greasy ties, operationalizes the preexisting task-based social ties that provide avenues for compliance to a new social structure. We calculated greasy ties as the average of reported task-based ties, prior to the reorganization, between an actor and all other actors assigned to the same Time 2 team (i.e., the average strength of the task-based ties with all future teammates, as reported by a focal actor at Time 1). This measure is called greasy ties to indicate that we expect strong prior ties to future team members to provide social grease, reducing friction and decreasing passive resistance to the change. Thus, we predict that resistance will be negatively associated with the strength of greasy ties.

To control for spurious association between Time 1 interaction and Time 2 compliance, created by possible variance in similarities between past workplace ties and postchange prescribed interaction, we also created a control variable from the sociometric data. The control variable, “Time 1 actual with Time 2 prescribed,” is the correlation between actual interaction at Time 1 and prescribed interaction at Time 2. Alternatively, we could have calculated the correlation between Time 1 prescribed structure and Time 2 prescribed structure, but this would be misleading and would underestimate the similarities across the two time periods: For example, the prescribed structure for a reporter was to talk only with his or her immediate superior and no one else, but this was not the normal method of accomplishing tasks for any of the reporters. “Time 1 actual with Time 2 prescribed” controls for the possibility that there were differences in the extent to which the restructuring actually placed demands on newsroom employees to change their task-based interaction.

**Dependent Measures**

We created two dependent measures to operationalize resistance or the extent to which the members of the newsroom followed management’s dictate. The first measure, within-team compliance, operationalizes resistance to the mandate to interact actively within teams. We calculated the strength of each worker’s task-based ties within his or her newly assigned team 2 months after the change, relative to his or her task-based ties in the newsroom as a whole. Specifically, we
measure within-team compliance as the average strength (1-7, where 7 is strongest) of the individual's task-based ties with others in his or her team divided by the average strength of his or her task-based ties outside the team. This provides an estimate of the extent to which each individual is working within the team structure dictated by management while controlling for overall sociability or involvement in the task network of the newsroom. High scores on this variable indicate low levels of resistance, whereas low scores indicate high levels of resistance.

The second dependent measure, match, operationalizes resistance to the broader change in organizational structure. We calculated match as a correlation between an individual's prescribed interaction in the new formal structure and his or her actual task-based ties subsequent to the change. This quantifies the extent to which the individual's overall interaction complies with management's dictate. Prescribed interaction patterns were determined through an iterative interview process with the executive editor and one of the two newsroom coordinators. We asked them to describe what the task-based interaction in the newsroom would be if the restructuring were completely successful. Using their answers, we created a sociomatrix, in which the value in each cell reflected the intended level of interaction between the row actor and the column actor. The executive editor and one coordinator then reviewed the matrix and suggested changes where our interpretations did not meet their intentions. We revised the sociomatrix according to their suggestions and used this revised matrix as our "prescribed" matrix. The dependent variable, match, is the correlation between an individual's prescribed interaction vector and his or her reported task-based ties. Consistent with the interpretation of within-team compliance, high scores on the match variable indicate low levels of resistance, whereas low scores indicate high levels of resistance.

Results

Before discussing our research questions, we first present the means, standard deviations and the simple pairwise correlations across all variables (Table 3.1). Greasy ties, average strength of Time 1 ties to Time 2 team members, are highly and positively correlated with the
TABLE 3.1 Variable Descriptives and Correlations

<table>
<thead>
<tr>
<th>Descriptive statistics</th>
<th>Mean</th>
<th>SD</th>
</tr>
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<tr>
<td>(N = 46)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 actual correlation with T2 prescribed</td>
<td>.326</td>
<td>.247</td>
</tr>
<tr>
<td>Job change (1–3)</td>
<td>1.956</td>
<td>.918</td>
</tr>
<tr>
<td>Attitudes (1–7)</td>
<td>4.710</td>
<td>1.190</td>
</tr>
<tr>
<td>Sticky ties (sum)</td>
<td>131.116</td>
<td>35.567</td>
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<tr>
<td>Greasy ties (average)</td>
<td>3.066</td>
<td>1.306</td>
</tr>
<tr>
<td>Attitude x sticky interaction</td>
<td>13.112</td>
<td>42.975</td>
</tr>
<tr>
<td>Attitude x greasy interaction</td>
<td>.136</td>
<td>1.890</td>
</tr>
<tr>
<td>T2 within team compliance</td>
<td>2.293</td>
<td>.752</td>
</tr>
<tr>
<td>Match-T2 actual and prescribed</td>
<td>.616</td>
<td>.140</td>
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<tr>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tr>
<td>1. T1 actual with T2 prescribed</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Job change</td>
<td>-.241</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>3. Attitudes</td>
<td>.248*</td>
<td>.169</td>
<td>1.000</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>4. Sticky ties</td>
<td>.237</td>
<td>-.165</td>
<td>.381**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Greasy ties</td>
<td>.638**</td>
<td>-.396**</td>
<td>.161</td>
<td>.479**</td>
<td>1.000</td>
<td></td>
<td></td>
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<tr>
<td>6. Within team compliance</td>
<td>.060</td>
<td>.207</td>
<td>-.062</td>
<td>-.270*</td>
<td>.145</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>7. Match-T2 actual and prescribed</td>
<td>.120</td>
<td>.466**</td>
<td>.242</td>
<td>-.030</td>
<td>-.018</td>
<td>.495**</td>
<td>1.000</td>
</tr>
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a. Normalized variable.

*Correlation is significant at the .10 level (two-tailed).
**Correlation is significant at the .01 level (two-tailed).

control variable, Time 1 actual with Time 2 prescribed. This is to be expected because individuals with higher levels of prechange interaction with their soon-to-be team members have a closer fit between what they were actually doing in Time 1 and what the restructuring prescribes for them in Time 2. Similarly, job change is negatively and significantly correlated with greasy ties; higher values of job change result when an actor is taken out of his or her current position and assigned to interact with a new task group. Attitudes at Time 1 are positively and significantly correlated with sticky ties at Time 1: Those who are more central in the task-based network are more likely to have a positive attitude about the change. Sticky ties are positively and significantly correlated with greasy ties, suggesting that some people are generally more social than others. Job change has significant pairwise correlations with the match-dependent variable.
The two dependent variables were designed to operationalize the same construct, resistance to (or, conversely, compliance with) the new organizational structure. Within-team compliance operates at the within-team level, whereas match operates at the newsroom level. As expected, the two dependent variables operationalizing the emergent structure are significantly correlated, although they are far from identical. Those who resist working closely with their new team members also tend to resist working within the dictates of the newly organized larger structure.

The first question we explore in the analysis is whether employee resistance can neutralize management's power to change emergent structure through a change in formal structure. To investigate this, we computed the correlation between self-reported task-based ties and prescribed interaction at Time 2 and compared this association to the correlation between self-reported task-based ties across Time 1 and Time 2. In other words, we checked to see whether emergent task-based structure subsequent to the change is more like the newly prescribed structure or more like the informal task-based structure of the past. If employee resistance outweighs management's power, the correlation of actual interaction across time should be noticeably greater than the cross-sectional correlation between actual and prescribed structures at Time 2. At the newsroom level, the correlation between actual interaction at Time 2 and prescribed interaction at Time 2 is .617 (SD = .140, p < .01), suggesting that employees are complying to a significant degree with the dictates of management. Also at the newsroom level, the correlation between self-reported interaction at Times 1 and 2 is .578 (SD = .244, p < .01), suggesting there is also a substantial overlap between one's pattern of task-based interaction before the restructuring and one's pattern after the restructuring. The correlation between Time 1-reported task-based ties and prescribed interaction at Time 2 at the newsroom level is .314 (SD = .259). Hence, the overlap is due partially to similarities in past interaction and present formal structure but also partially to resistance. The power of management has not been completely thwarted, but there does appear to be resistance in action.

To address the questions regarding the roles of individual and relational influences on resistance, we tested four models for each dependent variable (Tables 3.2 and 3.3). Because of high multicollinearity when multiplicative terms are used in regression analyses with
**TABLE 3.2 Regression Models Explaining Within-Team Compliance**

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<tr>
<td></td>
<td>B Coefficient (SE)</td>
<td>B Coefficient (SE)</td>
<td>B Coefficient (SE)</td>
<td>B Coefficient (SE)</td>
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<tr>
<td></td>
<td>β (t)</td>
<td>β (t)</td>
<td>β (t)</td>
<td>β (t)</td>
</tr>
<tr>
<td>T1 fit with T2 prescribed</td>
<td>.528 (.496)</td>
<td>.340 -.112</td>
<td>-.330 .109</td>
<td>-.135 -.045</td>
</tr>
<tr>
<td>Job change</td>
<td>.242 (.134)</td>
<td>.271 .331</td>
<td>.275 .336</td>
<td>.288 .351</td>
</tr>
<tr>
<td>Attitudes*</td>
<td>-1.04 (.104)</td>
<td>-.005 -.007</td>
<td>-.007 -.001</td>
<td>-.025 -.039</td>
</tr>
<tr>
<td>Sticky tiesa</td>
<td>(.104) -.999</td>
<td>(.102) -.044</td>
<td>(-.105) -.064</td>
<td>(.094) (-.262)</td>
</tr>
<tr>
<td>Greasy tiesa</td>
<td>(.004) -2.753***</td>
<td>(.004) -2.721***</td>
<td>(.003) (-2.005)*</td>
<td>(.340) (.196)</td>
</tr>
<tr>
<td>Attitudesa x stickya</td>
<td>(.119) (2.737)***</td>
<td>(.121) (2.702)***</td>
<td>(.119) (1.647)</td>
<td>(.119) (1.647)</td>
</tr>
<tr>
<td>Attitudesa x greasya</td>
<td>(-.000) (-.017)</td>
<td>(-.003) (-.119)</td>
<td>(-.158) (-.398)</td>
<td>(-.158) (-.398)</td>
</tr>
</tbody>
</table>

F-model  | $F_{(3, 42)} = 1.178$  | $F_{(5, 40)} = 2.932^{**}$  | $F_{(6, 39)} = 2.386^*$  | $F_{(6, 39)} = 4.264^{***}$  |
| $R^2$   | .078                   | .268                   | .268                   | .396                   |
| F change | 5.210***               | .014p                  | 8.262***               |

a. Normalized variable.

b. Relative to Model 2.

*p < .10; **p < .05; ***p < .01; ****p < .001
### TABLE 3.3 Regression Models Explaining Match Between Prescribed and Actual Structure

<table>
<thead>
<tr>
<th>Model</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B Coefficient (SE)</td>
<td>β (t)</td>
<td>B Coefficient (SE)</td>
<td>β (t)</td>
</tr>
<tr>
<td><strong>(Constant)</strong></td>
<td>.440</td>
<td>(.060) (7.294)***</td>
<td>.449</td>
<td>(.063) (7.134)***</td>
</tr>
<tr>
<td><strong>T1 fit with T2 prescribed</strong></td>
<td>.111</td>
<td>(.081) (1.383)</td>
<td>.080</td>
<td>(.103) (.780)</td>
</tr>
<tr>
<td><strong>Job change</strong></td>
<td>.72</td>
<td>(.022) (3.296)***</td>
<td>.073</td>
<td>(.024) (3.095)***</td>
</tr>
<tr>
<td><strong>Attitudes</strong></td>
<td>.017</td>
<td>(.017) (1.003)</td>
<td>.021</td>
<td>(.019) (1.120)</td>
</tr>
<tr>
<td><strong>Sticky ties</strong></td>
<td>-.000</td>
<td>(.001) (-.575)</td>
<td>-.094</td>
<td>(.001) (-.501)</td>
</tr>
<tr>
<td><strong>Greasy ties</strong></td>
<td>.012</td>
<td>(.022) (.543)</td>
<td>.110</td>
<td>(.021) (.346)</td>
</tr>
</tbody>
</table>

\[
\begin{align*}
F_{(3, 42)} &= 5.777^{***} \\
F_{(5, 40)} &= 3.424^{**} \\
F_{(6, 39)} &= 4.186^{***} \\
F_{(6, 39)} &= 3.215^{**}
\end{align*}
\]

- *F* — model
- *R*²
- *F* change

---

a. Normalized variables.
b. Relative to Model 2.

---

<sup>*</sup>p < .10; **p < .05; ***p < .01; ****p < .001
main effects, Cronbach (1987) and Jaccard, Turrisi, and Wan (1990) suggest using normalized main effect variables in the multiplicative term and the associated main effect terms. Following this method, we normalized the attitude, sticky ties, and greasy ties variables by subtracting the respective mean from each observation. The regressions reported throughout this section use the normalized variables as the main effect terms and their products as the interactive terms.

Model 1 tested the prediction that resistance to management’s power to determine emergent structure lies fundamentally at the individual level. Job change and individual attitudes regarding the change are entered along with the control for the correlation between Time 1 interaction and the new prescribed structure. Model 2 tested the prediction that resistance to management’s power has important determinants at both individual and relational levels. Sticky ties and greasy ties are entered simultaneously with the individual level variables in the equations. Finally, Models 3 and 4 tested the prediction that individual attitudes interact with relational variables to create significant resistance to management’s power to change interaction patterns. In Model 3, the interaction between individual attitudes and sticky ties is added and the results are compared to those of the main effect model (Model 2). Similarly, in Model 4, the interaction between individual attitudes and greasy ties is added to the equation and the results are compared to those of the main effect model.

Table 3.2 shows the effects of individual and relational variables on “within-team compliance,” the strength of individuals’ Time 2 ties to their newly assigned team members, relative to their overall levels of task-based interaction within the newsroom. Low levels of compliance with the dictate to interact as a team are indicative of higher levels of resistance. In Model 1, the overall regression testing the effects of individual variables alone is not significant. Individual variables appear to have little independent effects on resistance within a newly formed team. Model 2 produces a significant increase in fit compared to model 1 (F change [2, 40] = 5.210, p < .01). The overall regression is significant, explaining 26.8% of the variance in the strength of within-team ties. The change in squared multiple correlations indicates that 19% of the variance in within-team compliance is due to one’s prior relations with others in the organization. Sticky ties have a significant and negative effect, as predicted, indicating that strong prior ties with
many people outside one's new team are likely to inhibit within-team interaction. Greasy ties have a significant and positive effect, also as predicted, indicating that within-team interaction is facilitated by prior ties with new team members. Both these effects are very strong despite the control for the amount of overlap between one's prior overall task network and one's prescribed task network subsequent to the restructuring. With the inclusion of the relational variables, job change now exhibits a significant effect in a positive direction, opposite that hypothesized. In Model 3, we added the interaction term between attitudes and sticky ties. The variance explained remains at 26.8%, and the regression is only marginally significant, indicating that the main effects model (Model 2) is a better fitting model.

In Model 4, we added the interaction term between attitudes and greasy ties to the main effects model. The results show this to be the best fitting model of the four. This interaction model produces significantly better fit than the main effects model (F change [1, 39] = 8.262, p < .01) and increases the variance explained to 39.6%. The strength of the interaction effect can be seen in the difference between the squared multiple correlation for the interaction model and that of the main effects model: The interaction between greasy ties and attitudes accounts for a notable 12.8% of the variance in within-team compliance. The main effects for greasy ties and attitudes are not significant. The main effect for sticky ties remains negative and marginally significant (p = .052). Effects for job change remain positive and significant.

To examine the interaction more closely, we treated attitudes as the moderator variable and trichotomized it at one standard deviation above and below the mean and then graphed the effects on within-team tie strength at Time 2 (Figure 3.1). The results are striking: The effects of greasy ties on within-team compliance are flat for those with neutral or positive attitudes, but for those with negative attitudes more greasy ties lead to significantly higher levels of compliance.

Table 3.3 shows the effects of individual and relational variables on match, the correlation between prescribed interaction and emergent interaction across the newsroom. Model 1 shows strong support for the effects of individual variables. The overall regression is highly significant, explaining 29.2% of the variance in the dependent measure. The effects are driven by the strong, positive influence of job change on match—that is, once again contrary to predictions, job change
Figure 3.1. Within-Team Compliance: The Interactive Effects of Attitudes and Greasy Ties

decreases resistance. Adding the relational variables in Model 2 provided no additional explanatory power over the individual variables alone ($F$ change $[2, 40] = .217$, $p > .1$).

The fit is significantly increased when the interaction between attitudes and sticky ties is added in Model 3 ($F$ change $[1, 39] = 5.900$, $p < .05$). The interaction explains an additional 9.2% of the variance, raising the $R^2$ to .392. Job change remains positive and significant. Once again, we treated attitudes as the moderator variable, trichotomizing it one standard deviation above and below the mean to index the interaction effect. The results are presented graphically in Figure 3.2. For those with average attitudes toward the change, prior ties have no effect on the match between prescribed structure and actual task-based interaction. For those with strongly positive or negative attitudes, however, sticky ties have a significant effect on match. For individuals with positive attitudes toward the change, many strong prior ties to nonteam members increase the match between prescribed and emergent interaction; in contrast, many sticky ties decrease the match when attitudes toward the change are negative. Model 4, which adds the interaction between attitudes and greasy ties to Model 2, provides no significant increase in fit over the main effects model.
In summary, for both dependent variables, the best fitting model is one that includes the effects of an interaction between individual attitudes and a social variable. The associated social variable differs across the two dependent variables. An interaction model including the interaction between greasy ties and attitudes provides the best fit when the dependent variable is within-team compliance, explaining 39.6% of the variance in resistance to the team structure. When the dependent variable is the post-restructuring correlation between actual interaction and prescribed interaction across the newsroom, the best fit is provided by an interaction model including the interaction between sticky ties and attitudes. This model explains 39.2% of the variance in resistance to the larger formal structure.

**Discussion**

We began our study by asking two basic questions: Can employee resistance neutralize management's power to change social structure by
changing the formal organizational structure? and What roles do individual sources and relational sources of resistance play? Our results provide strong support for the contention that employee resistance plays an important role in power relations during organizational change. Employee resistance counters, but does not eliminate, management's power to change social structure. The analyses we present illustrate clearly that resistance stems from both individual and relational sources, and that these sources interact with one another to shape the emergent social structure within the organization.

Regarding the first question, our data show that actual interaction patterns are a function of both formal organizational arrangements (in this case, management's changes in those arrangements) and the existing social structure. Patterns of task-based interaction are not completely impervious to manipulation, but neither are they completely malleable. The relative success of this restructuring effort may be, in part, due to the high level of group involvement in the change process because groups that participate in change efforts are more likely to comply with the new order (Coch & French, 1948). Because of this, we present a conservative test of employee resistance and a generous test of compliance: Resistance in organizations in which the changes are determined less participatively is likely to be greater, whereas compliance is likely to be reduced. Returning to our original question about power and resistance, management appears to possess some power to alter routines, but that power is limited by resistance rooted in the deep structure of the organization.

Having established that at least some resistance is present, using our second set of analyses we attempted to understand more about the various sources of that resistance. Just as researchers have challenged the notion of power being an individual trait or characteristic (Pfeffer, 1981), we challenge the notion that resistance stems only from individual factors or only from structural factors. Our data show sources of resistance at the two levels have an interactive effect on management's ability to implement structural change.

We proposed two individual-level predictors—attitudes regarding the restructuring and the amount of job change experienced in the tasks performed by the individual. We also proposed two relational predictors—sticky ties, prechange ties with others who are not on one's team subsequent to the reorganization, and greasy ties, prechange ties to one's future team members. To isolate individual and relational sources
of resistance to change, we developed two correlated but distinct measures of employee adaptation. Within the team, we examined individual and relational influences on the degree to which individuals were in fact interacting more closely with their new team members than with other newsroom members subsequent to the reorganization. Across the organization (the newsroom in this case), we tested for effects on the correlation between prescribed and actual task-based ties. Not only were individuals asked to interact intensely with the members of their new team but also they were expected to develop different relationships with others in the newsroom—for example, copy editors, other team leaders, the newsroom coordinators, and the executive editor. Our second measure of compliance takes this broader mandate into account.

Employee attitudes toward management’s change initiatives showed little effect on resistance when considered independently of social variables. The influence of attitudes becomes clear only when simultaneously considering the individual’s location in the prior social network. At the within-team level, strong prior ties to new team members facilitate interaction within the new team for those with negative attitudes toward the change. At the newsroom level, prior ties to others in the newsroom facilitate acceptance of the larger formal structure for those with positive attitudes toward the change but decrease acceptance for those with negative attitudes toward the new structure. Taken together, these results suggest that a full understanding of resistance must include a consideration of how relational and individual sources of resistance interact to influence the emergent structure of a changing organization.

Examining the interactions in more detail provides some insights into the mechanisms behind these effects. Greasy ties and attitudes interact to create a substantial effect on resistance to the team structure: A history of strong social ties to one’s new teammates mitigates the effects of individually held negative attitudes. In fact, those with highly negative attitudes toward the change and strong prior ties to new team members exhibited the least resistance to working within their new teams. These people did not “buy in” to the change overall, but they found it comfortable to work with others whom they already knew well. Although the change whisked about them, they found solace in the familiarity of their new team. One reporter who was strongly against the change but knew most of the people in her new
team stated, "I personally feel more isolated from the rest of the news-
room, except within my team."

In contrast to the interactive effects of greasy ties and attitudes on 
within-team compliance, it is sticky ties and attitudes that interact to 
determine compliance with the larger organizational structure. For 
those individuals who report positive attitudes toward the change, 
strong prechange ties to people outside one's future team increase the 
match between prescribed and emergent structures. For people with 
negative attitudes toward the change, the opposite is true—stronger 
external relations decrease compliance. They seem to resent the man-
date to interact less with their tried and true coworkers. One person 
stated, "Restructuring has made me feel more competitive . . . against 
other people and other teams." Although strong and wide-ranging 
task-based ties provide a mechanism for compliance for those who are 
accepting of a change, for those who are negative toward a change 
these ties provide an anchor for resistance.

Changes in workers' tasks had the opposite effect of what we 
predicted: More change in tasks led to greater acceptance of the new 
structure. Many reporters in the newsroom underwent significant 
change in job tasks. Some reporters changed to new and unfamiliar 
beat topics, areas of expertise with which they had little familiarity. 
Others moved from being a reporter to being a team leader and there-
fore had to learn a new set of managerial tasks. We expected that these 
changes would generate anxiety over a potential lack of skills and fear 
of incompetence. Such changes have been found in prior studies to lead 
to strongly held ego-enhancing attitudes (Sarnoff et al., 1965) and have 
been argued to lead to increased resistance (Tichy, 1983). Instead, we 
found a slight positive correlation between job change and attitude and 
a strong negative relationship between job change and resistance.

To obtain a finer, and possibly more revealing, analysis of the 
effects of job change, we ran additional regressions representing job 
change with two dummy variables in the fully fitted models. The 
results revealed that for both within-team compliance and across-
newsroom match, those with little or no change in their specific task 
were significantly more likely to resist the new structure than were 
those facing moderate or significant change. Post hoc, there appear to 
be several factors that can explain these effects, factors that we failed 
to consider in our initial assessment. First, the job assignments were 
voluntary in nature: Individuals listed their top three job choices in the
newsroom, and estimates given by management indicate that nearly 60% got their first or second choice. Second, for individuals voluntarily taking on a new job, being asked to interact with new people in a new structure was only an incremental adjustment. Both types of adjustment were likely seen as parts of a larger change. In contrast, those who remained in their current job were doing the same things, so asking them to do it in a different way with different people was likely to be more ego threatening and create greater resistance. Finally, many of these reporters had been doing essentially the same job for years. Perhaps these reporters were bored and a change in task was welcomed, irrespective of their attitudes toward the larger structural change. Our understanding of resistance would be enhanced if future research could tease apart the different effects of change in the task itself versus change in the larger structure. The voluntary nature of changes in individual job assignments may be an important contingent variable.

Because organizational change occurs across time, the analyses we performed have important temporal components that could only have been addressed using longitudinal data. Attitude and relational variables were based on survey and sociometric responses gathered 2 weeks prior to the restructuring, whereas the dependent measures of postchange structure were collected through sociomatrices completed 2 months after the change. Job change compares tasks being performed by individuals prior to the change to those assigned in the restructured organization. Similarly, the control variable for overlap in social structure across time correlates past task-based ties with ties prescribed in the new structure. It is often necessary to collect network data at one point in time and ask people to recall whether the ties were present or absent at some given point in the past (Podolny & Baron, 1997) or how long the tie has been in place (Burt, 1992). This is appropriate for many questions but is problematic for tracing changes in social structure. Our data offer significant advantages beyond the typical cross-sectional investigations of power and influence in exploring structural change across time and sorting out direction of causation. Even two time periods, however, can be problematic. Because difficulties in causal inference may exist when only two time periods are used (Finkel, 1995), future research on structural change should test the robustness of these effects by collecting data at multiple time periods.

This research contributes useful knowledge about power and resistance during times of organizational change. It also provides
new insights into emergent social structure. Results reveal a complex relationship between emergent social structure and prescribed social structure, with management's power being limited by individual factors as well as relational factors. Important interactions across levels further influence power relations. Information regarding individuals' attitudes toward change as well as information about the routines embedded in the workplace can be used to inform the prescribed changes in structure. These efforts can minimize resistance and, in turn, may lead to an emergent structure that more closely follows the prescribed formal structure.

If a reorganization requires deep shifts away from current social structures, the social system may create blocks in the implementation of management's prescriptions, most notably for those individuals who do not believe in the value of the change. Influencing behavior entails more than formal power and more than just winning over people's minds; it depends on understanding how current social structure interacts with minds and hearts to influence people's ability and willingness to do things a different way.

Notes

1. The name of the paper has been changed to provide confidentiality to the organization and the individual respondents.
2. "Wire" stories are those purchased from one of the major national wire services (e.g., the New York Times and Associated Press). Wire stories are adapted by staff at the local paper to fit the local reader and space requirements.
3. Data from three subsequent time periods were also collected but were not used in this study.
4. Two open-ended questions were also asked. The responses to these questions are not used in this analysis.
5. Three other questions regarding expressive interaction and use of alternative media were also included in the survey. The responses to these questions are not used in this study.
6. Because job change is a trichotomous measure, we tested for linearity. The results show that there is significant linearity in the variable. We also tested all the models using two dummies for the job change variable. The results were not qualitatively different: All the same variables were significant at approximately the same level in all eight equations. We therefore chose to present the less complex equations, treating job change as an interval variable.
7. The correlation between the two interactions terms is .758, suggesting that multicollinearity, and hence interpretability, would be a problem if both were entered in the same equation.
References


