Hot Lights and Cold Steel: Cultural and Political Toolkits for Practice Change in Surgery

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One of the great paradoxes of organizational culture is that even when less powerful members in organizations have access to cultural tools (such as frames, identities, and tactics) that support change, they often do not use these tools to challenge traditional practices that disadvantage them. In this study, I compare data about work practice change from my own field study of an elite teaching hospital (conducted in the early 2000s) to previously reported data from field studies of two similar hospitals (one conducted in the 1970s and one in the 1990s). I demonstrate that although cultural toolkits supporting change may allow less powerful organization members to see traditional practices as running counter to their interests, they may not be able to significantly change traditional practices unless they also have access to what I call *political toolkits* (including tools such as staffing systems, accountability systems, and evaluation systems) that support change. Although cultural tools allow them to reinterpret practices that disadvantage them as unfair, political tools allow them to feel optimistic that others will help them effect change. Whereas cultural tools enable them to develop a "we" feeling with other reformers, political tools allow them to coordinate their change efforts. And although cultural tools provide them with a repertoire of contentious tactics, political tools afford them a sense of security that they can battle defenders of the status quo without ruining their careers. These findings contribute to our understanding of both the cultural construction of organizational life and social movement processes.

Key words: organizational culture; toolkit; social movements; institutional change; microinstitutional change; microfoundations; microprocesses; professions; political opportunities; political opportunity structure; cultural opportunities; cultural opportunity structure; law and society; ethnography; ethnographic; comparative case study; medical

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At Advent Hospital, Tom, a first-year surgical trainee, filled in the last line on the patient admission form, rubbed his eyes, and blinked heavily to force himself awake. It was already dark outside—9 P.M. He had arrived for work at 4 A.M. that morning and still had several hours of administrative tasks left to do before he could go home. It was mindless scutwork: patient admissions, consent forms, pre-ops, post-ops, progress notes, NG tubes, blood draws…hours and hours every day, seven days a week. At Boot Camp Hospital, first year surgical trainee Paul sighed as he adjusted patient toilet seats while weighing in his mind whether or not a patient could have a different flavor of vitamin shake. At Pacific Hospital, surgical trainee Carl faced another day that was just like the day before and the day before that—full of scutwork such as writing up medication orders, changing IVs, filling out patient admission forms.

Tom, Paul, and Carl were all first-year surgical residents—medical doctors undergoing five years of hands-on training in surgery before going into practice on their own. First-year surgical residents (also known as interns) historically have been required to do all of the routine "scutwork" on surgical wards. These were repetitive, mind-numbing, and often trifling tasks, and

they were endless. To get them all done, interns traditionally have had to work approximately 120 hours each week, usually from 4 A.M. to 9 or 10 P.M., and they have had to stay on-call overnight in the hospital several times each week.

Tom, Paul, and Carl all hated scutwork, but they each handled it very differently during their first year of residency training. During his intern year, Tom overtly challenged defenders of the status quo by acting collectively with other residents to significantly change traditional scutwork practices. Paul acted with his colleagues in a less organized way, and they challenged defenders of the status quo much less overtly; they were able to modify scutwork practices, but only slightly. Carl acquiesced to the status quo and performed the scutwork interns have traditionally performed for decades.

Tom, Paul, and Carl did not act differently because they worked in different medical settings. Advent, Boot Camp, and Pacific were all elite teaching hospitals. Interns did comparable work in all three, and those organizational factors that studies have shown to facilitate challenge were present in all three hospitals. Nor can their different behaviors be explained by biographical differences, for Tom, Paul, and Carl each had similar prior training and similar career goals. Nor can their

different behaviors be explained by idiosyncratic personality characteristics. Other interns in their respective hospitals acted as they did. How, then, can we explain the differences in their attempts to change the traditional scutwork practices that disadvantaged them? Why did Tom and his colleagues accomplish major change? Why did Paul and his colleagues realize only minor change? And why did Carl and his colleagues not make any change at all?

Cultural theorists would likely explain the differences in Tom, Paul, and Carl's behavior by arguing that each had access to a different set of cultural tools. One way of looking at culture is that it is a "toolkit" (Swidler 1986)—a collection of rituals, symbols, stories, and worldviews that actors can draw on to construct their action in particular situations. In some instances, less powerful members have little access to those cultural tools that support change, so they reproduce the status quo (e.g., Alvesson and Willmott 2002, Bechky 2003, Dacin and Dacin 2008, Vaughan 1996). But in other instances, change-oriented tools are more available, and the less powerful can use them to challenge traditional practices (e.g., Davis et al. 2008, 2005; Lounsbury 2001; Meyerson 2003; Morrill et al. 2003; Scully and Segal 2002; Weber et al. 2009; Zald et al. 2005). Thus, according to theorists who examine the cultural construction of organizational life, the ability of less powerful organization members to challenge the status quo depends on the availability of cultural tools supporting change.

And, in fact, the concept of cultural toolkits does explain quite well the different actions of two of the three interns—Carl at Pacific and Paul at Boot Camp. Carl was an intern at Pacific hospital during the 1970s, when scutwork was uniformly seen as a rite of passage for surgical interns. There were no cultural tools available that would prod him to question the practice, let alone challenge it. Paul, in contrast, was an intern at Boot Camp hospital during the 1990s, when the patient rights movement and the agitation for resident rights reform reconceptualized traditional scutwork practices as both unfair to interns and unsafe for patients. With the new cultural tools these movements made available to him, it is not surprising, then, that Paul would challenge traditional practices and Carl would not.

However, the concept of cultural toolkits fails to explain why Tom, who was an intern at Advent in the early 2000s, acted differently than did Paul at Boot Camp in the 1990s. Although each worked in the same kind of organization and had available to him the same cultural toolkit, Paul tried to modify scutwork practices single-handedly and covertly whereas Tom challenged those practices collectively and overtly.

In this article, I argue that to fully understand when and how less powerful organization members try to change disadvantageous work practices, in addition to cultural toolkits we must take into account what I call

political toolkits. Cultural toolkits are composed of symbolic elements such as frames, identities, and tactics that can be brought into organizations from other settings by any organization member. In contrast, political toolkits, as I conceive them, are composed of material elements such as accountability systems, staffing systems, and evaluation systems that depend on the formal authority of more powerful organization members for their introduction into particular organizations. Changes over time in an organization's broader institutional context shape changes in cultural and political toolkits inside organizations.

In what follows, I combine an historical examination of changes in the institutional context of surgical residency over time with an ethnographic analysis of interactions around scutwork inside three hospitals: Pacific Hospital (data gathered by Bosk 1976, 2003), Boot Camp Hospital (data gathered by Pratt and collegues 2005, 2006), and Advent Hospital (data gathered by me).[1] To explain when and how less powerful organization members challenge practices that disadvantage them, I examine the different ways interns attempted (or not) to change those practices at these three hospitals. I conclude by discussing the implications of political toolkits for understanding both the cultural construction of organizational life and social movement processes.

Current Literature on Practice Challenge and Change by Less Powerful Organization Members

Using Cultural Toolkits to Challenge and Change Traditional Practices

How and when do less powerful organization members challenge and change traditional work practices that disadvantage them? Early cultural approaches to organizations had difficulty answering these questions because they saw culture as a constraining force (e.g., Barley 1983, Van Maanen 1976). Culture shaped people's deeply held assumptions as well as defined what ends they were to hold sacred (Schein 1985).

More recently, theorists have conceptualized culture as enabling rather than constraining (see DiMaggio 1997 and Morrill 2008 for reviews). According to these theorists, rather than preempting challenge, culture can offer opportunities for questioning and altering traditional work practices in organizations (e.g., Davis et al. 2005, Dutton et al. 2006, Foldy and Creed 1999, Meyerson 2003, Meyerson and Scully 1995, Morrill et al. 2003, Scully and Segal 2002, Weber et al. 2009, Zald et al. 2005). In this view, culture is seen to be a "toolkit" (Swidler 2001) of resources that people can use to develop strategies of action in particular situations. The cultural toolkit of an organization is a grab bag of norms, values, frames, rituals, stories, jargon, rhetoric, humor,

and routines that organization members use to shape their actions as they go about their day-to-day work (e.g., Fine 1996, Martin 2002, Perlow and Weeks 2002, Vaughan 1999). Cultural tools are powerful, in part, because they are transposable—cultural tools can be conveyed from one context to another when the opportunity arises (Clemens and Cook 1999, Sewell 1992). Three kinds of cultural tools are important to the analysis presented in this paper: injustice frames, alternative identities, and contentious tactics.

Injustice Frames. Less powerful organization members often conform to traditional practices not because it serves their interests, narrowly defined, but because these practices are taken so much for granted that these organization members do not consider alternatives (e.g., Powell and Colyvas 2008, Scott et al. 2000). They may complain about traditional practices, but they attribute their discontent to personal failings or to "the system," and they come to accept what they feel they cannot change (Gamson 1992b). One of the most important cultural tools that enables the less powerful to challenge traditional practices is what theorists call "injustice frames." Injustice frames are arguments that allow less powerful members to define traditional practices as questionable or wrong (Gamson et al. 1982, Snow and Benford 1988). For instance, when inequities in pay between men and women were framed by the argument that men were the true breadwinners of the family and thus should be paid more than women, to the degree that such conceptual framing was accepted, it was difficult to perceive the practice as unfair or to change it. But, once the practice was reframed with an argument such as "equal pay for equal work," that is, once the practice was put in an "injustice frame," it became easier to both challenge and modify (McCann 1994). Fully elaborated injustice frames diagnose the existing situation as unfair, identify particular groups as responsible, and depict the problem as amenable to change through collective action (Gamson 1992b, Snow et al. 1986).

When activists outside of organizations create injustice frames to fight for new benefits for disadvantaged groups, they create a new cultural opportunity for less powerful members inside organizations. Less powerful members can bring frames created elsewhere into their own organization's cultural toolkit and adapt these frames for use in their own setting (e.g., Kaplan 2008). For example, Creed et al. (2002) describe how gay rights activists inside corporations drew on human rights frames that had been generated by the civil rights movement to argue for domestic partner benefits inside their workplaces. Binder (2002) details how teachers in American public schools drew on frames from the Afrocentricism movement that criticized the Eurocentric emphasis in American curricula to justify teaching their students in new ways. And Katzenstein (1998) elaborates how

women in the military used frames that had been created by feminist military interest groups to argue for "equal opportunity" rather than "special treatment based on difference."

Alternative Identities. Less powerful members often accept traditional work practices because of widely accepted role expectations about how members of their class should behave (e.g., Bailyn 2006). One powerful tool that enables them to see themselves as part of a group that is disadvantaged by the existing social system is an alternative identity. For instance, in many social systems, reformers are defined as "uninformed troublemakers," but by recasting their identity as, for example, "concerned citizens," reformers can legitimize their desire to challenge their existing roles and can use this alternative identity to mobilize with one another for change (Gamson 1992a, Taylor and Whittier 1992).

Activists outside of organizations can create alternative identities that the less powerful inside organizations can appropriate. These can be identities from social environments and settings quite foreign to their own, and they can include such elements as dress, narratives, or even religious practices (e.g., Creed and Scully 2000, Ibarra 1999, Meyerson 2003, Rao et al. 2003, Van Maanen 2001). For example, Meyerson (2003) describes how less powerful members in financial, hi-tech, and consumer products organizations quietly resisted the status quo by drawing on their alternative racial, sexual, or gender identities to dress differently, furnish their offices differently, and lead differently than those in the dominant group. Nelsen and Barley (1997) demonstrate how paid emergency medical technicians (EMTs) challenged incumbent volunteer EMTs by drawing on identities generated by occupational activists suggesting that paid EMTs were public servants rather than trauma junkies, decisive rather than indecisive, in control rather than out of control, and seasoned rather than trained. And Moore (1996) recounts how associate professor scientists on university campuses drew on the identity created by social movement activists of "scientist for the people" in contrast to "scientist for the State" to take social and political action against the Vietnam War.

Contentious Tactics. The less powerful sometimes acquiesce to traditional practices that disadvantage them because they are concerned about sanction (e.g., DiMaggio and Powell 1983, Scott 2007) or because they do not have the skills required to fight effectively for their rights (e.g., Fligstein 1997). Cultural tools such as a repertoire of contentious tactics can enable them to challenge defenders individually and covertly (Meyerson 2003, Meyerson and Scully 1995, Morrill et al. 2003) or collectively and overtly (e.g., Briscoe and Safford 2008, Katzenstein 1998, Lounsbury 2001, Raeburn 2004, Scully et al. 1998, Scully and Segal 2002).

A repertoire of contentious tactics is simply a collection of practices, often created by a social movement, that the less powerful inside organizations can draw from to challenge the status quo and its defenders. For example, Lounsbury (2001) demonstrates how university students borrowed from the National Recycling Coalition tactics such as developing particular measurement standards and encouraging people to reuse materials to promote recycling practices on their college campuses. And Weber et al. (2008) detail how small family farmers employed tactics publicized by the American Grassfed Association such as using grazing systems and farming technologies deemed environmentally sustainable to challenge large-scale factory farmers.

Theorists have shown that less powerful members are more likely to challenge the status quo when they are presented with new cultural tools created by social movement activists (e.g., Creed et al. 2002, Lounsbury 2001). They have also shown the opposite—without access to an expanded set of cultural tools, less powerful members often do not even think to challenge the status quo. Thus, those more powerful can maintain traditional practices by controlling the symbolic resources available to those less powerful (e.g., Alvesson and Willmott 2002). They can ensure consent and passive compliance not by using coercion but by restricting the cultural toolkit to traditional roles (Sveningsson and Alvesson 2003), discourses (Alvesson and Willmott 2002, Kunda 2006), behavioral scripts (Barley 2008, Morrill 1995), decision processes (Khurana 2002), rituals (Dacin et al. 2010), routines (Heimer and Staffen 1998, Vaughan 1996), emotional demeanors (Hochschild 1983, Weeks 2004), office space layouts (Alvesson and Robertson 2006, Kilduff et al. 1997), and sayings (Bechky 2003).

Bringing Politics into Our Understanding of Toolkits
The cultural toolkits approach explains why interns at Pacific in the 1970s did not even try to challenge traditional scutwork practices—they had access to only a restricted set of frames, identities, and tactics that supported the status quo. However, while Tom at Advent and Paul at Boot Camp both had access to the same set of cultural tools promoting change, Tom and his colleagues succeeded in dramatically transforming traditional scutwork practices while Paul and his colleagues merely slightly modified them. To understand why interns at Boot Camp and Advent acted differently, we need to bring politics into our understanding of toolkits. Organization theorists studying challenge and change by less powerful members in organizations have emphasized the importance of cultural tools but they have devoted little attention to political tools. Social movement theorists can provide some help here.

These theorists characterize institutional environments as enabling different levels of challenge and change according to differences in both cultural opportunities and political opportunities. Whereas cultural opportunities include symbolic resources supporting change such as frames, identities, and tactics, political opportunities include material resources supporting change such as new public policies, changing supply, and demand for labor, or shifting demographics (McAdam 1999, Tarrow 1994). New public policies can enable change by pressuring local authorities to be more open to the solutions of reformers (e.g., McAdam 1999, Meyer 2005). Changes in labor force supply and demand can facilitate change by reducing the capacity for repression, which makes success more likely because the costs of mobilizing are diminished (e.g., Costain 1992). And, changing demographics can allow for change because increasing the presence of potential allies makes it more likely that challenge will be successful (e.g., Tilly 1995).

This research helps us understand how political opportunities in addition to cultural opportunities enable social movement activism by less powerful members in our wider society. However, to explain the intra-organizational challenge and change processes I saw occur at Pacific, Boot Camp, and Advent, it is necessary to analyze the relationship between opportunities available in the institutional environment on the one hand and tools available to less powerful organization members inside organizations on the other. Although a handful of studies of social movements and organizations highlight the importance for challenge of what I call political tools (Katzenstein 1998, Meyerson 2003, Morrill 1995, Morrill et al. 2003, O'Mahony and Bechky 2008, Raeburn 2004, Scully and Creed 2005, Scully and Segal 2002, Weber et al. 2009, Zald and Berger 1978, Zald et al. 2005), they do not analyze how changes in institutional-level political opportunities affect changes in these organization-level political tools. In addition, no previous studies (to my knowledge) clarify how cultural and political tools available inside organizations facilitate challenge in different ways or document how challenge is affected by the presence of strong cultural tools but the absence of strong political tools.

In the context I studied, although cultural tools available inside hospitals were necessary for challenge, they were not sufficient for major change. I find that less powerful members in organizations may need strong political tools (such as staffing systems, accountability systems, and evaluation systems) in addition to strong cultural tools if they are to engage in the reinterpretation, organization, and contestation necessary to challenge and change traditional work practices that disadvantage them. In what follows, I review the methods used in the study and then describe how the combination of strong cultural tools and strong political tools at Advent enabled reformers to engage in the micromobilization necessary to accomplish major change in scutwork practices.

Methods

The methods used in this paper are inductive. I selected the Pacific, Boot Camp, and Advent cases for analysis because, in reading Bosk's dissertation and book about Pacific hospital (Bosk 1976, 2003), Pratt and colleagues' articles about Boot Camp hospital (Kaufmann and Pratt 2005, Pratt et al. 2006), and my own ethnographic field notes from Advent hospital, I was struck by the profound differences in intern behavior across the three hospitals. While the three studies were conducted in very similar organizations and analyzed similar phenomena, interns across hospitals differed dramatically in their attempts to change the loathed scutwork practices. I realized that these differences afforded me the opportunity to study when and how less powerful members may challenge traditional practices that disadvantage them.

All three hospitals were elite teaching hospitals whose organizational structures—as manifested in roles and relationships among the directors, staff surgeons, residents, and interns—were remarkably consistent. Yet, the institutional context of each hospital was quite different, for the Pacific study was conducted in the 1970s, the Boot Camp study in the 1990s, and the Advent study in the early 2000s. To analyze the different processes and outcomes at the three hospitals, I use two kinds of analyses: (1) an analysis of the macro-level institutional context over time and (2) an analysis of the micro-level challenge and change of scutwork practices inside the three hospitals.

Analysis of Macro-Level Institutional Context Over Time

The macro-level analysis details the cultural and political opportunities available in the institutional context of surgery over time. To measure changes in cultural opportunities over time, I analyzed articles about interns and residents written in three major newspapers (*Chicago Tribune*, *Los Angeles Times*, and the *Washington Post*) in three different time periods for evidence of changes in cultural opportunities (frames, identities, and tactics) related to the challenge of traditional scutwork practices. The three time periods each included the 10 years just prior to and encompassing the interns' internship year. To measure changes in political opportunities over time, I analyzed the diversity of workforce, supply versus demand for surgical residents, and changes in public policy supporting change in each of the three time periods.

Analysis of Micro-Level Practice Challenge and Change Inside Hospitals

The micro-level analysis entailed detailing the challenge and change of scutwork practices that occurred in each of the three hospitals. I use Buroway's (1979) methodological approach of combining the analysis of previously published field study data with the analysis of field study data gathered by the author. Neither Bosk nor Pratt and his colleagues theorized about interns' challenge of traditional scutwork practices, but the data from Pacific and Boot Camp describe interactions between staff surgeons, senior surgical residents, and interns in the year after interns first entered the hospitals, and so they adventitiously provide great detail about the ways the interns did—and did not—deal with such practices.

Data in all three studies were collected using a combination of observation and interviews with staff surgeons, senior residents, and interns. I analyzed these data to address three questions: (1) When did interns try to change traditional scutwork practices? (2) How did they do so? (3) What were the outcomes? Appendix 1, which can be found in the online companion (http://orgsci.pubs.informs.org/ecompanion.html), provides a detailed description of the data collected from the newspaper articles and from the studies conducted by Bosk, Pratt, and me, address potential problems with using previously published reports as raw data for analysis, and further elaborates my analytical approach.

Using Cultural and Political Toolkits to Change Surgical Practices

At Pacific Hospital, interns had access to few cultural tools that would help them change traditional scutwork practices and, perhaps not surprisingly, they made no changes. But at Boot Camp, strong cultural tools supporting change *were* available, and yet interns there succeeded in modifying these practices only slightly. An examination of Advent, where interns and their colleagues were successful in making major changes, helps to explain why. At Advent, interns had access not only to strong cultural tools but also to strong political tools, and this combination enabled them to successfully challenge defenders and to significantly transform traditional practices. An analysis of how changes to scutwork were or were not brought about at Pacific, Boot Camp, and Advent hospitals suggests that access to strong cultural tools alone is not sufficient to effect change. To significantly alter traditional practices, interns also needed access to strong political tools.

Weak Cultural Opportunities and Tools and No Change at Pacific

Weak Cultural Opportunities for Change in Pacific's Institutional Context. In the late 1970s, there were few cultural opportunities available in the institutional context for would-be reformers of traditional scutwork practices. In the 10 years just prior to and encompassing the Pacific interns' internship year, newspaper articles about interns and residents in the three newspapers analyzed here (*Chicago Tribune*, *Los Angeles Times*, and the *Washington Post*) suggest that internship was seen as

a rite of passage for those training to be doctors. Articles portrayed intern scutwork as normal and natural. For example, one article in the *Washington Post* matter-of-factly summarized the generally accepted administrative tasks of an intern: "Interns are used to round out hospital's staffs. They assist fully licensed doctors in the nonmedical care of patients, serve in emergency rooms and make preliminary physical examinations" (Auerback 1968, p. B5).

But, to fully understand the cultural opportunities available to interns in the 1970s, we need to recognize that what these articles did not say is as important as what they did say. Traditional intern practices were presented as unsafe for patients in only 2% of articles, as exploitative of or unhealthy for interns in only 6% of

articles, and as unnecessary for intern education in only 5% of articles (Table 1).

Similarly, in the 1970s there were no collective identities available that could facilitate the organization of would-be reformers. The newspaper articles written during this time suggest that, as "newcomers," interns were expected to complete all of the scutwork on surgical wards and to defer to seniors in all matters. As "experienced doctors" with "unrestricted license to practice medicine following [the] one year internship" (*Washington Post* 1973, p. E7), staff surgeons were to impart their wisdom to the interns in whatever way they saw fit. None of the articles questioned the interns' traditional identity as scutworkers; instead, this identity was presented as a matter of course. For example, one article

Table 1   Cultural Opportunities in the 1970s, 1990s, and 2000s

	Indicators	1970s (Pacific) weak opportunities	1990s (Boot Camp) strong opportunities	Early 2000s (Advent) strong opportunities
Injustice frames	• Unsafe for patients • Exploitative of or unhealthy for interns • Unnecessary for intern education	• 2% of articles suggest current intern practices are unsafe • 6% of articles suggest current intern practices are exploitative of or unhealthy to interns • 5% of articles suggest current practices are unnecessary for intern education	• 55% of articles suggest current intern practices are unsafe • 58% of articles suggest current intern practices are exploitative of or unhealthy to interns • 12% of articles suggest current practices are unnecessary for intern education	• 53% of articles suggest current intern practices are unsafe • 54% of articles suggest current intern practices are exploitative of or unhealthy to interns • 13% of articles suggest current practices are unnecessary for intern education
Alternative identities	• Zombie intern • Cheap labor • Intern as unhealthy or as having no time for personal life responsibilities	• 1% of articles depicting interns portray them as zombies • 6% of articles depicting interns portray them as cheap labor • 1% of articles depicting interns portray them as unhealthy or as having no time for personal life responsibilities	• 39% of articles depicting interns portray them as zombies • 42% of articles depicting interns portray them as cheap labor • 35% of articles depicting interns portray them as unhealthy or as having no time for personal life responsibilities	• 31% of articles depicting interns portray them as zombies • 40% of articles depicting interns portray them as cheap labor • 30% of articles depicting interns portray them as unhealthy or as having no time for personal life responsibilities
Contentious tactics	• Self-presenting as overtired, overworked • Proposing new practices to improve interns working conditions • Defying their superiors to improve intern working conditions	• 2% of articles recount incidents where interns self-presented as overtired or overworked • 4% of articles recount incident where interns proposed new practices • 2% of articles depict as directly defying their superiors	• 29% of articles recount incidents where interns self-presented as overtired or overworked • 20% of articles recount incidents where interns proposed new practices • 14% of articles depict as defying their superiors	• 30% of articles recount incidents where interns self-presented as overtired or overworked • 20% of articles recount incident where interns argued for new regulation • 16% of articles depict as directly defying their superiors
Total articles	• *Chicago Tribune, Los Angeles Times, Washington Post*	• 82 articles	• 92 articles	• 97 articles

described how staff surgeons at County General Hospital in Los Angeles required new interns to go to a special luncheon of salt-free foods during their orientation week so that they could learn to better perform the administrative task of ordering salt-free diets for patients (*Los Angeles Times* 1966). Only 1% of the articles portrayed interns as exhausted workers, only 1% portrayed them as unhealthy or having no time for personal life responsibilities, and only 6% of articles painted them as "cheap labor" for hospitals.

Finally, there were few contentious tactics available in the institutional context to help interns push back on scutwork in interactions with their seniors. Only 2% of the articles during this time period described an intern contesting traditional practices by self-presenting to a reporter as overworked. And, very few articles showed interns protesting the unfairness of traditional practices to interns by proposing less exploitative work practices (4%) or by defying their superiors through lawsuit or strikes designed to improve intern working conditions (2%). This is not to say that interns did not ever propose new practices or defy their superiors. They did do this at times, but, importantly, the focus of their protest was on demanding monies for the care of indigent patients in particular county hospitals rather than on demanding a change in intern work practices more generally. For example, in January of 1968, interns and residents at Chicago's Cook County Hospital rebelled. But they did not call for higher wages or shorter work hours for themselves or for interns across the country. Instead, in a report to the county board president, interns and residents publicly charged that "longstanding shortages of nurses, equipment, and medical supplies [at Cook County] frustrate their efforts to provide adequate medical care." Further, they argued that "these conditions...point out an obvious double standard of medical care for the indigent members of our community" (Kotulak 1968, p. 8).

Weak Cultural Tools for Change in Pacific's Cultural Toolkit. This lack of cultural opportunities in the institutional context directly shaped the cultural toolkit available within Pacific. Although Bosk's (2003) rich data show that interns at Pacific were critical about some surgical practices, no intern is ever reported as suggesting that scutwork was unsafe or unfair. In addition, at Pacific, practices in the organizational cultural toolkit followed a traditional model: surgical interns were to respect traditional authority relations by compliantly doing all of the routine work associated with the preoperative and postoperative care of patients. It is obvious from Bosk's description of the way seniors and interns saw their respective roles that both understood their duties within the traditional, strongly hierarchical frames and identities that were present in the external environment. The staff surgeon, Bosk notes, "was

clearly the superordinate on the service. He was the final authority in any disagreements with housestaff [interns and senior residents]; only the staff surgeon could give orders binding on every member of the service" (Bosk 2003, p. 9). Interns, explains Bosk,

> are the non-commissioned officers of the surgical world. The intern [ensures] that the routine but necessary work, scut, of clinical care is done. ...the intern can write medication orders and admit patients to the hospital. However his authority in the hierarchical world of surgery is limited. (Bosk 2003, pp. 9–10)

No Micromobilization by Interns and Their Colleagues at Pacific. Because the cultural tools available for interns at Pacific were so weak, there was little to provoke them to reinterpret scutwork practices as unfair, to develop a "we" feeling with other reformers, or to challenge defenders of the status quo. Lacking conceptual frames that defined scutwork as inequitable, interns interpreted scutwork traditionally—it was a given that was not amenable to change. And because interns had no access to reformer identities such as zombies or cheap labor or workers risking their own health, they did not develop a we feeling with other interns or more senior reformer allies.[2] Finally, because there was no repertoire of contentious tactics in the Pacific cultural toolkit, interns were kept from seeing how they might contest scutwork practices in interactions with their seniors. Bosk's deep observation shows that when they failed to do their expected scutwork, and when seniors punished them for this, interns reacted by apologizing profusely, silently accepting public humiliation, or hanging their heads in shame.

No Change in Scutwork Practices at Pacific. Because interns had no strong cultural tools for change, they did not mobilize with one another, did not challenge defenders, and did not change traditional scutwork practices.[3] Bosk's data show that, at the end of the year, one intern failed to comply with traditional scutwork practices, and he was ejected from the program. (Two other interns were ejected for other reasons.) The remaining interns were judged by staff surgeons in an end-of-year formal evaluation meeting as "appropriately" engaging in all of the practices required of surgical interns, including scutwork. Thus, all interns who continued on in the Pacific residency program abided by and reinforced traditional scutwork practices.

Strong Cultural Opportunities and Tools but Only Minor Change at Boot Camp

Strong Cultural Opportunities for Change in Boot Camp's Institutional Context. When Pratt and his colleagues conducted their field study 20 years later in the 1990s, social movement activists had begun to provide strong cultural tools for would-be reformers inside

hospitals. Patients' rights and residents' rights groups such as Public Citizen, the American Medical Student Association, and the Committee of Interns and Residents argued that hospitals were using residents as "cheap labor" and that long resident work hours were harmful to the care of patients and the health of residents. In the late 1980s, external reformers created a sense of moral outrage in the general public by demanding and publicizing a grand jury investigation of the avoidable death of Libby Zion, a patient in one of the country's most prestigious teaching hospitals, who died while in the care of a resident who was portrayed as exhausted and addled at the end of a 36-hour shift (e.g., Mitler and Cetel 1989). This new framing of long work hours as unfair to residents and dangerous to patients persuaded New York lawmakers to establish New York State regulations limiting resident work hours to 80 per week (Asch and Parker 1988).

In this context, injustice frames were much more available to potential reformers than they had been in the 1970s. Of the articles written about medical or surgical interns or residents in the *Chicago Tribune*, the *Los Angeles Times*, and the *Washington Post* in the 10 years just prior to and encompassing Boot Camp interns' internship year, 55% presented current practices as unsafe for patients, 58% presented them as exploitative of or unhealthy for interns, and 12% presented them as unnecessary for intern education (Table 1).

External reformers also offered new identities to interns that had not been available in the late 1970s and that afforded them with new self-understandings. Of the newspaper articles, 39% depicted interns as exhausted zombies compromising patient care, 42% depicted them as cheap labor for hospitals, and 35% depicted them as unhealthy or having no time for personal life responsibilities. External reformers also offered a new identity to senior residents and staff surgeons—the "complete doctor," a doctor who was "both physically and emotionally capable of taking care of patients" (Stein 1989, p. 3) and who acted in a nonhierarchical manner with subordinates by "managing...with a team approach" rather than acting as "captain of the ship" (Conley 1991, p. 1). Of the newspaper articles from this period, 27% mention identity characteristics associated with the new "complete doctor" identity; none had mentioned these identity characteristics in the 1970s.

In addition to providing new identities that allowed interns and their seniors, respectively, to see themselves in nontraditional ways, external reformers offered a new repertoire of contentious tactics that interns could draw on to resist scutwork with their superiors. Despite their long hours, interns had long been expected to present themselves to superiors and patients as well rested; this self-presentation both showed their acceptance of the scutwork their superiors required of them and gave patients confidence in interns' abilities to take care of

them despite the long hours they worked. Now external reformers had begun to offer interns an oppositional demeanor: the zombie who might fall asleep during surgery because he or she has been required to spend so many hours in the hospital doing scutwork. For example, resident Ladi Haroona, president of the Committee of Interns and Residents, told a story of a resident nodding off while assisting in the operating room during a liver transplant: "He was holding a patient's liver and fell asleep and someone grabbed it before it hit the floor" (Rubinowitz 1999). Of the newspaper articles in the three papers written about interns or residents, 29% highlight the tactic of self-presenting as exhausted or overworked by displaying themselves to journalists in this manner as they pressed for change.

In addition to offering interns forms of self-presentation to push back on superiors, external reformers introduced them to tactics designed to allow them to propose changes and defy these superiors. Newspaper articles in the three papers provide tactics around how to introduce new work practices (20%) and describe defiance tactics such as strikes designed to improve intern working conditions (14%). For example, an article in the *Washington Post* described how, in 1996, interns at Howard University proposed specific new work practices such as reducing the number of patients they were required to cover to prevent them from being treated like "indentured workers" who had "to accept what's given to us" (Cohn 1996, p. A12). Similarly, in 1990, interns and residents in Los Angeles highlighted the tactic of defying superiors by toting signs reading "Human Hours Make Human Doctors" and staging a "sleep in" outside of UCI Medical Center, sitting on bed sheets in symbolic rest (Mascaro 1990, p. 3).

Strong Cultural Tools for Change in Boot Camp's Cultural Toolkit. Interns and their colleagues within Boot Camp were aware of the frames, identities, and tactics created by social movement activists, so these became available in the cultural toolkit at Boot Camp. Pratt and colleagues note that the collective identity of "most complete doctor" served as part of an "identity kit" of cultural "raw materials" that residents and staff surgeons drew on to make sense of their work (Pratt et al. 2006, p. 246). And, Pratt and colleagues' reports suggest that interns and their seniors were aware of the frame of scutwork as exploitative, the tactic of self-presenting as exhausted (Pratt et al. 2006, p. 248), and the tactic of practicing work in new ways (Pratt et al. 2006, p. 247).

Cultural Micromobilization by Interns and Their Colleagues at Boot Camp. The strong cultural tools available to interns at Boot Camp led them to reinterpret scutwork practices as unfair, to develop a we feeling with other reformers, and to covertly challenge scutwork practices. Unlike interns at Pacific, who had justified scutwork as an acceptable rite of passage, interns at Boot

Camp reinterpreted scutwork as a "crap job" they were forced to do. One Boot Camp intern said,

> You just take care of businesses as an intern . . . that means writing down hundreds of pages of text into different places—patient's charts and forms—it's just an unbelievable pile of paperwork that somebody has to do. The interns get left to do all the crap. (Pratt et al. 2006, p. 247)

Another intern said that the work interns were forced to do was "just malignant and there are some services where not only are you working hours and hours and never getting any sleep [but] you're treated like crap" (Kaufman and Pratt 2005, p. 248). Pratt and colleagues note that interns felt a sense of "integrity violation" in doing scutwork: "Doing paperwork and other scut work . . . was at odds with [their] view of themselves as professionals" (Pratt et al. 2006, p. 245).

Second, at Boot Camp, the new alternative identities gave interns stronger tools for organizing than were available at Pacific. The "exploited worker" identity provided interns with an important oppositional identity to the "taking care of business, noncommissioned officer" identity, and the "most complete doctor identity" provided potential reformer seniors with an oppositional identity to the "authoritative commando" identity. Interns and senior reformers at Boot Camp used these alternative identities to build a loose sense of "we" versus "they." Interns also described how they liked (and clearly identified with) surgeons who enacted an alternative, change-oriented identity:

> He is an intern/resident/chief resident/fellow and attending [staff surgeon] wrapped into one. He comes in in the morning and rounds with us and basically his actions . . . he doesn't say this but his actions are saying . . . I don't need you to do any of the scutwork. You're more than welcome to come along with me and I will teach you everything I know . . . . (Pratt et al. 2006, p. 251)

Interns and senior residents who wanted to challenge traditional practices developed a loose sense of affiliation with reformer staff surgeons like Dr. Ian and Dr. Ivan. One senior resident who chose to identify with them said,

> They [Dr. Ian and Dr. Ivan] are excellent surgeons and they are so attentive to their patients. They talk and they communicate with their patients all the time. They always give them the plan and they explain everything. (Pratt et al. 2006, p. 251)

Finally, interns at Boot Camp understood that they were expected to present a well-rested, clean-cut demeanor as a way of denying the fact that scutwork and the long hours it required was detrimental to them in any way: "The Boot Camp way is trying to always look your best and everything like that . . . always look clean and pressed" (Pratt et al. 2006, p. 243). But they were

also aware that there were now available to them alternative, contentious tactics that would allow them to contest these scutwork practices and to challenge the defenders of the status quo. Thus, interns knew that they could occasionally resist the traditional hierarchy by letting it "show that you're 30 hours behind sleep for the week" (Pratt et al. 2006, p. 247)—in this way casting doubt on the ability of interns working 120 hours a week to safely take care of patients.

But Only Minor Change in Scutwork Practices at Boot Camp. Although interns at Boot Camp used strong cultural tools to challenge traditional practices, their challenges tended to be sporadic, covert, and individual, and thus they were not able to make significant change. Pratt and colleagues' data show that although a few interns modified their scutwork practices in some small measure to reflect the nontraditional identity, nevertheless, in general, intern "choices were highly constrained by the organizational context" (Pratt et al. 2006, p. 257) and there was "a fair amount of intragroup conformity" (Pratt et al. 2006, p. 256) among the interns. By the end of the intern year, interns were individually modifying traditional scutwork practices but only slightly and only in their interactions with senior reformers.

It appears, then, that even though interns at Boot Camp had access to strong cultural tools supporting change, they did not succeed in significantly changing traditional practices that disadvantaged them. Why would this be so? To answer this question, we need to turn to Advent. There, interns did succeed in significantly changing scutwork practices, and they did so because they had access to not only strong cultural tools but also strong political tools supporting change.

Strong Cultural and Political Opportunities and Tools and Major Change at Advent

Similar Cultural Opportunities and Tools at Advent. The cultural opportunities available in the institutional context of surgery in the early 2000s were much the same as they had been in the 1990s, and consequently, Advent interns had a cultural toolkit similar to the one their counterparts at Boot Camp had (Table 1). Advent interns, like Boot Camp interns, had the frames, identities, and tactics that allowed them to interpret traditional scutwork practices as unfair, to develop a we feeling with other potential reformers, and to covertly challenge scutwork practices. As at Boot Camp, interns at Advent believed that the traditional system of having interns do all of the scutwork was exploitative. Similarly, as at Boot Camp, interns and senior reformers at Advent drew on the new collective identity of most complete doctor to develop a feeling of common cause with other reformers.

Finally, as at Boot Camp, interns and senior reformers at Advent knew they could covertly resist traditional scutwork practices through oppositional demeanor.

Sometimes they "refused to put on a show" by acting polished and alert when they were tired after having stayed late to do scutwork for multiple nights in a row.

But Major Change in Scutwork Practices at Advent. However, although Boot Camp interns failed to change traditional scutwork practices in any major way, Advent interns succeeded in significantly transforming them. Although my initial evaluation of Advent scutwork practices before the beginning of the new intern year (and before the introduction of the new staffing, accountability, and evaluation systems) showed that interns did not attempt to hand off scutwork to seniors in any of the interactions I observed, my end-of-year evaluation showed that interns across the board at Advent were frequently sharing scutwork with staff surgeons, daytime chiefs and seniors, and seniors covering overnight.

Here, then, are two organizations, each with very similar cultural tools available to their less powerful members, and yet one organization made only minor changes to traditional practices while the other altered those practices significantly. How do we account for this difference?

I contend that the difference in change outcomes at Boot Camp and Advent is associated with the different political opportunities in the two time periods and the corresponding different availability of strong political tools within Boot Camp and Advent that facilitated micromobilization for change. At Advent, strong political opportunities in the external environment pressed directors to create strong political tools within Advent—a staffing system, accountability system, and evaluation system. These strong political tools, in turn, allowed Advent interns to reinterpret scutwork practices as amenable to change, to coordinate change efforts with senior reformers, and to overtly and collectively contest scutwork practices in interactions with defenders. At

Boot Camp, mixed political opportunities in the external environment did not press directors to create these strong political tools, and, as a result, Boot Camp interns did not engage in the political micromobilization necessary to change scutwork practices in any substantive way.

Strong Political Opportunities for Change in Advent's Institutional Context. Although cultural opportunities for change in the institutional context of Boot Camp and Advent were similar, political opportunities for change were, overall, stronger in the Advent institutional context (Table 2). In one respect, they were comparable. Changes in labor force composition since the 1970s had increased the presence of senior reformers inside both Advent and Boot Camp; whereas in the 1970s only 2% of surgical residents were women, by the 1990s roughly 20% of surgical residents were women (Kwakwa and Jonasson 1999), and by the early 2000s roughly 25% of surgical residents were women (Neumayer et al. 2002). This labor force gender diversity meant that there were seniors within both Boot Camp and Advent who were disadvantaged by the traditional occupational identity of commando surgeon, an identity well suited to "traditional" male residents who did not want to take on family and personal life responsibilities but less so to the new cadre of female residents and of male residents who, because of the new societal expectations, took personal life responsibilities seriously. These residents became allies for the interns within Boot Camp and Advent (but as we will see, new public policy pressure in the early 2000s led Advent directors to introduce accountability systems that encouraged senior reformers to overtly support change whereas Boot Camp senior reformers did not).

Another political opportunity—the supply-and-demand balance—was present in both institutional contexts but considerably stronger in the early 2000s

Table 2   Political Opportunities in the 1970s, 1990s, and 2000s

	Indicators	1970s (Pacific) weak opportunities	1990s (Boot Camp) strong opportunities	2000s (Advent) strong opportunities
Demographic shifts in the labor force	• Percent of female residents in general surgery	• 2% women	• 21% women	• 25% women
Supply and demand for workers	• Matched supply or undersupply of applicants for surgical spots available	• Oversupply of general surgery applicants; intern slots determined on basis of pyramid programs and greater number of students interested in surgery than surgical positions	• Matched supply of general surgery applicants; intern slots determined on basis of square programs and one unfilled position in surgery in 1996	• Undersupply of general surgery applicants; intern slots determined on basis of square programs and 69 unfilled positions in general surgery in 2001
Changes in public policy favorable to interns	• New regulation supporting challenge	No regulation supporting fewer work hours	• No regulation supporting reduced work hours outside of New York State	• Regulation requiring 80-hour work weeks for surgical residents across the United States starting in 2003

than in the 1990s. By the 1990s, surgery had become less attractive as a profession than it had been in the 1970s—a new era of managed care had resulted in decreased reimbursement for surgical procedures and increased need for expensive malpractice insurance (e.g., Cassell 1998). The number of medical school graduates choosing to pursue surgery declined. While, in the 1970s, hospitals had structured their general surgery programs as "pyramid programs" (e.g., Nolen 1970), hiring a greater number of surgical residents than they expected to graduate and ejecting those who did not exhibit desired performance, they now structured them as "square programs," hiring the same number of surgical residents they expected to have graduate. But even this change was not enough to address the changing supply and demand for labor. In 1996, for the first time ever, a position in general surgery went unfilled (Zinner 2002). By the early 2000s, pressure on hospitals to make change increased further as this balance between supply and demand became a shortage. In 2001, 69 general surgery positions went unfilled (Zinner 2002).

Finally, one crucial change in the political opportunities presented by the institutional context affected Advent and Advent alone. In 2002, in response to the social movement advocating patient and resident rights, a regulatory body in surgery, the American Council for Graduate Medical Education (ACGME), preempted national legislation by announcing a new regulation within the profession calling for reduced hours for surgical residents (ACGME 2003). The new regulation required all residents to work 80 hours per week, and hospitals whose residents worked more than that risked losing their residency program's accreditation. This change in public policy exerted pressure on surgery department directors in the early 2000s to create new staffing systems, new accountability systems, and new evaluation systems to reduce resident work hours.

Strong Political Tools for Change in Advent's Political Toolkit but Not in Boot Camp's. Advent directors responded to the strong political opportunities of the early 2000s by creating strong political tools within Advent.

In response to the announced change in public policy, directors of the surgery department at Advent introduced a new staffing system—the night float team. The new night float program added three Advent surgical residents to the general surgery services (by eliminating other surgical resident rotations), creating a new "night float team" to work overnight each night in place of the traditional on-call team. The new staffing system gave reformers a strong political tool for change; it did not merely move work around between existing residents on the general surgery services but added three new work positions to these services to help reduce the amount of work done per resident.

Once the new system was introduced, a night float team of residents would arrive at the hospital at 6 P.M. each night and take care of work until 6 A.M. the next morning. The new night float system was designed to allow for two changes to the traditional on-call system: (1) it would dramatically reduce the number of nights that residents in all years spent on call, and (2) it would shorten interns' workdays so that all residents would work only 80 hours per week. By eliminating overnight shifts, the new system would enable senior residents to reduce their weekly work hours from 100 to 80 and interns from 120 to 100. To further reduce their weekly hours to 80, interns would cut the number of hours they worked on a regular workday from roughly 17 hours per day (4 A.M. to 9 P.M.) to roughly 13 hours (6 A.M. to 7 P.M.).

Directors also created a new accountability system that assigned responsibility for program implementation to the chief residents. They worked closely with the chief residents to design the new staffing system and made it clear that they held chiefs responsible for requiring residents on their teams to reduce their work hours to 80. Potential reformers at Advent were emboldened by the new top-level support for change and more willing to act overtly as reformers to the interns.

Finally, the combination of the new shortage of surgical residents in the labor market and the new public policy requiring reduced work hours pressed Advent directors to begin to actively use an upward feedback system that had been in place before but not focused on. For some years, in addition to being judged by their staff surgeons at the end of each rotation, interns had been allowed to anonymously submit their own judgments of each rotation and, by association, of the staff surgeons working on that rotation. Interns had been asked to rate each rotation in terms of the amount of technical guidance and feedback they received from staff surgeons and the extent to which they felt they had the appropriate level of input in determining treatment plans. Their evaluations were confidential. Now, faced with new pressures from the external environment, directors at Advent began to actively review the results of the interns' evaluations, and this process of two-way feedback resulted in the strong political tool of a less repressive evaluation system for the interns.

In the 1990s, without the pressure of a new public policy and with only the beginning of a shortage of general surgery applicants that was not yet felt to be urgent, Boot Camp directors did not create a new staffing system, accountability system, or evaluation system. Instead, under Boot Camp's traditional on-call staffing system, interns were required to take care of all of the scutwork, even though doing so required them to work approximately 120 hours a week (Pratt et al. 2006, p. 245). Under Boot Camp's one-way evaluation system of "bites" and "the grapevine," chiefs

and staff surgeons used informal sanctioning to punish interns who did not live up to traditional expectations and interns had no way of pushing back on defenders (Pratt et al. 2006, p. 250). "Bites" were incidents of humiliation where defender staff surgeons and chiefs yelled at interns publicly for not doing their work appropriately; these incidents were then disseminated via the informal "grapevine" seniors used to publicly judge interns. Finally, under Boot Camp's traditional accountability system, there was no chief resident accountability for changing scutwork practices (Pratt et al. 2006, p. 243), so potential allies who might have supported the interns in change were not willing to openly show their reformer stripes.

Political Micromobilization at Advent and Not at Boot Camp

At Advent, the strong political tools of a new staffing system, a new accountability system, and a new evaluation system led interns to engage in what I call political micromobilization. Political micromobilization entails reinterpreting scutwork practices as amenable to change, organizing with other reformers by coordinating their change efforts, and contesting scutwork practices with defenders by overtly challenging traditional authority relations.

Reinterpreting Scutwork Practices as Amenable to Change at Advent and Not at Boot Camp. The strong political tool of a new accountability system at Advent encouraged interns to believe that change was possible. As noted previously, at Advent, there were seniors whom interns saw as potential allies because they were interested in direct patient care and did not mind doing work labeled scutwork. However, there is a big difference between privately supporting change and openly acting to further it. In my observations at Advent before the directors assigned the chief residents accountability for change, I saw very few senior reformers agitate overtly for change. However, once the directors assigned accountability to them at the beginning of the new resident year, I saw previously secret potential reformers begin to openly support change.

In contrast, senior defenders ignored the new accountability system and taught interns in no uncertain terms that interns were responsible for all of the scutwork on the surgical wards. They told interns to break the night float system rules and to stay late and arrive early to complete all of the scutwork. They argued that this was necessary both because it was "not fair for seniors who had already paid their dues to do scutwork" and because it was "inappropriate for interns to hand off work on their patients to other residents" (Kellogg, field notes).

Thus, new interns entering Advent were exposed to two very different, and contradictory, sets of behaviors. Senior reformers taught interns that it was not only right and fair but also possible to share scutwork with seniors. These reformers supported interns in their hand-off attempts. When defender night float members insulted and threatened the interns who attempted to hand-off routine work to the night float residents, calling them "weak" and saying that they would "never learn surgery" unless they did "their own work," interns often sought, and got, reaffirmation for their nontraditional practices from the senior reformers. "Some of the chiefs say they support the changes," one intern noted,

> but it's kind of like "wink, wink." They don't really want to know what is going on. They just want the work to get done. Others are really trying to get the new system to work. Like [reformer chief]. He'll ask how it is going, and he'll press to find out. So I'll tell him what's going on, that the night float members don't want to take our sign-outs. (Kellogg, field notes)

Senior reformers who overtly supported interns felt emboldened to do so because the new accountability system meant that they would be supported in their actions by top managers. One senior reformer told me, "This isn't just lip service. Goodwin and Williams [the Advent Surgery Department Director and the Surgical Residency Program Director] are putting real resources behind this. And they are counting on us to make it happen" (Kellogg, field notes).

In contrast, at Boot Camp, in the absence of middle manager accountability for changing traditional practices, those who openly supported doing things differently were few and far between. One intern noted that most staff surgeons acted as defenders of the status quo: "The Boot Camp 'commando' attitude...yes, it's still that way..." (Pratt et al. 2006, p. 248). Thus, although the availability of injustice frames led interns to see scutwork as unfair, the lack of open allies led them to feel pessimistic about the possibilities for change. One intern noted with resignation, "All the paperwork is put on you basically. You get removed from thinking that you are here for surgery, you just have to try and block it out" (Pratt et al. 2006, p. 246).

Coordinating Change Efforts with Other Reformers at Advent and Not at Boot Camp. Advent offered another strong political tool—a new staffing system—that allowed interns to coordinate their efforts with one another. Advent's new staffing system of the night float team stimulated interns and reformers to work together with one another to create a set of supporting practices that would enable change. In addition, because the new staffing system eliminated most on-call nights (except for night float members who were not working during the day), all residents were now much more rested. Many were more open to taking on new kinds of work both because they were no longer working as many hours and because the new rules officially required them to cut interns' daily hours. Some reformer night float

members began to "take the pager" from the intern upon arrival at 6 P.M. so that all nurses' pages would come to the night float member starting at 6 P.M. rather than to the intern. Some seniors began covering intern scutwork during the day while the intern was in the OR so that there would not be as much left to hand off at 6 P.M. A reformer chief also modified the traditional morning rounds ritual by instituting a practice whereby all residents would do the scutwork of gathering patient data during rounds so that no one needed to "preround" on patients before 6 A.M. Interns added to these new practices by contributing ideas from their medical school settings or from their knowledge gained through reading. For example, one intern reinforced this new practice of no prerounding, saying,

> In my med school we didn't preround. Instead the chief and everyone got here at 6 A.M., and someone got vitals, someone checked notes, someone checked ins and outs. It was a lot faster, and it worked fine. (Kellogg, field notes)

In addition to providing a structure for problem solving, the new night float team brought rested reformers together and allowed them to craft a sense of solidarity with one another. Interns told senior reformers stories about specific actions of senior defenders and together they talked about why they felt that the senior defender actions were not justified. For example, one intern told a day senior reformer during afternoon rounds that one of the defenders had told him that he was not going to be as well educated because he was not working 120 hours a week. The day senior reformer replied,

> That's ridiculous. No one is 100% after having been up for 36 hours. There are definitely diminishing returns [on learning]. . . . It's not just how many hours you are here, but what you are doing. . . . You don't need to see every patient to learn. The system needs to be changed. We all know it needs to change. (Kellogg, field notes)

In contrast, in the absence of a new staffing system at Boot Camp, there was no opportunity for interns and senior reformers to coordinate their change efforts. All residents, including seniors, were extremely tired and interested in individually surviving rather than sharing work with others (Pratt et al. 2006, p. 243). Although some staff surgeons took on some of the scutwork because they valued taking care of patients (Pratt et al. 2006, p. 251), there was no coordination of change efforts among interns and senior reformers at Boot Camp. Indeed, in describing the identification process that interns at Boot Camp engaged in, Pratt and colleagues refer to it as a customized rather than a organized process: interns chose from various identity elements to do and make sense of their work, but they did so individually rather than collectively (Pratt et al. 2006, p. 257).

Overtly Contesting Practices with Defenders at Advent and Not at Boot Camp. Finally, at Advent, the new political tool of a nonrepressive evaluation system allowed interns and senior reformers to challenge defenders overtly and collectively. The new evaluation system encouraged upward feedback in two ways. First, directors actively reviewed the anonymous feedback on staff surgeon surgeons from interns and senior residents. Second, in their weekly meetings with chief residents, directors asked how the new night float team was working.

Emboldened by this new system of upward feedback, reformer chiefs informally strategized about the best way to bring defenders' resistance to the attention of the directors. In their weekly meetings with directors, reformer chiefs named to the directors the particular night floats who were refusing to take hand-offs of scutwork from the interns, and reformer chiefs did not back down when defender chiefs disputed the accuracy of their claims:

> Reformer chief Levy: "Evan Cohen was on last night and he was terrible. He takes all of his calls from the bunk."
>
> Reformer chief Scott: "Sometimes when he was on overnight, he wouldn't even be there when I got there at 6 A.M. Anand Roy is a problem, too."
>
> Defender chief Agarwal: "I haven't had any problems with them."
>
> Reformer chief Scott: "Some of these guys, like Brian Johnson or Sarah Hill, are great. They're good about taking intern handoffs, and when they're on overnight, I never have any problems." (Kellogg, field notes)

Naming particular night floats who were breaking the rules may not seem like a major challenge to a layperson, but by doing so reformer chiefs violated longstanding norms which held that officially reporting misconduct of fellow residents was unacceptable.

Reformer chiefs also urged directors to send an e-mail to residents reinforcing their support of interns' sharing of scutwork with seniors. This e-mail, which employed arguments the reformers had used in their upward feedback to directors, read as follows:

> Sign out to (the night float members) continues to be a problem— . . . Although I think we have made a lot of progress as a result of hard work by everyone, this is never going to work the way it should if we don't abandon some of our traditional roles. The whole raison d'etre for the . . . (night float team) is to get the day team out of the hospital— . . . the (night float) should call the day residents as soon as they arrive and make it their first priority to get that resident out of the hospital—they should follow them around, take all new calls, force them to sign out everything they have left and escort them to the door. If the day person is in the OR . . . the (night float) should go to the OR and find out what's left to do and start working on it . . . I promise the interns that they don't have to see every patient and do every case—you will still finish well trained. (Kellogg, field notes)

This public legitimation of hand-offs of scutwork by the directors, in combination with the specific stock of new work practices that reformers had created in their interactions with one another, led interns and senior reformers to begin overtly challenging defenders to accept hand-offs of scutwork.

Defenders punished senior reformers and interns who attempted to share scutwork using "beatings" (public shaming) and the grapevine. But the directors' new active reviewing of anonymous feedback on staff surgeons allowed senior reformers and interns to push back against defenders who had delivered "beatings" to them by judging defenders themselves. When directors learned through the anonymous upward feedback that particular staff surgeons were not supporting the night float system, they privately spoke with these staff surgeons about their need to comply with the regulation.

The continual lack of cooperation between defenders and reformers led to breakdowns in everyday working procedures—hand-offs were fumbled, orders were ignored, instructions were stonewalled—and staff surgeons and chiefs found themselves trying to manage a system that was rapidly falling into disarray. Although defender staff surgeons and chief residents had originally supported defender night float members' resistance to change in scutwork practices, these continual breakdowns forced them to deal with the problem of scutwork that was not completed. They began to think that it was necessary to change tactics. They started using reformer chief residents' upward feedback about negligent night floats to justify their abandoning those defender night float residents whom they had supported up until now. "In the beginning," one previously defending chief said,

> we understood where these guys [the night float members] were coming from. When you're an intern, you do all of the scutwork with the understanding that once you're a senior resident, you're not gonna do that stuff. And now, all of a sudden, they were getting that scutwork again.... But, you know, there's a lot of truth in the fact that the night float guys weren't working and the quality, particularly with some of them, had dipped. They were just being lazy. (Kellogg, field notes)

Faced with the withdrawal of staff surgeon and chief resident support for resistance, defender night float members began to accommodate hand-offs of scutwork.

In contrast, in the absence of a new evaluation system at Boot Camp, Pratt et al. (2006) report that it was quite common for interns to be punished and that their humiliation was "fast and ubiquitous" (p. 250). The absence of strong political tools at Boot Camp led interns to fear the consequences of overt collective challenge. To the degree they contested scutwork practices, they did so in individual and covert acts of resistance. For example, Pratt et al. (2006) relate that rather than directly challenging defenders, interns instead responded to the

violation of their dignity that scutwork posed by reinterpreting the meaning of scutwork as necessary to their learning to be complete doctors. Some interns also engaged in some minor challenges. Very occasionally some interns resisted displaying the traditional demeanor of alertness in the face of the long work hours required to complete all scutwork. But these acts of resistance and challenge were covert, individual, and sporadic.

In sum, the experiences at Pacific, Boot Camp, and Advent suggest that although cultural tools may have been necessary components in effecting major changes in traditional practices, in and of themselves, they were not sufficient. At Boot Camp, interns had in their possession strong cultural tools supporting change, but they succeeded in modifying traditional practices only slightly. For meaningful change to actually take place, the experience at Advent suggests, less powerful members of an organization need access to both strong cultural tools *and* strong political tools. Interns at Advent succeeded not simply because they had the cultural tools that allowed them to frame scutwork practices as unfair but also because they had the political tools that encouraged them to see such practices as amenable to change; not only because cultural tools aided them in developing a we feeling with other potential reformers but also because political tools helped them formally coordinate their efforts for change; and not merely because there were cultural tools available that allowed them to individually and covertly challenge defenders but because there were political tools that helped them to collectively and overtly challenge them. It was the combination of cultural and political micromobilization that enabled Advent interns to transform traditional scutwork practices (Table 3).

Conclusions and Discussion

Cultural and Political Toolkits

These findings contribute to the literature on the cultural construction of organizational life and to the literature on social movements in several ways. First, they help to answer the question of *when* less powerful organization members may challenge and change traditional practices that disadvantage them. Theorists using the concept of cultural toolkits to explain when less powerful members attempt change suggest that they do so depending on the kinds of cultural tools available to them (e.g., Alvesson and Willmott 2002, Bechky 2003, Dacin et al. 2010, Kunda 2006). This focus on the empowering character of cultural tools is important. Because less powerful organization members have fewer political tools available to them than do more powerful members, their creative use of cultural tools may be critical to allowing them to overturn traditional arrangements.

However, by focusing solely on less powerful members' use of cultural tools to challenge the status

Table 3   Practice Challenge and Change at Pacific, Boot Camp, and Advent

	Pacific	Boot Camp	Advent
Institutional conditions			
—Cultural opportunities	Weak cultural opportunities: • No injustice frames • No alternative identities • No contentious tactics	Strong cultural opportunities: • Injustice frames • Alternative identities • Contentious tactics	Strong cultural opportunities: • Injustice frames • Alternative identities • Contentious tactics
—Political opportunities	Weak political opportunities: • Homogenouse workforce • No public policy supporting change • Oversupply of workers	Mixed political opportunities: • Diverse workforce • No public policy supporting change • Matched supply of workers	Strong political opportunities: • Diverse workforce • Public policy supporting change • Undersupply of workers
Organizational toolkits			
—Cultural toolkit	Weak cultural toolkit: • No injustice frames • No alternative identities • No contentious tactics	Strong cultural toolkit: • Injustice frames • Alternative identities • Contentious tactics	Strong cultural toolkit: • Injustice frames • Alternative identities • Contentious tactics
—Political toolkit	Weak political toolkit: • No allies • No facilitative staffing systems • Highly repressive evaluation system	Weak political toolkit: • No openly supportive allies • No facilitative staffing systems • Moderately repressive evaluation system	Strong political toolkit: • Openly supportive allies • Facilitative staffing systems • Nonrepressive evaluation system
Change processes			
—Reinterpreting	Minimal reinterpretation: • See traditional practices as fair • Feel pessimistic about their ability to change them	Pessimistic reinterpretation: • See traditional practices as unfair • Feel pessimistic about their ability to change	Confident reinterpretation: • See traditional practices as unfair • Feel optimistic about their ability to change
—Organizing	Minimal organization: • Do not develop a "we" feeling with other reformers • Do not coordinate their change efforts	Informal organization: • Develop a "we" feeling with other reformers • Do not coordinate their change efforts	Formal organization: • Develop a "we" feeling with other reformers • Coordinate their change efforts
—Contesting	Minimal contestation: • Do not challenge individually and covertly • Do not challenge collectively and overtly	Covert contestation: • Challenge individually and covertly • Do not challenge collectively and overtly	Overt contestation: • Challenge individually and covertly • Challenge collectively and overtly
Outcomes	No change in scutwork practices	Minor change in scutwork practices	Major change in scutwork practices

quo, these studies may overestimate the likelihood of them dramatically changing traditional practices. Indeed, interns at Boot Camp and Advent each had the same cultural tools available to them, but only Advent interns were able to substantially transform scutwork practices. This suggests that less powerful members in organizations may not be able to significantly change traditional practices if they have access only to strong cultural toolkits. To create dramatic change, they may also need access to strong *political toolkits.*

Even theorists of social movements and organizations who highlight the critical importance of what I call political tools for change (Katzenstein 1998, Meyerson 2003, Morrill 1995, Morrill et al. 2003, O'Mahony and Bechky 2008, Raeburn 2004, Scully and Creed 2005, Scully and Segal 2002, Weber et al. 2009, Zald and Berger 1978, Zald et al. 2005) do not examine change in the presence

of strong cultural tools but the absence of strong political tools. Here, I demonstrate that when less powerful organization members have access to strong cultural tools without strong political tools, they may pessimistically reinterpret traditional practices, informally organize for change, and covertly contest traditional practices with defenders to slightly modify rather than significantly transform traditional practices.

These findings also highlight the interface between resources available outside versus inside organizations. Social movement theorists have drawn attention to the importance of cultural opportunities and political opportunities for allowing activists "on the streets" to successfully challenge the status quo (McAdam 1994, 1999; Tarrow 1994). This study demonstrates that cultural opportunities available in the broader institutional context may be directly available to internal reformers in

ways that political opportunities are not (Table 4). For example, Boot Camp interns were able to borrow frames, identities, and contentious tactics created by activists in their external environment, but they were not able to so easily use the political opportunities of a high demand for workers and a more diverse labor force. The reason for this appears to be that it is the more powerful rather than less powerful members inside workplaces who control the creation of new political tools such as staffing systems, accountability systems, and evaluation systems. Political opportunities, it seems, must be filtered through the more powerful in organizations for it is these more powerful members who control the creation of strong political tools for change inside particular organizations.

In addition to explaining the importance of political toolkits, these findings add to social movement theory by detailing a process of *political micromobilization.* Theorists have argued that, although movement activity may occur in broader, more macro contexts, the actual development of movements depends upon micromobilization—a series of specific dynamics operating at the micro level (Gamson 1992a, Gamson et al. 1982, McAdam 1988). Theorists of social movements

and organizations have demonstrated how reformers inside organizations engage in what one could call cultural micromobilization by reinterpreting practices that disadvantage them as unfair, developing a we feeling with other reformers, and using a repertoire of contentious tactics to mobilize with one another. I add to our understanding of micromobilization by detailing the process of what I call political micromobilization whereby less powerful members use accountability systems to enlist the help of senior allies in attempting change, use facilitative staffing structures to coordinate a new set of concrete work practices, and use nonrepressive evaluation systems to push back on defenders' negative judgments (Figure 1).

Concluding Thoughts

This analysis raises several questions for future research. First, the model of practice challenge and change that I lay out here is quite structuralist—strong cultural and political opportunities available in the institutional context shape strong organizational toolkits that lead less powerful organization members to reinterpret traditional practices, organize with one another, and overtly and

Table 4 Cultural and Political Dimensions of Practice Challenge and Change

	Cultural	Political
Institution-level opportunities —Examples	Cultural opportunities • Injustice frames • Alternative identities • Contentious tactics	Political opportunities • Changing demographics • Public policy supporting change • Undersupply of workers
—Who creates opportunities	• Social movements	• Social movements, the State, changes in the economy
—How do opportunities facilitate challenge	• Injustice frames allow potential reformers to diagnose the existing situation as unfair, identify particular groups as responsible, and depict the problem as amenable to change through collective action • Alternative identities allow reformers to see themselves as part of a group that is disadvantaged by the existing social system and mobilize with one another for change • Contentious tactics provide reformers with a set of practices they can use to challenge the status quo and its defenders	• Public policies pressure top managers in organizations to provide resources for change • Changing demographics provide stock of potential allies for reformers inside organizations • Undersupply of workers pressures top managers to reduce capacity for repression
Organization-level tools —Examples	Cultural tools • Injustice frames • Alternative identities • Contentious tactics	Political tools • Facilitative staffing systems • Middle manager accountability for change in combination with stock of potential allies • Upward feedback systems for front-line workers
—Who creates tools	• Any organization member who has familiarity with similar tools used in other settings	• Powerful organization members who have authority to establish and enforce formal rules
—How do tools facilitate challenge	• In the same way that cultural opportunities do	• Facilitative staffing systems allow reformers to coordinate new practices with one another • Middle manager accountability for change legitimates open support of change by allies • Upward feedback systems allow reformers to anonymously push back on defenders

Figure 1 Political-Cultural Approach to Practice Challenge and Change
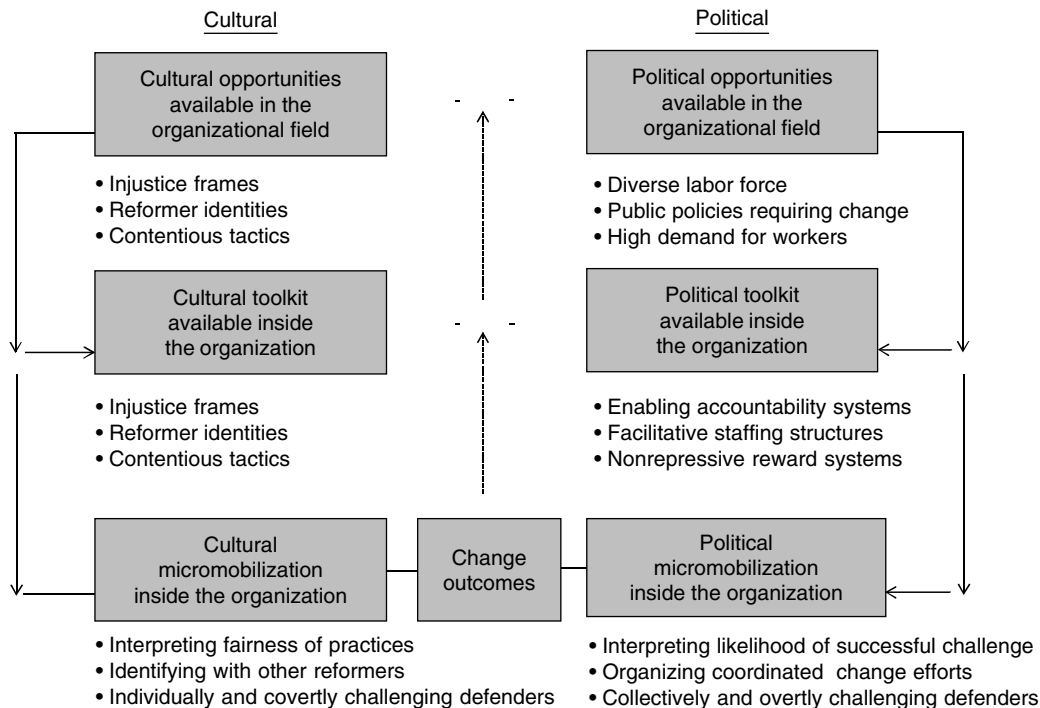
collectively contest change with defenders. Is it really that simple?

No. The research design I employed in this study allows me to dispute the strongly culturalist perspective that less powerful organization members can use cultural tools alone to accomplish major change. But, even adding an understanding of political tools is not the whole story. To examine whether new cultural and political opportunities in the institutional environment always lead less powerful members to challenge traditional practices, one would need to conduct a different kind of comparative study—a study of similar organizations exposed to the same set of cultural and political opportunities. For example, Weber et al. (2009) conducted a study of pharmaceutical organizations responding to new cultural and political opportunities in biotechnology and found that organizations cannot simply utilize new opportunities provided by external reformers; instead, the effect of movement activism is conditioned by the internal polity of organizations. And, even in the particular context of surgical practice, the combination of strong cultural and political opportunities is not always sufficient for less powerful members to change traditional practices. In a different paper (Kellogg 2009), I report on change efforts at two hospitals in the early 2000s and demonstrate that, despite the same cultural and political opportunities available to both, change occurred at one hospital and not the other. That research suggests that even when cultural and political opportunities are favorable for change, change still may not occur inside organizations if reformers do not have

access to relational spaces—spaces of isolation, interaction, and inclusion. Such spaces allow reformers from different work positions to mobilize with one another apart from defenders and to mount a cross-position challenge in everyday encounters that pressures middle manager defenders to change practices (see also Kaplan 2010 for a discussion of how particular kinds of spaces facilitate change).

Second, I have argued that Boot Camp interns were not able to dramatically transform scutwork practices because of their lack of access to strong political tools. But one could argue that Boot Camp interns failed to change scutwork practices not because of the lack of strong political tools but because of the lack of access to even stronger cultural tools. It is possible that the frames of scutwork as harmful to patients and residents, the identities of zombies, cheap labor, and complete doctors, and the contentious tactics of displaying oppositional demeanors and speaking up were simply not strong enough to allow Boot Camp interns to accomplish change. This raises the question of whether strong political tools are necessary for change in cases where cultural tools are very strong. My evidence indicates that they are necessary, but to convincingly answer this question, one would need to study practice challenge and change in several organizations with weak political tools for change and differentially strong cultural tools for change.

Third, this study brings up the issue of which is more important to facilitating mobilization inside organizations, cultural opportunities or political opportunities?

The social movements literature has historically given more weight to political conditions and only recently begun to "bring culture back in" to social movement analysis (e.g., Johnston and Klandermans 1995). Whereas one reading of the data could suggest that cultural opportunities are preconditions for challenges whereas political opportunities only matter once the cultural conditions are in place, the analysis does not support this interpretation. Instead, the analysis evaluates the strength of both political and cultural opportunities in each of the three time periods and suggests that both kinds of opportunities were required for change to occur, as it did at Advent. To test whether political or cultural opportunities matter more to mobilization inside organizations, one would need to do a different comparative case study examining two different contexts, one with high political opportunity and low cultural opportunity, and one with low political opportunity and high cultural opportunity.

Fourth, I have suggested that, in the absence of strong political tools, less powerful organization members may not be able to significantly change traditional practices because they cannot optimistically reinterpret traditional practices, formally organize with other reformers, and overtly and collectively contest practices with defenders. However, I do not mean to minimize the importance of the minor change that occurred at Boot Camp. Meyerson (2003) has demonstrated that such "small wins" can lead to bigger changes in the future; Orlikowski (1996) has explained how such gradual improvisations can lead to organizational transformation over time; and Ewick and Silby (2003) have shown how such individual challenges can result in narratives that can be used by reformers in other settings.

Finally, because this study examines newcomers to a profession, it may be that the processes described here are specific to this kind of organization member. On the one hand, one might expect that professionals like the interns who are forced to engage in practices that disadvantage them for only a short time before becoming members of the elite themselves would be less likely to mount challenges than other kinds of less powerful organization members (such as nonprofessional women, blacks, or even nurses). Interns' statuses are temporary, and they are built into the system of professional training. On the other hand, one could surmise that these kinds of less powerful members, because they have high amounts of human and social capital and because they are newcomers who bring with them expectations and ideas from other settings, would be more likely to use cultural and political tools to challenge practices that disadvantage them than would other kinds of less powerful members. Future research could examine how cultural and political tools facilitate challenge by different kinds of less powerful organization members (Battilana 2007),

including incumbent members gradually losing power (Anteby 2008).

The findings carry practical as well as theoretical implications. Skeptics of the usefulness of new public policies to regulate organizations argue either that policies are not necessary because organizations can police themselves or that policies are problematic because organizations often engage in merely symbolic compliance, establishing new formal programs to satisfy outside regulators but maintaining traditional practices in day-to-day interactions. Professionals often suggest that government regulators do not understand their professional practices well enough to design appropriate regulations. Indeed, defenders of the status quo in surgery made exactly this argument. But I find that such public policies may be critical to permitting less powerful members to change daily work practices. Public policies can pressure top managers to introduce staffing systems, accountability systems and evaluation systems that enable change. As such, public policies have profound implications not only for how less powerful organization members act today to change practices that disadvantage them but also for the opportunities they create for future generations.

Electronic Companion
An electronic companion to this paper is available on the *Organization Science* website (http://orgsci.pubs .informs.org/ecompanion.html).

Acknowledgments

Endnotes
[1] For reasons of confidentiality, hospital and informant names are pseudonyms. Pratt and colleagues do not give their informants pseudonyms; for illustrative purposes, I used the name Paul in my introduction to describe one of the interns in their study.
[2] For instance, interns like Jones, the sole female in the Pacific surgical residency program, did not seek out others who may have had similar interests in change. In a candid appendix to the second edition of *Forgive and Remember* (Bosk 2003), Bosk notes that once Jones left Pacific, she "disappeared without a trace, as powerful an indicator of her social isolation within the group as one could imagine" (p. 221). Jones, like other interns who would have benefited from changing traditional practices, confided in no one, not even Bosk. "Jones

was silent with me and I did not know how to break through that silence" (p. 220). Jones may not have seen Bosk as part of a broader group of potential reformers because no collective reformer identity was available in Pacific's cultural toolkit that helped interns to see that others might share a common reformer cause.

[3]An alternative explanation for the lack of challenge at Pacific is that the total amount of scutwork that interns did in the 1970s was less than in the 1990s or 2000s. This is analogous to a deprivation-based mobilization argument in social movement research. The data from Pacific, Boot Camp, and Advent do not support this alternative explanation—interns did similar, and very large amounts, of scutwork in each of the three time periods.

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