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**“DISCURSIVE
OPENING” AND
CLOSING IN
ORGANIZATIONAL
SELF-STUDY**

Culture as Trap and Tool in
Wildland Firefighting Safety

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This article describes the practice of organizational self-study and examines its potential to create "discursive openings" in systematically distorted communication, particularly when members engage new discourses to investigate subjective and objective features of their own organizational lives. It investigates a recent self-study undertaken by the U.S. Forest Service to diagnose and solve safety issues in wildland firefighting. The analysis reveals how engaging a new discourse allowed firefighters to imagine a new culture where they would be encouraged to think rather than just obey rules. But certain discursive closure moves reinforced the constitutive steering medium of bureaucratically managed safety rules, and potentially thwarted cultural change hoped for by organizational members and demanded by legitimating third parties.

Keywords: *discursive closure; discursive opening; organizational communication; organizational culture; organizational self-study; U.S. Forest Service; wildland firefighting*

In the course of organizational life, members engage in explicit moments of organizational self-reflection, where they actively study their own organizational meanings and practices. They may do so voluntarily or under pressure by some third party, and a committee may be formed for this purpose. An organizational self-study may culminate in the documentation of the procedures and processes, and it may result in a presentation to an internal group in oral or written form, and it may even include recommendations for change.

An organizational self-study may be as minor as making small modifications to a system that seems to be working well in many respects. For example, members may undertake a so-called procedural audit to ensure that established decision-making procedures properly engage desired values. In other cases, an organizational self-study may entail a complete reexamination of procedures and policies. Whether it involves a minor procedural fix or a full-blown search to root out organizational pathologies, we can define organizational self-study as any kind of deliberate and systematic self-reflection undertaken for the purpose of gaining knowledge about objective and subjective features of organizational life.

Organizational communication scholars are in an excellent position to examine the discursive complexities involved when members study their own organizations. Members may employ existing organizational discourses to assess their organizations, such as, "Are we making decisions fairly? Are we being efficient?" In these cases, we can examine the productivity or limitations of the prevail-

ing discursive frames (e.g., Morgan, 1997; Putnam, Phillips, & Chapman, 1996). However, in other cases, organizational members may adopt new discourses to capture previously unacknowledged or otherwise ineluctable elements of organizational life. The emerging popularity of the “academic audit,” for example (see, e.g., Massy, 2003), engages the academic world with financial language, presumably to highlight values of efficiency and return on investment (for a related critique of this perspective, see McMillan & Cheney, 1996). In these instances, we can assess the implications of the newly adopted discourse and track how members negotiate meanings between the old and new discursive frames.

Because organizational self-studies require decisions about how to carry them out, which topics to investigate, and which meanings to bring to bear, they are likely to involve power struggles. A critical perspective on organizational communication can be helpful for understanding the discursive struggles that might arise in such collective organizational self-examinations. The critical perspective can also help illuminate the potential for self-studies to “open up” organizational discourse to better represent the interests of multiple stakeholders (Deetz, 1992a). To explain these statements, it is necessary to review what is meant by open and closed discourse and the stakeholder model.

OPEN AND CLOSED DISCOURSE

When critical scholars speak of organizational communication being “open” or “closed,” they are generally referring to whether organizational discourse is “discursively redeemable” (e.g., Alvesson & Deetz, 1996; Deetz, 1992a; Deetz & Mumby, 1990; Power & Laughlin, 1992). In *The Theory of Communicative Action*, Habermas (1984, 1987) posited that a key crisis of late modernity is that regulatory systems can take on a life of their own such that they no longer answer *to* the lifeworld; rather, they begin to constitute it and become steering media *for* the lifeworld. Habermas called this a “legitimation crisis” and cited pragmatics theory for proof of this distortion. Specifically, a constitutive steering medium such as “money” or “power” violates the ideal speech

situation because it is not redeemable at the level of discourse (Power & Laughlin, 1992). In other words, communication is systematically distorted when an operative steering medium cannot be questioned by appealing to any or all of the four validity claims inherent in any communicative interaction—clarity, truthfulness, correctness, and appropriateness (Lyytinen, 1992, p. 166; see also Forester, 1992).

Organizational communication scholars have adapted Habermas's ideas to show how certain steering media may come to constitute the lifeworld of contemporary organizations (e.g., Deetz, 1992a, 1992b; Power & Laughlin, 1992). Communication is said to be systematically distorted in organizations when procedures, policies, rights of participation, and even preferred ways of being are continually reproduced and unable to be questioned by multiple organizational stakeholders (Deetz, 1992a, 1995).

Constitutive steering media in either process or content can create systematically distorted communication in organizations. For example, sometimes organizational issues can only be questioned within the confines of established decision procedures, rather than be about the decision-making process itself (Deetz, 1992a, p. 180). Or, dominant meaning systems can function as distortive steering media when "certain experiences and identities [become] preemptively preferred over equally plausible ones" (Deetz, 1992a, p. 174; see also Deetz & Mumby, 1990).

Whereas the term "systematic distortion" usually characterizes an entire communicative system, "discursive closure" usually refers to the suppression of a particular conflict. Discursive closure can certainly result from intentional instances of managerial coercion (Mattson & Buzzanell, 1999; Redding, 1996), but many studies emphasize how it can also arise even with the best intentions (e.g., Cheney, 2000; Kassing, 2001; Markham, 1996; Morgan, 2001; Ruud, 2000; Thackaberry, 2000; Zoller, 2000; Zorn, Page, & Cheney, 2000). For example, managers may simultaneously champion inclusive ideals yet continue to privilege dominant interests, such as by conscripting "permissible" versions of diversity (e.g., Cheney, 2000). Similarly, employees may be likely to "enthusiastically participate" in their own domination when discourses of empowerment and participation function as a backdrop for other-

wise top-down management imperatives (Zorn et al., 2000, p. 556; see also Morgan, 2001).

The ideal speech situation has been critiqued for its reliance on intellectual reasoning and a universal pragmatic ideal (e.g., Deetz, 1992a), yet it is still retained as a useful heuristic because it “provides a basis for illuminating pathological or distorted forms of communication” (Power & Laughlin, 1992, p. 123). Generally, critical organizational scholars depart from Habermas’s modernistic “consensus” view for remedying systematically distorted communication (e.g., Alvesson & Deetz, 1996; Power & Laughlin, 1992). Instead, influenced by postmodern theory, many critical organizational communication scholars regard apparent order in group settings as only a temporary suppression of conflicting interests (Alvesson & Deetz, 2000; Deetz, 1992a; Giddens, 1979; Habermas, 1979), and organizations themselves as sites of discursive struggle (e.g., Deetz & Mumby, 1990; Mumby, 2001). “Open” communication in organizations, then, refers to the ability of organizational stakeholders to question sedimented procedures, meanings, rights of participation, and even preferred ways of being (Alvesson & Deetz, 1996; Deetz, 1992a; cf. Eisenberg, Murphy, & Andrews, 1998).

IDENTIFYING MOMENTS OF DISCURSIVE OPENING

To date, critical studies have tended to regard systematical distortion as an evitable feature of contemporary organizational life, with the “discourse of managerialism” as a prevalent constitutive steering medium (e.g., Deetz, 1992a; Deetz & Mumby, 1990). Even recent examinations of resistance in organizations (e.g., Gibson & Papa, 2000; Kunda, 1992; Mumby, 1997; Murphy, 1998; Trethewey, 1997, 2001) have tended to focus on resistance that occurs within systems where communication is already systematically distorted. However, it is also important to search for moments of “discursive opening” that might lead to productive changes toward representing the interests of a variety of stakeholders.

Organizational self-study may represent one such moment in organizational life. Indeed, the very perception that a self-study is needed might signal that a particular steering medium has overtaken the organizational lifeworld, and that conversations need to be reclaimed about "how things should be done around here," including whose voices should be included. To the extent that an organizational self-study is bracketed from the normal routine as a markedly different kind of event, it may encourage the participation of otherwise disenfranchised organizational members who view it as an opportunity for a significant change. And, to the extent that an organizational self-study tries on a new discourse to understand organizational reality in new terms, these new voices can potentially appropriate and shape emerging discourses in unpredictable and even creative ways.¹

Following from the critical perspective, if organizations are sites of discursive struggle, then organizational self-studies would necessarily entail discursive struggles as well. There may be struggles over how to carry out the study,² which areas to investigate, and which meanings to bring to bear. Even when organizational self-studies do result in productive new regulatory systems, these may become so bureaucratized that they become constitutive steering media and hence colonize the lifeworld yet again. As Zorn, Christensen, and Cheney (1999) pointed out, for example, many organizations now pursue change for its own sake. In the vocabulary of critical theory, we can understand change as a once-useful tool that can become a constitutive and therefore distorting steering medium.

Thus, in addition to looking for productive discursive openings in organizational self-studies, it is also important to examine the manner in which a self-study is carried out to determine what happens to the articulation of interests in the final decisions. A self-study that simply masks the status quo yet provides the appearance of participation and organizational change may actually be more damaging than one never undertaken at all. A critical examination helps us understand how organizational problems may be "solved" but not "addressed" (Deetz, 1992a, p. 178) in even the most promising organizational self-studies.

This article examines the possibilities for discursive opening in a recent organizational self-study undertaken by the U.S. Forest Ser-

vice (USFS) regarding safety issues in its wildland firefighting operations. In 1994, 14 firefighters were killed in a “blowup” on Storm King Mountain near Glenwood Springs, Colorado (MacLean, 1999). The accident investigation team cited firefighters’ apparent disregard for safety rules as a direct cause of the tragedy (USFS, 1994). As a result, the agency chartered a study to identify and to change the so-called organizational culture issues that may have been interfering with safety on the fireline. The next section reviews the tradition of research in communication and control at the USFS, explains the agency’s rationale for undertaking the study, and explains why the texts that emerged from it are worthy of analysis.

COMMUNICATION AND CONTROL IN THE USFS

The study of communication and control at the USFS has an established history in the field of organizational communication. Tompkins and Cheney (1985), for example, coupled Kaufman’s (1960) classic analysis of control in the Forest Service with Simon’s (1949/1997) concept of “unobtrusive control” to show how unobtrusive control is an essentially rhetorical process involving organizational identification. Using this same frame, Bullis and Tompkins (1989) replicated the Kaufman study and found that nearly 30 years later, control at the Forest Service was becoming less reliant on identification and was becoming more reliant on bureaucratic means (p. 288).³

Although the formal study of forestry and wildland firefighting continued in other fields (for a review, see Pyne, Andrews, & Laven, 1996), communication studies of the Forest Service were once again renewed with the release of Norman MacLean’s (1992) *Young Men and Fire*, a best-seller that reconstructed the Mann Gulch disaster that killed 13 elite smokejumper firefighters in the remote Montana wilderness in 1949. Weick (1993), for example, gleaned from MacLean’s account the importance of “dropping one’s tools” in the face of organizational change (also see Rothermel, 1993); he even extended this advice to management theorizing (e.g., Weick, 1996). Interest in leadership and control on the fireline continued in the 1990s, particularly after the Storm

King Mountain tragedy struck down 14 elites in a tragedy similar to Mann Gulch (e.g., Alder, 1997).

Whereas those studies tend to focus communication among actual firefighters on the fireline, the data for this article stem from a larger project examining how the Forest Service as a corporate entity has managed threats to its legitimacy that have emerged from these organizational tragedies. Thus, rather than focus on decisions that were made on a particular fireline, this article focuses on the organization's recovery period since the 1994 Storm King Mountain tragedy. This recovery period includes an organizational self-study undertaken by the agency from 1996 to 1998, as well as another fire that took the lives of four more firefighters in Washington state in 2001. Fallout from the so-called Thirtymile Fire has also raised questions about the effectiveness of the self-study in retrospect.

THE SAFETY AWARENESS STUDY

Both the 1994 Storm King Mountain and the 1949 Mann Gulch fires involved the deaths of elites in a sudden acceleration of fire known as a blowup. As such, many have compared the two fires to each other (e.g., Alder, 1997; Everly, 1994; MacLean, 1999; Perez-Pena, 1994; Pyne et al., 1996). However, there was one important organizational difference between the two fires. In 1949, there were no safety rules in effect (Sallee, cited in Wolfinger & Bacon, 2002), whereas in 1994, many safety rules were in effect. Specifically, the "Ten Standard Fire Orders" and the "Eighteen Watchout Situations," provided for illustration in Tables 1 and 2, respectively, have been taught for decades to all firefighters who fight fires on federal wildlands. Besides functioning as a means of control, the "10/18," as they are called, also function as a discursive resource for assigning blame in the wake of accidents (Thackaberry, 2003; Tri-Data Corporation [Tri-Data], 1998). For example, the official accident investigation for the Storm King Mountain fire determined that the firefighters' "can-do" attitude led them to compromise "Eight of the Ten Standard Firefighting Orders," and to disregard "Twelve of the Eighteen Watchout Situations" (USFS, 1994,

TABLE 1: The Ten Standard Fire Orders (circa 1994)

Fight fire aggressively but provide for safety first
Initiate all action based on current and expected fire behavior
Recognize current weather conditions and obtain forecasts
Ensure instructions are given and understood
Obtain current information on fire status
Remain in communication with crewmembers, your supervisor, and adjoining forces
Determine safety zones and escape routes
Establish lookouts in potentially hazardous situations
Retain control at all times
Stay alert, keep calm, think clearly

Source: U.S. Forest Service (1994).

NOTE: The initial letters of each command help spell the words F-I-R-E O-R-D-E-R-S, indicating that this list was intended to be memorized.

TABLE 2: The Eighteen Watchout Situations (circa 1994)

Fire not scouted and sized up
In country not seen in daylight
Safety zones and escape routes not identified
Unfamiliar with weather and local factors influencing fire behavior
Uninformed on strategy, tactics, and hazards
Instructions and assignments not clear
No communication link with crewmembers/supervisors
Constructing line without safe anchor point
Building fireline downhill with fire below
Attempting frontal assault on fire
Unburned fuel between you and the fire
Cannot see main fire, not in contact with anyone who can
On a hillside where rolling material can ignite fuel below
Weather is getting hotter and drier
Wind increases and/or changes direction
Getting frequent spot fires across line
Terrain and fuels make escape to safety zones difficult
Taking a nap near the fire line

Source: U.S. Forest Service (1994).

executive summary). National and regional news coverage of the fires reiterated these quantities of broken rules (e.g., Davis, 1994; McCullen, 1994).

Many interpreted these findings as blaming the firefighters for their own deaths (e.g., Chronis & Kowalski, 1995; "Dead firefighter's dad assails report," 1994; Garner, 1996; MacLean, 1999; Wolfinger & Bacon, 2002). Indeed, one of the original members of the accident investigation team had refused to sign the team's offi-

cial report. Fire sciences investigator Ted Putnam had claimed that the 45-day deadline for producing the report had been arbitrary and overly restrictive.⁴ In what would come to be regarded as a “landmark” paper (e.g., Tri-Data, 1997), Putnam (1995) later argued that the typical factors considered in the accident investigation were not likely to inform our understanding of human dynamics on the fireline. Putnam argued instead that firefighters should be taught how to make good decisions under stressful conditions, and he called for more research on the psychological and sociological factors of firefighter safety (Putnam, 1995).

Although Putnam never actually used the word “culture” in his 1995 article, his remarks were construed as referring to issues of organizational culture. It was this framing that helped initiate an organizational self-study that year, focusing on the relationship between wildland firefighting culture and safety in the field. One text (Tri-Data, 1997) from that study explains, for example,

Following the soul searching, multiple-agency investigations, and special conferences on safety stimulated by the 1994 South Canyon incident that killed 14 firefighters, a new idea arose: that the usual things sought in fatality investigations were not sufficient. There were likely to be *organizational culture* [italics added] problems, leadership issues, human factors problems, and possibly other issues that were underlying the firefighters safety problems. (p. 1)

By the late 1990s, it was an established practice to study the effects of organizational culture on organizational processes and outcomes (e.g., Deal & Kennedy, 1982; also see Alvesson, 2002; Eisenberg & Riley, 2001). In addition, trying to “manage” organizational culture had become an accepted practice (e.g., Davis, 1984; Kilman, Saxton, & Serpa, 1985). However, the idea of studying their own organizational culture was a novel concept for members of the USFS firefighting operations. Therefore, the agency⁵ contracted with Tri-Data Corporation, a self-identified specialist in public safety issues based out of Washington, D.C. (Schaenman, 2001; Tri-Data, 1996, p. 4), to assist with the Safety Awareness in the Fire Environment Study (Safety Awareness Study).

Even though Tri-Data was a commissioned consultant, the Safety Awareness Study can be regarded as a self-study by the USFS for a few reasons. First, Congressional testimony reveals

how the tragic surprise of Storm King Mountain compelled Forest Service leaders to root out and fix safety problems (e.g., Thomas, 2000). Thus, the study had significant management support. Second, this was a self-study insofar as members of the organization were asked to identify their own culture problems and to suggest solutions for them. One-thousand wildland firefighters⁶ participated in the study (Tri-Data, 1996), and many of their ideas found their way into the problem statements, solutions, and final recommendations. Moreover, as the study progressed through its various stages, management feedback influenced the development of the reports. For example, in testimony to Congress, the principal investigator explained that the goals arising out of the study “were discussed and accepted by the fire directors of the five major wildland firefighting agencies before we moved on” (Schaenman, 2001). Finally, it was up to the management of USFS firefighting operations to ultimately implement those goals.

Although an organizational self-examination may solicit contributions from many voices, critical scholars remind us that “official” discourses may not represent the full range of stakeholder interests (Clair, 1993; Deetz, 1992a; Deetz & Mumby, 1990; Giddens, 1979; Smircich & Calás, 1987). Texts that arise from organizational self-studies are no different. Therefore, even though organizational self-studies have the potential to create discursive openings, official documents that result from them can be critically examined for the extent to which they ultimately reflect and represent the interests of multiple stakeholders.

DOCUMENTS EXAMINED

From 1996 to 1998, Tri-Data Corporation released three major reports, each corresponding to a separate phase of the Safety Awareness Study. The Phase I report (Tri-Data, 1996) detailed more than 250 safety problems identified by current wildland firefighters. The Phase II report compiled potential solutions suggested by the firefighters and proposed 86 initial goals for the agency to consider (Tri-Data, 1997). Finally, the Phase III report (Tri-Data, 1998) presented the finalized 82 goals along with 227 implementation strategies for achieving them.

These three texts are worthy of study for a few reasons. As Deetz (1992b) pointed out, corporate organizations are “in the meaning business” in that they are concerned with “the subjective as well as the objective conditions of work” (p. 42). The Safety Awareness Study represented a concerted effort to shed light on the existing culture of wildland firefighting in the hope of generating change. The study assumed that firefighters would be in the best position to know, to examine, and to help change their own culture, and thus it was designed in such a way as to capture their contributions. Furthermore, the self-study was conducted outside the normal flow of work, and away from the trauma atmosphere of accident investigation, where firefighters could reflect on safety issues, voice concerns not otherwise captured by the bureaucratic apparatus (including those critical of it), and contribute to the collective search for solutions. As Kunda (1992) demonstrated in his discussion of the “native culture ethnographers” at a high-tech firm, the process by which organizational members make sense of their own organizational culture is an inherently interesting phenomenon. Thus, at a very basic level, these texts simply display an organizational culture self-study that is worthy of examination in its own right.

However, unlike Kunda’s (1992) documentation of “Tech’s” operative discourse of culture, in this case members of the Forest Service were engaging the discourse of culture *for the first time*, potentially providing firefighters with a new way to describe and legitimate their experiences. And this study potentially granted firefighters at all levels the opportunity to shape meanings for the relatively undefined yet clearly valued “safety culture” to which agency leaders aspired. Therefore, a second reason to examine the texts is to assess the productivity of this new discourse for helping to capture previously ineluctable elements of organizational life and to lead to creative organizational changes.

DISCOURSES OF CULTURE

At this point, it is helpful to clarify meanings for culture in the Safety Awareness Study. The study was designed to identify safety problems in wildland firefighting, to develop goals for moving the

agency toward a safety culture, and to recommend strategies for implementing those goals (Schaenman, 2001). The discourse of culture was thus engaged as the operative lens in this organizational self-study (Putnam et al., 1996) in the hope that it would illuminate elements of safety that had previously escaped notice.

In Alvesson's (2002) terms, the study regarded culture as both "trap" and "tool" (p. 10). By assuming that the existing culture of wildland firefighting was preventing firefighters from following safety rules, the study regarded culture as a trap. However, by assuming that a newer, better culture could be invented to take its place, the study also regarded culture as a tool. The trap view of culture favors description, in particular capturing those "attitudes, values, and beliefs" (as inspired by the work of Schein, 1991) that were interfering with culture and needed to be rooted out. Cultural attitudes in this case included "attitudes toward safety rules," which had been considered a key factor in the Storm King Mountain tragedy. However, the tool view of culture favors prescription, and as some have pointed out (e.g., Jermier, 1991; Kunda, 1992) deliberate culture management can function as a form of ideological control.

Thus, a third reason to examine these texts is to examine the power issues involved in culling cultural meanings and practices from members to prescribe a new culture that will exert control over them. We can trace what happens to firefighter voices in the study as well as whose interests are ultimately represented in any final decisions arising out of it. Finally, although self-studies usually entail confidential information that is kept internal to an organization, in this case, the three texts were disseminated on the Forest Service's Fire and Aviation Web site (among other places). The three texts ostensibly showcase a collective cultural housecleaning that takes many voices into account. Therefore, these documents are worthy of study for their rhetorical function in displaying an organizational self-investigation that was undertaken in the spirit of participation and collectively planned change.

In summary, these three texts can be studied for any discursive openings enabled by the newly engaged discourse, as well as for instances of discursive closure that can arise from power struggles in the execution of a self-study. This analysis continues the tradition of studying communication and control at the Forest Service, but it does so by examining discursive openings and closings in the

agency's own study of the relationship between wildland firefighting culture and firefighter safety.

DISCURSIVE OPENING IN THE SELF-STUDY

Because firefighters were invited to participate in this collective search for organizational self-understanding and to engage a new discourse, the self-study had the potential to provide a true discursive opening. The analysis presented here focuses on a discursive opening that emerged with respect to how the Ten Standard Fire Orders had been traditionally used to manage safety.

According to the Phase I report, 300 firefighters were interviewed individually and in focus groups during 1995. Later, a 238-item questionnaire developed from those discussions was mailed to 1,400 firefighters; 700, or 50%, responded (Tri-Data, 1996). In the survey, firefighters were asked to rate and rank perceived safety problems, and they were asked to rate and rank potential solutions to those problems. They were also asked to step back and prioritize both problem areas and potential solutions that they believed would have the most impact on safety. The number one area of concern that firefighters felt the agency needed to address was "attitudes toward safety rules" (classified under the heading "culture") (Tri-Data, 1996, p. 197). The report interpreted this to mean that "the federal wildland firefighting community strongly believes that there is a need to change attitudes about safety. The 'passion for safety' is widespread but not universal" (p. 197).

Because the "broken rules" findings in the Storm King Mountain investigation (USFS, 1994) had been so controversial, and because the self-study was actually designed to focus on cultural factors other than those typically addressed in accident investigations (such as safety rules) (e.g., Putnam, 1995), I decided to trace this theme of attitudes toward safety rules through the self-study texts. In examining the texts, I focused on how problems and solutions related to safety rules were articulated, rated, ranked, prioritized, and explained in narrative form. In other words, I sought to assess any discursive openings that may have been created when firefighters engaged the issue of safety rules with the new discourse

of culture. Also, given the study's impulse toward prescriptive cultural control, I sought to assess the disposition of firefighters' concerns in the final decisions arising out of the study. Thus, although hundreds of items were covered in the study, I narrowed the analysis to firefighter comments about safety rules, and I traced how their concerns were handled throughout the three reports, including their disposition in the final goals arising out of the study.⁷

When asked to rate particular problems that related to their number one concern about attitudes toward safety rules, firefighters' responses to the choices offered were relatively lukewarm. For example, the item "Ignoring the Eighteen Watchout Situations" tied for sixth place, with 28% of firefighters saying that it occurs often or very often (Tri-Data, 1996, p. 118). Similarly, "Ignoring the Ten Standard Fire Orders" rose to ninth place, with 23% of those surveyed stating that it occurs often or very often (p. 119). Then, when asked to stand back and prioritize these problems, the phrases "Ignoring the Watchout Situations" and "Ignoring the Ten Standard Fire Orders" emerged only 12th⁸ among firefighters' top priorities (pp. 203-204).

Just as the Phase I report had compiled firefighters' answers to questions about safety problems, the Phase II report summarized firefighters' ratings of potential solutions to those problems (Tri-Data, 1997). In comparison to the relatively lukewarm responses to specific problem areas noted above, solutions pertaining to training and safety rules were fairly highly ranked as likely to have an impact on safety. The number-four-ranked solution, for example, explicitly addressed safety rules. Specifically, the phrase "Develop a safety culture that encourages people to think rather than just obey the rules" was rated by 85% of firefighters as likely to have "much or some positive impact" on safety (Tri-Data, 1997, p. 10).

As they had done for the problem statements, next firefighters were asked to prioritize among all proposed solutions by choosing the top five solutions they believed would have the most impact on safety. Firefighters placed the following solution among their top five choices more often than any other solution:

Develop a safety culture that encourages people to think rather than just obey the rules. (Tri-Data, 1997, p. 18)

In sum, according to the results of the survey, firefighters felt that attitudes toward safety rules was the number one problem area to address. They felt that the best solution to that problem was to develop a thinking culture to replace the existing method of managing safety by emphasizing rules. Although their responses were relatively lukewarm about the precise cultural traps, firefighters rallied around this particular tool for cultural change.

Analysis of a relatively minor comment from the prose of the Phase I report can help explain the popularity of this top solution. Line numbers are included for ease of reference in the analysis. A sidebar in the Phase I report had explained that during the initial focus groups,

1 Some interviewees and experts felt that rather than just obeying the
2 rules set forth in the [Ten Standard Fire] Orders and [Eighteen]
3 Watchout [Situations], an organizational culture should be developed
4 where people are encouraged to think rather than follow rules.
5 They should be trained on the general practices to follow, but
6 allowed to make exceptions when warranted, and given lots of
7 practice in decision making to improve the ability to make those
8 decisions. Others felt that having a culture in which it was not only
9 acceptable to point out the violation of a watchout or fire order, but
10 that one was expected to do so and applauded for doing so would
11 help. Others thought that crews should consult more together to
12 have the benefit of a group's thinking and memory. (Tri-Data, 1996,
pp. 123-124)

Although this quote paraphrases sentiments expressed in the focus groups and interviews (and thus is not necessarily a direct quote from firefighters), this explanation nevertheless sheds light on the firefighters' top safety solution. It shows how firefighters characterized the current method of managing safety as one that emphasizes "just obeying the rules" (lines 1-2), and it begins to express what a safety culture would look like in contrast.

Specifically, it suggests that participants feel that the rules are rigidly invoked and that there is little room to "make exceptions" to safety rules when warranted (line 6). An alternate culture would be the one where firefighters would learn "general practices" (line 5) but be given autonomy to make local decisions. Second, this explanation suggests that firefighters believe that it is currently not "acceptable" to point out safety violations made by supervisors

(lines 8-9). This is consistent with statements made by firefighters who were interviewed for the Storm King Mountain investigation, who complained about having to follow orders that actually violated safety rules and about having their suggestions dismissed on the fireline (e.g., Kowalski, 1994; USFS, 1994). This suggests that some firefighters feel that they lack the voice to point out safety violations from others or to defend their own decisions that stray from the letter of the law. An alternate culture expressed in the quote is the one where firefighters not only experience no retaliation when pointing out violations by others (line 9), but also one in which they are “expected” (line 10), and even “applauded” for doing so (line 10). Presumably, new training procedures would help firefighters practice making decisions in the moment and develop the voice to justify their decisions (lines 5-7).

TRACKING THE PROPOSED SOLUTION

Although this comment was a relatively minor aside in the Phase I report, the phrase “develop a safety culture that encourages people to think rather than just obey the rules” nevertheless became the item most frequently placed into firefighters’ top five priority solutions for the agency to implement. Next, I examined what became of this top rated solution. The Phase II report proposed 86 preliminary goals for the Forest Service to consider from all the issues that had been raised during the entire study. The firefighters’ preferred solution was included as one of those goals. However, when it was articulated as a goal statement, the phrase “rather than just obey the rules” was dropped. Specifically, in the Phase II report the statement was rewritten as

Goal 22: Develop a safety culture that encourages people to think in the context of safe practices, standards, and procedures. (Tri-Data, 1997, p. 85)

In other words, the phrase “rather than just obey the rules” was replaced with “in the context of safety practices, standards, and procedures.” The Fire Orders were addressed separately in their own separate goals, as follows:

Goal 11: To prevent information overload and allow flexibility, the fire orders should periodically be screened to identify the minimum essential set, and that [set] should be rigorously enforced. (Tri-Data, 1997, p. 39)

The text accompanying this goal in the Phase II report commands that “fire orders are orders. They are not to be violated. Their lessons have come at a high price” (Tri-Data, 1997, p. 62). However, the discussion also goes on to acknowledge that “there is some controversy as to whether the current set of 10 orders is the right number, the right ones, well stated” (Tri-Data, 1997, p. 62). Ultimately, the report concludes that “whatever the consensus as to what constitutes the appropriate set, there needs to be greater enforcement of them; they need to be taken seriously by the culture” (p. 62).

A third goal addressed the Watchout Situations directly:

Goal 13: The list of watchouts needs to be integrated into training and decision making, and their roles as warnings emphasized. (Tri-Data, 1997, p. 40)

The text accompanying this goal clarifies that “the watchouts are warnings, not rules or orders,” and thus cannot exactly be “broken.” Instead, the report recommends that “their principles should be incorporated in realistic training on decision-making” (Tri-Data, 1997, p. 63).

FINAL DISPOSITION

Whereas the Phase II report was an interim statement of potential goals, the final Phase III report presented a refined set of 82 goals with 227 implementation strategies (Tri-Data, 1998). The three goals referring to safety remained essentially the same in the movement from Phase II to Phase III, except that in Phase III, each was coupled with specific implementation strategies. The three refined goals, and their corresponding implementation strategies, are re-produced in Table 3. The implementation strategies for the Fire Orders goal (Goal 37) included reducing the quantity of orders, and clarifying which are merely “guidelines.” Furthermore,

TABLE 3: Phase III Goals Relevant to Safety Rules

Goal 37: To prevent information overload and allow flexibility, the fire orders should periodically be screened to identify the minimum essential set, and that should be rigorously enforced

Implementation Strategy 1—Conduct a content analysis of the various guidelines and produce a reduced set.

Implementation Strategy 2—Redefine [sic] which are truly orders and which are guidelines that can be modified under special circumstances

Goal 39: The list of Watchouts needs to be integrated into training and decision making, and their role as warnings emphasized

Implementation Strategy 1—Clarify the use of the Watchouts in training

Goal 82: Develop a safety culture that encourages people to think in the context of safe practices, standards, and procedures

Implementation Strategy 1—In addition to all of the above, get firefighters and managers to raise safety consciousness in day-to-day activities

Source: Excerpted from Tri-Data Corporation (1998, p. xxxv and p. xliii).

as anticipated by the Phase II report, they also called for better enforcement of the final set. The implementation strategy for the Watchout Situations (Goal 39) was to incorporate them more into training.

Finally, the goal related to “develop a safety culture” was placed last on the list of 82 goals. The implementation of this goal was assumed to be satisfied through the preceding 81 goals and their implementation strategies (as evidenced by the phrase “in addition to all of the above” in Table 3). However, it was added that firefighters and managers should also “raise safety consciousness in day-to-day activities” (Tri-Data, 1998, p. xliii).

When compared to the Phase II report’s harsh “orders are orders . . . not to be violated” (Tri-Data, 1997, p. 62), the Phase III report reflects a softened stance on the precise authority of the Fire Orders. Specifically, the prose of the Phase III report describes how safety rules are managed, and even evaluates the limitations of the current system. In particular, whereas the Phase I and Phase II reports deal with “attitudes toward safety” among firefighters in general, the explanatory text in the Phase III report extends “attitudes toward safety” to management attitudes as well.

For example, the Phase III report identifies discrepancies in typical management characterizations of the 10/18. For example, using the Storm King Mountain investigation document (USFS, 1994), the Phase III report shows how management tends to characterize the 10/18 as “situational awareness and risk assessment” tools (Tri-Data, 1998, pp. 4-17), yet actually invokes them in practice “as a yardstick against which performance is measured when tragedy strikes” (pp. 4-18). The report further supports this claim by quoting a statement issued by the secretaries of Agriculture and Interior in the wake of Storm King Mountain fire, who had commanded, “the Ten Standard Fire Orders are firm. We don’t break them; we don’t bend them” (pp. 4-18). Thus, the Phase III report showed how management tends to *describe* the 10/18 as though they were guidelines, but tends to *enforce* them as though they were orders.

To challenge this yardstick approach, the report noted that at any given moment, firefighters are expected to remember and apply up to 156 pieces of information, yet compares this to “Miller’s Law,” which says that “the human mind can comprehend just seven (plus or minus two) concepts when engaged in a task” (USFS, 1999, pp. 4-18). The discussion (Tri-Data, 1998) concluded that

It is unlikely that the Ten Standard Fire Orders, 18 Watchouts, and other tactical references provide effective guidance to firefighters, since their overwhelming number precludes their use as concise, memorable and sequential guides. (pp. 4-18)

Next, the Phase III report explained how the 10/18 might be managed differently. For example, it suggests that a standing order could be framed as “do this unless you have darned good reason not to” such that a firefighter would be “prepared to defend deviations” (Tri-Data, 1998, pp. 4-20). The report also recommended that examples be provided for “reasonable exceptions,” as well as the frequency with which they are expected to occur (Tri-Data, 1998, pp. 4-20).

To summarize up to this point, having been catalyzed by Putnam’s (1995) landmark article, the self-study and its new discourse of culture appeared to create a discursive opening for firefighters to articulate a new vision for managing safety in wildland firefighting operations. Firefighters agreed at the outset that attitudes toward

safety rules was an important cultural trap and a priority area for the agency to address. Although their ratings for items such as ignoring the 10/18 were relatively lukewarm in comparison to other priority problems, further discussion of this remark in the Phase III report indicates that attitudes toward safety rules extended to management attitudes as well.

Next, something resonated with firefighters about the potential tool of developing a safety culture that encourages people to think rather than just obey the rules. Whereas the rules provided management with a yardstick for evaluating safety in retrospect, firefighters did not have a language to defend decisions that strayed from accepted practices. A safer culture, in their view, would be the one that deemphasizes enforcement and favors thinking, deciding, and defending, with the proper training to go along with it. In this view, rules are more like guidelines, where a firefighter's reasoning and judgment in the moment could take precedence. (However, it should be pointed out that codifying "reasonable exceptions" [e.g., Tri-Data, 1998, p. xliii] could also lead to the development of new yardsticks.)

ASSESSMENT OF THE DISCURSIVE OPENING

The Phase III report was released in 1998. Now that 5 years have passed, it is important to assess the impact of these suggested changes. Fallout from the recent Thirtymile Fire in Washington State reveals that there is lingering public dissatisfaction with the management of safety in Forest Service firefighting operations, as well as renewed doubts about the perceived effectiveness of the Safety Awareness Study itself, in retrospect.

In 2001, four young firefighters were killed in an otherwise routine mop up of a fire in the Okanogan National Forest in Washington State (see, e.g., "Trapped at Thirtymile," 2001; USFS, 2001). Whereas in 1998, the Safety Awareness Study had cautioned against using the Ten Standard Fire Orders as a yardstick, in 2001, investigators nevertheless determined that "all ten" of the Fire Orders were broken (e.g., Murphy, 2001; Preusch, 2002; Solomon & Welch, 2001a, 2001b). And whereas the Safety Awareness Study had emphasized that the Eighteen Watchout Situations were simply

cautionary statements and should not be used as punitive checklists for blame, the Thirtymile firefighters were nevertheless found guilty of “breaking” the Watchouts as though they were rules (e.g., Murphy, 2001; Preusch, 2002; Solomon & Welch, 2001a, 2001b).

Parents of the fallen firefighters, the local paper, and members of Congress were angered that despite promises of change, firefighters were once again being blamed for their own deaths by official statements that detailed numbers of rules violated (see, e.g., Murphy, 2001; Preusch, 2002; Solomon & Welch, 2001a, 2001b). Furthermore, many were outraged to note that a risk abatement plan developed in the wake of the Thirtymile Fire simply recycled some of the very same recommendations that had emerged from the Safety Awareness Study 3 years earlier (e.g., “Change Forest Firefighting Culture,” 2001; Pflieger, 2001). The *Seattle Times* noted, for example, that it was “maddening” for outsiders to see the same findings reiterated in wildland fire fatality investigations: “the same problems captured in the same words, with no apparent effect on the policies *and culture* [italics added] of the Forest Service seven years [after the Storm King Mountain fire]” (“A Smoldering Frustration,” 2002). Likewise, in a Senate investigation into the Thirtymile deaths in November 2001, Senator Cantwell (D-WA) criticized the agency for failing to live up to the changes proposed during Phase III of the Safety Awareness Study. She argued, “These ideas aren’t new. They simply haven’t been implemented” (Pflieger, 2001).

Thus, 5 years after the study was concluded, external constituents reasonably ask that if the Forest Service set out to study and to change its culture, Why do large-scale tragedies continue to happen? Why do official accident investigations continue to find that firefighters “broke all the rules” (e.g., Solomon & Welch, 2001a, 2001b)? and, most damaging, Why do investigators seem to continue to “recycle” the same recommendations for safety (Pflieger, 2001)?

Recent comments from organizational insiders also reveal continued frustrations about how safety is managed. Firefighters quoted in news reports use increasingly draconian language to characterize firefighter instruction about safety rules. Fire managers, for example, express frustration about violations of rules that

are “drummed into the head of every firefighter” (e.g., Furnish, in Banse, 2001). Surviving family members who chafe at blame placed on their loved ones insist that their sons and daughters characterized the rules as having been “written in blood” (e.g., Weaver, in Sieckmann, 2001). One widow even exhorted, “Tom disregard an order? That’s ridiculous . . . These guys followed orders all day; it’s what got them killed” (Solomon & Welch, 2001b).

The issue of better enforcement of the Ten Standard Fire Orders, which was included in Goal 37, is also causing debate over how to properly punish surviving firefighters who were found to have violated safety rules at the Thirtymile Fire (see, e.g., “Who the [blank] is the Forest Service Hiding?” 2002; “Thirtymile Report is Mostly Secret,” 2002). As recently as March 2003, reactions in public documents related to disciplinary action have further angered some constituents (e.g., “Discipline Handed out in Wildfire Deaths,” 2003; “End the Secrecy,” 2003).

Although one implementation strategy for Goal 37 was to produce a reduced set of “true orders” that would be distinct from guidelines (see Table 3), this apparently has not been done. The Ten Standard Fire Orders have certainly been reordered to guide firefighters to “provide for safety first” and then to “fight fire aggressively” (e.g., USFS, n.d.), but to date, they have not been pared down per se. Nevertheless, the implementation strategy related to the Watchout Situations is being carried out. For example, lessons from the Thirtymile Fire have been incorporated into a PowerPoint training tool that is available on the Forest Service Fire and Aviation Web site (USFS, 2002). However, the final slide presents the following “key message” that should be taken away from the presentation:

The Ten Standard Fire Orders are firm rules of engagement. All decisions to engage, disengage, or re-engage in a suppression action must be made in terms of the Ten Standard Fire Orders. (USFS, 2002, last slide)

In other words, the lessons of the Thirtymile Fire are being taught in such a way as to reinforce the authority of the Fire Orders. This is in spite of the fact that the study’s Phase III report had criticized a

similar statement issued by the cabinet secretaries after the Storm King Mountain fire.

In the Safety Awareness Study, firefighters had articulated a vision for a different kind of culture, one that would be less reliant on the steering medium of safety rules and more reliant on local reasoning and decision making. But these reactions to the events of the Thirtymile Fire indicate that as much as 5 years later, the Forest Service is still managing safety by emphasizing rule following. The next section explores how in spite of the discursive opening created by engaging the discourse of culture, certain discursive closure moves in the Safety Awareness Study may have helped reinforce—rather than challenge—this constitutive steering medium, potentially stymieing true cultural change in the process.

DISCURSIVE CLOSURE IN THE SAFETY AWARENESS STUDY

The key to identifying and addressing discursive closure is to examine the “everyday micropractices” that privilege certain interests over others (Deetz, 1997, p. 134). Deetz (1992a) described eight “moves” that can be done deliberately, or outside of awareness, to create discursive closure. They include neutralization, naturalization, subjectification of experience, pacification, topical avoidance, meaning denial, legitimation, and disqualification (pp. 189-198), many of which will be applied to the present case. These moves can be understood as ways of closing off alternate determinations of meaning, alternate conceptions of process, and alternative views of participant rights. The primary effect of these moves, according to Deetz (1992a) is to “suppress insight into the conflictual nature of experience and preclude careful discussion of decision making regarding the values implicit in experience, identity, and representation” (p. 188).

The prose portion of the Phase III report noted that two sharply contradictory positions had emerged during the course of the study. Specifically, the report distinguished between one group of firefighters who believe that “orders are orders” and should be fol-

lowed no matter what, and another group of firefighters who believe that the Fire Orders are guidelines for action but should be flexible enough to allow local decision making to take precedence. For example (Tri-Data, 1998),

some argue that the Fire Orders are *orders* not to be violated since the lessons on which they are based have come at a high price. Others argue that agencies should be teaching people to think flexibly rather than follow rules, and that the various tactical references and “rules” are intended to distill past wisdom and prompt leaders to think about safety, but not to be inflexible hard and fast rules, a philosophy which would represent a fundamental shift in thinking, and is controversial. (pp. 4-16)

However, rather than try to resolve the conflict between the *orders are orders* and the *orders are guidelines* perspectives, the report simply characterized these as two differing opinions. Firefighters’ key distinction between a rule-following culture and a thinking culture was diluted when these two issues were separated and addressed in two different goals arising out of the study. The following analysis shows how this move implicitly privileged the *orders are orders* perspective, closing off the conversation about whether this is the best way to manage safety. Furthermore, this left the *orders are guidelines* perspective as a cultural add-on that could not challenge the authority of the steering medium of the *orders are orders* perspective.

SUBJECTIFICATION OF EXPERIENCE

Characterizing the conflict between “orders are orders” and “orders are guidelines” as a matter of opinion represents subjectification of experience. Deetz (1992a) described *subjectification of experience* as a way of avoiding discussion by invoking the liberal ideal of personally held opinions (p. 193). However, subjectification of experience can contribute to discursive closure because it fails to address how certain opinions become formed in a system of social valuing in the first place. This perceived dichotomy between *orders are rules* and *orders are guidelines* might actually be a divi-

sive social issue that would be important for the agency to address. In fact, it may be the very discursive element on which significant culture change (as opposed to culture augmentation) hinges.

To understand the *orders are orders* perspective, it is necessary to examine the origin of the Ten Standard Fire Orders themselves. As Bullis and Tompkins (1989) explained, because the Forest Service is part of the U.S. Department of Agriculture, its original mission was to cultivate lumber and protect the national forests as a natural resource. However, when the Forest Service was still in its infancy in 1910, disastrous fires destroyed 3.5 million acres of inhabited areas and wildlands in the West (Thomas, in Wolfinger & Bacon, 2002). As Pyne et al. (1996) explained, this led to a national mentality that fire was the "enemy" and that firefighting was "the moral equivalent of war" (p. 252; see also Thomas, in Wolfinger & Bacon, 2002). Early firefighting operations were thus organized around a "root metaphor" (Lakoff & Johnson, 1980; Smith & Eisenberg, 1987) based on military operations. This root military metaphor was further reinforced by U.S. military successes in World War II, after which surplus war equipment was mobilized to contain this new "red menace" (Pyne, 1994; Pyne et al., 1996).

However, by the mid-20th century, it became apparent that too many firefighters were being killed in the line of duty. In particular, the 1949 Mann Gulch fire "severely shook the confidence of the firefighting profession" (Dombeck, 2000) precisely because it struck down an elite force of Smokejumpers. A taskforce was formed in 1956 to "recommend action to reduce the chances of men [sic] being killed by burning while fighting fire" (USFS, 1957). The group studied eight tragedy fires and determined certain common denominators that linked them all.

In their report, released in 1957, the taskforce noted that in the confusion of an emergency situation, firefighters generally "forget" what they know about personally managing the dangers of fire (USFS, 1957). In searching for a solution, the agency once again turned to the example of the military and proposed the development of a set of military-style "general orders" that would help individual firefighters remember what they know (USFS, 1957). The rationale was that by requiring firefighters to memorize a set of

rules, this would create a bond between firefighters and their units, such that loyalty to the group would help them remember what they already knew when stressful conditions struck (USFS, 1957).⁹ As a result, the same root military metaphor that organized the Forest Service firefighting operations after 1910 now organized how the Forest Service managed firefighting safety as well. Over the years, the original list evolved into the Ten Standard Fire Orders. The Eighteen Watchout Situations were added gradually as well (USFS, 1994).

In Habermas's (1984, 1987) terms, in 1957 the Ten Standard Fire Orders were initially adopted as a "regulatory medium" to increase cohesion and loyalty, and therefore to prevent firefighter deaths. However, the rules are no longer managed with the expectation that they function as a group technique against individual forgetting. Rather, they are managed bureaucratically; that is, they are taught to individuals, they are expected to be followed by individuals, and they are used as yardsticks to measure individual and group performance (USFS, 1999). Most important, accident investigations tend to find that firefighters "broke" safety rules. The *orders are orders* mentality clearly expresses this bureaucratic rationality.

In contrast, the *orders are guidelines* perspective expresses a different, perhaps newer, impulse toward firefighter participation in decision making, where firefighters determine the correct course of action in the field without fear of later being measured against a decontextualized checklist. By articulating the orders are guidelines perspective, firefighters are not necessarily objecting to the content of the rules (after all, it is a good idea to have escape routes and safety zones, for example), but rather they are objecting to the manner in which these rules are managed and even invoked in the wake of tragedy. The Tri-Data report (1998) characterized the orders are guidelines perspective as "controversial" precisely because it would require a "fundamental shift in thinking" (pp. 4-16). The fallout from the Thirtymile Fire clearly shows that this shift in thinking has not occurred, or at least that it has not been codified into organizational routines. Unfortunately, so long as the social formation of the *orders are orders* perspective remains unexamined, firefighters who subscribe to the *orders are guidelines* perspective will continue to be evaluated as having "poor attitudes."

PACIFICATION

The firefighters' preferred solution of developing a thinking culture rather than a rule-following culture was reworded as developing a thinking culture *in the context of* a rule-following culture. This amounts to *pacification* (Deetz, 1992a, p. 196), a move that appears to engage the subject matter but actually diverts attention from substantive issues by focusing on what cannot be changed rather than on what can be changed. Adding thinking as Goal 82 does not remove the force of the steering medium of safety rules. It simply tacks on thinking as an additional (and unfortunately the last) solution. Furthermore, in the restatement of the solution, such thinking is conscribed by "standards, practices, and procedures" (Tri-Data, 1998, p. xliii), which can be interpreted as including the 10/18.¹⁰ Pacification helps create discursive closure by thwarting participant rights to determine the subject matter. Reframing an either-or formulation as a both-and solution denies firefighters the right to determine that it is valid to examine and even question the rules in this kind of study. Ironically, this implicitly suggests that rules and their enforcement somehow lie outside of culture rather than represent a fundamental component of culture that might need to be changed.

NATURALIZATION AND NEUTRALIZATION

The objective evaluation of the usefulness of the Ten Standard Fire Orders focused on the cognitive limitations in memorizing numbers of rules. For example, the report had found that firefighters can effectively remember up to seven pieces of information at once, but that the rules would have them remember 156 pieces at a time. By focusing on how to shorten the list, rather than questioning whether the list should be used at all, the implementation strategies for Goal 37 helped to naturalize the idea that military-style general orders are necessary for managing safety, rather than opening up this assumption for discussion. Deetz (1992a) described how in naturalization, organizational members talk about a socially produced phenomenon as if it were "given in nature" (p. 190). Naturalization contributes to discursive closure

because it prevents discussion of the value judgments that went into the original decisions when a given practice was initiated (see also Mattson & Buzzanell, 1999).

Whether the 1956 taskforce was correct in its assumption that memorizable, military-style rules actually work as intended to promote safety was never posed as a question in the 1996-1998 Safety Awareness Study. Indeed, the fact that “time and time again” tragedies can be “traced to violation of one or more of the Ten Standard Fire Orders” (USFS, 1994, p. 30) may suggest that there is a problem with the very assumption that rules lead to safer practices. Nevertheless, the problem was simply naturalized as a cognitive and administrative issue (e.g., “How many rules are optimal?” “Which ones are never to be broken?”). The logic of their initial adoption, and their relevance for the contemporary fireline, were never questioned.

Goal 37 also assumes that once the ideal set of rules is determined, the solution becomes one of better enforcement (Tri-Data, 1998, p. xliii). This tends to neutralize the issue of enforcement. In neutralization, according to Deetz (1992a), positions are discussed as if they were neutral or value free. Neutralization helps create discursive closure because “one system of valuing is treated as the only possible one” (p. 191). However, fallout from the recent Thirtymile Fire offers a glimpse into the frustrations inherent in the continued search for stronger enforcement and stricter accountability.

LEGITIMATION

Legitimation is the key discursive closure move that maintains rule following as a naturalized and neutralized constitutive steering medium. *Legitimation* conscripts alternate conceptions of process through rhetorical appeals to “higher order explanatory devices” (Deetz, 1992a, p. 196; see also Ruud, 2000). Legitimation appeals to a higher order value, such as hard work or The American Dream without allowing for examination of the values embedded in those very ideographs. For example, in a study of a symphony, Ruud (2000) showed how appeals to the higher order principles of keep-

ing the symphony in business tended to privilege the business code over the artistic code.

The Phase II report had legitimated the authority of the Fire Orders by invoking a currency metaphor: orders are orders that should be followed because they have “come at too high a price” (Tri-Data, 1997, p. 62). (This verbiage was softened somewhat in Phase III.) This refers to the fact that in the past, rules tended to be developed in the wake of firefighter deaths. However, when it is determined that rules were broken in subsequent tragedies, fallen firefighters have been eulogized with the promise that they will not have died in vain because surviving and future firefighters shall now adhere to the rules (e.g., Dombeck, 2000; USFS, 1994).

This legitimation strategy stems from and reinforces the same root military metaphor that organized firefighting operations and, later, safety rules. As in wartime, firefighter deaths are characterized as sacrifices to a greater cause. But, as Pyne (1994) noted, the metaphor of “firefighting as war” fails because firefighting lacks a *human* protagonist. As a result, the cause to which firefighters are said to be sacrificed becomes the cause of safety. In effect, the 10/18 have become more than lists of safety rules; they have become memorials to the dead, and they continue to be used as a control device for surviving and future firefighters (Thackaberry, 2003).

Ultimately, the *orders are orders* perspective wins out over the *orders are guidelines* perspective because the currency argument that the “lessons on which they are based have come at a high price” (Tri-Data, 1998, pp. 4-16) trumps any inflexibility that firefighters might experience in following them. Said another way, although the self-study was designed to uncover subjective cultural meanings that were affecting safety, the study examined the Ten Standard Fire Orders objectively (in terms of cognitive overload, for example). Then, rather than “thinking culturally” (Anonymous Authors, 1991; Clair, 1993) about this currency metaphor, the study actively invoked it as a legitimation strategy to reinforce the authority of the 10/18. This is not to criticize the agency for honoring its dead. Indeed, in the wake of September 11, 2001, the nation has witnessed an outpouring of gratitude toward firefighters that recognizes the heroic nature of the profession. On the contrary, the point is to show how this discursive move makes it difficult to assess whether the 10/18 are the *best* way to retain and apply les-

sons learned from past firefighting tragedies so as to keep current and future firefighters safe in the field.

In summary, the Safety Awareness Study provided a discursive opening where firefighters imagined a new culture as one where they would be encouraged to think rather than just obey the rules. Nevertheless, certain discursive closure moves upheld the constitutive steering medium of managing safety by way of rule following. Inviting firefighters to participate in an organizational self-study, but effectively sidestepping the radical change implicit in their key suggestion, represents *disqualification* or a clear “determination of who has a right to have a genuine say” (Deetz, 1992a, p. 189; see also Ruud, 2000). The study was undertaken in the spirit that there was something culturally wrong that could only be diagnosed by seeking firefighter input and securing their participation in plans for cultural change. Firefighters had identified attitudes toward safety rules as a key problem, but their version included management attitudes about safety rules as well. However, the manner in which firefighters’ concerns were handled in this case suggests that their right to comment on the culture apparently did not extend to bureaucratic lists of rules used to control them. The final solutions literally organized this idea out of existence (Clair, 1998). Instead, the final decisions privileged management’s need for control, and management’s need to maintain a sense of consistency with past actions.

STRUCTURAL ELEMENTS OF DISCURSIVE CLOSURE

The analysis thus far has considered discursive moves that elided firefighters’ proffered meanings for an emerging safety culture. Discursive closure can also be facilitated by structural design of an organizational self-study itself. During the focus group, interview, and the survey phases of the study, participants were asked to recommend and rate solutions at the same time as they were asked to identify and rate problems (Tri-Data, 1997). This saved the consultants time so that they would not have to resurvey the firefighters. Also, it probably guided the firefighters to remain constructive with their comments. On the other hand, this technically

rational frame also assumed that all problems could be discretely identified, and that discrete solutions could be paired with each one.

Clearly, firefighters' image of a safety culture where people are encouraged to think rather than just obey the rules did not lend itself to an easy technical solution. However, by asking for solutions at the same time as questions, the structure of the culture study did not create a space for such a paradigm shift to occur. Instead, as evident in the implementation strategy for Goal 82 ("in addition to all the above"), it was assumed that culture change would occur once all other discrete goals had been implemented.

Second, the study became constrained by the managerial discourse of strategic planning. The process for changing from a so-called trapped culture to a so-called retooled safety culture was framed as needing to generate 82 goals and 227 implementation strategies by a particular deadline. Although this would certainly provide measurable deliverables for organizational members to implement, this technically rational format facilitated incremental rather than radical change solutions for the organization. Although factors other than those typically included in accident investigation (Putnam, 1995) were investigated in the culture study, discursive possibilities for overcoming the operative steering medium of managing safety by way of rule following were sidestepped.

DISCUSSION

This article defined organizational self-study, introduced the concept of discursive opening, and proposed that organizational self-studies that engage new discourses have the potential to provide moments of discursive opening in systematically distorted communication where new stakeholder interests can be articulated. The article also examined a particular self-study that engaged the discourse of culture to achieve organizational self-understanding. The original military-inspired discourse for safety at the USFS had actually originated from an earlier organizational self-study that was undertaken in 1956. However, 40 years later, the discourse of culture was invoked to identify safety issues in wildland

firefighting that were not able to be captured by that original discursive frame.

This analysis explored the productivity of that new discourse for creating a discursive opening. Indeed, it showed how the new discourse of culture helped firefighters articulate a vision for a safety culture as one where they would be encouraged to think, as opposed to the current culture where safety is managed by way of bureaucratic rules. Firefighters also extended attributions about “poor attitudes toward safety rules” to include management attitudes as well.

These findings reinforce Bullis and Tompkins’s (1989) observations about increased reliance on bureaucratic controls at the Forest Service (although in this case, the findings apply to firefighting operations and not necessarily to the practice of forestry). Whereas bureaucratically managed rules offer a ready discourse of evaluation, firefighters have difficulty talking back to rule-based determinations of blame in the wake of tragedy. The discourse of culture helped firefighters articulate a culture where they would be able to make decisions in the moment, to defend those decisions, and to call for new forms of training to help them do so.

However, the analysis also showed how the entrenched steering medium of managing safety by way of rule following was difficult to overcome (and even difficult to see) in this organizational self-study. At a critical juncture in the study, a key conflict over the extent of authority assumed to be wielded by safety rules was chalked up to a matter of opinion, when it might have been more productive to recognize it as expressing a potential shift in social valuing. The analysis explored when and how the orders are orders perspective evolved and suggested that truly “opening up” discourse would mean questioning assumptions made back in 1956 about the relationship between rule following and safety.

The implications of this case are simultaneously encouraging and discouraging. On one hand, the case highlights the potential of the practice of self-study to provide discursive openings in systematically distorted communication. On the other hand, the case illustrates the difficulties of gaining critical distance on one’s own cultural assumptions and practices. Furthermore, it shows how tempting it may be to actually *invoke* deeply held traditions to justify calcified meanings that privilege some organizational mem-

bers and not others. In this case, for example, the self-study invoked a currency metaphor to retain the Fire Orders rather than examine that metaphor as an element of culture worthy of investigation and critique in its own right.

Nevertheless, even the discouraging implications of this study can help guide future self-studies. First, when engaging the discourse of culture in an organizational self-study, it might be advisable to avoid the piecemeal view of culture, such as by operationalizing cultural elements (such as attitudes) as discrete variables. Organizational culture self-studies might also avoid the pitfalls of premature normativity (Alvesson, 2002) by eschewing preconceived evaluations about the rightness or wrongness of cultural attitudes. Second, when engaging any new discourse, proponents of a self-study might assess its epistemological compatibility with traditional methods of analysis. A culture study, for example, generally benefits from grounded and ethnographic methods rather than survey methods that tend to aggregate individual opinions.

Third, organizational members who undertake self-studies should pay attention to moments when members converge over newly coined phrases such as “develop a safety culture that encourages people to think.” Rather than regard these moments as complicated or inconvenient, rather than label them as personally held opinions, and rather than invoke deeply held traditions to squelch them, investigators might use them as an opportunity to examine the social formation of new and old meanings alike. As Cheney (2000) observed, taking the idea of participation seriously means being ready to be changed by any input received. In this case, for example, exposure to popular management discourses about teamwork, participation, and flattened hierarchies may have sensitized these firefighters to imagine themselves as being able to participate in decisions on the fireline. Fourth, although strategic planning discourses favor concrete goals that lend themselves to measurement and accountability, self-studies also have the opportunity to create discursive openings that can lead to punctuated or paradigmatic, rather than incremental, change.

NOTES

1. To the extent that self-studies entail the collective search for self-understanding, they may also allow members to pursue the practical knowledge interest, in contrast to the customary pursuit of the technical interest (Habermas, 1971; Stablein & Nord, 1985).

2. Conversely, avoiding setting the agenda at all for fear of creating discursive closure can also lead to unproductive results (e.g., Zoller, 2000).

3. Bullis (1993) also noted that foresters are more likely to identify with their specialized scientific professions than they are to identify with the agency.

4. Putnam and his team went on to conduct their own investigations of the fire behavior at Storm King Mountain. Over the next few years, they produced reports whose findings differed from the official accident investigation team's "blowup" theory (e.g., Kowalski, 1995; USFS, 1999). Equipment specialist Dick Mangan had also refused to sign the report initially but ultimately relented (MacLean, 1999). However, he has since spoken out about the potential culpability of the local ranger station in failing to dispatch needed resources (see, e.g., MacLean, 1999; Wolfinger & Bacon, 2002).

5. The Storm King Mountain tragedy occurred on land operated by the Bureau of Land Management, yet 13 of the 14 firefighters who perished were employees of the USFS. Therefore, although both agencies contracted with Tri-Data, for simplicity's sake, the current analysis will refer to the USFS as the contracting agency.

6. A distinction is usually made between "wildland firefighters" and "urban firefighters" insofar as they fight different kinds of fires in different locales and with different tools.

7. Although a textual approach is used in this particular case, other approaches such as ethnography may also be appropriate for investigating organizational self-study (see, e.g., Lazega, 1992; Thackaberry, 2000).

8. Firefighters placed these items into their top five priorities approximately twice as often as expected: 39 times for Watchout Situations and 37 times for Fire Orders (Tri-Data, 1996, p. 204).

9. This is consistent with one theme identified by Redding (1985) as characteristic of organizational research of the 1940s and 1950s, that "changes in attitudes and behaviors can be effectively accomplished through group dynamics" (p. 51).

10. This is not the same thing as "bounded rationality" as defined by Simon (1949/1997), which suggests that rational decision making is bounded by the impossibility of achieving perfect information. Rather, in this case, the agency is actually saying that standard procedures are the proper limits for thinking. The USFS is literally creating "the box" that popular management authors are referring to when they encourage readers to "think outside the box" (cf., Morgan, 2001).

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