CHALLENGING OPERATIONS: CHANGING INTERACTIONS, IDENTITIES, AND INSTITUTIONS IN A SURGICAL TEACHING HOSPITAL

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Abstract

If institutions are comprised of cultural and positional prescriptions for action and interpretation, then institutional change must depend at some point on thinking the unthinkable, acting in "inappropriate" ways, and convincing powerful others to give up their privilege. How does this happen? How do people come to question taken-for-granted beliefs? How do they decide to attempt the unacceptable in their interactions with others? How do they persuade those who benefit from the status quo to change? And how do they extend new understandings created in particular interactions into future situations?

In this dissertation, I tell the story of surgical residents at ACADEMIC hospital who accomplished both institutional stability and institutional change in their interactions with one another in the wake of nationwide changes occurring outside their hospital. Using findings from a 15 month ethnography of this surgical teaching hospital, I demonstrate that institutional stability and change occur only insofar as they are negotiated in interactions between particular workplace members with particular reasons for wanting either to maintain or to challenge the status quo. I draw on these findings, in combination with identity theory and symbolic interactionism, to develop a relational, identity-based framework for understanding processes of institutional stability and change.

Members negotiate institutional stability and change as they shape their actions in particular situations according to their sense of self in relation to the situation, their own personal narrative, and their judgment of the likely response of their interaction partner to their various actions. What looks like institutional stability or change in the abstract is, in fact, constituted through the culturally and politically-charged daily contests between organization members interacting with one another to either protect or change their way of life and the persona and authority associated with it.

At first pass, these daily contests between one action or another in familiar situations may seem obvious, even unimportant. But it is in these simple contests around habitual issues that the institutional order is constructed. The institutionalized values, positions, and beliefs that shape the patterned action of large numbers of people across decades are built up and torn down in these daily contests between challengers and defenders of the status quo and the varied positions of privilege and senses of self that that this status quo provides.

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Acknowledgements

It seems unlikely for me to end up writing something that has the trappings of a book. When I think of writing books, I think of gifted geniuses composing alone by day in their sunny Parisian flats, pushing back their sleeves each evening for existentialist debates over red wine, and taking weekend trips here and there to scale the Alps or run with the bulls in Pamplona. Needless to say, this picture of solitary brilliance and rugged individualism doesn't exactly fit me or my life. But because of the wonderful group of people who have supported, encouraged, cajoled, and pushed me along the way, the solitary brilliance doesn't seem to have been necessary.

Lotte Bailyn has been an incredible source of inspiration and support and my relationship with her has truly been life-changing. In my first year at MIT, I did research with Lotte looking at how professional workers in a mission-driven organization could better manage both their work and their personal lives. Lotte gave me a crash course in statistics, and we spent several days in her London office running regressions to figure out what the key variables were. After several days of this, I remember turning to Lotte and saying, Yes, but what really IS the answer? With a 3 year old and 1 year old at home, I was pretty desperate to find the holy grail. I remember Lotte looking at me somewhat bemusedly, pausing for a moment, and then saying, in her Lotte-like way, "It's complicated." Well, it certainly IS complicated, but a lot less so with Lotte involved. Her ideas and her mentorship have made all of this possible for me. Her writings about how work-personal integration is a societal not a personal problem, and how hidden assumptions about work are preventing people from both working and taking on responsibilities in their personal lives have made me look at the world in a whole new way. And her unending ability to remove barriers and help me solve day-to-day problems that have arisen has been crucial to my pursuit of this PhD. She continues to inspire me to question the status quo, to envision how things could be different, and to write about what I am finding to help others discover their own hopes and dreams.

Leslie Perlow taught me to "trust the method" and to get something interesting (I hope) out of it. As someone who had trained at MIT in the same research tradition I was learning, Leslie was the person I turned to from early on to figure out how to do just about everything---which classes to take, which conferences to go to, how to get through general exams, how to pick a research site, and on and on. Once I actually started my ethnography, Leslie provided a stream of great advice about following what was most interesting to me, writing interpretive memos, and not sweating my inability to observe every single thing that happened.--"Remember, like John always says, if it's important it will happen again." Leslie's constant refrain of, "What's the story really about?" pushed me to go back to the data in search of insights, despite my every attempt to the contrary. When it came to the writing, Leslie always started by blowing things up, and always ended by helping me put them back together in a much more powerful way.

It was Wanda Orlikowski who introduced me to the incredibly liberating idea that we construct the world that we live in, and that we have the responsibility and challenge to shape it in ways that we want. She taught me that while social structures guide our actions, we always have the opportunity to "act otherwise." From the time I took her amazing course in my first year at MIT, Wanda has pushed me to consider my ontological and epistemological assumptions (Aren't those words fun? I love to pull them out anytime one of my childhood friends questions whether I really am going to get a Ph.D.). Wanda has pressed me to think deeply, and to be careful about the words I use because these words carry particular meanings. Most importantly, Wanda has helped me find my own voice and encouraged me to use it.

John Van Maanen taught me about the craft of ethnography and the irreverence of the Chicago School. He encouraged me to get as close to my people as possible in order to become a "convert" rather than a "martian," to draw a broad cultural portrait from focusing on everyday happenings, to provide detail on these day-to-day situations and get rid of my 300,000 feet variables (I tried, John, I swear I tried). I always went to John with my early thoughts, because he was able to find the most interesting stories in my mess of other noise, and because he encouraged my every hairbrained idea. John introduced me to the ideas about identity that became the core of this dissertation, and he was an endless source of wonderful recommendations about what I could read to broaden my thinking. I think that only John truly understands my fascination with surgeons and my need to hang around my research site years after the official data collection has ended. It's fine, he says. Don't worry about it, he smiles, as he plys me with yet another book on some anthropologist who never left her tribe.

While these four were my official advisors, other professors on the 5th floor have been great sources of ideas and support as well. JoAnne Yates worked with me on my first paper from fieldwork, and she and Wanda were incredibly patient coaches as I stumbled around for years trying to learn how to do observation, tell a story, and frame it to make a contribution to the literature. Roberto Fernandez has always challenged me to be a "column person as well as a row person" (or is it row as well as column, Roberto?) and to figure out which conversation I want to enter. His feedback has encouraged me to sharpen my insights and to focus my stories in order to contribute to theory. Deborah Ancona has helped me think about my academic identity--who am I intellectually, and what do I want to say? She has also been an incredible role model, showing me how one can successfully manage the demands of academic scholarship as well as those of a family. John Carroll has been my healthcare partner-in-crime, and his ideas about it have pushed me to think about how the cultural issues I am interested in are linked to the safety and quality of care. Jesper Sorensen has consistently cut to the chase on my work and pushed me to clarify my insights--to tell less rather than more, but more coherently. Ezra Zuckerman has led me to develop more specific indicators for my categorizations, and his ideas about identity have been critical to my thinking. Paul Carlile and Pablo Boczkowski, as the junior ethnographers on the floor, played a special role in my work. Paul's incredible thoughts about power and practice were a great source of inspiration. Pablo taught me that knowing the story and telling it in a clear fashion are two different things, and that, in a book, the story rather than the conceptual frame drives the argument.

I met Susan Silbey late in the game, and she was wonderful in helping me think through issues of culture and power.

The MIT doctoral students, both who came before and who were there with me, were a great source of encouragement and feedback. Steve Barley, Gideon Kunda, John Weeks, and Deborah Dougherty provided great thinking every time I cornered them at an MIT event. Corinne Bendersky, my office mate the first two years, introduced me to the MIT culture, and has provided great feedback on my papers ever since. Sachi Hatakenaka and Michael O'Leary showed me the ropes and helped me think through how to deal with the day-to-day issues that come up in fieldwork. Forrest Briscoe, Nils Fonstad, Isabel Fernandez, and Sean Safford responded to last minute desperate requests for paper readings and offered wonderful suggestions every time. My fellow OSGers and Pro-seminar friends--Brian, Maria, Alice, Melissa, Joao, Henrik, Steve, Rodrigo, and Lourdes,—heard more about the iron man over the years than anyone should ever have to know, and challenged me at every step to provide a more nuanced description.

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As an ethnographer, I aim to describe the world of surgical residents from the perspective of those who live it. I also need to make sure to protect all of the people who so generously gave me their time and their insights from any unwanted ramifications from my research. For this reason, I have used pseudonyms for the individuals I studied, and this precludes me from publicly thanking the people who took me into their confidence and shared their experiences and their hopes for the future with me. But those whose

lives are depicted in this dissertation know who they are, and to them I am deeply indebted. Thank you for times at ABP, the Grill, and your parties, for putting up with my endless barrage of questions, and for always greeting me with a smile when I showed up with my notepad for yet another day of following you around. You will likely never know how much you affected me or how much I learned from you. I hope that I have done justice to your experiences and the complexity of your world.

My life during this dissertation work has been incredibly enriched by my friendship with four wonderful women. Sarah Kaplan provided endless insight into my work and Kaplan-style butt kicking to get it done. I think that Sarah has read every paper I have written since I started this dissertation, and it was Sarah who suggested that I use identity theory rather than structuration theory to push my interpretation of my data further. Over the years, she has provided many razor-sharp insights about how to better construct my work, and a wonderful friendship all at the same time. Leslie Tsui has seen my whole transformation-- from harried working mom to brassy MIT scholar, complete with a new wardrobe and chic glasses to match. Our walks around the pond were crucial to helping me manage the demands of fieldwork and my family, and her advice has been always on target and incredibly helpful. Lois Slovik has been part of the transformation as well, assuring me that it is possible to manage both a career and a family and challenging me to define for myself how I want to handle both rather than relying on conventions accepted by others. Finally, Katelyn Quynn has been my fellow Wellesley working mom, mother of boys, and healthcare enthusiast. Her penchant for tea and Suzu bakery have provided many hours of great discussion while our boys played outside together, no doubt wreaking havoc upon the neighborhood as we calmly sat and solved all our lifes' problems.

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Thank you.

The Problem

In the Spring of 2002, the American Council for Graduate Medical Education (ACGME) sent shockwaves through the American surgical establishment by proposing new rules for residency training programs. In order to pre-empt legislation generated by public advocacy groups questioning patient safety in the hands of tired residents, the ACGME self-regulated the medical profession by outlining new guidelines. Starting in July 2003, residents (doctors engaged in hands-on training in their specialty) would no longer be allowed to work more than 80 hours per week. While surgical residents in Canada and in the United Kingdom typically work well under 80 hours per week, in American teaching hospitals, surgical residents have a history of working about 120 hours a week (Mukherjeee, 2002).[1] Counterintuitively, a change that promised an improved quality of work and personal life for the residents sparked a strong outcry from surgical residents themselves.

The momentum for the work hours change, while startling to those affected by it in 2002, had actually been developing for quite some time. On a Sunday night in 1986, a college freshman named Libby Zion died unexpectedly at New York Hospital after being given the wrong medication by a resident who had been working for 19 hours straight (Holzman & Barnett, 2000). Her death touched off a chain of events that would eventually culminate in the creation of the new work hours regulation. Libby's father, a New York Times reporter, took on the role of an institutional entrepreneur, and helped develop a cultural logic that suggested that tired residents are more apt to endanger

[1] This includes hours spent on call, when residents sleep in the hospital overnight and get up to care for patients.

patient safety (Holzman et al., 2000). The Institute of Medicine produced a report—"To err is human"—that further fanned the flames. A social movement, comprised of Public Citizen, the American Medical Student Association, and the Labor Committee of Interns and Residents, seized upon this new logic, formed a coalition, filed a petition with OSHA, and motivated Representative John Conyers Jr. to introduce a bill in Congress calling for federal regulations limiting work hours for residents (Altman & Grady, 2002).

Before Congress had a chance to consider the bill, the American Council for Graduate Medical Education (ACGME) scrambled to mount a pre-emptive strike, and compiled a set of new rules calling for an 80 hour resident workweek to go into effect in July, 2003. This change in cultural logics and governance structure led hospital Directors across the country to take a variety of actions including creating new night float teams to decrease on-call hours for residents. In July 2004, twelve months after the new regulation went into effect, ACGME regulators reviewing hospital reports found that 97% of hospitals reviewed were in full compliance with the new regulations (Chang, 2004).

However, reporters across the country who managed to make their way into specific residency programs and talk to residents found that this "full compliance" was far from reality. In fact, residents admitted that there was tremendous pressure for them to underreport their hours (Strazouso, 2004). Evidently, the new cultural logic about patient safety, the new governance structure mandating 80 hour work weeks, and the new night float teams formed by high level hospital managers were not being utilized by members inside workplaces as intended by those who created them. Why not?

This decision on the part of residents to continue working many more than 80 hours per week despite regulation to the contrary is, at first pass, very surprising. One might expect that the major battle for change in surgical institutions had taken place outside of hospital workplaces, with the patient safety activists fighting with the profession and winning the battle. Surely, one might suppose, if this new regulation had teeth to it, Directors of surgical residency programs across the country would be forced to support the change. And the new regulation did, in fact, have teeth to it. In May, 2002, a year before the 80 hour rule went into effect, the ACGME sent a strong signal to surgical residency programs nationwide by threatening to take away the Yale Medical School's accreditation when inspectors found that Yale's residents were not working in concert with previous regulations regarding resident training. Yale's warning about loss of license unless they made major changes to their residents' work hours, signaled a turning point in the debate over the work hours regulation (The Boston Globe, May 20, 2002). Directors at other hospitals took note, and began to make moves to show the ACGME that they were following regulations.

At ACADEMIC hospital in the Northeast, Directors in Surgery did not merely outwardly comply with the new regulations; they actively embraced the change. They secured funds for its implementation, and pushed hard for its adoption in their department. The Directors did this because they were concerned about nationwide problems of recruiting medical students into surgical residency programs, a problem that stemmed from the traditionally grueling work hours of the 7 year surgical training programs. Yet, even at ACADEMIC, where there was top level support for this work hours reduction, staff surgeons and surgical residents alike resisted the change. Why?

To a layperson, this resistance may seem counterintuitive, even astonishing. Who wouldn't, if given a chance to cut their work hours by a third while maintaining the same level of pay, do so? But to someone more familiar with the character of the professional worker, the resistance would be less surprising. Soon after I began my observation work at ACADEMIC, one of the ACADEMIC surgical attendings (staff surgeons) gave me some of the answers that someone with a deeper understanding of professional work might expect. He explained that the reason the reduced work hours sparked such a strong outcry was because of the nature of the work of surgery. The two key tasks of surgical residency--patient care and resident education—could not be well accomplished with shorter resident workweeks.

First, the new work hours would endanger patient care. While sensationalist news in the public press broadcast problems associated with tired doctors, in fact, some studies had shown that more patient errors resulted from handoffs of care from one surgeon to another than from surgeons' lack of sleep. Most attendings and residents at ACADEMIC felt strongly that residents needed to provide continuity of care by managing the care of patients from the time they entered the hospital until the time they left. This way they would ensure that no patient details fell through the cracks in the information transfer between residents. With dramatically fewer hours in the hospital, they would no longer be able to do this.

But it was not only patient care that the surgeons and residents were worried about. Resident education would be compromised as well. In surgery, manual talent is as important, if not more important than the cognitive abilities that can be learned by more formal education. In addition, the problems that surgical patients have often require

rapid problem solving and ingenuity. A sense of how quickly and effectively to respond to these kinds of situations can only be learned in practice. The forced elimination of operating days would diminish surgical case experience, and the loss of time caring for patients post-operatively would decrease residents' ability to build clinical judgment. In addition, if residents got used to leaving the hospital in the middle of caring for patients, the ethic of commitment to the patient would be traded for a shift mentality.

Through my study, I found that, as this attending suggested, the nature of surgical work drove some of the resistance to change at ACADEMIC. But, even initially, it seemed that there was more to it than that. It turned out that in order to truly understand this resistance, I would have to explore issues of culture, power, and identity as well as of the nature of the work. The strength of negative reaction from incredulous and angry surgeons was not a phenomenon specific to ACADEMIC—it was occurring nationwide. This widespread alarm signaled that the new work hours regulation had struck a deep blow to the surgical profession. The proposed changes did not only present a challenge to the delivery of patient care and resident education. They also presented a challenge to the very core of American Surgery—to its longstanding institutions, its closely held ideas of what it means to be a surgeon, and its time-tested work practices. Altering surgical residency programs to comply with the new regulations would mean dramatically changing surgical institutions, identities, and interactions.

Part I: Background

Chapter One

Introduction

It's a June night at 7pm in the 11th floor surgical lounge, and Mark, chief resident on the ACADEMIC hospital trauma service, is just finishing up evening rounds with his team. They've got a good bunch of interns this month, and the trauma service is pretty tight, with no patients likely to go south overnight. No looming disasters either—no warm weather bringing in drunken college students falling off of balconies, and no Red Sox game tonight. Plus, Gaffney is on call and he'll keep everyone in line.

The service at ACADEMIC hospital is usually pretty busy in the summer, but things are looking good right now. Good thing, because he's been on thoracics for the last month and he literally has not seen his kids awake for the last 2 weeks. It was fine when his kids were little, but now, at 3 and 5, they want to see their Dad.

He gives a few last words of instruction to his team, and heads to the call room to hang up his white coat before going home. On the way he passes a fellow 4th year resident who razzes him for taking such a long time with his laparoscopic cholycestectomy that afternoon. He jokes back that at least he GOT to the OR today instead sitting on his fat ass in clinic all day.

Mark goes around the corner to the elevator bank and presses the down button. As he waits for the elevator, the hospital loudspeaker crackles. "Code Blue, code blue" and his beeper goes off. FUCK. As acting chief on the trauma service, he needs to be at all the traumas. Resignedly, he heads back to the call room he just left, takes his coat off the hook, and buttons it back over his green scrubs. He gets to the elevators as the rest of

his team arrives, so puts his game face on: "Fire up." Together they head down to the ER to wait for the trauma to arrive.

Oh, well. At least he hadn't called Karen yet to tell her to keep the kids up for him. That's one thing you learn early on: Don't call home until you're on your way home. You never know what's going to come up at the last minute that you need to deal with. But it is a bummer all the same. It's a code alpha, not an acute trauma, so he won't even get a case out of it.

When they get to the ER, the ER nurse in charge tells them that this woman's car was hit, then hit again and spun around. They take her in for a CT scan. The on-call attending surgeon is there too. They don't both really need to be there, and with a whole team of residents besides. But, as acting chief on trauma, and for continuity of care, he's got to see the patient from the outset. As a surgeon, you live to take care of the sickest patient in the hospital. Nothing comes before your patients—not your sleep, not your wife, and certainly not two kids waiting hopefully at home to tell Dad about their trip to the Mystic Lake amusement park. It's times like these when he regrets ever deciding to be a doc.

Meanwhile, down in the OR, Christina is sweating, and it's not because she's under the hot OR lights. She's got a dinner tonight with her fiancee's parents and she's stuck in this interminable colectomy. She knew she shouldn't have agreed to do it. But it was scheduled to go at 3pm and she thought it would be over by now. The chief gave it to her as a reward for her hard work on the service. She's only a second year resident, and it's really a 3rd year case, so he was throwing her a bone to give it to her at all. She really had no choice but to say yes. You just don't tell your chief that you don't want to

do a colectomy because you have to go out to dinner with your boyfriend. Even though it's actually a fiancée not a boyfriend, and it's not just any old dinner, and she needs to make a good impression on his family. This is just great. Now they're going to think that their son isn't going to be well taken care of because his wife is always going to be working.

She's bound to see lots of other colectomies before she's done with her 7 year training. Unfortunately, this all doesn't get factored in. The surgical mantra is that more is always better. The more you do, the better you are. Period. You need to be there in order to learn. You can't get that anywhere else.

Christina doesn't totally buy it. She thinks that you can learn to be a good surgeon in seven years without being here all the time. But now she's stuck. Anesthesia residents scrub in and out of cases all the time, but a surgeon at ACADEMIC wouldn't do it in a million years. One of her chiefs always tells the story of how when he was a third year resident and his wife was in labor, the attending never told him to scrub out. The attending knew his wife was in labor, but didn't care. Finally, his chief came in and told the attending that he was going to replace him. But the chief took a risk in doing that. And the attending was pissed off. So, tonight, even though this attending isn't even letting Christina do much, she's got to act grateful, act interested in the patient's anatomy, and act impressed with the attendings' great hands. But, shit, why tonight of all nights?

As the evening drags on and Christina sweats it out in the OR, Tom goes home to crash. He was on call last night and up all night with a couple of problem patients. He

arrives at his apartment and checks the fridge for something to eat. All he's got in there is a pizza leftover from the other night and Sprite. That'll have to do.

He can't wait for this intern year to be over. Next year he's headed to urology where the hours are sane and everyone doesn't feel the need to act like an asshole all the time. This morning was a perfect example of what he will definitely not miss. At 4am after being up all night, he had to spend 2 hours getting patient numbers before rounds. How idiotic. On urology, no one pre-rounds. They just all get there at 6am and the team gets numbers together as they round on the patients. The interns get more sleep; the patients don't get woken up at 4am, and the team sees everyone before the OR.

But would they ever think of doing something so rational on general surgery? Nooooo. That's not part of the macho surgical persona. They say it's part of being an intern, that you've got to do it to learn to take true responsibility for the patients. And that you need to learn to develop patient plans. It's so ridiculous. He can learn by watching people with more experience do it. And, as for the responsibility, responsibility my ASS. Anyone who makes it to ACADEMIC hospital as a surgical resident knows how to take responsibility. You don't get here by being a slacker. It's all such a bunch of bullshit. But he's outta here in two more weeks. Not a moment too soon.

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Before a recent nationally mandated reduction in resident work hours, scenes like these were repeated hundreds of times each night in teaching hospitals throughout the country. On a regular basis, surgical residents felt tensions between the conflicting demands of their different identities—between their general surgical identity which required them to be macho, individualistic, and solely focused on work and a competing

identity of significant other, of woman, or of medical caregiver. Yet because of the institutions shaping their surgical identity and governing their actions and those of the people they interacted with, they could not meet the demands of their non-surgical identities without sanction from their general surgical interaction partners.

This phenomenon was not without its consequences—for occupations, organizations and individuals. Tom had been at the top of his class at Harvard Medical School, and the full range of residencies was his for the choosing. He had liked general surgery when he did his medical school rotation, but decided against it because he "didn't want to sign up for the surgical lifestyle." Mark was judged by all to be an excellent resident, and ACADEMIC hospital offered him a job to stay on as a faculty member post-residency. At the urging of his wife and because he was "too burned out after residency," he chose, instead, to take a job at St. Mary's in Rhode Island, with its promise of more time for family and community life. Christina was offered a spot in ACADEMIC's prestigious vascular fellowship, and took it. But she never married the man she had been engaged too on that evening back in June.

If it hadn't been for changes in the environment outside of ACADEMIC, residents like Tom, Mark, and Christina would probably have continued to act in ways that were inconsistent with their desired senses of self. However, in the wake of a nationally mandated reduction in resident work hours, residents like them began to reduce the tension between who they wanted to be and who they felt pressure to be when interacting with others at ACADEMIC. Once the new mandate was introduced, residents like them began to question institutionalized surgical beliefs. They began to attempt change in their interactions with others. They began to persuade those who benefited from the status quo

to change. And they began to extend new understandings created in particular interactions into future situations. This story is their story.

Outline of the Dissertation

In Part I of the dissertation, I introduce the study by providing an overview of existing theory of institutional stability and change that I both employ and critique in my analysis (Chapter 2). I also discuss an identity based perspective that I found helpful in interpreting my data. In Chapter 3, I describe my field site and research methods.

In Part II, I begin my story by describing what life was like at ACADEMIC before the work hours changes. In Chapter 4, I relate how residents drew on surgical institutions in particular work situations to shape their senses of self in relation to the particular situation in which they were acting. These situational identities, which were shared among all surgical residents at ACADEMIC, guided their actions and interactions. Through their interactions, they reproduced these situational identities and the institutions that supported them.

In Chapter 5, I explore why some ACADEMIC residents came to question the previously taken-for-granted surgical identity and institutions. These latent challengers experienced tensions because the actions and interpretations prescribed by surgical institutions in particular situations (situational identity) often conflicted with their senses of self across the social worlds in which they acted (personal identity). Since these residents were unable to maintain personal narratives consistently over time and across their various social worlds and because their diverse identities afforded them low status in the surgical world, they were more reflective about the traditional surgical identity and institutions than were others. They would have liked to attempt new forms of action, but

before the work hours change they did not often do so. Through their earlier experiences at ACADEMIC they had learned that such attempts would likely be rejected by their interaction partners, so they silenced themselves and acted according to collectively accepted prescriptions.

In Part III, I tell how, once the work hours changes were introduced by Directors at ACADEMIC, these latent challengers attempted change, how others defended stability, and how, together, they reproduced and changed elements of the traditional surgical identity through their joint interactions. In Chapter 6, I describe how the Directors tried to implement the change at ACADEMIC by forming a new night float team and telling residents to hand off any of their work not completed by 6pm to this night float team. Latent challengers attempted change in signout situations, and in crafting novel responses to these situations, they drew not only on their situational identities and on their personal identities, but also on their "interactional identities." Since new actions were also new identity claims, latent challengers used their knowledge of their interaction partner in each specific situation to judge the likelihood of acceptance of their new identity claim and the likely future consequences of their attempt. In order to forge new actions, they orchestrated different prescriptions for action and interpretation from their three identities.

In Chapter 7, I relate how, when challengers attempted new actions in signout situations, these new actions challenged the institutionalized situational identity guiding signout behavior. Those benefiting from the status quo in these situations tried to prevent these new identity claims in order to maintain the traditional institutions that supported their own persona, power, and worldview. They did this directly by actively resisting

challenges in particular situations and indirectly by de-legitimating new practices and isolating those who attempted challenge.

In Chapter 8, I describe how, when challengers and iron men fitted their lines of action to one another in signout situations, their actions gave rise to particular forms of interaction. In these situations, handoffs were either attempted or not by interns and were either accepted or not by night float members. When handoffs were either not attempted or were rejected, this reproduced the traditional surgical situational identity, and the personal and interactional identities of participants. When they were attempted and accepted, this altered the traditional surgical situational identity, and the personal and interactional identities of participants. These identities, in turn, guided action and interaction in future signout situations.

In Part IV, I focus on how the actions of the Directors and chiefs residents shaped the actions of the interns and the night float members in signout interactions. In Chapter 9, I describe how some of these Directors and chiefs acted as challengers and others as iron men. Challenger and iron man interns and moonlighters acting in particular signout situations were not acting only in relation to their situational, personal, and interactional identities but also according to new prescriptions for action and interpretation provided to them by the Directors and chiefs. The actions of these four groups of members structured the process of stability and change at ACADEMIC over time.

In Chapter 10, I highlight how some of the chiefs who were initially iron men began to challenge in particular situations when they were presented with situations in which different elements of their situational identities conflicted with one another. I relate how they began to craft new prescriptions for action and interpretations in response

to these situations, and how they objectified these new prescriptions by teaching them to new recruits. In this process, residents at ACADEMIC changed their actions and interactions, their identities, and the institutions that guided these.

In Part V, Chapter 11, I end by integrating the insights from my story. I use my empirical results to develop a framework that highlights the importance of members' senses of self and of relational interaction to institutional stability and change in workplaces. I conclude with the implications of this relational, identity-based framework for the theory of institutional stability and change.

Chapter 2

Institutional Stability and Change

If institutions are comprised of collective prescriptions for cultural and positional action and interpretation, then institutional change must depend at some point on thinking the unthinkable, acting in "inappropriate" ways, and convincing powerful others to give up their privilege. How does this happen? How do people come to question taken-for-granted beliefs? How do they decide to attempt the unacceptable in their interactions with others? How do they persuade those who benefit from the status quo to change? And how do they extend new understandings created in particular interactions into future situations?

Organization theorists have addressed these questions in various ways over their history of exploring institutional stability, and in their more recent efforts investigating institutional change. Theorists studying institutional stability have provided important insights about how the actions of organizations are guided by institutional understandings rather than rational calculations of efficiency. Those studying institutional change have highlighted the role of social movements in changing governance structures and logics.

This focus on structure and on the agency of organizations in relation to their external environment has yielded important insights about large scale phenomena. However, it has come at the expense of exploring how institutional stability and change is actually accomplished within organizations. Without understanding how organization members accomplish institutional stability and change on the ground in their everyday

work we cannot fully understand institutional dynamics, because the changes we observe at the macro-level are constituted by the day-to-day actions of organization members. In this chapter, I review the existing literature on institutional stability and change, and discuss several recent attempts to bridge the micro-macro gap in institutional theory. I then introduce an identity-based perspective which I found helpful in interpreting my data from this study of institutional stability and change.

Macro-Theories of Institutional Stability and Change

Institutional Stability

Institutional theorists have approached the study of institutional stability using three perspectives: cognitive, cultural, and political. Those highlighting the role of cognition in institutional stability focus on the socially constructed nature of institutions (Berger & Luckmann, 1967), which they define as the shared interpretations that help individuals and organizations construct meaning about what behaviors are appropriate in the larger institutional field (Zucker, 1977, 1987). In this view, actors are not purely rational, but are entities deeply embedded in a world of institutions, composed of taken-for-granted scripts, rules, and classifications that they use to determine appropriate conduct in particular situations (DiMaggio & Powell, 1983, 1991b; Meyer & Rowan, 1977; Scott, 2001). Institutions display continuity over time because many of the conventions associated with them are taken-for-granted to such an extent that they escape direct scrutiny (Tolbert & Zucker, 1996; Zucker, 1977). Mental schemas and institutional logics (Scott, Ruef, Mendel, & Caronna, 2000; Thornton & Ocasio, 1999) shape what factors are considered in any given situation, thus providing templates for interpretation and action. Actors conform to shared understandings not because it serves

their individual interests, narrowly defined, but because they take routines for granted as 'the way we do things' (Zucker, 1977) and this leads them to resist new evidence that might lead them to change their behavior (DiMaggio et al., 1991b).

While theorists using a cognitive perspective give a central place to shared interpretations in perpetuating patterned behaviors, others employing a normative lens highlight values and social obligation as an important mechanism for stasis (Hughes, 1971; Parsons, 1951; Selznick, 1949). These theorists conceptualize institutions as shared cultural prescriptions for action. They describe how values about what is good, right, and appropriate shape desired ends and specify how actors can legitimately achieve these ends (Becker & Carper, 1956b; Goffman, 1959).

Here, actors are seen to engage in stable forms of action because they identify with particular roles and internalize role expectations that guide how members of their class in good standing should behave (Becker & Carper, 1956a; Bosk, 1979; Van Maanen, 1976; Van Maanen & Barley, 1984; Van Maanen & Schein, 1979) . Institutions display continuity over time because the institutional environment imposes structures on organizations, which adopt them in order to be seen as legitimate (DiMaggio et al., 1983; Edelman, Uggen, & Erlanger, 1999; Tolbert, 1985; Tolbert & Zucker, 1983).

In the political approach to institutional stability, institutions are not comprised of shared interpretations or cultural prescriptions but of relations of power. Here, institutions are seen to give some groups or interests disproportionate access to resources (Fligstein, 1987; Hirsch, 1975) Thus, institutions are created through the constructions of powerful actors and are based on the interests of those actors (Brint & Karabel, 1991; DiMaggio & Powell, 1991a; Fligstein, 1991; Galaskiewicz, 1991). Institutional stability

is maintained because actors instrumentally conform to "rules of the game" in order to achieve rewards and avoid sanctions (Scott, 1995, 2001).

Through these cognitive, cultural, and political mechanisms, actions and institutions remain stable because institutions constrain the consideration of alternatives, generate obligations to act in particular ways, and promote the interests of some groups over others who need to bow to powerful groups in order to avoid sanction. However, these institutional arguments that explain stability are poorly suited to illuminate institutional change (Hirsch, 1997; Hirsch & Lounsbury, 1997; Lounsbury, 2001; Powell & DiMaggio, 1991). Thus, a central challenge facing organization theorists over the past decade has been explaining the locus and sources of this change.

Institutional Change

In this recent work, institutional theorists have drawn on social movement theory to explain how groups mobilize collective action to challenge and replace political and cultural institutions outside of organizations. They have described how social movements can forge new laws (McAdam, McCarthy, & Zald, 1996), legitimate innovative forms of organizing (Fligstein & MaraDrita, 1996; Haveman, 1992), and promote novel institutional logics (Rao, Monin, & Durand, 2003). Institutional entrepreneurs change cultural logics by outlining new ideas that disturb the socially constructed consciousness of members in a particular organizational field (DiMaggio, 1988; Garud, Jain, & Kumaraswamy, 2002; Maguire, Hardy, & Lawrence, 2004) . New logics become institutionalized when they become legitimized and ultimately taken-for-granted as social facts (Greenwood, Suddaby, & Hinings, 2002; Jepperson, 1991) .

Instrumental social movements leverage resources to challenge economic and political structures in order to further their interests (Fligstein et al., 1996; Haveman & Rao, 1997; Holm, 1995; Lounsbury, 2001, 2002). They generate sociopolitical legitimacy for the new institutions by ensuring that these conform to legal rules and gain endorsement from other powerful actors (McAdam, McCarthy, & Zald, 1996; Rao, Morrill, & Zald, 2000). Applying a social movement perspective to the study of institutions has "brought agency back in" (Hirsch & Lounsbury, 1997), and yielded important insights into the dynamics of institutional change.

Unexamined Dynamics in the Macro-Perspective

These approaches to institutional stability and change highlight the importance of both structure and agency, and draw attention to important cognitive, cultural, and political dynamics involved in maintaining and changing institutions, but they leave several issues unexamined. The theorists using cognitive, cultural, and political approaches to institutional stability (summarized by Scott, 1995, 2001) privilege structure over agency so leave little room for resistance and contest. Hirsch (1997) criticizes Scott's (1995) explanation of institutional stability as "an unnecessarily reified and functionalist framing of key concepts that ignores or denies institutional, cultural, and structural conflicts, contests, and ongoing change in real time" (Hirsch, 1997, p. 1705). The theorists studying institutional change leave some unexplored areas as well. By focusing solely on abstract cultural logics and political governance structures, they assume that once created, institutions are stable entities that organization members can appropriate for use in their own contexts.

If cognitive, cultural, and political dimensions of institutions shape action, and if institution and action are recursively related, then we need to explore the cognitive, cultural, and political dimensions of everyday actions and interactions of organization members in order to understand the stability and change of institutions. Attempts may be initiated outside of workplaces to maintain institutional stability or promote institutional change, but change and stability only occur insofar as they are enacted through the actions and interactions of workplace members. Only a handful of organization theorists have empirically explored this relationship between micro- actions and interactions of frontline members in workplaces, on the one hand, and macro-institutions that shape these actions and interactions, on the other.

Bridging the Micro-Macro Gap

These scholars draw on Giddens (1984) to elaborate the relationship between institutions and the day-to-day actions of organization members (Barley, 1986; Barley & Tolbert, 1997; Orlikowski, 2000). Giddens (1984) suggests that structure does not stand outside of and prior to human endeavor, but is an emergent property of ongoing action. Through an interplay called the process of structuring, structures shapes human actions, which in turn, reaffirm or modify structures.

Giddens (1984) describes structure as an enacted set of rules and resources (structures) derived from prior action and interaction on which actors draw to act in their daily lives. Structure and agency are mutually constituted through the influence of modalities. Rules and resources inform ongoing action because their systems of signification (meaning), domination (power), and legitimation (morality) become part of an actor's stock of practical knowledge (which Giddens call modalities). This practical

knowledge consists of interpretive schemes, facilities, and norms adapted to particular situations. Actors draw on this practical knowledge to structure their acts of communication, power, and sanction in these situations. In doing so, they reconstitute the rules and resources that structure their social action.

For Barley and Tolbert (1997), and Orlikowski (2000), Giddens' modalities (which Barley calls "scripts") serve as the pivots between action and institution. Barley and Tolbert (1997) write:

> Scripts are observable, recurrent activities and patterns of interaction characteristic of a particular setting. Scripts encode the social logic of what Goffman (1983) called an "interaction order." Our contention is that the institutions relevant to a particular setting will manifest themselves in the behaviors characteristic of that setting and, hence, will appear as local variants of more general principles (p. 98).

In this view, what we observe from a macro perspective as institutional stability is really patterned action of a wide variety of actors across a wide variety of settings. Over time, these habituated actions attain a social facticity. They become taken-for-granted as the good and right way to do things and, in turn, shape future actions and interactions.

Barley (1986), Barley and Tolbert (1997), and Orlikowski (2000) use structuration theory not only to explain institutional stability, but also to explain institutional change. They note that while patterns of interactions often become established as standardized practices in organizations over time, these structures have no reality except as they are instantiated in daily activity. And while knowledgeable and reflexive actors often choose to reproduce these structures through their actions, in every particular situation they are capable of making a difference to the existing course of events.

Barley (1986) and Orlikowski (2000) argue that institutional change can occur through both the process of slippage and the process of improvisation. Barley (1986) suggests that:

> Since acts of communication, power, and moral sanction necessarily entail the vagaries of interaction, some slippage will occur between the institutional template and the exigencies of daily life...when slippages persist, they become replicated patterns whose contours depart...from former practice. Eventually, changed patterns of action reconfigure the setting's institutional structure by entering the stock of everyday knowledge about 'the way things are (p. 80).

Orlikowski (2000) argues that, in addition to slippage, actors improvise new structures in practice as they experience changes in factors such as awareness, knowledge, or power. This may occur as actors enact various interpenetrating structures. As they do, they experience a range of rules and resources that may generate knowledge of different structures and awareness of the possibilities for structural change. As people enact their modified structures in practice, they also change the facilities, norms, and interpretive schemes in their use of those structures (Orlikowski, 2000, p. 411).

Through their study of stability and change, these theorists have illuminated how the cultural, political, and interpretive institutions that have been emphasized by institutional theorists using a macro-perspective are related to the day-to-day micro-actions and interactions of organization members. However, their use of structuration theory and the conceptualization of Giddens' modalities as the pivot between action and institutions presents two areas for further clarification: the motivation for transformative agency and the dynamics by which this transformative agency can be accomplished in the face of resistance.

Giddens (1984) suggests that the human need for ontological security leads actors to repeat routine patterns of behavior that unintentionally reproduce social structures, but he does not focus on what leads them to choose to act otherwise. His structuration model, though, does provide some perspective on how transformative agency can be accomplished in the face of resistance. He suggests that actors draw on systems of domination to shape their practical knowledge of power relations in order both to intervene to alter a course of events (transformative capacity) and to secure outcomes where the realization of these outcomes depends upon the agency of others (relational domination) (Giddens, 1993, p. 109-110). However, researchers using the structuration perspective in their empirical work do not always focus on how action is shaped through relational domination in interaction with specific others in particular situations. Without understanding the motivation of agency and the dynamic relations of power that are dialectically related to action we cannot explain why some members and not others act to change institutions, and to explain how they can create change in the face of resistance from iron men of the status quo.

My study builds on this stream of research by Barley (1986), Barley and Tolbert (1997), and Orlikowski (2000). My conceptualization of the interpretive, cultural, and political dimensions of institutions, and of the recursive relationship between actions and institutions is derived from their work. To their conceptualization, I add a relational identity-based perspective, in order to try to explain the motivation for transformational agency and the dynamics through which this transformative agency can be accomplished in the face of resistance. By suggesting that identities, rather than modalities, serve as the

pivot between actions and interactions on the one hand and institutions on the other, I explicate the motivation for agency and its political dynamics.

A relational identity-based perspective

In this dissertation, I develop a relational, identity-based perspective to help me interpret my findings by drawing on four ideas from identity theory and symbolic interactionism: 1) Identities serve as the pivots between action and institutions 2) Identities are shaped by historical institutions of culture and power, 3) Members negotiate these identities in relation to the situation, their interaction partners and themselves, and 4) Conflicts between the prescriptions for action and interpretation of each of these identities lead members to try to bring the identities into alignment by changing their actions and interactions.

Identities serve as pivots between actions and institutions

The key idea underpinning my framework of institutional change is Mead's (1934) conception that changes in the institutional order require changes in ourselves and the others with whom we are interacting, and that these changes arise relationally, in interactions between organization members in a community. For Mead, the self is related to the institutional order in the following manner:

> The self-conscious human individual, then, takes or assumes the organized social attitudes of a given social group or community...to which he belongs, towards the social problems of the various kinds which confront that group or community at any given time, and which arise in connection with the correspondingly different social projects or co-operative enterprises in which that group or community as such is engaged; and as an individual participant in these social projects or co-operative enterprises, he governs his own conduct accordingly. (Mead, 1934, p. 156)

Mead refers to this aspect of the self which is an individual reflection of the institutions of the community in which it and all others are involved as the "Me." But he also

identifies another dimension of the self-- the "I"--which is the individual's action over against that social situation. The "I" gives the sense of freedom, of initiative.

For Mead, the source of institutional reconstruction is always an individual member of society. However, he suggests that:

> Any such social reconstruction, if it is to be at all far-reaching, presupposes a basis of common social interests shared by all the individual members of the given human society in which that reconstruction occurs, and is shared by all the individuals whose minds must participate in, or whose minds bring about, that construction" (Mead, 1956, p. 269)

Thus, Mead argues, the emergence of a new self requires the incorporation of the relational component, the attitude of another. In this way, when a self is changed, the institutional order is reconstructed as well:

> The relations between social reconstruction and self or personality reconstruction are reciprocal and internal or organic; social reconstruction by the individual members of any organized human society entails self or personality reconstruction in some degree or other by each of the individuals, and vice versa; for, since selves or personalities are constituted by their organized social relations to one another, they cannot reconstruct those selves or personalities without also reconstructing, to some extent, the given social order, which is, of course, likewise constituted by their organized social relations to one another. (Mead, 1956, p. 270).

Identities are shaped by historical institutions of culture and power

While Mead's (1934, 1956) conception of the relationship between institutions and identities focuses on culture, Holland, Lachicotee, Skinner, and Cain (1988) add a critical dimension to this discussion of identity by discussing positional dimensions of identities. They also highlight the specific ways in which identities are lived through social action. Drawing on Bakhtin (1981) and Bourdieu (1977) they suggest that identities are shaped by collective cultural forms and social relations specific to particular social worlds (which Mead would call institutions), and that these identities guide the actions of members in particular situations. They use a "dialogic" concept of self

(Bakhtin, 1981), or identity, to forge a synthesis between accounts of society that privilege either structure or agency.

Holland et al. (1988) describe identities as situated in particular social worlds. In describing the cultural, or figured, identities, they write:

> A (social) world is peopled by figures, characters, and types who carry out its tasks and who have styles of interacting within, distinguishable perspectives on, and orientations toward it... In this socially and culturally constructed realm of interpretation, particular characters and organization members are recognized, significance is assigned to certain acts, and particular outcomes are valued over others....A figured world is narrativized or dramatized because many of the elements of the world relate to one another in the form of a story or drama, a standard plot against which narratives of unusual events are told....The meanings of acts in everyday life are figured against this storyline (p. 51-54).

In their conceptualization, these cultural, or figured identities are related to positional identities:

> Neophytes entering into a (social) world, acquire positional...identities. At some level of apprehension, they come to know these (cultural identity claims) as claims to categorical and relational positions, to status. More important, they learn a feel for the game, as Bourdieu calls it, for how such claims on their part will be received. They come to have (positional) identities in the most rudimentary form: a set of dispositions toward themselves in relation to where they can enter, what they can say, what emotions they can have, and what they can do in a given situation....(p. 142).

Organization members draw on these cultural and positional identities in particular situations to craft their actions. Using the cultural resources available to them and the subject positions afforded them by these identities, organization members improvise their actions. Cultural and positional identities are conceived as living tools of the self—as media that figure the self constitutively, in open-ended ways. In this way, "sites of the self," the loci of self-production or self-process are both social and are recognized as plural (Holland, et al., 1988, p. 28). Organization members orchestrate different

prescriptions for action and interpretation from these cultural and positional identities in their own "space of authoring" in order to craft their actions in particular situations.

Organization members draw on these identities to construct their own subjectivities. These identities both position them and provide them with resources to respond to problematic situations in which they find themselves:

> Identities are not without their disruptions...People sometimes fix upon objectifications of themselves that they find unacceptable. These objectifications become the organizing basis of resentment and often of more active resistance...The...capability to figure social practice...is at the same time a capability to figure it otherwise than it is. The interchange or convertibility of the two contexts of identity provides opportunities to reform either by recourse to the other (p. 143)

Members negotiate their identities in relation to the situation, their interaction partners, and their personal narratives

While Holland et al. (1988) helps us see how identities have cultural, political, and interpretive dimensions, how they are multiple, and how conflicts between them provide organization members with opportunities to craft new actions, symbolic interactionists highlight how organization members do not only craft their actions in relation to cultural prescriptions for demeanor in situations given their positions within them. They also craft their actions in relation to their interaction partners, and in relation to their own personal narratives. Describing how action and identity are related to one's interaction partners, McCall and Becker (1990) write:

> Any human event can be understood as the result of the people involved continually adjusting what they do in light of what others do, so that each individual's line of action "fits" into what others do. That can only happen if human beings typically act in a nonautomatic fashion, and instead construct a line of action by taking account of the meaning of what others do in response to their earlier actions. Human beings can only act in this way if they can incorporate the responses of others into their own act and thus anticipate what will probably happen, in the process creating a "self" in the Meadian sense (p. 3-4).

Goffman (1959) emphasizes how an individual's identity is socially constructed in interactions with others. An individual's identity is either confirmed or denied by partners in interactions. Individuals' actions are not only instrumental but are also identity claims which, if accepted by interaction partners, enable the individual to carry off his or her desired sense of self in each situation. If not, individuals are denied this particular sense of self.

Symbolic interactionists also highlight how members craft their actions according to their own personal narratives—their personal identities (Van Maanen, 2001; Vinitzky-Seroussi, 1998). They suggest that individuals try to identify themselves in a reasonably coherent fashion across social situations and times. They are concerned with continuity, that an identification made by them in one social context carry over into another.

Conflicts between identities lead members to attempt to change their actions

Differences between an organization member's personal identity and enacted identity in particular situations can cause tensions which lead organization members to try to align these two identities with one another. Van Maanen (2001) writes:

> Personal identity refers to those understandings of self (by the self) that are internal but stable, transcending time and place. Yet they must rest on (enacted) identities that are public, socially enacted, negotiated, and bounded by space, time, and circumstances...(Enacted) and personal identities are related in the sense that we presumably wish to enter and exit situations with our personal identity intact. Much of the time, if we are fortunate, this is not a problem but inevitably tensions between (enacted) and personal identities arise. The challenge on such occasions for the individual is to not only bring forth a convincing self (enacted identity) but to believe in that self (personal identity) as well (p. 10-11).

This theory helps us see that in order to align their identities, members may need to attempt actions that are not consistent with the institutionalized identities of their

communities. Aligning these misaligned identities can become a motivation for members to attempt new forms of action with their interaction partners.

In the dissertation, I use these four ideas to explore how members begin to change the institutionalized prescriptions for cultural demeanor, positional relations, and interpretations that shape their identities, actions, and interactions. Studying these dynamics calls for the observation and analysis of relational and identity-based actions and interactions. In the next chapter, I describe how I did this kind of observation.

Chapter 3

Methods

The data for this ethnography were collected from April, 2002 to June, 2003. The research involved an intensive look at a teaching hospital located in New England. ACADEMIC is a pseudonym for the hospital, and the names of people I describe are also fictitious. Throughout my description, I have changed many of the insignificant details in order to ensure the anonymity of my informants.

Research Site

ACADEMIC is teaching hospital that trains newly minted doctors for academic careers in surgery. In America, doctors graduating from medical schools who hope to be surgeons must undergo a 5 year clinical training program (often with an additional 2 years in the laboratory) called surgical residency, during which they learn to diagnose patients and recommend potential surgeries, operate on patients, and provide post-surgical patient care. During my study, Academic had 61 surgical residents and 29 attendings working at the hospital in General Surgery (**Figure 3a**). The residents worked an average week of 120 hours, including staying overnight at the hospital 'on call' every third night. In the Spring of 2002, the American Council for Graduate Medical Education called for a reduction in resident work hours to 80 hours per week.

Data Sources

I started my study 3 months before proposed changes occurred and followed the change process for 12 months after the changes began to be implemented. For the first

three months, April through June, I focused my research on documenting traditional surgical resident institutions to establish a basis for determining how changes were accomplished over time. For the next 12 months, I focused on the change process. I also went back to ACADEMIC at the beginning of each of the next two years, in July, to continue to observe how changes continued to unfold.

During the whole 15 months, I observed the actions and interactions of the surgical residents on the general surgery teams. I spent an average of 25 hours a week on-site observing members at different times of day and night during surgeries in the operating room (OR), on the patient floors, on patient rounds, and in conferences, and sleeping overnight in family waiting rooms next to the resident call rooms in order to observe residents in the middle of the night. I also socialized with the group members: I regularly ate breakfasts, lunches, and dinners with them, fraternized with them in the residents' lounge, and attended resident parties, black tie events, and regular Thursday drinking evenings.

I recorded the occurrence and timing of events chronologically during the course of each day in order to create behavioral records for all of the residents' daily work activities. I typed these observations in the form of field notes when I was away from the site. In addition to behavioral records, I also sought and recorded participants' interpretations of events at the time they occurred or shortly thereafter.

I noted early on that interactions around *handoffs* of patient tasks during *signout situations* involving junior daytime members and senior members covering overnight would be a crucial component of changing resident interactions to meet the new regulations. The use of handoffs defied surgical institutions because of surgical

interpretations favoring a doctors' taking complete responsibility for a patient, cultural norms prohibiting handoffs, and strong hierarchical positional relations. Therefore, I began to focus carefully on these signout situations. For each of the signout situations I observed, I recorded conversations between participants in shorthand and followed up with each member of the interaction to gather their interpretations of the events that occurred.

Analyses

My analysis consisted of multiple readings of the interview transcripts, field notes, and documentation, and the coding of activities and issues that related to surgical institutions (Glaser & Strauss, 1967; Strauss & Corbin, 1990). I analyzed transcripts and field notes to address the following issues: 1) What were the institutions that shaped resident action before the changes? 2) What motivated some residents to question these institutions? 3) How did these residents attempt to change actions in their interactions with other members? 4) How were these attempts received? 4) How did residents succeed in changing joint interactions in particular situations? 5) How did actions and interactions change over time, and 6) How did new actions and interactions begin to become institutionalized for residents?

To answer my first question about the traditional institutions that shaped resident actions, I coded my field notes around residents' actions and interpretations before the changes to identify the prescribed cultural and positional actions and interpretations that shaped traditional surgical resident actions and interactions at ACADEMIC.

To answer my second question about what motivated residents to question institutions, I compiled and categorized by resident all field notes related to this

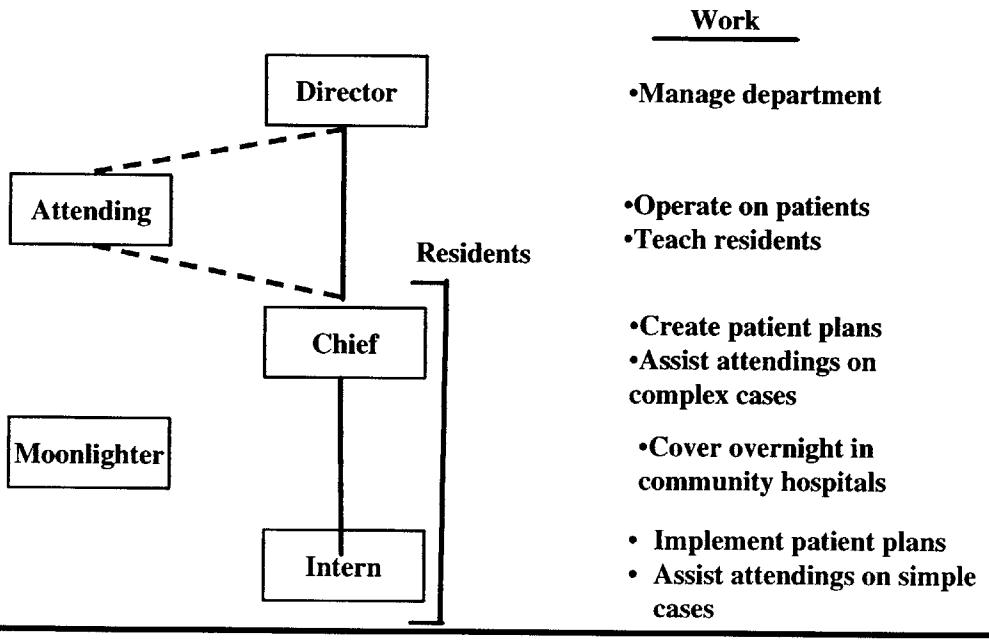
questioning. These included interactions observed and stories told by the residents. In my early analysis, I noted that residents presented themselves as either supportive of or opposed to the proposed changes. I developed indicators of challengers versus iron men by analyzing the interpretations of each resident in regard to the work hours change, and factors related to these interpretations.

To answer my third, fourth, and fifth questions about when residents attempted to change actions, how these attempts are received by others, and how members jointly changed interactions and identities in particular situations, I focused on signout situations. I grouped my data according to 57 signout situations, and coded them to identify patterns of interaction that occurred within signouts and what seemed to be accounting for these patterns.

To answer my sixth question about change over time, I coded my fieldnotes and identified breakpoints in residents' actions and interactions in the 57 signout situations. I focused on the actions of Directors and Chiefs and how these seemed to be related to changes in the actions and interactions of interns and moonlighters.

Finally, to answer my last question about how new actions and interactions begin to be objectified, I coded residents' explanations of their actions in signout situations in order to trace changes in their descriptions of cultural demeanor, positional relations, and interpretations over the 15 months, and then at the beginning of each of the next two years. I also coded my notes and analyzed presentation materials from three different years of intern orientations to track differences in the way senior members provided new members with prescriptions for action and interpretation.

Figure 3a: ACADEMIC Surgical Residency Positions



Part II: Before the Changes

Chapter 4

Traditional Surgical Institutions, Identities, and Interactions

(Field notes; June 27th). It's a little before 4:00 in the afternoon on the first day of new intern orientation, and we are packed into a basement room waiting for a "Do's and Don't of Residency" talk by one of the surgical attendings. At exactly 4pm, he strides in wearing green scrubs and a surgical cap, his long white coat, and a surgical face mask down around his neck. He is a stocky Italian with brown hair and brown eyes.

I'm Dr. Miller, one of the trauma attendings. I'm available 24 hours a day, 7 days a week. My pager is on 24 hours a day. If you have a problem, call me or page me. I want to know about it. The last thing we want is an unhappy intern.

(These kind words about his open door policy are completely contradicted by his posture and tone of voice. He looks like a tightly wound ball of intensity as he barks out his comments. He came up through the ACADEMIC residency program, and is one of the cultural heroes of the residency).

Be Organized: keep yourself organized. When your chief asks you a question, you don't want to be shuffling through your pockets or looking down at your scrub pants for an answer. There are two kinds of interns: those who write things down and those who forget. Always have a pen, and write everything your chief says down. The intern is the workhorse of the team. You need to work harder than everyone, and be available longer than anyone.

Be Prompt: when rounds are at 6 am don't show up at 6:05. If you've always been late your whole life, set your clock ahead. We run on a tight schedule and if the chief has set 1 and ½ hours for rounds he needs every minute. Don't show up at 6:00 with only half of your patients' numbers. Get here at whatever hour you need to in order to be ready. Also in the OR--Nothing ticks an attending off more than having to drape and prep his own patient. If you aren't there to do it, some attendings will tell you to go, you've lost that procedure.

Be Honest: The most important thing is to be honest. The last thing you want to do is lie. If your chief asks what the CT scan showed don't pretend you saw it if you only listened to the dictation and you didn't look at the film yourself. It may turn out later that the film was read by some radiology intern in his first week and you missed a pneumothorax. Once you've lost the trust of your chief you can never regain it. Next time you tell him numbers, he won't believe you. There will be times when you don't know the numbers, or you won't have seen the scan. Be honest and your chief will be mad for a day. If you lie, you're in trouble for much longer.

Be Humble and Respectful: Over the next 6 months you'll make your reputation at ACADEMIC. The last thing you want to do in your first week is piss off some OR nurse that has been here for 20 years. If you do, she'll be operating with (Director) and tell him, and he'll call me and say what's the story with so and so, I hear he was a jerk. And next time (Director) is at a function and reads your name tag, that's the first thing he is going to think about. You've been a doctor for 2 weeks, and some of these

nurses have been here for 20 years. Even if you disagree, you say, thank you we'll consider that. You don't know who is important and who isn't at first. So be careful and be humble. Be pleasant, be courteous. You don't want to start a 7 year relationship the wrong way. The difference between 4 hours of sleep and 0 hours of sleep is your relationship with the nurses. If you are disrespectful, you'll be called all night about a normal potassium, a normal urine output, a normal blood pressure. Word gets around, and if you piss off one person, everyone will know.

Trust No one, Expect Nothing: You are responsible for your patients. Don't tell some med student to get your numbers because you did it as a med student. If he does, you need to get them too. If Bill tells you to go home and he will take care of things, don't show up the next morning and find out that one of (Director's) patients hasn't been pre-opped. If it is your responsibility and you farm it out, then get there in time to double check it. The chief should never hear from an intern that, Oh it's someone else's fault. The nurse didn't get the data, or the consult service didn't show up. You are responsible for the nurse getting the data. You are responsible for the consult service showing up. You may need to page Neuro 5 times in order to get them there, but you need to get them there before rounds in the afternoon. You are responsible for your patients 24 hours a day. You own that patient. There are two acceptable answers to any question. Either, Yes I've done it or No, I didn't do it and I'll do it right away.

Be in Perpetual Motion: Don't say, I'll have time between cases to check numbers so I'm going to go for a cappuccino, watch TV, take a nap. Inevitably something will blow up and you won't have time to get things before rounds. Check your labs and studies before doing anything else. You'll be inefficient in the beginning and you need to do things right away in order to get them done.

We are excited to have you. You're here because you wanted to be here. We have that luxury. We are not like some middle tier programs that are scrambling to fill slots with people who would rather be elsewhere. The first days will be scary and there will be some reworking. You have the team supporting you.

Work hard. Bring us praise. Good habits start day 1 and bad habits are hard to break. Work hard. Put your nose to the grindstone, and you'll do well here. See you on Wednesday night at Skipjacks. We'll throw back a few cold ones and celebrate your last week of freedom.

Before the work hours changes, these collective cultural and positional prescriptions for action and interpretation—institutions—guided resident actions and interactions. ACADEMIC surgical residents drew upon cultural prescriptions to craft a demeanor that enabled them to accomplish their work in an appropriate manner for a surgical resident. They utilized prescriptions for positional relations to negotiate power and status relative to others. And, they employed interpretations to help them make sense of this prescribed demeanor and deference structure. The new work hours regulation

sparked strong opposition because it challenged these closely held prescriptions for action and interpretation. In order to understand why a change directed at providing better patient safety and an improved quality of work and personal life for the residents was resisted by many ACADEMIC attendings and even surgical residents themselves, it is necessary to begin our story by exploring how these new rules flouted existing institutions in the surgical occupation in general and in surgical residency at ACADEMIC in particular.

Surgical Residency's Institutional Context

While surgical residents in Canada and in the United Kingdom typically work well under 80 hours per week, in American teaching hospitals, surgical residents have a longstanding history of working about 120 hours a week (Mukherjeee, 2002). The term surgical "resident" was coined because these trainees were essentially living in hospitals during their training period. American surgeons and surgical residents have traditionally described themselves and have been seen by others in and outside of the hospital as action-oriented male heroes who single-handedly perform death-defying feats and courageously act with certainty in all situations (Katz, 1999). This persona of surgeons as active heroes originated in the early history of the surgical profession when surgery was performed amidst perilous events and lives were saved despite hazardous hygienic conditions, and it has been perpetuated in contemporary times (Katz, 1999).

In line with this occupational persona, professional power relations prescribe a strict hierarchy with authority and tasks and responsibilities rigidly prescribed by position, with the chief resdents leading the team and the interns occupying the lowest rung on the ladder. The interpretations supporting this occupational persona and power

relations are "continuity of care" for patients (which means that best patient care is achieved when one surgical resident takes total and complete responsibility for a patient from the time of their surgery to the time they leave the hospital), "learning by doing" (which means that residents must learn surgery through hands-on experience) and "living the life of a surgeon" (which means that surgeons must always put their patients first, over and above any commitments they may have in their personal lives).

U.S. surgical residents have traditionally achieved this persona in everyday action by avoiding handoffs--a common action in non-surgical residencies, where one medical resident transfers his or her own work to another medical resident at the end of a work shift. The taboo on handoffs in Surgery originated in the 1890s when the Director of Surgery at Johns Hopkins, William Halsted, developed surgical residency programs centered around these ethics as a way for American surgeons to distinguish themselves from "Butchers, Barbers, and Quacks" (Mukherjeee, 2002). Since Halsted's time, surgeons have occupied a high position in the status hierarchy of the medical profession and in society as a whole. The occupation's dominance was built on and maintained by long work hours, a macho demeanor, deference to seniority, and the avoidance of handoffs of work between residents.

Surgical Institutions at ACADEMIC

These occupational institutions took a particular shape within ACADEMIC. The cultural dimensions of surgical institutions at ACADEMIC afforded residents an appreciation of the appropriate demeanor of a surgical resident in good standing, that of "iron man." The positional dimensions of these institutions allowed residents to allocate resources and authority according to position in the strict surgical hierarchy.

These shared cultural and positional understandings not only specified the appropriate demeanor and deference structure of ACADEMIC surgical residency, but also provided residents with particular interpretations, or justifications for this prescribed demeanor and deference structure. An iron man identity and a strict hierarchy were seen as necessary to achieving good patient care and good resident education. Residents drew on these institutionalized understandings in particular situations to shape their actions. While not all residents acted according to these prescriptions in all situations, those whose behaviors across situations most closely approximated the cultural ideal for surgical residents at ACADEMIC also held the highest status in the community (**Table 4a**).

Cultural Prescriptions for Action

Cultural dimensions of institutions at ACADEMIC specified three important characters and prescribed actions specifically appropriate to these characters, and a demeanor appropriate for all ACADEMIC surgical residents.

Characters

In the social world of ACADEMIC, the standard plot was for residents to come in as interns who "don't know anything" to be "molded" by those more senior to them, so that 7 years later they'd have "hair on their chests" and could act as chiefs. Three key characters in the ACADEMIC surgical residency narrative were the interns, the chiefs, and the moonlighters.

Interns (first year residents) at ACADEMIC were expected to act as "beasts of burden," as "workhorses" who could be counted on to do whatever their chiefs asked of them. According to the prescribed surgical resident persona, they arrived at the hospital

at 4am and left the hospital at 10pm. They were expected to be always on time to rounds, to stand up rather than sit when entering orders at machine gun speed, to rush quickly in and out of patient rooms to collect data without allowing for much conversation with patients, and to "live for the OR." These interns taught to be "often wrong, but never in doubt" when they were being mercilessly "gunned" by their Chiefs during "teaching" on afternoon rounds.

"Strong" interns were expected to take total ownership of their patient data, and to not hand off their work to anyone, or sign out their pagers. In the idealized drama, interns got everything on their task list accomplished by afternoon rounds, and they did not help, or get help from, other team members in doing their work, regardless of how busy, or not, other residents were. Good interns took "real responsibility" for their patients. One senior explained:

> As an intern you felt like I am that patient's doctor. I was with them when they got admitted and I will be with them when they get discharged. I'm not going to leave their side. I'm going to round on them twice a day at least.

"Strong" interns were also willing to do whatever it took to get the job done. One attending explained:

> Take (intern) from last year. He was a Southerner who hadn't gone to an Ivy League school. He was a hard working SOB who had worked as a car mechanic. He never had anything given to him on a silver platter. You'd give him a huge scut list, and he'd roll up his sleeves and say, I can do it. Not, why do I have to be the one to do it?

Finally, "strong" interns were the ones people saw "burning the midnight oil"and "walking out of here at 10:00 at night."

Iron Man *chiefs*, in contrast, saw themselves as "dogs of war" because "we are always in enemy territory." They saw themselves as "the biggest, baddest, SOBs around,

beating up on the meddies (medical residents) and beating up on the radiologists." They were also "commanders" in charge of molding the new interns. One Academic chief from a prior year describes his actions on morning rounds, which epitomized the cultural ideal for a chief:

> I was someone who was very focused on rounds. One guy used to take around his little mug of coffee when he rounded. And we were like, "What the fuck are you doing?" I finished at 7am with my rounds. I hated finishing at 7:30 because that's when the OR is. I think it's important to break bread with the guys all the time. So you finish at 7, team breakfast. Then you sit back, buh, buh, buh, the game last night, joke around, have your coffee, bust each other's balls. But from 6 to 7 it's game face, boom, no chit chat, no extraneous conversation, just give me the data.
>
> I was incredibly demanding that they know their patients. If they were like, I'm sorry I didn't have a chance to see all of these patients. I'd say, STOP. OK we're rounding at 5:30am tomorrow, and then the occasional 4am ones. So the interns had to show up at 1am to get the numbers, you know, having gone home at 10pm. Or I rounded late, 4:00 in the afternoon and I went home, and then came back in at 8pm, just so those guys stayed late and realized that, you know what, you guys can't leave but I'm gonna leave. I'm gonna leave, and I'm gonna go home, and I'm gonna come back when all the data's done.
>
> But I looked out for them. When interns were on for iron man weekends (Saturday morning through Monday night), I came in on Sunday morning and grabbed their beeper for 4 or 5 hours, just so they could go home, shower, pick up the mail, see the wife, and then come back. I also told them when they did a good job because you have to give them that little carrot. If it's all stick, you can't motivate people. Like the slot machine, intermittent reinforcement. It's a lot of stick. It's a lot of stick early on, but then you lighten up, because once they're trained, once you break their will, and you've molded them, then there's less stick.

Iron man *moonlighters,* as specified by the cultural ideal, were mid-level residents doing their mandatory 2 years in the laboratory in order to receive training in surgical research and earn publications crucial to gaining access to further specialized training after their residency. They were expected to regularly moonlight at night in hospitals in the surrounding environs to make money to pay off their medical school loans. The lab years were known to be a time when residents could make "beaucoup bucks" by moonlighting and take the time to "find a wife" since schedules were too crazy during

regular residency to allow for much serious dating. Moonlighting was claimed to be easy money because moonlighters were hired to take care of emergencies, and so went to these other hospitals to essentially sleep and earn money while doing it.

Demeanor

While some actions were prescribed for particular types of characters, others were prescribed for all surgical residents at ACADEMIC. "Strong" residents were expected to be male, going into general surgery versus other specialties, with a single-minded focus on work. They were expected to act as "iron men" by "trusting no one" and by "living in the hospital." Most residents did not actually act out all of these idealized characteristics, and in fact, many lived in a state of some tension with the iron man drama. But, this idealized character of iron man was associated with the highest status at ACADEMIC.

Iron Man. An ACADEMIC iron man (as they identified themselves when they described the long weekends on call that only surgical residents engaged in as "iron man weekends") was expected to act as a "go-to guy," with "nerves of steel" who is "unflappable" under pressure. According to the accepted storyline, iron men could be counted on to "make it happen" no matter what the circumstances. Iron men were tough enough to work longer hours than any other residents in the hospital: "Pain is just weakness leaving the body."

As part of the iron man persona, male residents were expected to display the cultural vernacular of macho: short haircuts, tucked in scrubs worn low on the hips, green surgical caps and masks around necks long after leaving the OR, fast striding movements during morning rounds and cocky swaggers in the evenings. The "best" iron man stories revolved around the game last night, smokin' interns, house calls, and call room exploits.

One night I sat with two residents who told war stories about one of their favorite chief residents:

> Resident 1: Before we'd start rounds every day, we'd have to get an update from (chief). He'd have a different woman every night. One night it was some Danish chick wearing a white lace thong and taking a house call from him. The next night it was a red headed Irish waitress. He'd come in and say, Thank god I'm on call. I need to rest (laughter).
>
> Resident 2: Yeah, when he was on call and I was the intern, he used to say, after 11 you can always come get me. But it is a sign of weakness. I don't want you to come knocking on my door.

Part of being an iron man was being action-oriented and daring. Traditional surgical resident sayings at ACADEMIC communicated this action orientation:

> Often wrong, but never in doubt...If you wanna make an omelet, you gotta break some eggs... Everyone makes mistakes—that's why it's a 7 year program...Don't let the skin get between you and the diagnosis...The only prescription this patient needs is hot lights and cold steel...It's showtime..Giddy-up...Got it covered...Fire it up and BRING IT ON.

Trusts no one. As well as enacting a male persona, iron men were expected to take "real responsibility" for their patients. One of their favorite sayings was "trust no one, expect nothing, suspect sabotage." This involved never handing off their work to anyone, and never signing out their pagers. In addition, they were expected to avoid the help of physician assistants, and to discount the input of nurses and other physicians when making their decisions. One surgical resident explained how general surgical residents recognized themselves as different from residents in other specialties

> Well, there's definitely a different ethos in a surgeon. We have a different openness to being responsible for patients. So we spend a lot of extra time in the hospital. In medicine there is a willingness to take care of patients when you are here and put it behind you when you leave. There is a different kind of person attracted to each and a culture instilled in each. It is not to say that there are not lazy surgeons or diligent, hard working medical residents. But, surgeons are definitely more dedicated to patients.

Lives in the hospital. Finally, iron men prided themselves on "living in the hospital" and asserted that their "fellow residents were their family." They constantly told stories with bravado about breaking commitments with disaffected wives and significant others, who were seen to have bought into this reality by choosing to have relationships with surgeons: "Just because you want to be in the circus doesn't mean you like cleaning up after the elephants." About parenting, their favorite saying was: "Have your baby at ACADEMIC, at least you'll get to see if for the first few days of life."

One attending who had recently come up through the ACADEMIC residency related:

> When I was a second year resident, they wouldn't let me go to my grandmother's funeral. I was on cardiac surgery. I'll never forget the reaction from the chief resident. He was like, she's not going to know if you're there or not. (What did your family say?) My family just sort of understood. I said, I'll try, but I don't think there's any way I'm going to be able to go. (Did ACADEMIC really need you?) Absolutely not. That was about, you are a surgeon first and your personal life comes second. And right now we need you to pull chest tubes and do this and that. And you're like, you fuckin asshole, I hate you, blah, blah, blah. But you're too tired to let that grudge hold because they are beating on you about something else. And they also instilled in you that you wouldn't want to do that to your fellow residents who are going to be holding the fort down.

Another said:

> Residency is legendary for breaking up marriages. They say that (the old Department Chair), only took married men because they had a stable home life and hot meals waiting for them at home. And he only took single women because the he was not worried about them getting pregnant. Everyone loves to celebrate Duke as a hardcore program because, they say that at Duke they had a 110% divorce rate. Guys would come in married, get divorced, get re-married, and get divorced again before their 7 years were up. At ACADEMIC, it was not uncommon for guys to burn out their marriages early on. If they do stay married, their wives have to put up with a lot. One of the guys in my year entered the program when his wife was pregnant. And they wouldn't even give him the afternoon off after the delivery. So his wife had to take a taxi home.

Positional Prescriptions for Action

As cultural dimensions of institutions at ACADEMIC prescribed how a good resident was expected to act, so positional aspects of ACADEMIC institutions provided the surgical residents with an understanding of their positions relative to important others. Positional dimensions gave them a sense of their social place and entitlement, power, status, and privilege in relation the others present. At ACADEMIC, positional dimensions of institutions provided residents with understandings of traditional power relations and with prescriptions for enacting these relations relative to one another. These positional relations specified a particular hierarchy of privilege of seniors over juniors. Cultural and positional aspects of institutions interrelated in myriad ways. The ACADEMIC social world was organized around both positions of status and influence and the cultural narratives that posited particular sorts of characters and their dealings with one another. At ACADEMIC prescriptions for positional relations corresponded with prescriptions of cultural demeanor. Senior residents were those who could most closely approximate the persona of commanders.

Some of the prescriptions for enacting positional relations of seniors over juniors involved appropriate dress. Residents in their first through fourth years were expected to wear short white lab coats with ACADEMIC sewn in blue on the top left pocket. In contrast, the chiefs were expected to wear long white lab coats with their full names sewn in red on the pocket. This was an indicator of their claims to a position of privilege relative to the other residents with whom they were interacting, and of the rewards that awaited those who respected traditional power relations.

Types of work activities were also understood to reflect particular positions in the hierarchy. Certain kinds of patient care work, such as doing "pre-ops" (checking patient charts prior to surgery) and "admits" (admitting new patients), were labeled "scutwork." Doing this kind of work would have insulted the dignity of a senior resident.

Other positional prescriptions for action entailed displays of deference in interactions. In the extremely strong hierarchy at ACADEMIC, juniors were expected to "know their place", "pay their dues," and not "whine." One opportunity for enforcing the hierarchy was in the exchanges between chiefs and interns over patient plans. One intern noted positional prescriptions around language for these exchanges: "As a Chief you don't want to hear arguments. 'Maybe my idea is better' does not fit into the hierarchy." An intern put it more bluntly: "If the chief wanted my opinion, he'd beat it out of me." Similarly, one chief described his interactions with an intern:

> Out at the VA, (female resident) was my intern. And I barked at her. She put up a lot of lip. Like, "In my opinion the patient should get a CT scan." So I barked: "Surgery is not a democracy, it's a dictatorship! I don't care about your opinion. 7 years from now, you can give your opinion. Your job now is to do what I say and to keep your mouth shut."

In the culturally accepted iron man narrative, if juniors "paid their dues," they could expect status accretion over time. One attending who had come up through the ACADEMIC system related:

> People can get disillusioned in the first few years because they don't want to spend their days doing discharge summaries and drawing blood. The reason you stick with it in the early years is that you look up to see the Chief residents on top of the hill, and you think, I want to be like them. I was like: "I am your putty. Take me. Mold me. Make me great."

As well as promising reward for good behavior, the accepted narrative promised punishment for those who strayed from the traditional path. Positional prescriptions outlined that seniors could reinforce their demand for conformity by regularly meeting any suggestions of complaint from juniors with taunts of weakness such as: "Cry me a river.....Do you want some cheese with that whine?" As they drew on these positional prescriptions in their interactions with one another, seniors taught juniors not to complain. Through day to day encounters with seniors who acted in these accepted ways, the interns learned to act in ways appropriate to both the situation of the activity and their position within it. They learned how particular actions on their part would be received, in particular situations with particular others, and that their current actions could have long lasting consequences.

Prescriptions for Interpretation

While these collective cultural and positional prescriptions for action may seem strange to an outsider, they were understandable within the ACADEMIC surgical social world because of a highly articulated system of interpretations that the residents used to make sense of their social reality. This is not to suggest that their strongly hierarchical system of long hours work and their macho identity did not create certain structural strains, contradictions, and anomalies for the residents. Workers in all occupations develop accounts to deal with these difficulties, which they draw upon when they have questions raised for them about the worth of the activity they are engaged in, and when they ask themselves why they are doing this rather than something else (Becker et al., 1956b).

Within the surgical social world of ACADEMIC, residents needed to be conscious of and manage the emotional tension generated by needing to work long hours, to unquestioningly obey those above them in the hierarchy, and to be "strong." They did this, in part, by learning to see the world from a particular point of view that constructed the working of long hours, deference to seniority, and machismo as normal rather than strange. Three key prescriptions for interpretation at Academic provided residents with justifications for institutionalized cultural and positional prescriptions for action. These were described as "ensuring continuity of care," "learning by doing," and "living the life of a surgeon."

Ensuring continuity of care

One of the key interpretations that supported the traditional cultural and positional prescriptions for action was that of "continuity of care." Attendings and residents at ACADEMIC explained that, although there was much public skepticism around tired residents and patient safety, what the public did not understand was that reducing resident work hours would actually be detrimental to patient safety because of the problems it presented for continuity of care for patients. Interruption in continuity of care would lead to an increase rather than a decrease in the number of patient errors. These attendings and residents believed that: 1) handoffs between team members are more detrimental to patient care than tired surgeons and 2) adrenaline overcomes tiredness in important situations. One attending explained how handoffs between residents were detrimental to continuity of care:

> You need to treat everyone like you are taking care of your mother. That patient's care could very well depend on how anal you are about finding out what their allergies are, what medications they're on. You need to know every detail and you need to do

> everything yourself. Because when there are a lot of signouts...stuff falls through the cracks and things get missed."

Surgical attendings and residents worked closely with medical residents whose system had traditionally been structured around shorter hours, and hence, more handoffs. Because of these handoffs, many surgeons felt that these medical residents often were not as knowledgeable about their patients as were the surgical residents. One attending said:

> The med service has always done it this way. But the surgical mentality is different. When you are senior resident you get called in the morning by a medical resident to come look at Mrs. X. You say, what's wrong? I dunno, I'm just cross-covering. There is a box here to call surgery to examine the belly so that's what I'm doing. So you are pissed off and you say, WHAT DO YOU MEAN YOU DON"T KNOW. DON"T YOU HAVE PRIDE IN YOUR PATIENTS! Well, it's not really my patient....
>
> It is going to evolve into that for us as well. I dunno, I just got her signout. I don't really know her. She's an 85 year old woman, but I've never seen her. In surgery things can turn on a dime, so you need to have a good grasp of things. In surgery our patients are a lot frailer. An 80 year old woman who just had an invasive procedure is different from an 80 year old woman coming from a nursing home.

In addition to holding deep beliefs about the problems associated with handoffs, almost every surgical attending and resident I talked to at ACADEMIC vehemently denied that being tired was detrimental to their patient care. They felt that, no matter how tired they were, when they got under the lights in the OR in an emergency situation, they were able to focus well and operate effectively. One attending asserted:

> All this talk about being tired is such bullshit. When you get a code trauma and you've been up all weekend, the adrenaline starts to flow and you get your game face on. You are like that until you know the situation is under control. ..I'd rather know what I'm doing and be tired than be rested and fear that I'm not able to do something.

This interpretation of "continuity of care" accounted for the seemingly strange cultural persona of iron man and strict hierarchy of surgery. In order for residents to provide continuity of care, they were seen as needing to work very long hours and be

"tough" enough to withstand this. In addition, in order to provide this continuity, residents were seen as needing to work longer hours than attendings, thus supporting the strict hierarchy in surgery. While attendings were ultimately responsible for the continuity, positional relations prescribed that it was the residents who were expected to remain in the hospital late to check CT scans and to arrive early to check patients' progress overnight. The interns were expected to work the longest hours because, since they were managing the day-to-day work on the floor for these patients, they had the most detailed knowledge of the patients' progress and plans.

Learning by Doing

While the "continuity of care" interpretation accounted for the iron man persona and strong hierarchical relations related to patient care, a "learning by doing" interpretation accounted for the prescriptions related to resident training. "Learning by doing" was seen as required in order for residents to become skilled at the most important things in surgery--manual talent in the form of "good hands" and a sense of "what is going on with a patient." "Learning by doing" explained that residents could be taught best in a dyadic, apprentice-master type of relationship, and under the stressful conditions which they would experience as attendings. "Learning by doing" suggested that 1) surgery requires a tangible sense of "knowing how to handle things" so that to learn surgery 2) you need to practice it under the guidance of a more senior teacher, and 3) you need to make decisions when alone and under pressure.

One attending stressed the importance of learning hands-on skill and "street smarts" versus "book smarts:"

> Surgery is a body contact sport....There are certain people who, if I had to retake my recertification exam in the American Board of Surgery, I would definitely have them take it for me. But would I have those same people operate on a loved one? Absolutely not. Surgery's difficult even though you may know the moves to do. Like, I'm looking at a patient with this process and this disease. They need this operation. But between the brain and the hands there's a disconnect. We say: "Often wrong, but never in doubt." I may not know what's going on but I'll get in there and I'll be able to get in there and figure it out afterwards. There are certain people who are very slick surgically and very good, but do they score 99% on their Boards? No. But they are damn good doctors and they are very compassionate and they do what's best and safe for the patient.

Another emphasized the importance of junior resident learning by doing under the tutelage of an expert attending or senior resident:

> You learn by being here. There is a huge amount of information passed on in an ad hoc fashion at 2 o' clock in the morning when the senior resident and you are trying to get the pressure up or the IV in. You need to be the one managing it, doing it, in order to learn.

It was felt that learning the valuable skills necessary for being an attending required spending as many hours in the hospital as possible during residency. One attending said:

> There is a reason for why it has been that way for 100 years. If it's your mother, you don't want your surgeon saying, you know Mrs. Smith I've never seen this before, or, I'm not as adept as I could be at doing this operation, but I'm really well rested. Like when you are getting on a plane, you don't want to hear the captain say, "Buckle your seat belts. I haven't flown as many times as I should have up until now, but I've had a great lifestyle." You learn so much more by doing cases and being by the bedside when a patient is sick.

And, frequent nights alone on-call were seen to be crucial for resident learning. One resident related:

> The nights you get blasted on call make you learn. You have to get it done because no one else is there. Like the first time I made a decision to intubate. It was one of my first nights on call in my first rotation as an intern. I was at the Faulkner watching a patient in the unit of the ICU. She wasn't doing well so I got a gas. She was hypercarbic. She was retaining CO2 and not ventilating. Her CO2 was 70. I had never intubated anyone before expect in a controlled environment in anesthesia. My backup was 20 minutes away, and it was my 3rd night on call ever as a resident. The ER attending was the only backup in the house. I called my backup and told him it

> was imminent, that he needed to come in. He said to get the stuff set up and call the ER. He said, If it needs to happen before I get there, just do it yourself. I decided that I thought it was time just as they both got there. I didn't end up having to do it myself, but I needed to make all the decisions, like when is it time to intubate, when do I call the Chief, What studies do I order. I didn't do it all correctly, but I did some of it right. The Chief said, you should have done this and that, do it next time....So it's a constant trial by fire. But that's how you learn. You need to call them to let them know what you've done, but you have to choose to give this drug before you call them. By the end of my rotation I was just FYIing them. Like FYI, so and so went into afib at rate of 140, gave 5 of lopressor X3 with good effect. Now rate of 90-100. Hemodynamically stable throughout. Chest x ray unchanged. Electrolytes were repleted.
>
> It is a good way to learn....The mistakes you make you never forget. And you'd never make mistakes that would truly hurt the patient without asking.

These rationales of "learning by doing" are not unique to ACADEMIC or to surgery. They echo those described by scholars studying other occupations where "craft" is necessary. Barley (1996) suggests that in these kinds of occupations, manual talent is considered as important, if not more important, than the cognitive abilities that are the focus of more formal education. Workers' sense of materials and situations is integral to performance because the kinds of problems typically faced often require workers to solve problems immediately and with whatever materials are at hand (Barley, 1996; Orr, 1996). For these reasons, formal education alone cannot provide the skills that can be acquired more informally by learning by doing under the guidance of more experienced workers.

The need for "learning by doing" accounted for the iron man persona because it called for long resident hours in the hospital. It also accounted for the strict hierarchy because it demanded an apprenticeship relationship between seniors and juniors where seniors, experienced in the ways of work, taught juniors who began with little or no work related knowledge.

Living the Life of a Surgeon

A final key interpretation that supported ACADEMIC's traditional cultural and positional prescriptions for action was "living the life of a surgeon." Many of the attendings and residents I spoke to believed that: 1) You need a single minded focus in order to learn surgery, 2) you need to learn to do surgery when you are tired and 3) surgery means always putting your patients first and if you do not work long hours now then it will be difficult to accept the tough lifestyle required of a surgical attending later.

Describing the importance of a single minded focus, one resident explained:

> The problem comes in the fundamental belief: either you are here to learn to be a surgeon or you are learning to be a surgeon while life is going on. I believe the former. Surgery shouldn't be part of what you do. It should be all of what you do. Chiefs with kids do everything in their power to make sure they don't come in when they want to be with their kids. But there is never a conflict for them. Instead they say, this sucks. This is what needs to be done.

Another explained how residents needed to learn to operate when tired:

> There's a lot of stress and pressure as an attending. You need to be up on call all night, and operate the next day. And, that's a learned skill. If they don't learn it now, how are they going to do it later?

Finally, working long hours was described as necessary preparation for the lifestyle of a surgeon. One attending said:

> We're going to give them a false idea of what it means to be a surgeon. I'm worried that people will think that working 80 hours is what they will do afterwards. On a weekend like this one I work Friday morning through Monday night. That's 110 hours right there. I do 90 straight hours on call and then go into a full day Monday and a full week...And, if they work more than 80 hours now, then it will be easier for them to accept 80 later. They will have something to look forward to.

The need for "living the life of a surgeon" accounted for why a macho demeanor was necessary, why working long hours was particularly important during residency, and why residents needed to work harder than attendings.

These three interpretations—"continuity of care," "learning by doing," and "living the life of a surgeon"—explain why so many of the highly intelligent and extremely dedicated surgeons I met held prescriptions for action (iron man, strong hierarchy) that seemed, to the outsider, to be amazing, even outrageous. Any culture looks crazy from the outside. Only by understanding the deep commitment to patient care and resident education that these surgeons had, and the interpretations they held about the best way to deliver this care, can we understand their traditional prescriptions for action and their resistance to the reduction in resident work hours.

While these prescriptions of iron man and strict hierarchy are completely understandable once one grasps the interpretations supporting them, they are not without their negative consequences. In the next chapter, I discuss the negative consequences associated with these prescriptions for action and interpretation and how they negatively affected some groups of residents more than others. First, however, I describe how residents drew on these general and collective cultural and positional prescriptions for action and prescriptions for interpretation to guide their conduct in particular situations.

Situational Identities, Actions, Interactions

For any given situation they found themselves in, residents drew on these shared institutions to develop a sense of themselves in relation to that situation, which I call a "situational identity." Since this situational identity was derived from surgical

institutions, it was shared by all members of the community. Cultural aspects of institutions provided residents with part of this situational identity--a repertoire of morally appropriate actions associated with problems encountered regularly in this type of situation by members like themselves and an account for why these behaviors were appropriate. Positional aspects of institutions provide members with the other part of this situational identity—a repertoire of appropriate actions given their particular place in the status hierarchy in this kind of situation and an account of why those actions were appropriate.

Residents drew on situational identities to forge a line of action that they hoped would be appropriate to whatever situation they were acting within. As residents fit their lines of action to one another in specific situations, they either reproduced or transformed the shared situational identity and the institutions that guided it. One particular situation—the signout situation at the end of the day—became a particularly important situation to making the work hours change happen. The traditional situational identity for signouts at ACADEMIC specified that surgical residents avoid handoffs, a common practice in non-surgical residencies, where one medical resident transfers his or her own work to another medical resident at the end of a work shift.

At ACADEMIC, residents drew on this situational identity to shape their actions in signout situations. One junior member and one senior member of each surgical team stayed 'on call' overnight every third night in order to take care of any emergencies arising for the team's patients overnight. But the surgical residents not on call took pride in never 'handing off' work to the on call resident by accomplishing all of the work

required for their patients before they left at night and before morning rounds each morning.

Before they left at night, residents not on call would meet with the on call resident and review general information on each patient, alerting the on call resident to very sick patients who might have emergent issues overnight. The resident on call took care of any emergencies that arose for these patients overnight. But this on call resident did not do any routine work on patients overnight such as post-ops (checking patients several hours after they came out of the OR to make sure they were recovering well from surgery), pre-ops (checking paperwork on patients scheduled to go to the OR the next day and ordering any additional tests that were necessary), admits (admitting new patients to the hospital), or pre-rounding on patients in the morning. The resident not on call took care of all of this work, even though this often meant staying until midnight and getting in the next morning at 3 or 4am.

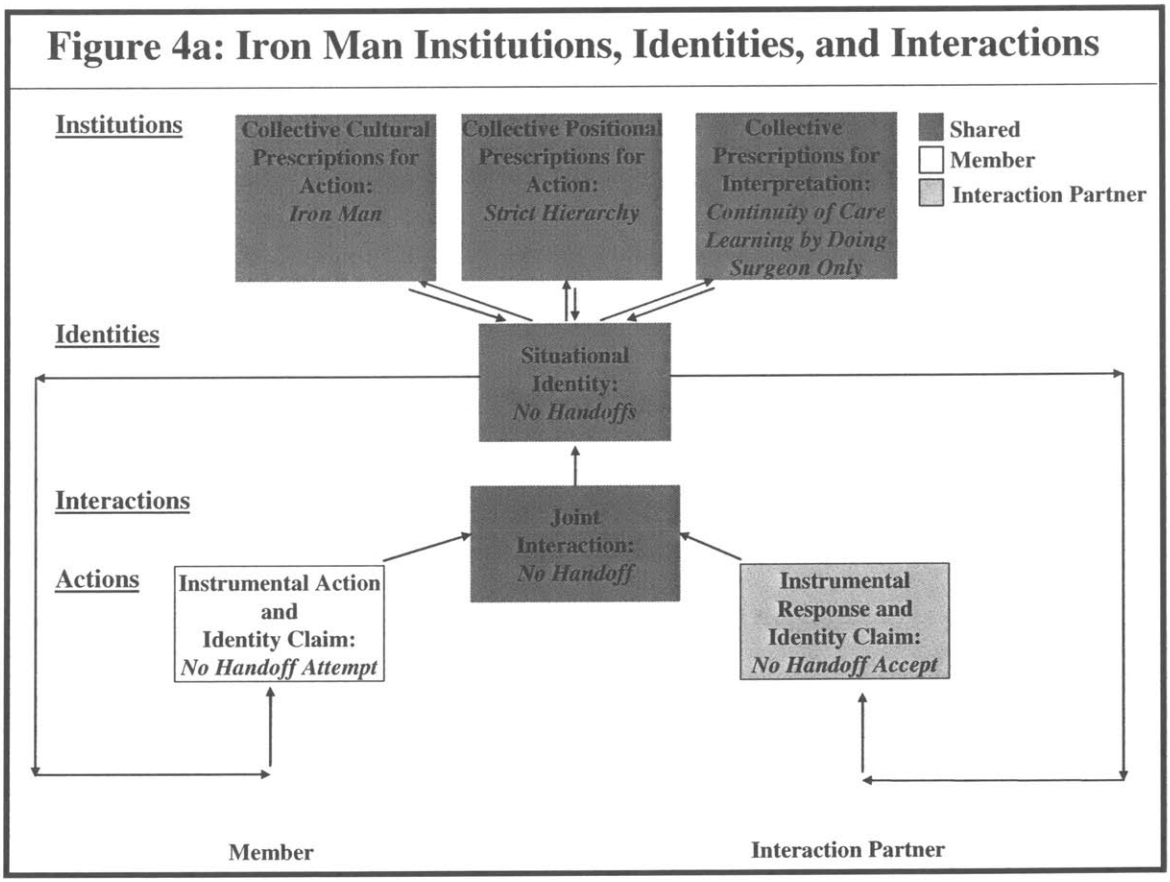
Summary: The Relationship Between Institutions, Identities, and Interactions

As shown in **Figure 4a**, before the work hours change at ACADEMIC, the cultural and positional dimensions of surgical institutions prescribed a particular cultural prescriptions for action (iron man), positional prescriptions for action (strict hierarchy), and interpretations (continuity of care, learning by doing, living the life of a surgeon) for the residents. Residents drew on these institutions in particular situations to shape their action and interaction. By drawing on the surgical situational identity for signout situations, residents routinely reproduced the expected action of no handoff attempt in signout situations and this was routinely accepted by their interaction partners. Through

these interactions the residents reproduced their situational identity of no handoffs for these situations. In reproducing their traditional situational identity in signout situations, residents reinforced existing institutions.

Table 4a: Institutions at ACADEMIC

Cultural Prescriptions for Action	• **Beasts of burden, commanders, moonlighters** • **Iron man** • **Trusts no one** • **Lives in the hospital**
Positional Prescriptions for Action	• **Seniors over juniors**
Prescriptions for Interpretation	• **Continuity of care in the individual** • **Learning by doing** • **Single-minded focus**
Situational Identity: Signout	• **No handoffs**



Chapter 5

Latent Challengers

At ACADEMIC, not all residents were equally able to accomplish the iron man persona through their actions and interactions. These "latent challengers" (my term) held personal identities whose prescriptions for action and interpretation conflicted with those of their surgical identities. Because of their diverse personal identities, they held inferior positions in the surgical world. In addition, they were not able to achieve a consistent personal narrative across the various social worlds in which they participated. This led them to question the actions and interpretations prescribed by surgical institutions.

Latent challengers included female residents, residents for whom general surgery was not their ultimate career path[2] , and male residents who wanted to take on responsibilities in personal relationships with significant others outside the hospital. As shown in **Figure 5a,** 59% of the 61 residents were latent challengers before the changes: 94% of residents going into a different specialty versus 47% of those going into general surgery; 82% of the women versus 51% of the men; and 64% of the men who wanted to spend time in relationships with significant others outside of the hospital versus 14% of other men. These latent challengers questioned the interpretations prescribed by surgical institutions because these interpretations were not helpful to them.

Inferior Positionality in the Surgical World

Latent challengers were unable to achieve the ideal persona for surgical residents. This persona dictated that residents should act like iron men who trusted no one and lived

[2] Residents planning to make a career in specialties other than general surgery (e.g. urology, orthopedics) spent their intern year training in general surgery before moving onto specialty training.

in the hospital. Residents who acted in this way held the highest status at ACADEMIC. But these actions were claims to social positions that some residents, because of their diverse personal identities, were not entitled to attain. They were not allowed to enter certain spaces, to use particular language, to wear particular clothes, to express particular emotions, to engage in particular deeds that were part and parcel of displaying the high status identity.

For example, female residents were barred from certain spaces and activities. In her study of female surgeons, Cassell (1998) notes that in professions like surgery active male bonding and profound distrust and exclusion of females as participants is common. She also notes that women are essential to such occupations so that they can be excluded from camaraderie. Without women to be kept away from these mysteries, the secrets would lose their savor (p. 18). I found these things to be true at ACADEMIC.

In some ways, the female residents I observed had a lot of leeway to act out the ideal surgical persona, and in my early observations, I was struck by how "macho" they acted. Like the male residents, many of them told stories of idiotic medical residents, annoying patients, "trainwrecks" (patients who had no chance of living when they entered the hospital), and "nightmare" versus "unflappable" attendings. Many of them strode rather than walked on morning rounds, individualistically accomplished everything on their scutlist, sent joking pages back and forth to other residents, and lobbied the chief resident for more difficult cases.

However, even though they were able to act like iron men up to a point, they could never completely live up to the idealized expectations. For example, one favorite pastime of the male residents was "appreciating" women. This involved going to "the

office" (the front lobby of the hospital) everyday in the late afternoon to "check out" women going by. It also involved "making rounds" on good looking new nurses. If a male resident met a new nurse or physical therapist whom he felt was attractive, he'd page his male friends to "make rounds" on her floor. Acting in this way was an important part of achieving the iron man persona. I never saw a female resident engage in these activities or occupy these spaces.

Male residents were also allowed to use certain language that female residents were not. While female residents were allowed to swear, highly graphic jokes about male and female anatomy were off limits to them. Many of the attendings were male and they felt comfortable telling jokes in front of the men that they wouldn't tell in front of the women. One male intern described:

> I was just on thoracics and it was all guys (no female residents on the rotation at that time) and it was so much easier. We could just let loose and not worry about what we said. (Like what's something you wouldn't say if there were women on the service?) Well, like, today, one guy said, "Did you see that guy's wife? Either he has a big dick or a big wallet." Stuff like that. Just guys joking around.

Female residents were also not allowed to make particular claims through dress in the way that men were. While all surgical residents wore green scrubs and white coats, only men were permitted to wear a particular kind of surgical cap in the OR. Dressing in this way was an important part of achieving the prescribed action-oriented demeanor. Female residents wore, instead, the same caps that the lower status OR nurses and anesthesiologists wore.

Female residents were also not allowed to engage in the same kind of emotional expressions as were men. Male residents were permitted to explode, to lose their temper and yell at people in front of an audience of others. Aggressively shaming residents in

this way was an important part of the commander persona of the chief residents. Chiefs were expected to "break the will" of the interns by brutally loading on work and berating them in front of others when the interns failed to complete everything on their task list. I never observed a female resident do that, and one female resident who occasionally used a harsh tone of voice was described by others as "a bitch."

Not only were the women barred from acting in particular ways, they also were not given the support by others that iron men were given and that enabled iron men to successfully achieve the ideal persona. For example, nurses gave a lot of help to the male residents, but were less helpful to the female residents. During my time at ACADEMIC, two female residents got written up for being "disrespectful" to the nurses. No male resident had ever been written up as far as anyone could remember. One of these female residents described an incident where she was so frustrated she grabbed a phone away from a nurse:

> It's so frustrating. These nurses will do anything for the guys. The guys just have to smile at them and they bend over backwards to help the guys out. But for me, they won't even follow my written orders. They question me and sometimes I just do it myself instead of going through the hassle. When I got into that fight with that nurse it was because she had ignored my orders and the patient almost coded (died) as a result.

These examples were interesting because in both cases the female residents who were written up were considered good residents and respected by everyone in the residency.

Residents who were going into a specialty other than general surgery were denied certain positional claims as well. An important part of attaining the action-oriented surgical persona was "living for the OR." Residents from other specialties were not given the same opportunity to do this as were residents going into general surgery.

Chiefs routinely assigned better cases to the general surgical residents and invited these residents to "scrub in" with them to witness a particularly interesting case.

Not all residents going into other specialties were given second class treatment. Instead, there was a hierarchy of other specialties, with residents going into the prestigious fields of neurosurgery or orthopedics treated similarly to general surgery residents. Residents going into less "hard core" specialties like urology, ENT, or oral surgery were not considered worth investing time in. One chief said:

> I try to be pretty good about case assignment. If one of those guys (other specialty residents) is doing a good job for me on the floor, I'll reward him with good cases. But I definitely save the most interesting ones for the general surgery residents. They're the ones who really need the experience. Internship year is a time where they learn things that will stick with them for the rest of their career.

Situational Identity Conflicted with Personal Identity

While many of the difficulties that these challengers faced stemmed from their inability to attain the valued iron man persona, some also stemmed from their own desires to maintain a consistent personal narrative across the social worlds in which they participated. "Personal identities" refer to those self-conceptions that spell out to us the kind of person we believe we really are. Through their participation in multiple interactions, members begin to build a personal narrative consistent with their definitions of situations and their role within them. People feel the need to create coherent biographies of themselves in order to decrease anxiety (Giddens, 1991) and promote trust with interaction partners (Van Maanen, 2001).

For the iron man residents, personal identities provided them with similar guidelines for action and interpretation in surgical situations as did situational identities. This was because these residents' senses of continuity, identification, and integration in

relation to the self and its projects was so strongly shaped by the actions and understandings of the surgical community. Before the work hours change, surgical residency was a total institution (Goffman, 1961). Because residents only went home to sleep, and often did not leave the hospital at all, many of their personal narratives were closely bound to the narratives of the surgical community.

For latent challengers, on the other hand, there was a disparity for them between how they were expected to act in surgical residency versus how they were expected to act in the other domains in which they participated. This disparity created a tension for them. The tension arose because prescriptions in their other social world conflicted with those in the surgical world. For example, while iron men were expected to "live in the hospital," residents with children found it difficult to attain that ideal. One explained:

> It's different for us than it was for these senior attendings. When we get home at night, our wives have been working, and they've gotten home earlier than us and started with the kids. And the minute you walk in the door, you're a Dad. You're changing diapers or putting the kids to bed or doing their baths. And you're trying to help around the house. Then all of the other stuff you have to do, like reading, you're doing once everyone else has gone to bed. Working these hours means you end up asking a lot of favors.

Historically, iron men had been expected to have no other responsibilities during residency, and many of the men I followed were in relationships where their wives or significant others picked up all of the work at home (grocery shopping, cooking, cleaning, childcare). Regarding whether male residents should have children during residency, one attending said:

> You can make that choice. But be prepared for consequences. I'm not saying you can't do it. It's just that it's going to be more difficult. But it's a matter of what you want more. I always felt like you know what, I can have a family anytime I want. But in order to survive a 7 year training program, I'm probably better off doing it to maximize my experience and make it as fair to my family as possible. Maybe it's

> being selfish. I'm doing this when I'm young and I can tolerate the physical demands and the mental demands and when that's done I feel like OK, now I can go and start a family.

Refraining from having children during residency was a risky strategy for those who did hope to have children because residents were usually about 35 by the time they finished their 7 year training. Biological clock issues affected women more than men, and men with wives the same age more than those who married younger women.

Female residents faced similar tensions between how they were expected to act as surgical residents and how they were expected to act as women outside the hospital. Everything about the surgical situational identity of iron man conflicted with the traditional female gender identity. Iron men were expected to be tough, individualistic, warlike, action-oriented, daring, sexually promiscuous. Women in our society are expected to be soft, collaborative, peace-loving, passive, prudent, and virginal. One woman explained:

> It looks to me like all of my friends' lives have progressed and mine hasn't. I'm frozen in time, I'm on a treadmill and my friends have moved on. Being a surgeon isn't so great as a woman. These guys can go out and meet anyone anywhere who will date them. .... It is a huge asset for men. It means money, status, a safety net. They're heroes ... But for a woman. What guy wants to put up with that shit?...I've told people before I'm a bartender and can have a great conversation with them. But once I tell them I'm a surgeon, forget it.

Interaction partners related to their female identity often pushed them to behave in these female gendered ways, and this also limited their ability to accomplish what was required to be good iron men in the surgical sphere.

Residents going into other specialties faced these same problems. As surgical residents they were expected to care only about operating. But their other specialty social world prescribed for them to also care about taking care of patients outside of the

operating room. This created a tension for them, and many of them covertly violated the rules of the surgical identity to live by the rules of their other specialty identity. One explained:

> I think managing patients on the floor is important. But it is not valued by general surgeons because it is considered the touchy feely part of training. If you don't see someone's guts splayed open, if you don't take knife to skin, then it is not considered important. The only thing I would call scut work is if I were told go get me a cup of coffee. I don't think anybody should be above tracking down a film, transferring a patient, looking up labs, drawing labs when they need to be drawn, doing transfer orders. People think that unless you are doing an operation everything else is scut work. History and physical--scut. Discharge summary—scut. I take time for the patient care. I just do it.

Even though this resident cared about patient care work, when I observed him in his work, I found that he did not advertise his beliefs or actions in front of the other residents.

Challengers Remained Latent before the Work Hours Changes

Since these residents were unable to maintain personal narratives consistently over time and across the various identities they were trying to manage, they were more reflective about the traditional surgical institutions and the situational identities that stemmed from them than were others. However, before the Directors' attempts to introduce new work hours, they almost always acted like iron men in their interactions with other residents.

These latent challengers were not passive receptors of prescriptions for surgical demeanor and the interpretations that supported it. Nor were they positioned and trapped within webs of interpretation that supported their inferior positioning. They were, instead, partially constrained by but actively producing cultural meanings and positional relations with others in the context of specific situations.

Wanted to Avoid Guilt

Before the Directors' attempts to introduce changes, latent challengers chose not to actively challenge traditional prescriptions for action, in part, because doing so would have made them feel guilty. Their participation in the surgical social world gave rise to emotionally charged visions and rehearsed dialogs about themselves as residents. They came to describe themselves in ways that defined them as good residents, and they attempted to avoid or dispute negative labels. They not only knew the prescribed actions and interpretations for the surgical situational identities, but they also embraced them as ways to define themselves. One related:

> I would feel bad asking someone else to do my work for me. It's a pride thing. These are my patients. This is considered part of your responsibility as an intern.

Wanted to Avoid Shame and Negative Evaluation

Even if acting differently would not have made them feel guilty, they also chose not to avoid traditional surgical actions in order to avoid being shamed in front of or being negatively evaluated by their fellow residents. While on the one hand they derived important senses of self from the surgical situational identities, on the other hand they had developed a sense of themselves as different from the iron men and as recipients of unfair treatment because of their diverse identities. Because of the tension between their personal and situational identities and because of their lower status in the surgical world, they were more reflective about the traditional surgical institutions than were those residents who benefited from the status quo.

However, in order to avoid shame in front of others in their reference group in their early encounters at ACADEMIC, they had learned to act in ways consistent with the

prescribed surgical demeanor and deference structure, even though their own positioning within that system was inferior. Through earlier reprimands, gossip sessions, observations, and stories, they had learned that those who did not portray the appropriate surgical identities would be directly punished or would suffer the loss of reputation. For example, calling someone "weak" was a common insult to residents who violated iron man prescriptions. These latent challengers hoped to avoid negative evaluations, and so tried to avoid behaviors that would categorize them as "weak." For example, a female 2nd year resident, the morning after her night on-call, was literally falling asleep at the computer for minutes at a time as she talked to me. She explained how she would have liked to ask a team member for help with work on her patients that morning. But she did not do it because she did not want to be labeled "not hardcore:"

> What killed me is on Tuesday I was here from 4:15 am to midnight and then I came in at 4:30 in the morning yesterday, then no sleep last night. I fell asleep 3 times today during morning rounds. You know how when you fall asleep standing up, your knees go limp...[But] I can't ask [the other resident] what I forgot because it's sort of a pride thing. I don't want to admit to him that I can't take care of everything on my patients. You don't want to be seen as weak.

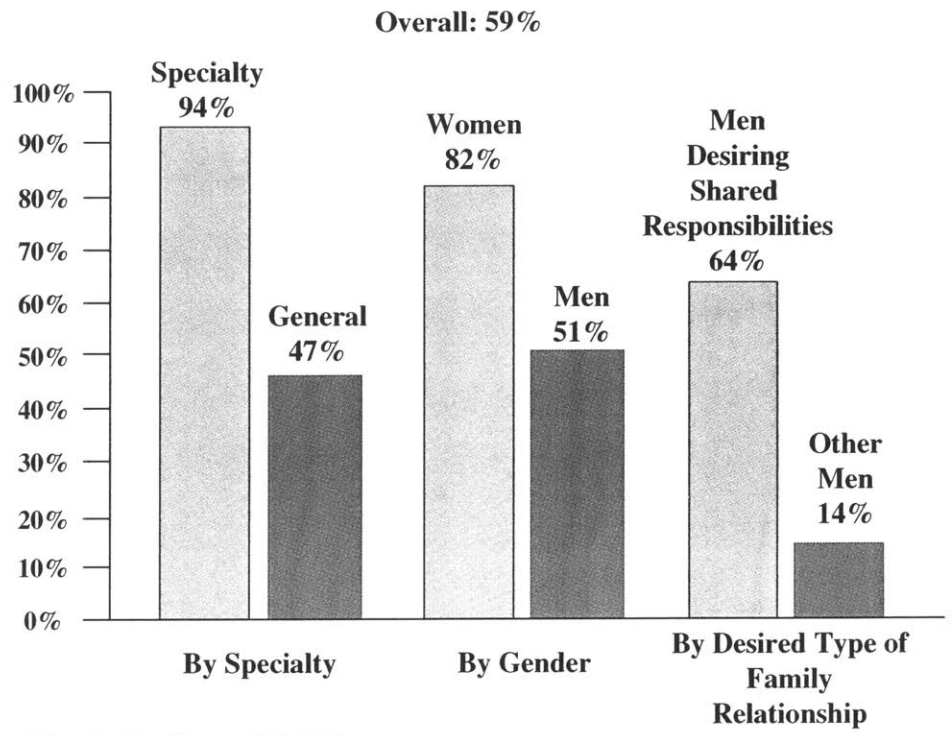
These challengers had learned to put up with a certain level of tension inherent in their attempts to navigate different social worlds. They had become used to failing to fit the prescriptions for action in any of their social worlds, and therefore of failing to live up to the cultural ideal, and achieve the high status associated with that, in any part of their lives. One female resident said:

> I guess you just have to get used to it. My friends from outside the hospital don't understand me. They're like, she's 30 and she's not even dating. What is she doing with her life? Meanwhile, people here are like, she's not tough enough. She doesn't spend every single moment at the hospital.

Summary

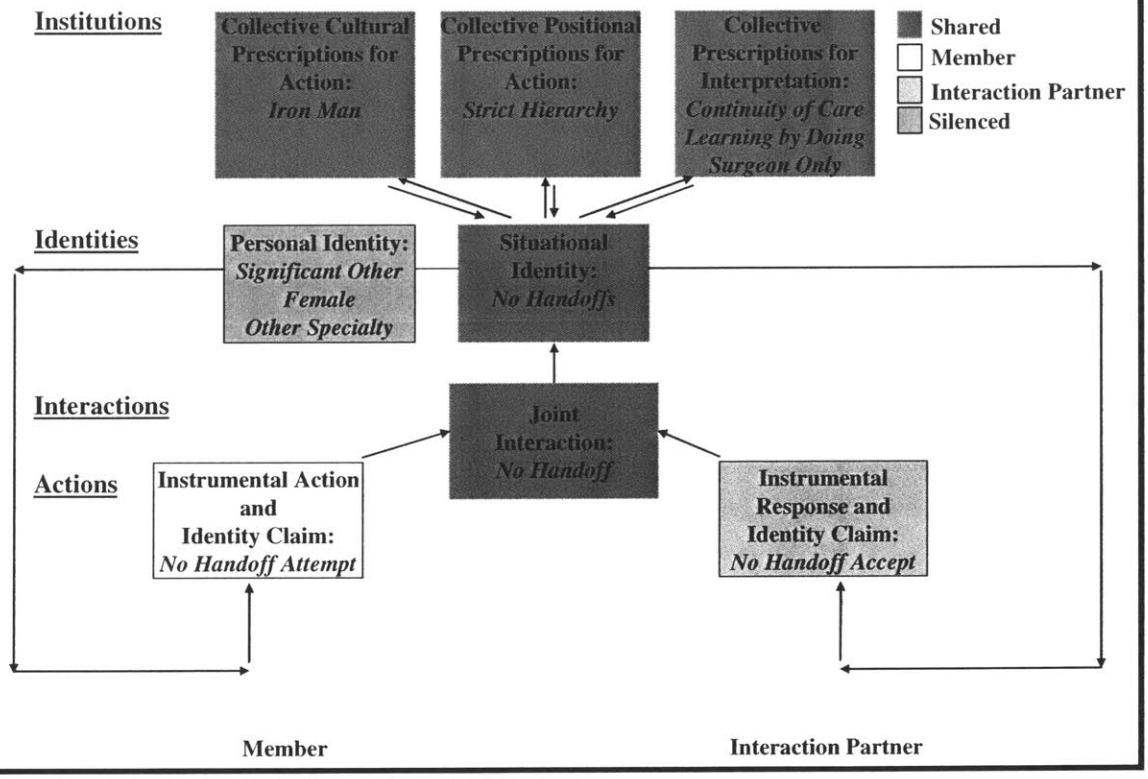
Latent challengers' desires to attain a more favorable position within the surgical social world and to maintain a consistent personal narrative across the different worlds in which they participated motivated them to question the prescriptions of surgical institutions. These difficulties presented a conflict between the surgical situational identity and their own personal identities (**Figure 5b**). However, before the Directors' attempts to introduce new work hours, they silenced themselves and acted like iron men in their interactions with other residents. While they questioned some of the prescriptions, they also derived a large part of their sense of self from being surgical residents, so violating prescriptions would have made them feel guilty. They also sought to avoid shame in front of other members of this important reference group.

Figure 5a: Latent Challengers by Category



N= 61 Surgical Residents; 2002-2003

Figure 5b: Challengers Silenced their Personal Identities



Part III: Negotiating Stability and Change

Chapter 6

Attempting Change

Simply because latent challengers questioned institutionalized prescriptions for action and interpretation did not mean that they attempted to change their actions. Before the work hours change, they had silenced attempts at new actions. The new regulation and the introduction of a new night float team by the Directors disturbed conventional prescriptions, and enabled latent challengers to significantly reorient their behavior in some of these situations. In making decisions about whether to attempt change, these latent challengers drew on their interpretation of the situation, themselves, and their interaction partners. One situation in particular--the signout situation--became a crucial locus for their change attempts.

ACADEMIC Directors Attempt Change

In March of 2002, in response to the announcement of the impending policy by the ACGME, Directors in Surgery at ACADEMIC stated that they wanted to see their residents begin to move toward the soon-to-be regulated 80 hour work week during the surgical residency education year from July 1, 2002 to June 30, 2003. To do this, they created a night float position by hiring moonlighters (residents who were doing lab research during the day and who would cover overnight shifts at the hospital) to cover their overnight shift on a rotating basis. The idea was that the moonlighters would cover all required work on patients on each service from 6pm to 6am the following morning.

In order to reduce work hours to 80 hours per week, interns would need to hand off uncompleted work to the senior moonlighter at 6pm. However, by doing this they

would be violating the longstanding persona of iron man and the strong hierarchy in surgery. The proposed changes thus presented a challenge to the very core of the occupation—to its respected logics, its time-tested work practices, and its closely held ideas of what it meant to be a surgeon. Altering signout interactions to comply with the new regulations would mean dramatically changing traditional surgical institutions.

Motivation for Change: Conflict between Situational and Personal Identity

Some residents had no interest in changing traditional actions because they experienced no conflict between their own personal identities and the surgical situational identity for signout situations which prescribed that they not hand off work to the resident covering overnight. These residents accepted the collective interpretations justifying no handoffs in signout situations. Explaining his reasons for not handing off work even though the Directors told him he should, one intern said:

> I try not to sign out much. It is hard to let someone else take care of your patients. It requires a good signout. People always make mistakes. So I'll stay until I feel like I've checked everything I need to.

In addition to being concerned about patients care, many of these residents felt if they handed off their work and went home that they might not end up as well trained as the chiefs and senior residents that they admired. One intern related:

> I look at (chief) and I think whatever they did with him, I want to experience the same thing so I can end up like him. I didn't come into surgical residency to make my life easier. I came here to learn. And whatever it takes to do that. That's what I'm gonna do.

Other residents experienced conflict between the prescriptions of their personal identities and those of their surgical situational identity in signout situations. As described in the last chapter, these latent challengers tended to be female residents,

residents going into other specialties, and male residents with personal life responsibilities. These latent challengers were motivated to attempt new forms of action in signout situations, but they did not do so in all situations.

Assessing Likelihood of Success: Interactional Identity

In deciding whether to hand off work in a particular situation, latent challengers faced a tradeoff: Did they want to attempt to take advantage of the new moonlighter arrangement in order to more successfully act according to the prescriptions of another aspect of their personal identity, or did they want to avoid handoffs in order to escape sanction in their surgical domain? Latent challengers needed to hand off in order to express and maintain a consistent personal identity over time. But attempting handoffs was a potential identity confrontation since handing off threatened the iron man demeanor and the moonlighter's prescribed more senior positionality. Latent challengers were very careful about when they risked confrontation by attempting new actions because of potential rejection and embarrassment or loss of resources.

When they entered signout situations, latent challenger interns carefully judged the likely response of their interaction partner given his or her demeanor and relative position, and this gave them greater or lesser access to particular actions. In making this judgment, the intern was forming what I call his or her "interactional identity" in this situation—his or her sense of self in relation to his or her interaction partner. Their assessment of their interactional identity vis-à-vis a particular moonlighter in a signout situation enabled them to weigh potential consequences of new actions. The two negative consequences they were most concerned about were outright rejection of their new identity claim and indirect withdrawal of resources from them by iron men.

Weighing Potential Consequences:

Sometimes the latent challenger interns judged, based on their history of interactions with a particular moonlighter or the stories that the intern had heard about the moonlighter from others, that this moonlighter was not likely to reject a new identity claim that challenged the iron man demeanor or the moonlighter's more senior position. When they made this judgment, their interactional identity guided them to attempt to hand off their work. When they judged the opposite, they usually chose not to. One day intern explained:

> I adjust according to who the moonlighter is. Some of these guys are really hands off, and they just won't deal with stuff. They will just deal with emergencies and otherwise will let it simmer until morning. If it is menial some of them think it isn't important. Like last week I needed to make sure that a patient would get a ride through the Mass Transit program. You have to call the night before to set it up. So I called, but you have to call after 7pm. I was going to ask the moonlighter to do it. But I found out who was moonlighting and I thought, "It's probably not something he would do." So I just stayed and did it myself.

Interactional identities had cultural and positional dimensions. Latent challenger interns judged the likely response of the moonlighter to their potential actions, in part, according to the demeanor that the moonlighter routinely expressed. When I asked one latent challenger intern why she had not handed off work to a particular moonlighter that evening, she explained:

> (Moonlighter) is one of the old school moonlighters. He would have given me flack for asking him to do pre-ops, so I just did them myself. It's easy for me to stay a while longer to do them, and it's not worth the hassle of dealing with him.

Latent challenger interns also judged the likely response of the moonlighter based on his or her history of respecting traditional authority relations. Particular tasks, like pre-ops,

were considered "scutwork," which, latent challengers reported, would have insulted some of the moonlighters. One intern explained:

> You have a lot of hesitation signing out intern tasks to some of the moonlighters. But (moonlighter) doesn't see them that way. He says that he's here anyway so why should I stay.

In a system where a resident's education depended on his or her winning the trust, guidance, and teaching of senior residents and attendings, many interns chose not to hand off their work in order to avoid potential loss of teaching or valued recommendations for fellowships. One resident expressed this concern about trying to impress his seniors:

> You're always trying to prove you are competent to the old school people. Because if you prove yourself, then they give you the freedom to take care of patients the way you think they should be taken care of, they let you do more in the OR, they give you good letters for fellowship. First impressions matter but so do last impressions. You're always trying to keep up the reputation you've built.

Latent challengers often felt that handing off work to moonlighters with iron man demeanors or expectations for traditional deference would lead these interaction partners to judge them as undesirable. This would, in turn, diminish their reputation outside of the interaction.

These interns often did not attempt to hand off work in these situations because they wanted to maintain a reputation as "iron men," as "strong" rather than "weak" residents and the rewards that this reputation provided. One intern explained:

> You never even want to be suspected of [handing off work]. Reputation starts early and sticks with you...A lot of people don't say things to your face, but they tell other people, 'This guy is weak'...If people trust you, they look out for you, and they let you do more.

They also often did not attempt handoffs here because that would have displayed that they were willing to trust others to complete what others would consider as their own work. One intern related:

> If a patient that needs to be admitted has been around for that many hours then that is something people will think I should have gotten too. Like if a person has been out of the OR since 3:00 and they aren't post oped by 6, they should have been. Many of them don't care that I've been in the OR all day and running around like crazy trying to get stuff done.

Finally, they often did not attempt handoffs in these situations because they knew that leaving the hospital to engage in family or community life was not considered a priority by members with a personal identity in line with the traditional surgical situational identity for signout situations.

> I was supposed to go on a date tonight. But I had to cancel because my case went late and I hadn't finished all my floorwork. I would never have asked the moonlighter to do it, because he would have seen that as weak. You don't go on dates when you still have work left to do...As a surgical resident, you're expected not to make plans because you're not going to be able to keep them.

Handing off work would also have displayed that they were residents who did not respect the traditional surgical positional relations. One intern explained:

> You don't want to be seen as someone who's not willing to pay his dues, that you're above scutwork.

Forging a Line of Action

To forge a line of action in signout situations, latent challengers drew on these interactional identities. But they also drew on their situational identities and their personal identities when deciding what kind of actions to attempt. Their situational identity--sense of self in relation to traditionally expected actions in signout situations--

provided them with prescriptions for actions based on traditional surgical interpretations. Their personal identity—sense of self in relation to their own personal narrative over time—provided them with prescriptions for action based on interpretations drawn from the other social domains in which they participated. Their interactional identity—sense of self in relation to their interaction partner—provided them with prescriptions for action based on their judgment of the likely response of their interaction partner to various actions. They drew on these identities in each signout situation to forge a line of action that they hoped was appropriate to the situation, consistent with their own ongoing subjective narrative about themselves, and accepted by their interaction partner.

However, these identities did not necessarily provide prescriptions for action that were consistent with one another. Before the Directors had introduced the night float team and encouraged day interns to hand off work to moonlighters, institutionalized prescriptions for demeanor and relations of authority in signout situations had prevailed and had meant that the surgical situational identity silenced other potential voices in what Holland et al. (1988) call "the space of authoring." Once the Directors disturbed conventional prescriptions, this enabled latent challengers to significantly reorient their behavior in some of these situations.

In the context of disturbed prescriptions for demeanor and deference in signout situations, latent challengers were able to act in new ways by "orchestration," by arranging elements of each identity (Holland, Lachicotee, Skinner, & Cain, 1988). In these situations, by combining and counterposing their different identities, these latent challengers were able to create act in new ways. For example, an intern who had

switched into general surgery from another specialty drew on prescriptions for action and interpretation in that specialty to justify his handoff in a particular signout situation:

> I may be more open to night float systems because I've worked on them before. I think that patient care is actually better under the new system...Because if someone calls you at 3am after you have been in the hospital for 20 hours and are going to be in for another 20 hours, you are just going to say, Zofran, and go back to sleep. But if you are on night float and in your 8th hour and going home in 4 more hours, then you will go see the patient.

Similarly, a urology resident drew on prescriptions from urology to question the iron man norm, the strict hierarchy, and the belief of continuity of care in the individual, and to emphasize efficiency, fluid power relations, and continuity of care in the team. He related:

> In my med school we didn't preround (have interns come in at 4am to gather data and see patients before the team rounded at 6am). Instead the chief and everyone got here at 6am, and someone got vitals, someone checked notes, someone checked ins and outs. It was a lot faster, and it worked fine.

One intern with personal life responsibilities drew on prescriptions for action and interpretation from both his personal and interactional identity to attempt a handoff of some kinds of work but not others and to justify this to himself:

> (Moonlighter) is great about getting us out of here. But I didn't sign out pre-ops because I think that's insulting. I did sign out post-ops because that actually involves patient care rather than just administrative work....When I can hand off and go home and sleep or see my girlfriend I'm a lot better with the patients when I get back in here. When I don't I find myself being very abrupt with them.

Moonlighters who were latent challengers before the work hours change were particularly interesting because they did not perceive attempted handoffs as challenges and they usually accepted them. Acting in this way made their work overnight more difficult then it would have been if they had acted like iron men. However, in order to express their challenger identities, they needed to interact with interns in non-traditional

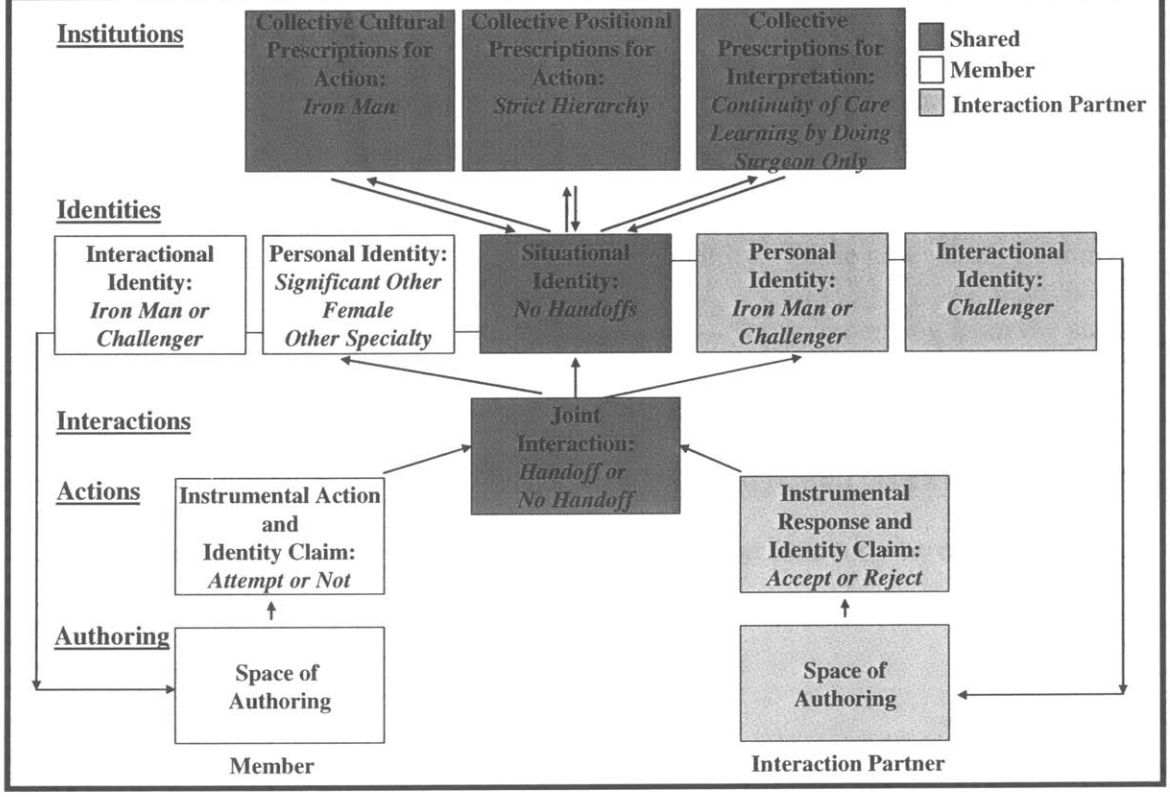
ways. One moonlighter's explanation of his actions reveals how he drew on resources from his family world and how this enabled him to act in new ways:

> Now that I am in the lab, I have a hard time working the next day after being up all night on call. But I think the hours are overboard...I want to be someone who is available most of the time for my patients. But I still have a lot of other interests. I don't want to be a father who doesn't spend time with his kids...I think we need to move beyond having interns stay and get every last piece of scut done. I think we need to move to them being extremely efficient and doing as much as they can, but in 12 hours.

Summary

In crafting novel actions in signout situations, latent challengers drew not only on their situational identities, but also on their interactional identities and their personal identities (**Figure 6a**). Since selves are formed in interaction, a new action on the part of a latent challenger was not only instrumental but also expressive—it was a new identity claim and a potential challenge to the personal identity of the moonlighting interaction partner. Thus, latent challengers desiring to create new actions used their knowledge of their interaction partner (their interactional identity) to judge the likelihood of acceptance of handoffs by this moonlighter and the likely future consequences associated with them. As they forged a line of action, latent challengers orchestrated different elements from their three identities in the "space of authoring" to improvise new actions in signout situations.

Figure 6a:
Challengers Make Decisions About Attempting Change



Chapter 7

Defending Stability

When latent challengers attempted new actions in signout situations, these new actions challenged the institutionalized situational identity. These new identity claims were not always accepted by their interaction partners. Those benefiting from the status quo in these situations tried to prevent these challenges in order to maintain the institutional stability that supported their own persona and power. They did this directly by actively resisting challenges in particular situations and indirectly by de-legitimating new actions and isolating those who attempted them.

Challenging Surgical Institutions and the Surgical Situational Identity in Signout Situations

Surgical institutions prescribed that surgical residents should be tough, should trust no one, should act macho, should live in the hospital, should be action-oriented and should respect a strict hierarchy. Thus, when latent challengers attempted new actions in signout situations, they challenged prescriptions for action and interpretation in these situations--the situational identity for signout situations. Handing off work was acting "weak" because it meant that the resident would no longer be the first one there and the last to leave. It meant trusting others to accomplish work that had traditionally been taken care of individualistically by the interns. It meant that the surgical residents were no longer the hardest working residents in the hospital, so were no longer justified in going around the hospital with a macho swagger in their step. It meant that interns lived

at home rather than in the hospital, and that they passively let others help them rather than actively handling everything themselves. And, it meant violating the strict hierarchy which specified that a resident should never ask something of anyone more senior than him.

Challenging the Personal and Interactional Identities of Interaction Partners

When latent challengers attempted new actions in signout situations, they were not only challenging the surgical situational identity for that type of situation, but were also often challenging the personal identity of their interaction partner. Actions that violated the traditional surgical institutions tended to be experienced as challenges by some groups more than others. Surgical institutions not only prescribed acceptable demeanor, but also protected power and privilege at ACADEMIC. These institutions imposed a hierarchy of status prestige in which some members dominated others by providing a cultural ideal to imitate--the iron man persona-- which was impossible for particular kinds of members to ever attain. Institutional interpretations conveyed the message that residents who acted out the valued persona of iron man and obeyed its prescribed strict hierarchy were entitled to entry into the upper echelons of surgical society, whereas residents who did not were "weak" and so were suited for less prestigious careers.

By challenging existing institutions in particular situations, challengers struck at the very heart of the iron man's persona and authority. Their attempted new actions challenged actions in which these other members were skilled, a cultural demeanor they had perfected, positional relations that afforded them high status in the occupation, and interpretations that supported this persona and status hierarchy. Thus, the challenger-to-

iron man interactions were cultural and positional contests in which the legitimacy and authority of the existing situational identity and the institutions that supported it were either confirmed, denied, or left in doubt. To the iron man, such challenges were not to be taken lightly, for the legitimacy and authority of the existing institutions were also the bases for his own persona and power. To deny or raise doubt about his legitimacy was to shake the very ground upon which his self-image and status were built.

One iron man moonlighter related how he continued to express his iron man persona, which depended on him enacting interpretations of continuity of care in the individual, in the face of challenge:

> Some of these guys (interns) expect me to treat their patients overnight. I refuse to do it. Because I don't know them. I don't advance diets, I don't change meds, I don't do any fine tuning over night. I don't feel comfortable doing it. And, it's not just that. It's also that I don't have any claim on these patients. I don't like tinkering with other people's patients so I don't. In the past if I was on for 36 hours then I would do a CT (Cat Scan) at 3 in the morning.

By attempting new actions in signout situations, challengers were also threatening the interactional identity of their interaction partners. Through their actions in a history of previous signout situations, interaction partners had built up bits and pieces of an interactional identity. If iron men allowed challengers to hand off work, this interactional identity would be changed, and it would likely lead to further attempts to hand off work in the future.

As **Figure 7a** shows, at ACADEMIC those who perceived attempted handoffs in signout situations as challenges tended to be the more senior, established members (50% of seniors versus 8% of juniors). Other members who most frequently defended the status quo were those who expected to gain most from the dominant groups, who were

most able to successfully achieve the iron man persona. Thus, male residents were affronted by handoff attempts a greater percentage of the time than female residents (53% versus 13%). And, those continuing on to a career in general surgery acted as iron men more often than those who would be leaving general surgery after one year (48% versus 0%).

A large percentage of the members at ACADEMIC fell into one of these three categories. Of the 61 surgical residents in 2002-2003, fifty-four percent were senior residents, seventy percent were men, and seventy-two percent were going onto a career in general surgery.

Responding to Challenges

The defense process at Academic was a highly personal battle where iron man members fought hard against challengers to preserve legitimacy for their way of life and the persona and power they derived from it. In order to maintain the status quo, powerful members within the Academic social system made the rules about which actions were legitimate and which were deviant, and they labeled as outsiders members who acted in ways contrary to these rules (Becker, 1991). By responding fiercely to new action attempts, iron men not only retaliated in the face of particular challenges, but also clarified to other members what behavior was acceptable and unacceptable, thus preserving the stability of the traditional surgical persona and positional relations at Academic. An examination of signout interactions showed that iron men chose to respond to challenges through either direct or indirect means.

In some signout situations iron men directly corrected transgressions by socially constructing challenger acts as deviant and aggressively retaliating in the face of them.

By responding directly, they tried to squelch the enactment of new situational, interactional, and personal identities. These would have threatened the meaning of iron men's traditional actions and taken away their valuable resources if they had been repeated over a wide range of interactions at Academic.

Direct retaliation: "Teaching."

One direct strategy iron men used in response to a challenge was to "teach" the challenger, tell the challenger that the offending action was not acceptable, but do so privately. For example, one evening early in the year, an intern signed out a post op (post-operative check on a patient to make sure the patient is stable after surgery) to the moonlighter. In response, the moonlighter "taught" the new intern by telling her that she needed to do post op checks within two hours in order not to endanger the patient. For patients who had been out longer than 2 hours, the moonlighter refused to post op them, telling the intern that, "It isn't good patient care to let patients sit around for hours without being post-opped."

When I asked this moonlighter about his actions, he intimated that he felt that post op work like this was inappropriate for a member of his standing in the residency organization. And he drew on traditional ideas about education to justify his actions, saying:

> They shouldn't be expecting me to do this stuff for them. I did my internship three years ago. I don't need to do it again. There's not the pride of ownership that there was before where you couldn't go home until the work was done. The problem with this signout business is they don't learn to be efficient. I could do these things but it takes away from their education.

In terms of how delayed post-ops were related to patient care, before the night float team was formed, residents often didn't do post-ops for many hours after the OR

because they were too busy. In any case, the nurse in the post-operative care unit monitored these patients and paged the residents if they observed any problems. But if the moonlighter had let this handoff attempt go unaddressed, it would have prohibited him from accomplishing his iron man personal identity in the interaction and would have altered the interactional identity that the intern held of him, possibly leading to future handoff attempts.

Direct retaliation: "Beating." A second direct strategy the iron men used was to "beat" (their term) the challenger. As one senior iron man outrightly explained to me, the purpose of "beating" was to shame a challenger into acting differently. Beating involved aggressively reprimanding the challenger, and doing so in front of as many important others as possible. For example, one evening at rounds, the chief asked the intern to check the patient's potassium level and to tell him if it looked high. The intern handed this off to the moonlighter and the moonlighter did not do it. The potassium level was not critical to this patient's care, so the moonlighter ignored it.

This chief explained to me that he retaliated the next morning in rounds by "beating" both because he wanted to deter the intern from doing something like this in the future, and because he was truly ticked off by his act. By yelling at the intern, this chief was aggressively reasserting the traditional surgical persona and positional relations.

Indirect Retaliation: Gossiping. In other signout situations, iron men responded indirectly to a challenge by gossiping about it with other members. For example, in accordance with new formal rules, one of the interns several times handed off work that he had not accomplished by 6pm to another intern filling in on the night float team. The

day intern was spending one year training in General Surgery before moving on to Urology, and he was less committed to acting out traditional signout situational identity than were many of those who were continuing on in General Surgery. His behavior was an attack on the traditional demeanor of finishing all work before departing at night and of singlehandedly accomplishing all work on a patient, and the traditional interpretation of providing "continuity of care" by taking total individual responsibility for patients.

In this case, the night intern did not confront the resident leaving at 6pm directly, but instead gossiped about him with some of the other interns. This gossip served as an informal means of punishing deviance that was especially effective given the small, stable, and outwardly homogenous character of the surgical occupational community at Academic. It functioned as a social control over this gossiper himself since by disapproving of the day intern's deviant behavior, he implicitly confirmed the validity of the established surgical situational identity. In addition, as a result of this gossip, other interns expressed their disapproval to this day intern through teasing and clever remarks, exercising pressure on him to change his disreputable behavior to make it agree with the established surgical code. Finally, this gossip served as a means of social control because, as the mere threat of sanction, it promoted conforming behavior. The anxiety that accompanied the knowledge that members could gossip about one, and thus soil one's reputation, was enough to prevent many potential challengers from acting deviant.

Indirect Retaliation: Ostracizing. A second indirect way that iron men responded to challenges in signout situations was by ostracizing the person who attempted the offending action. For example, one female intern handed off any work she had not completed by 7pm on a regular basis. She violated the surgical demeanor in other ways

as well: by talking about her personal life while in the hospital and by planning a career in a non-surgical specialty.

The iron man interns punished her indirectly by ostracizing her and excluding her in a variety of ways. They did not tell her when they were going to lunch or heading over to the bar they went to on Thursday nights. They did not send joking pages to her or play good-humored practical jokes on her.

One member talking about her explained:

> (Intern) has already ruined her reputation. Because she leaves around 7 every night even if all of her work isn't done, and expects the moonlighter to pick it up. She'll never be able to recover from it. There's a lot of talking, and this is a small program.

The interns and moonlighters joked about her to the chiefs, so that the chiefs began to isolate her as well. The chiefs focused their teaching efforts on those whom they thought had the potential to become "real" surgeons by calling them first to fill in on uncovered cases, and by letting them do more of the operating in these cases. By ostracizing this intern, they set an example to other residents who then chose not to pollute themselves by socializing with her, now a social outcast. In this way, they highlighted behavior that was outside the bounds of acceptability for the community. By doing this they also isolated her from other key work situations, and thus defended their traditional identity from further assaults like this.

Factors Shaping Choice of Response

When an iron man perceived a new action to be a challenge, his or her choice of defense strategy was shaped by two dimensions of the interaction. **Figure 7b** captures the four major modes of retaliation the iron men used, and how these were shaped by

degree of threat to the iron man and judged teachability of the challenger in the attack situation. The first dimension was the degree of threat that the iron man judged the attack to pose to his own persona and relative power at Academic. The degree of threat was determined by both the relative distance between the challenging act and the iron man's own actions, and by the iron man's judgment of the blameworthiness of the challenger. The distance between the act of the challenger and the way the iron man would have handled work in a similar situation determined how much of a challenge the iron man considered it to be. And if the iron man felt that the challenger should have known better than to act in this manner, the iron man attributed blame to the challenger.

The second dimension affecting the iron man's response was the judged teachability of the challenger in this particular situation, and this shaped whether the iron man retaliated directly or indirectly.[3] The iron man's judgment of challenger teachability in any given attack situation was shaped by his formal hierarchical power relative to the challenger, by the situational power of each interaction member given organizational manager legitimation of particular challenger acts, and by the iron man's assessment of the desire of the challenger to reform. Situational power varied by particular kind of attack and over time. As organizational managers became more adamant about their support for the night float team as the year went on, this decreased the iron man's situational power in the face of this challenge. If the judged teachability of the challenger was high because of the iron man's higher hierarchical position and situational power,

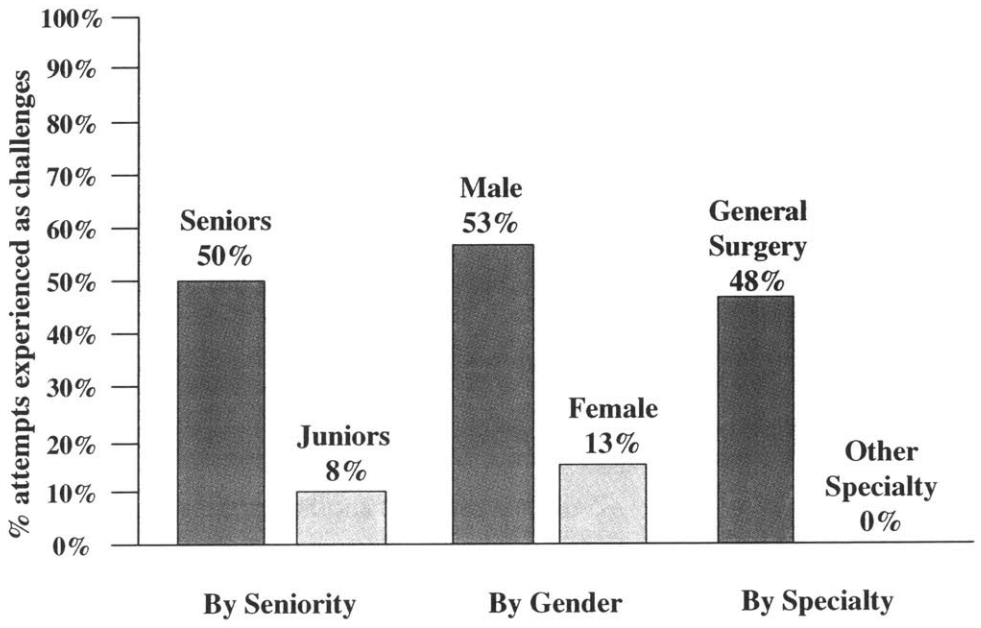
[3] This concept of "judged teachability" implies intentionality on the part of the iron men. Van Maanen (2001) argues that most interpretation in interaction is implicit, and only becomes explicit as an active, conscious matter when novel situations are experienced or when our assumptions about situational rules are challenged. Active interpretation of the actions of the self and others is a common phenomenon only when persons are showered with unexpected, sometimes traumatic experiences that violate their sense of routine, normality or propriety. I suggest that the challengers' attacks represented challenges to accepted situational rules and routines, and so sparked iron man reflexivity and intentional judgment about the challengers' actions.

and the challenger's desire to reform, then the iron man usually retaliated directly; if not, he retaliated indirectly.

Summary

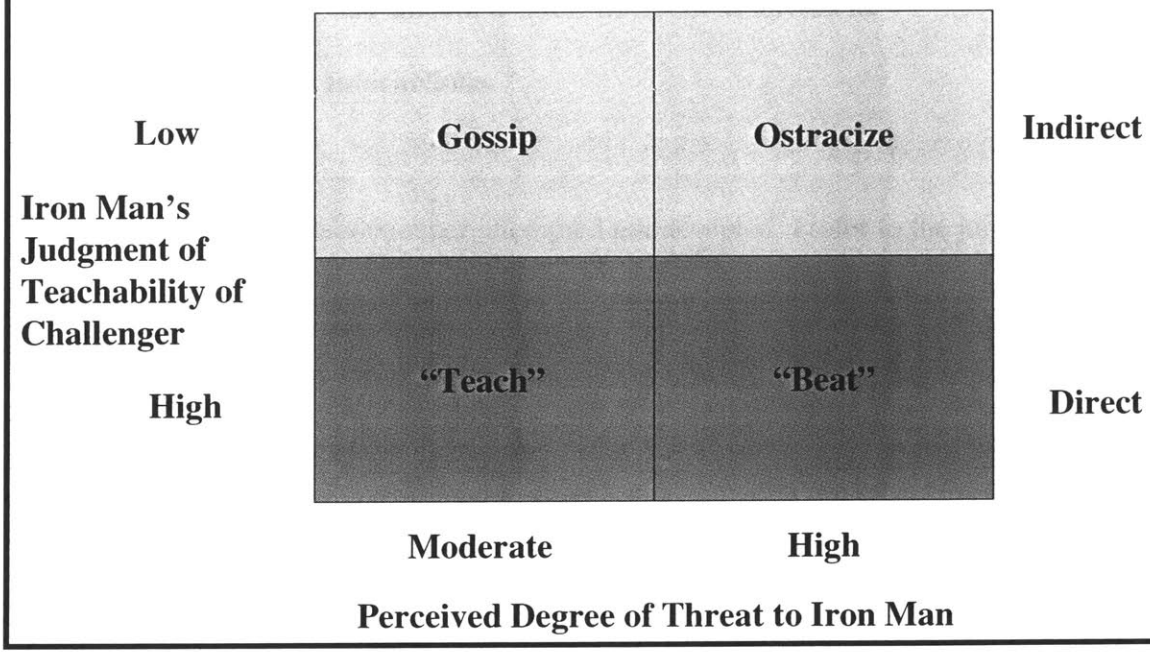
Since residents' situational, personal, and interactional identities were shaped, in part, through interactions in signout situations, challengers' handoff attempts threatened traditional identities. For iron men, their personal sense of self, and the persona and the power that it entailed, was challenged by these new identity claims. Iron men responded to these challenges either directly or indirectly, depending on the perceived degree of threat to the iron man and judged teachability of the challenger in the signout situation . By retaliating against challenger attempts at new action, iron men initially succeeded in maintaining traditional surgical cultural and positional prescriptions for action and interpretation (institutions) in the face of challenge in signout situations.

Figure 7a: Who Experiences Handoff Attempts as Challenges?



N = 30 handoff attempts in 57 signout situations observed before and after change

Figure 7b: Iron Man Responses to Challenges



Chapter 8

Defending and Changing Interactions and Identities

Interaction in signout situations proceeded through a process of interpretation and action. As challengers and iron men acted in signout situations, they both made identity claims and interpreted the identity claims made by their interaction partners. As they fitted their lines of action to one another, their actions gave rise to particular forms of interaction. Through their interactions they both reproduced and transformed identities that then guided their future actions and interactions.

Interactions in signout situations differed along two dimensions—handoffs were either attempted or not by the daytime residents, and accepted or rejected by moonlighters. This resulted in four types of signout interactions (**Figure 8a**). I term them no handoff, fumbled handoff, takeaway, and smooth handoff. No handoff and fumbled handoff interactions reproduced the traditional situational identity for signout situations, and takeaway and smooth handoff interactions altered it.

Defending Traditional Interactions

No handoff

When handoffs were neither attempted nor accepted, I refer to the joint interaction as "no handoff." As described in detail in the chapter on attempting change, in these situations, the day intern was either an iron man or was a latent challenger who judged that the negative consequences of handing off in that situation outweighed the importance of doing so. The moonlighter in theses situations perpetuated this assessment by not offering to take on unfinished work.

Fumbled handoff

In contrast to the situations where the day intern did not attempt to hand off work, sometimes the day intern did attempt to hand off work but the moonlighter either rejected it, or accepted it but did then not complete the requested work. When the moonlighter held an iron man personal identity and judged his relative power in the situation to be high, he usually actively rejected the attempted handoff. These direct rejections were the teachings and beatings described in the previous chapter.

When he judged his relative power to be low, he passively rejected it by either dishing out emotional abuse to the intern through eye rolling, sighing and calling the intern weak, ignoring an intern's page requesting signout, or simply not doing it. These indirect rejections include the gossiping and isolating described in the last chapter.

I call both of these forms of interaction, "fumbled handoffs." One intern reported that a moonlighter did not outright refuse to take on work, but "made it really unpleasant for you to try to hand things off." She explained:

> Last night, a patient on day surgery hadn't gone to the bathroom. That's one of the criteria before they can go home. So when I signed out, I told (the moonlighter) that this was something that needed to be checked. He said, I don't mind doing it, but do you mind checking with the nurse to see if I need to. Well that's not very considerate. By the time I did that, it was just as easy for me to do the whole thing. And he wasn't busy or anything, just checking his roster.

Defending Traditional Identities

By reproducing traditional interactions, iron men protected the institutionalized situational identity from challenge. They also shaped the personal and interactional identities of their interaction partners. Before the active involvement by Directors and

challenger chiefs which occurred several months after the changes were introduced at ACADEMIC,[4] the iron men accomplished several things through these retaliations and reproduction of traditional interactions. They changed the personal identities of some challengers by teaching them the traditional interpretations for signout situations. They silenced others by preventing them from expressing their personal identities in signout situations. And they isolated the rest, as much as they could, from other situations that were important to maintaining surgical prescriptions for action and interpretation. For example, they did not invite them to the OR to observe interesting cases, did not invite them out to Thursday drinking nights, and so on.

Iron men succeeded in changing the personal identities of some of the latent challenger interns by retaliating against their new actions in signout situations. Interns whose personal identities were transformed to iron man identities were those interns who had attacked the traditional identities out of ignorance when they first entered ACADEMIC. As with new members to any organization, when they first entered as residents, these new interns were ignorant of some of the rules of thumb for action and some of the aspects of the sacred identity of the iron man, and they failed to properly appreciate the interpretations shared by the more experienced members present on the scene.

Through the process of teaching and beating them and gossiping about and isolating others, more experienced iron men in general surgery taught the new interns directly and indirectly about the moral hazards associated with disobeying their social rules. These members learned about iron man actions and interpretations, and became motivated to follow traditional rules because of their desire to do "right." Once these

[4] I describe this in the next chapter.

members learned about the traditional actions and interpretations, these became elements of their own personal identities and guided their future actions, so that external controls in the form of iron man retaliations became superfluous. By changing the personal identities of this group of challengers, the iron men defended the stability of the traditional surgical situational identity and the institutions that supported it.

For a second group of latent challengers, the iron man retaliations did not change their personal identities, but silenced them by changing their interactional identities. Unlike the challengers whose personal identities had been changed, these latent challengers did not limit new actions in future signout situations because of learning traditional prescriptions for action and interpretations and making them part of their own personal narratives. They limited these attempts because the retaliations of the iron men had shaped the interactional identities between particular challengers and particular iron men. These interactional identities, which were based on past direct experience with particular iron men and on stories about the experiences of others. This group of challengers limited new actions because their interactional identities led them to judge that if they continued to challenge they would lose access to important resources, such as patients to operate on and access to iron mens' knowledge of surgical practices in a system where knowledge was passed on mainly through its incorporation in traditional practices.

These sanction-oriented secret challengers strove to comply with others' expectations because of the fear of being rejected by the others, branded guilty, and denied valued resources. One related:

> I don't hand off my work to others and go home because of pride and reputation. If people trust you, they let you do more. And they look out for you. Reputation is

> pretty important to me personally. It affects your everyday life. This is where I live. I literally go home to sleep. It sounds sick, but these people are like my family. The worst thing would be to not be respected by them.

By implicitly threatening these members with the loss of resources if they failed to obey traditional prescriptions for action, the iron men protected the surgical situational identity and the institutions that supported it. They did this by dissuading a group of people who would have acted in new ways from doing so.

Finally, the last category of members that the iron men shaped through their retaliations in these initial months after the introduction of the work hours changes became what I will call "blatant challengers." These were those who did not change their personal identities, and who did not change their interactional identities. They did not change these because they did not agree with iron man prescriptions for action and interpretation and did not want to be accepted by the iron men. Instead, they cared more about accomplishing their persona and status in a different social world, so they did not inhibit their new identity claims in the face of retaliation. For example, since the interns going into other specialties were not continuing on to a career in general surgery after their first year, most of them gave the teaching of the members of the surgical specialties they would be training in over the longer term more weight than that of the general surgical members. They began to forge their personal identities in relation to others in that social world rather than to others in the general surgical world. These blatant challengers considered iron man retaliations a deterrent, a threat to be avoided as much as possible, but often acted in alternative ways even in the face of retaliations.

Changing Traditional Interactions

Takeaway

While the reproduction of traditional interactions reproduced traditional identities, the change of these interactions led to change in identities. I observed two types of interactions which led to changed identities—takeaways and smooth handoffs.

In some situations, the day intern did not attempt to hand off work, but the moonlighter actively requested it. I call this a "takeaway." For example, I followed one moonlighter multiple times who, rather than waiting for the intern to page him, always paged the day intern when he got in at 6pm and said: "Want to get out of here?" If the intern was in the middle of finishing something, he went down to the area outside of the operating rooms to examine that intern's patients who had come out of surgery. Then, when the intern came to sign out information to him, he told the intern that he had already done the post-ops.

Smooth handoff

In other situations, the day intern attemptted to hand off work and the moonlighter accepted it. I call the joint interaction in these situations a "smooth handoff." Interestingly, even in smooth handoff situations required a certain etiquette. The day intern did not simply tell the moonlighter what to do. Instead the day intern mentioned what he or she had left to do and paused to let the moonlighter jump in and say, "I'll do that." If the moonlighter did not jump in, then the day intern would ask if the moonlighter "would mind" doing that. In contrast to the "fumbled handoff" situations, in "smooth handoff" situations, the moonlighter quickly reassured the day intern that he or she would do it. For example, during one signout, the day intern said: "I am up to my

neck in making new cards (residents kept a white index card for each patient with all of the key patient information on it). Today we had three admits and three or four more admitted from day surg. And I have to present my most complicated guy to (Department Chief) tomorrow at rounds." Then she paused. "Would you mind doing the card on Goode?" And the moonlighter said, "Sure, no problem."

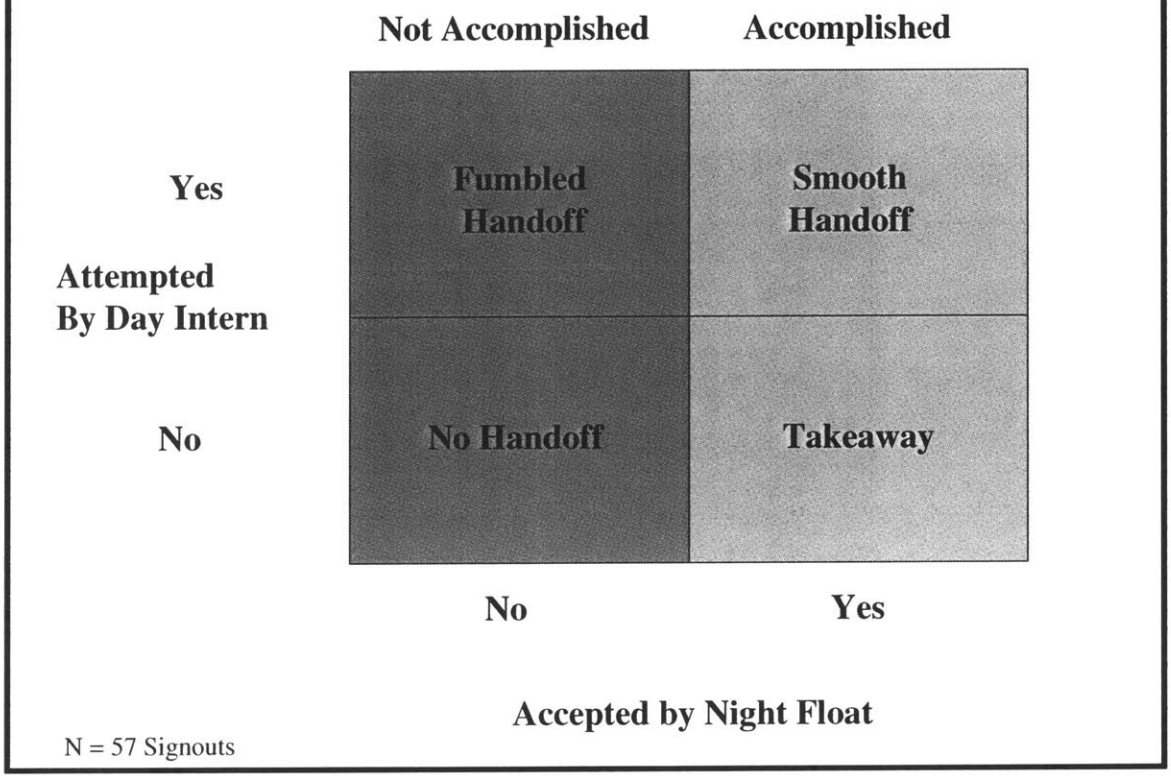
Changing Traditional Identities

In the same way that reproducing traditional interactions reproduced traditional identities, changing traditional interactions changed these identities. The power of iron men and challengers to fight for their identity claims changed over the year, and how this happened over time is the topic of the next chapter.

Summary

Challengers could succeed in efforts to change their actions in signout situations only in concert with their interaction partners. While they sometimes attempted new actions, these new actions were not always accepted by their interaction partners. As challengers and iron men fitted their lines of action to one another, their actions gave rise to interaction. As iron men rejected handoff attempts, they not only defended the traditional situational identity for signout situations and their interaction partners' interactional identities, but also changed the personal identities of some of the interns, silenced others, and isolated the rest. In order for new identities to be created, the iron men who benefited from the status quo needed to accept new action attempts. In the next chapter, I relate how this occurred over time at ACADEMIC.

Figure 8a: Types of Signout Interactions



N = 57 Signouts

Part IV: Creating Change Over Time

Chapter 9

The Structuration of Interactions and Identities Over Time

Interns and moonlighters defended and changed interactions and identities by shaping their actions in relation to the situation, their own personal narrative, and their interaction partner. But this shaping did not occur in a vacuum. Directors and chiefs at ACADEMIC provided new cultural and positional prescriptions for action and interpretation around signouts. As these higher level challengers and iron men either promoted change or defended stability, they provided new prescriptions that added to the repertoire of available prescriptions that the moonlighters and interns could draw on in their signout interactions. In this way, their actions were an important part of the process of structuration of new actions, interactions, and identities in signout situations at ACADEMIC.

Providing Interns and Moonlighters with Additional Prescriptions for Action and Interpretation

High level challengers and iron men contributed to the change and defense process by creating, in their interactions with one another, new prescriptions for action and interpretation that were drawn on by interns and moonlighters in signout situations. However, not all interns and moonlighters drew on these meanings in similar ways. The prescriptions for action and interpretation that the challengers and iron men created and used were not elements carried around in individual's heads, but were fundamentally collective diagnoses of problems and prognoses for change. They were products of the interaction between the interns, moonlighters, chiefs and Directors that were produced, sustained, and transformed in the course of contention.

The Directors and chiefs, because of their positions in the surgical social world at ACADEMIC (**Figure 3a**), played an active role in demarcating the prescriptions for action and interpretation, but they did not solely determine how the interns and moonlighters combined these prescriptions through orchestration in signout situations, nor how they created new meanings through them. Interns and moonlighters used competing repertoires (from the traditional situational identity in signout situations, their own personal identities, judgments of their interaction partners, and the new prescriptions provided by challenger and iron man Directors and chiefs) and internal tensions within each of these repertoires to shape their actions and interpretations. Thus, new prescriptions for action and interpretation in signout situations were created in a "dialogic" (Bakhtin, 1981) process that occurred during interaction.

Different perspectives, or prescriptions in the repertoires, come inscribed with differing amounts of authority, which suggest how they might be orchestrated (Holland et al., 1988). Because of changes over the year in the authority of the prescriptions presented by the Directors and chiefs, I observed three breakpoints in action and interaction in signout situations, which affected the structuration process of actions and interactions on the one hand and identities on the other. The structuration process occurred in the following way.

Challengers and Iron Men Provide New Prescriptions for Action

The Directors at ACADEMIC--the Head of the Department of Surgery and the Surgical Program Director--played a crucial role in the change process. Both of these Directors were latent challengers. They had been recruited into ACADEMIC from another teaching hospital, so their persona and power were not derived from traditional

ACADEMIC-specific institutions. In addition, their personal identities were at odds with the institutionalized situational identities at ACADEMIC.

The Director of the Department of Surgery prided himself on his prior efforts to make the profession of surgery more open to women. In addition, he was concerned about problems with recruitment to surgery because of the combination of dropping prestige of surgeons within society, worsened economic reward, and lifestyle issues. The Director of the Department believed that this rapid drop in applications to surgical residency programs in the past five years represented a desire on the part of residents for specialties with a controlled professional environment, particularly during early family raising years. The Director of the Surgical Residency program had slightly different reasons for wanting to foster change. He had suffered through some aspects of his own residency training, and he felt that many of the traditional surgical prescriptions for action in residency were unnecessary to training good surgeons. The personal identities of these Directors not only motivated them to make change, but also gave them access to a repertoire of other ways of doing things that they had used in the previous teaching hospitals in which they had worked.

When the Directors first tried to react to the upcoming changes, they enlisted the support of the incoming chief residents. Four of the chiefs defined themselves in iron man terms, and three privately challenged this traditional identity. The iron man chiefs did not support the proposed changes, but in order to comply with traditional positional relations associated with the situational identity of chief, the four iron man chiefs initially followed the lead of their surgical Directors and supported new handoff practices. One iron man chief affirmed his initial support of the new system:

> The moonlighters are not used to taking orders from interns. Some people always have the feeling, back when I was an intern I did my internship and had ownership of my service. But the chiefs can't feel that way. The new system would fall apart if the chiefs took that attitude. My job would be much easier if I had a continuous person in house, but I need to endorse it wholeheartedly. The moonlighters are the most resistant. They weren't involved in any of this. The job was created for them and they stepped into it. But it's a scam. It's not that difficult and they are getting paid a lot. It's starting to go away. They see it's here to stay, that we're backing our interns.

Despite their initial support of intern handoffs to moonlighters, these iron man chiefs saw handoffs as a short term measure until interns got "up to speed." One iron man chief related:

> To some degree it is a graded thing. In the beginning, interns don't know anything, and they will be struggling to get their floor stuff done. They won't have time to strike (complete) pre-ops because they are new and don't know how to do stuff yet. When they are completely fired up to speed they can do all that stuff before they go home. Ideally the night person will just cover what comes up overnight, but in the beginning he'll have to do some pre-ops and post-ops as well. There won't be strict adherence to get out at 6.

The three challenger chiefs, on the other hand, supported handoffs, and saw this action as enduring indefinitely, and as truly enabling the interns to leave close to 6pm. These challengers had suppressed their alternative personal identities before the changes, but now the Directors' support for the changes enabled them to attempt new identity claims to maintain a consistent personal narrative over time and place. One chief, who had written articles about surgical error and efficiency explained his support of handoffs:

> My goal is not necessarily to get down to 80 hours. I don't know if that will be the magic number. But there is a lot of stupid stuff we do that drove me crazy as an intern. And I have an easier time trying new things. I'm less worried that the ethos will be lost.

Another challenger chief supported new actions at work because she thought they would enable her to maintain her personal identity as a 'good' significant other at home. She said:

> I've been dating a guy since last January. It's been hard. He survived thoracics (long hours rotation) with me and then I thought it would get better but (trauma rotation) and the (veteran's hospital rotation) were really bad. He's starting to wonder if it's a good idea for him to be in a relationship with a surgeon. Rounding early will let me get out in time to cook dinner once in awhile.

While the chiefs set the tone for signout situations, it was the interns who had to make the decision to hand off their work, or not, each night before they left the hospital. Most interns had entered ACADEMIC trying to act out both the surgical intern situational identity in the hospital and their identities as significant others, women, or other specialty residents. Many of them initially believed that handoffs were a good idea, and that handing off work to a moonlighter wouldn't hurt patient care or their own education. They knew that their job was to follow the direction of their chiefs, and most were ignorant of the importance of no handoffs to the traditional iron man situational identity in signout situations.

In contrast, before the changes were implemented, most moonlighters lived by the hierarchical 'pay your dues' aspects of interns completing all scut work before going home and believed that handing off work violated tried and true principles of good patient care and education. Many felt that the job of the moonlighter should be to 'put out fires' overnight, rather than to deal with intern level 'scut work' such as doing preops, post ops, and updating patient information cards. However, during the initial phase of change, some iron man moonlighters grudgingly accepted handoffs even though they didn't agree with them since handoffs were being promoted by the Directors and chiefs.

Directors and chief residents implemented the night float team in July 2002, and instructed the new interns to hand off any work not completed by 6pm to a moonlighter covering the two general surgery teams overnight. This led to many interns trying to hand

off work on a regular basis, which met with mixed success as some moonlighters rejected the interns' attempts. In the first month, interns attempted handoffs in 57% of signout situations, and accomplished them in 29% of the total situations that I observed.

Phase 2: Iron men Begin to Resist Change

After about a month, the interns' handoff attempts began to threaten the iron man chiefs' situational and personal identities as iron men and commanders of the interns and their corresponding power. As they acted out new situational identities and jointly created new handoff interactions, interns and moonlighters challenged the prescribed cultural and positional actions and interpretations of the traditional surgical situational identity. This upset the iron man chiefs, who had hoped to change signout interactions without challenging the surgical residency identity. For example, one of these chiefs was upset that the interns were not honoring traditional interpretations about good patient care. He related:

> Last Monday, I got a call that a patient was coming from another hospital. I told my intern, make sure he gets an ICU (intensive care unit) bed, call admitting, do an H&P (patient admission workup), and make sure he gets labs sent. So I go up there and (the intern) hasn't done any of it. She thought she would be leaving at 6 and could transfer the responsibility to the night float person. So she was trying to get stuff together for rounds. Well, maybe ideally they should be leaving at 6. But, in practice, that's not the way surgery works. We were dealing with a very ill patient on our service who had a perforation and needed a unit bed to stabilize her. The patient needed someone to take responsibility for her. This never would have happened in the old world. The intern would have jumped all over the patient and made sure all the orders were in immediately. But now the expectation of the interns is that at 6 they are out of here and if not they get grumbly about it. She was getting numbers and labs for rounds. Forget about that. Deal with the sick patient. But it was like, this is not my priority. They don't have the ownership of I'm the doctor and this is my patient.

By attempting handoffs, the interns were also modifying the traditional cultural persona associated with the surgical situational identities of both interns and moonlighters.

Describing violation of cultural demeanor and positional deference by the interns, a different iron man chief said:

> I hate handoffs. I can't stand it. When I was a junior, we didn't leave until all our work was done. We didn't expect the person on call to do it. We did it out of a sense of duty. It's just what we do. Now people expect to get out of here by 6. You should never leave anything for anyone else to do. It's your patient. Moonlighters don't want to come in and do H&Ps that came in at 2 in the afternoon. The interns need to stay late and do it.

In addition, the intern's handoff attempts were leading to violation of the persona of the traditional chief situational identity, which was also the personal identity for the iron man chiefs. This situational identity was closely linked to their persona as commanders of the interns. One iron man explained:

> The interns learn the most from their group of chief residents, and now they're not learning as much. You make them a better doctor because you train them up in the Academic way. You sort of break them of the teachings that they may have brought from (other places). And you say, OK, this is the Academic way...It is sort of like boot camp. It's very grueling. And now they've taken away our ability to do that.

Since the cultural persona and positional power of the iron men were intertwined, a change from iron man identity to a new identity entailed a loss of power for the chiefs and for all of the surgical residents within the hospital as a whole. Surgical residents at ACADEMIC had traditionally occupied the top of the status ladder in the hospital, and part of this status was derived from their long hours work. One iron man chief said:

> I miss the old days of power weekends (working Saturday morning through Monday night)...After a power weekend, you were at the top of the hospital. You had clearly demonstrated your ability to do things. If you can survive that, you can survive anything. None of the medical residents ever did that. You were a step above. With the new schedule you can't say, 'I can handle working more hours than anyone else.' Before you were here surviving, kicking butt.

The iron men chiefs also felt that their status was due to their ability, and that this was being lost. One said:

> When I was in the ER (emergency room) as a 3rd year resident the attending did an overhead stat page for me to come to see a patient. The patient was septic and was going down the tubes. Later I said, hey, why did you think to call me. He said: where I was trained, whenever we had someone really sick, we had Surgery involved. I wanted you around because I had a bad patient. I like to have Surgery hovering whenever that happens. And he was right. Even as a 3rd year, there wasn't much I couldn't do. We are losing that. Now they won't be capable of handling anything that comes up.

Finally, the iron man chiefs were angry about handoffs because they threatened the power structure within the surgical ranks. Once interns stopped taking full individual responsibility for patients, the chiefs needed to work harder to provide continuity of care and to know every detail, as this was demanded of them by the attendings. This challenged the power of the chiefs. One iron man chief said:

> The moonlighters are a problem because now the chief needs to be the team continuity. Before this night float, you never handed off. When a person was on call they didn't get a handoff because they already knew everything about the patient. Now the chief is the only continuity at night.

Because of these challenges to their own personal identity, the iron man chiefs withdrew support for the interns' new identity claims in signout situations about a month after they introduced the changes. At the same time, the Directors, who had been actively involved at the outset of the changes were now uninvolved in the day-to-day aspects of the changes. So the iron man chiefs now began to support the iron man moonlighters' rejection of intern handoff attempts. One chief said:

> You know, we ARE asking these guys (moonlighters) to work a lot of shifts. That takes away from their lab time. And you can see how it would be tough as a 4 (4th year resident) to be told to do the intern job all over again.

This was the same chief who had told me in the first month of the changes that the moonlighter job was not that difficult, and that they were getting paid a lot, and would have to learn that the chiefs were backing the interns and the system was here to stay.

In contrast to the iron man chiefs, the challenger chiefs continued to defend the new handoff actions. Loss of the iron man chief situational identity was not a problem for them because it had never fit well with the other identities they were trying to manage. In addition, the loss of power within the hospital was not as great a problem for them. For one of the chiefs, while attempted new actions at Academic caused her to lose power in the hospital, not attempting new actions would have caused her to lose power at home. For the other one, he derived a lot of his power from his writing. He related:

> I care about what everyone here thinks. But I've got other people I care about too. Like (names co-authors) who work with me on these articles we are submitting to the New England Journal.

But since the iron men chiefs were supporting the moonlighters' rejection of handoffs and they wielded more power over the day-to-day actions in the ACADMEIC system than did the challenger chiefs, these challenger chiefs lost the power to force handoff acceptance. In turn, the challenger interns began to think that they couldn't trust the challenger chiefs to support them. One intern related:

> I told (challenger chief) that I was having trouble getting everything done, and he said split it equally with (moonlighter). But I feel uncomfortable initiating that since I'm an intern. But (challenger chief) saw me one night and told me to start signing out everything to (moonlighters). So I signed out everything to (moonlighter) the next night. But now I know I signed out stupid things. Like I signed out medication orders. So (moonlighter) got mad and told (challenger chief) and (challenger chief) said I took him too literally. As an intern you don't know what to expect or do and it makes you feel bad. If they are going to push me to hand off work, they need to talk to both me and the moonlighter together. And they need to stick to it. Otherwise it can get warped in all different ways.

These interns, new to the world of surgery at ACADEMIC, were still early in the process of constructing their personal identities in light of their new social system and were lowest in the power structure. In response to the iron man chiefs' actions, the interns began working long hours and not attempting handoffs in order to meet the traditional standards. In addition to modeling the iron man identity for interns, the iron man chiefs had taken away the legitimation and power that they had given to interns to attempt new identity claims in their signout interactions. Thus, the interns lost situational power, and so stopped attempting handoffs in interaction with the more senior moonlighters. One challenger intern who had often attempted handoffs at the beginning said:

> Reputation is important here. There is a lot of talking, and this is a small program. A lot of people don't say things to your face, but if you hand off then they tell others that this guy is weak.

During this time, approximately 3 months, the interns attempted handoffs in only 14% of the signouts I witnessed, and they accomplished them in none of these situations. The repeated interaction of no handoffs continually reproduced the cultural and positional prescriptions for action and interpretation associated with the traditional iron man situational identity.

This upset the challenger chiefs, because, since identities need to be confirmed by others in order to be realized, it prevented them from accomplishing their own new identity claims and making these consistent with their personal identities. These chiefs informed the Directors that most interns were not handing off work to the moonlighters.

Challengers Counter by Providing Revised Prescriptions for Action

In one of their weekly meeting discussions with the Directors, the challenger chiefs and iron man chiefs debated how to handle this issue:

> Director: How is everything going with the schedule?
>
> Challenger Chief: Handoffs to the night team are a problem because the intern has a hard time telling the moonlighter to do these two admissions or these two preops.
>
> Director: Couldn't you do rounds when the moonlighter was there and you be the one to say, "Take care of these two preops?"
>
> Iron man Chief: No. You need to make the interns do this stuff or they will always leave it for the moonlighter and will never learn.
>
> Another Iron man Chief: You know, we're telling these guys [moonlighters] to work a lot of shifts. That cuts into their labwork. And you can't expect them to start all over doing preops and updating cards. These guys have been there and done that.
>
> Challenger Chief: These guys [moonlighters] are making a ton of money...By rounding at 4:00, I give the intern two hours to finish things, and whatever isn't done by six should be handed off. But they still aren't handing off a lot of the time.

In these weekly meetings, the challenger chiefs alerted the Directors to the problem and discussed their alternative cultural and positional prescriptions for action and interpretation. They asserted that efficiency was more important than working all the time, and that the high earnings of moonlighters justified the violation of the hierarchy. Further, these challenger chiefs argued that patient care could be delivered by a team, and that residents would learn what they needed to know even if they handed off work.

In response, the Directors began legitimating these new interpretations by talking informally with the residents and sending several different e-mails to them. Here is an example of one e-mail sent by a Director to all the residents:

> Sign out to the evening moonlighters continues to be a problem—from what I can tell the major issues seem to be a reluctance by the...interns to sign out grunt work to the...moonlighter, and there may also be some unwillingness by some of the moonlighters to do what has traditionally been the intern's job. 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...moonlighter is to get the day team out of the hospital—...the moonlighters 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 moonlighter 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. The moonlighters are being paid well for their services and you should not be reluctant to sign out everything that isn't done.

In this way, the Directors provided a new situation-specific identity for signout situations that both provided the challengers with new prescriptions for interpretation, and increased the likelihood that iron man moonlighters would accept handoff attempts. These emails were read and discussed by all, but seized upon differently according to each member's personal identity.

After these emails from the directors, the interns' handoff practices reflected a split according to those staying in general surgery versus those going into different specialties after their intern year. Now the other specialty interns, most of whom had not been handing off previously, began to attempt to hand off most tasks not done by 6pm now. I asked one of them why, and he said:

> Did you see all of those emails from (the directors)? Those guys clearly want us to hand off stuff. Before I was just trying to do my work and was not so sensitive to how long it took. I would drag my feet about calling the moonlighter, and I'd be down there at 6:30 (pm) doing preops before calling the moonlighter. But recently, (a director) has been joining us for lunch. And one day he started to say, "I hear this is what is going on, that you guys aren't signing stuff out." And someone said, "We don't really need to, it's no big deal." And he put down his fork and said: "This is bigger than your puny sense of pride. Whether it feels right to you or not, this is what you need to do." So we were essentially being told that our priorities should include getting out on time. And I've been doing it ever since.

A general surgery intern explained his view of why there was a difference in actions among the two groups of interns

> What does (other specialty interm) really care about what general surgery thinks about him? There is a stigma of signing out preops and postops. I'm trying to build a reputation for the next 7 years.

In the face of new explicit rules by Directors, the iron man moonlighters switched from active to passive resistance. One iron man moonlighter explained his grudging acceptance of handoffs, and why he never offered to take work from interns unless they forced the handoff onto him:

> It's a different mentality than before. Before you didn't sign out anything to anyone. You crossed all of your 't's and dotted all of your 'i's before you left the hospital. And you would never sign out anything to someone higher that you. It was considered a sign of great weakness...One thing that has considerably changed is that people are just willing to sign out things. It's a huge shift in mentality. We always thought poorly of it. Before it I was against it. But in the last few months, I'm like, fine, if this is what they want to enforce then it will be this way. But I wouldn't do it if I were them.

During this period of about 6 months, interns attempted handoffs in 61% of signout situations, and accomplished them in 39% of total situations. By re-emphasizing their commitment to handoffs, Directors had re-introduced new cultural and positional prescriptions for action to the challenger chiefs and interns, and these were used by the challengers as resources as they acted in signout situations.

However, because iron man chiefs and moonlighters were still against handoffs, and because general surgery interns were now drawing on the traditional surgical situational identity to shape their actions, the new introduction of power by the Directors resulted in a polarized situation where challenger chiefs and other specialty interns attempted new identity claims in signout situations and moonlighters passively rejected them.

One of the problems with the passive fumbles was that many times the intern thought that the moonlighter was going to take care of something, and then the moonlighter didn't do it. In most cases, this resulted in only minor problems such as a CT scan not being checked, but it sufficiently alarmed the attendings who began urging the iron man and challenger chiefs alike to solve the problem.

Iron Men Reinterpret Traditional Prescriptions to Support Change

Since the Directors were not willing to revert to the old schedule, this put pressure on the iron men chiefs to somehow make the handoffs work. At this point, both the iron man and the challenger chiefs suggested that the Directors make a structural change in the night float team, getting rid of the senior moonlighters and replacing them with interns.

Once they replaced the moonlighters with interns on the night float team, the chiefs faced a dilemma. If they encouraged day interns to hand off work and interns on the night float team to accept handoffs, then they would not be acting as true "commanders" by providing interns with the prescription to act like "iron men" who "trusted no one" and "lived in the hospital." But, the chiefs also felt duty-bound to be "go-to-guys" for the attendings, and to "make it happen" by ensuring that all work on patients was done overnight. This presented them with unsettled situations where different elements of the surgical institutions contradicted one another and required them to make difficult situational judgments. By weighing choices in light of their understandings of situational exigencies, these iron man chiefs decided that their obligation to the attendings was stronger than their obligation to teach interns in traditional ways. One chief explained:

> If something doesn't get done, as the chief resident, you are responsible. You are it. The attendings expect you to take care of everything....You are expected to know everything and do everything or you get a beating for it.

Thus, the chiefs stopped providing the prescription of "be an iron man," "trust no one," and "live in the hospital." Instead, they took the traditional understandings of floorwork as "intern work" and reinterpreted it to emphasize to the day and night interns that since they were both interns, they were both responsible for intern work. Before the work hours change, two interns were sometimes on a rotation together. But, in the past, when one was on call that intern did not do any work overnight on the other intern's patients. I observed several signouts at that time between interns, and I never saw the intern who was going home ask the intern who was on-call to do any of his work.

In addition, the chiefs reinterpreted traditional positional prescriptions by carrying them over into a new situation. They began to suggest that it was fine for interns to hand off to interns because interns were at similar levels in the hierarchy.

At this point, the general surgery interns who had been following the traditional situational identity in signout situations began to draw on these new prescriptions and hand off their work in most situations. One of these interns explained his new understanding of positional prescriptions in signout situations:

> I feel like (the intern) is an equivalent of me. Versus the second year is just there to get the patient through the night. It is fair for (the intern) to have all of the crap during the night. For the moonlighters, their first priority is sleep.

Another related that he couldn't trust that the higher level moonlighters would do 'scutwork.' In the wake of the chiefs' new prescriptions regarding "intern work," he said that he could trust that the night interns would accomplish it:

> At the beginning of the year I didn't sign out as much...the moonlighters didn't want our signout...It is so much better to sign out to an intern. Like things like picking up films. A lot of the moonlighters would give you flack and even if they didn't do it to your face, you worried that they would tell other people. Since the intern sees the patients every night I don't mind asking, can you check several abdominal exams or take the Foley out at midnight. I just wouldn't ask the moonlighters to do that kind of thing. And if I did, I wouldn't expect it to get done. I usually went home later when I was signing out to moonlighters. I would never sign out my post ops and stuff or ask them to pick up films. It would be 1 or 2 hours later to get all of that done. So this is a better system.

By this time, interns were attempting handoffs in 79% of signout situations and accomplishing them in 79%. **Figure 9a** shows how the percentage of accomplished handoffs increased with each successive change made by the Directors and chiefs.

Summary

Interns and moonlighters did not act in signout situations only in relation to the traditional situational identity, their own personal identity, and their interactional identity vis-à-vis particular interaction partners. Challenger Directors and chiefs also provided new cultural and positional prescriptions for action in signout situations which shaped the actions of the interns and moonlighters. These new prescriptions were initially resisted by iron man chiefs. However, once some of the interns began acting in new ways and moonlighters failed to respond, particular tasks began falling through the cracks. This led the iron man chiefs to work with the challenger chiefs and the Directors to redesign the signout situation so that challenger interns could attempt new actions in a way that minimized the challenge to the traditional surgical demeanor and deference structure. In addition, the iron man chiefs reinterpreted traditional prescriptions for action in order to support change in signout situations. Interns drew on these new prescriptions to shape new forms of action and interaction in signout situations.

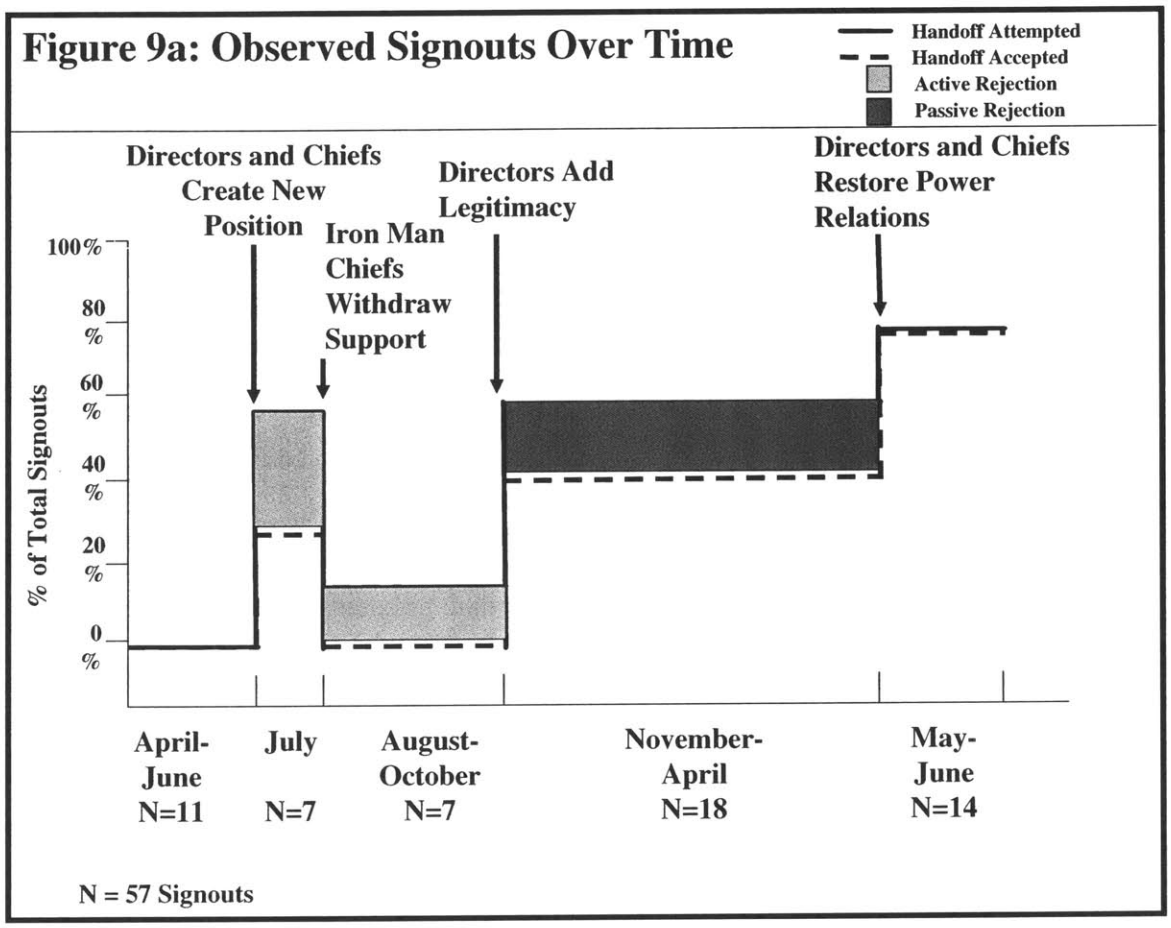


Figure 9a: Observed Signouts Over Time
Handoff Attempted
Handoff Accepted
Active Rejection
Passive Rejection
Directors and Chiefs Create New Position
Iron Man Chiefs Withdraw Support
Directors Add Legitimacy
Directors and Chiefs Restore Power Relations
100%
80%
60%
40%
20%
0%
% of Total Signouts
April-June N=11
July N=7
August-October N=7
November-April N=18
May-June N=14
N = 57 Signouts

Chapter 10

Institutionalization of New Interactions and Identities

After the Directors and Chiefs redesigned the signout situations, the residents began to change their interactions and their situational identity in signout situations. While I have described one situation that was particularly important to institutional change at ACADEMIC-- the signout situation -- I saw similar changes across a wide range of situations. By changing their interactions across these situations, ACADEMIC residents changed the prescribed identity for many situations. As the Chiefs and residents narrated these new prescriptions to the incoming class of interns, they took on a social facticity and became taken-for-granted by these new members. In this way, over time, ACADEMIC residents changed not only their actions, interactions, and identities, but also the institutions that shaped them. I followed the residents over a three year period—one full year after the changes and then at the beginning of each of the next two years. Over this time, I saw the residents change the institutions that guided their actions.

Iron Man Chiefs Institutionalize New Prescriptions for Action and Interpretation

The chiefs extended new prescriptions outside of particular signout situations when they communicated them to new residents. One formal opportunity was the chiefs' orientation presentation to the incoming interns regarding their expectations for the year.[5]

In the intern orientation at the beginning of the first year of the changes, iron man chiefs described the new nighttime moonlighter coverage, and warned incoming interns

[5] I have data from this presentation in three different years—the first right before the changes, and the next two at the beginning of each of the next two years. Analysis of these presentations presented an excellent opportunity to study changes in principle because incoming chiefs each year used the presentation from the previous year as a starting point, and then tailored it to fit the principles they wanted to communicate,

not to expect moonlighters to do much work. In their presentation, the iron man chiefs said: "Never pass off work that you should have done. There will only be 2-3 guys at night. It is not fair to them to be doing work that should have been done during the day."

In the orientation that preceded the second year after the changes were initiated, the iron man chiefs used the exact same presentation they had used the year before, but this time in their talk they emphasized that interns should try "as much as possible" to complete all of their work. And, this year, they left some discretion to the interns: "Decide between yourselves how you want to handle signout."

In their presentation in the third year of the changes, instead of telling the interns that they should not hand off work to the night float resident, iron man chiefs stated that interns needed to work together with night float members as a team. In their presentation, the chiefs wrote: "Night float needs to take responsibility and be accountable. Night float is part of the team. Night float shouldn't drop the ball."

Through occasions such as these, chiefs communicated new prescriptions for action and interpretation that then shaped future actions and interactions of interns in signout situations.

Residents Express Challenger Identities in Interaction

At ACADEMIC, there were a small group of residents who continued to act as iron men. But the majority of residents, many of whom had hidden their challenger personal identities earlier in the study, now outwardly expressed them. The influx of new interns enabled this change in identities. Two years after the initial change, at the start of the new intern year, I saw old interns teach these new interns the tricks of the trade and provide ready-made accounts of the shared interpretations that supported newly

acceptable actions. They communicated the same prescriptions that had been narrated by the chiefs in that year's orientation presentation. For example, one old intern told a new intern on night float:

> You'll do a lot of preops on night float, especially at the beginning of the year because the interns won't get to them. I always make cards for the next day when I do preops because I'm looking it up anyway. Not everybody does, but it is much nicer.

In this way, the new interns were immediately taught that accepting handoffs from day interns was desirable behavior. Old interns communicated what was socially defined as an exterior and objective reality. As a result, new interns learned a new situational identity for signouts and drew on this in their interactions with one another. Now it was the iron men who kept their identity secret from most other members. One resident related: "Come back here in 5 years and this will be a totally different place. People won't even believe it when we tell them how it used to be."

New Institutions at ACADEMIC

At the time I left ACADEMIC, the best interns were no longer considered to be those who acted as beasts of burden and individualistically accomplished their work. By the end of the third year of the changes, the best interns were considered to be those who were efficient and worked well with other team members. One chief related:

> When I was an intern, what mattered is that you were the workhorse, that you worked hard and you were here all the time. Now they still need to work hard, but being here the most hours is no longer what matters. Now it's about, are they organized? Are they efficient? Do they work with the night float intern to get everything done?

The persona of the best chiefs had changed also. Now, it was no longer commanders who beat on the interns who were considered to be the best. In fact, in the third year I was there, none of the chiefs adopted the commander persona. Instead, the

best chiefs acted more like coaches, giving the interns some space to try things, and helping them when they needed help. Every year, the residents voted on the best chief who received an award at the end-of-the-year ceremonies. By honoring a particular kind of chief at this formal ceremony, the residents were both thanking the chief and signaling to other members what the prescribed persona for a good chief was. One intern described the demeanor of the chief who won the award in the last year I was there:

> He's a great teacher. He lets you do stuff, but you're never stranded. You know that he knows what's going on, but that he's letting you figure it out on your own, giving you just what you can handle but not too much.

The desired general cultural persona for all levels of residents had changed as well. Instead of being an iron man, who trusted no one, and lived in the hospital, the most admired residents were efficient, good teammates, who managed to maintain some sort of personal life outside of the hospital. As the valued demeanor changed, so did the deference structure. The hierarchy was no longer as strict, with more senior members on a team now offering to help interns with tasks at times in order to help them get done by around 6pm. In addition, women, residents going into other specialties, and men with personal life responsibilities were somewhat better able to achieve the cultural ideal, so no longer held such inferior positionality.

Finally, as prescriptions for action had changed so had interpretations of those actions. Now, most residents felt that it was possible to achieve "continuity of care" in the team rather than in the individual. One noted:

> It is important to take personal responsibility. But I think you can preserve this personal commitment without having one person there all the time. Some people are old school and say I'm going to do it myself. For me, it is the team that is going to take care of everything. Each of us takes personal responsibility to make sure that patient care is the best it can be, but that doesn't mean doing it all yourself as long as all of the pieces fit together.

In addition, residents felt that it was possible to learn more slowly over a longer period of time rather than needing to learn by doing in a sink or swim environment. One related:

> It's not so bad if the interns are not so skilled as they were five years ago at the end of the year, as long as they get it the next year, or the next year.

Also, given the explosion of information in medicine, many began to argue, it was impossible to learn everything one needed to know just by "being there." Some cases were so rare that it was unlikely that a resident would see them during residency. These things could be better learned through didactic training than in the hospital. Thus, residents started to suggest, both hands-on learning in the hospital and didactic learning in other settings was critical to learning surgery. One resident said:

> General surgeons used to be generalists but there's an increasing need for specialization. In the same way that no general surgeon can know enough to handle any kind of operation, no resident is going to get to see every case during residency. The only way to learn this more specialized knowledge is through reading and through work in skills labs. Now there's an increasing focus on how we can learn things in different ways.

And residents thought that it was possible to be a good surgeon and to take on personal life responsibilities. One said:

> I think the 80 hour workweek is good. 80 is an arbitrary number, but working as hard as we did was crazy. I don't think I needed to work as many hours to learn what I needed to learn. There is an image among surgeons that we should be available at all times. I don't think it is the humane thing to do. It's nice to say that. I want to be someone who is available most of the time for my patients. But I still have a lot of other interests. I don't want to be a father who doesn't spend time with his kids.

Dramatic Changes within ACADEMIC Enabled by Multiple Changes Outside

The dramatic changes that I saw occur over the course of a few years at ACADEMIC would have been unlikely to happen had it not been for multiple new prescriptions for action and interpretation offered to ACADEMIC members by those outside of ACADEMIC. The new work hours regulation and the logic that supported it provided just one new set of prescriptions for action and interpretation. Other new prescriptions that likely affected the ability of challengers to create change in institutions were related to the declining status of the surgical profession both in relation to other medical specialties and related to non-medical professions. Describing some of the impact of the corporatization of medicine, the drop in financial rewards and professional autonomy, and the dropping prestige of surgery within the medical professions, one attending noted:

> It's hardly worth it. When I went through Harvard Medical School, there were probably 130 people going into surgery every year. Now there are 5 or 10. They see the writing on the wall and it takes a big personal toll.... a lot of things that surgery and physicians in general had are being chipped away. You know, reimbursement is going down, power is going down....In emergency situations, there are often alternatives to surgery now that didn't exist before such as endoscopy or interventional radiology that can salvage a situation without the need for a surgeon. Usually a surgeon gets called anyway but doesn't have to operate as much as we used to. So there are alternatives and the need for the surgical white knight isn't as frequent as it used to be. And there's a major culture shift on the part of patients, because if they are sick they want to see their doctor. If I have operated on them, if I have operated on them on Monday on Tuesday they want to see me and that is part of the stress of medicine and surgery is that Americans are very demanding, not just in their medical care but in everything. They want it all and they want it now and they don't want to pay for it....And the personal toll is huge. During residency I did six clinical years. Then I did two years of fellowship and at the end of those years of general surgery I was on my knees. I was tired. In fellowship, the time demands weren't so high and I was able to eat, to get some sleep and it helped me a lot. But unless a surgeon has a very supportive home environment, a spouse and family that are totally behind him and unless they have their own psychological shit together, it is easy for them to lose it.

In addition to these changing conditions and the new prescriptions that members inside and outside of ACADEMIC crafted to deal with them, demographic changes in medicine also created new desires for change. Now more women were training to be physicians and more men in training also wanted more time for family and community life. New prescriptions for action and interpretation developed by members outside of ACADEMIC in response to these changing historical conditions shaped the local action at ACADEMIC.

Work hours, Education, and Patient Care

Readers may wonder how these changes in institutions, identities, and interactions at ACADEMIC affected resident work hours, education, personal life outcomes, and patient care. Work hours data show that residents are working 80 hours a week, but all of the residents I have spoken to have admitted that they are not accurately reporting their hours. Most feel that their hours have come down from 120, and that they are working about 90-95 hours per week. In terms of resident education, an analysis of ABSITE test scores (which are aimed at measuring resident clinical judgment each year) shows that scores have been increasing, not decreasing. Residents all report that the quality of their work and personal life has dramatically increased since the night float team was instituted.

My recent interviews with residents and attending surgeons (Fall, 2004) suggest that iron men are surprised that the changes have not had a substantive negative impact on patient care. They relate that some minor things are "falling through the cracks" but they say that these things do not negatively affect patient care. While most of the residents are supportive of the new work hours, many of the senior attendings are still

concerned, in spite of some objective data to the contrary, that interns now are not as well-trained as they were before the work hours changes. This is not surprising since their views of what makes a good intern were initially learned and were shaped for many years under the traditional system.

Part V: Conclusions

Chapter 11

A Relational, Identity-Based Framework of Institutional Stability and Change

Introduction

If institutions are, by definition, firmly rooted in taken-for-granted beliefs, norms, and power relations, and if those institutions are so powerful that organizations and individuals conform to them, then how can institutions be changed? In this dissertation, I attempt to address this central paradox in institutional theory by elaborating a relational, identity-based framework for understanding institutional stability and change. Drawing on empirical data derived from an ethnography of surgical residents in a teaching hospital and on conceptualizations of identity as shaped both by cultural and positional institutions (Holland et al., 1988) and by relational dynamics (Van Maanen, 2001; Vinitzky-Seroussi, 1998), I find identity to be the key mediating mechanism linking action and interaction on the one hand with institutions on the other.

Differences between the prescriptions for action and interpretation offered by diverse identities can create tensions for organization members. These tensions can provide members with a space to author new actions and negotiate new interactions with others, thus changing the shape of the institutions. This conceptualization of the relationship between identities, actions and interactions, and institutions can help us reconcile two seemingly incompatible tenets of institutional theory: institutional embeddedness and transformational agency.

Theoretically, my central contribution is to begin to reconceptualize institutional stability and change as comprised of relational processes of action and interaction in particular situations that are enabled and constrained by identities of members in the situation. In any situation, there are three different forms of identity that shape member action and interaction: 1) situational identity--institutionalized cultural and positional prescriptions for action and interpretation for that type of situation that guide members to act according to traditional understandings of appropriate behavior, 2) personal identity--orientation toward the self that guides members to imagine alternative possibilities in the context of a coherent personal narrative and 3) interactional identity--judgment of others in a given situation that guides members to contextualize institutionalized actions and personal possibilities in relation to the imagined responses of others.

These identities are not always unitary, and may provide the organization member with conflicting prescriptions for action in any given situation. In order to navigate the tensions between their relational orientations, organization members may draw on some elements from each of these identities to orchestrate novel actions. If their actions are accepted by interaction partners, members can change interactions, identities, and institutions. I suggest that institutional stability and change can only be captured in their full complexity if they are analytically situated in a relational, identity-based context.

In this concluding chapter, I first use the understanding gained from my empirical analyses in combination with a theoretical conceptualization of identity to develop a framework of the relationship between identities, interactions, and institutions. Next I elaborate this framework by illustrating with my empirical data how it can explain

institutional stability and change. Finally, I discuss the implications of this framework for the existing theory of institutional stability and change.

Framework of the Relationship between Institutions, Identities, and Interactions

The key theoretical idea underpinning my framework is Mead's (1962 [1934]) conception that changes in the institutional order require changes in ourselves and the others with whom we are interacting, and that these changes arise relationally, in interactions between organization members in a community. I start my description of the framework with a discussion of institutions.

Institutions

I define institutions as the set of collective cultural and positional prescriptions for action and interpretation derived from a cumulative history of interaction that shape the identities that members draw on to guide their action in particular situations. In order for these prescriptions to attain the character of institutions, they must be reproduced over time and space. When they do, they become objectified and acquire the status of taken-for-granted facts for organization members.

At ACADEMIC before the work hours changes, collective cultural and positional prescriptions for action and interaction—institutions—shaped residents' identities, actions, and interactions. Collective cultural prescriptions afforded residents an appreciation of the appropriate demeanor of a surgical resident in good standing, that of "iron man." Collective positional prescriptions allowed residents to allocate resources and authority according to position in the strict surgical hierarchy. These collective cultural and positional prescriptions not only specified appropriate actions for particular

situations but also provided residents with interpretations of these actions—an iron man identity and a strict hierarchy were seen as necessary to achieving good patient care and good resident education. Thus, cultural and positional prescriptions were linked—those who most closely approximated the cultural ideal for surgical residents at ACADEMIC also held the highest status in the community.

Situational Identity

For any given situation they find themselves in, members develop a sense of themselves in relation to that situation, which I call a "situational identity." This situational identity is derived from institutions, and as such it is shared by all members of the community. Cultural aspects of institutions provide members with one part of this situational identity--a repertoire of morally appropriate behavior associated with problems encountered regularly in this type of situation by members like themselves and an account as to why these behaviors are appropriate. Positional aspects of institutions provide members with the other part of this situational identity—a repertoire of appropriate actions given their particular place in the status hierarchy in this kind of situation and a justification for why those actions are necessary.

At ACADEMIC, one particular situation became very important to the work hours change—the signout situation. This situation was so important because in order to reduce their work hours, members would need to change their actions in this situation, yet doing so would entail challenging existing institutions. Before the creation of the night float team by the Directors, institutions prescribed a situational identity for residents that required avoiding handoffs—even though handoffs were a common practice in non-

surgical residencies where one medical resident transfers his or her own work to another medical resident at the end of a work shift.

Situational identities at ACADEMIC for signout situations enabled residents to develop certain notions regarding how they were to act in that kind of situation. In signout situations, cultural aspects of the situational identity prescribed that all residents act as "iron men" who "trust no one" by not handing off work to one another. Positional aspects of the situational identity prescribed that juniors defer to seniors in these situations by adopting a somewhat formal manner of speech and by not displaying greater knowledge than their seniors in any of their descriptions of patients. In contrast, these positional aspects prescribed that when seniors signed out to those junior to them they could joke about patients and display knowledge by specifying what kind of emergencies might happen overnight and how the juniors should handle these emergencies should they arise.

The situational identity also provided residents with accounts for why these cultural displays and positional relations were justified. The "iron man" and "trust no one" aspects of the identity were deemed justified in the signout situation because surgical residents needed to take full responsibility for patients in order to deliver good patient care. A strict hierarchy was said to be necessary in the signout situation as a way of reinforcing the message that junior residents should not take it upon themselves to make decisions about patient care when on call that they were unqualified to make given their limited knowledge.

Personal Identity

In addition to drawing on situational identities to craft their actions and interpretations in particular situations, members also draw on their personal identities. Personal identities refer to those self-conceptions that spell out to us the kind of person we believe we really are (Hewitt, 1991 (1976); Van Maanen, 2001; Vinitzky-Seroussi, 1998). These involve understandings of self that are both internal and that transcend particular places and times. Hewitt says: "people have memories and they use them to take stock of and keep track of the self....The self is never merely an object in the particular situation, but also an object linked to past and future" (Hewitt, 1991, p. 123). Members feel the need to create coherent biographies of themselves in order to decrease anxiety (Giddens, 1991) and promote trust with interaction partners (Van Maanen, 2001).

Personal identity emerges from the process of social interaction in which other people are defining a person to himself or herself (Cooley, 1902; Goffman, 1959, 1983; Mead, 1962 [1934], 1977 [1956]). When people act, they are making identity claims by conveying images that signal how they view themselves or hope to be viewed by others. Through their participation in multiple interactions, members begin to build a personal narrative consistent with their definitions of situations and their actions within them.

At ACADEMIC before the work hours changes, personal identities provided many residents with similar guidelines for action and interpretation in signout situations as did situational identities. This was because these residents' senses of continuity, identification, and integration in relation to the self and its projects was so strongly

shaped by the actions and interpretations of the surgical community. Before the work hours change, surgical residency was a total institution (Goffman, 1959). Because residents only went home to sleep, and often did not leave the hospital at all, their personal narratives, for many, were closely bound to the narratives of the surgical community. For these residents, when a resident drew on a felt idea of who he really was to shape his action in a signout situation, who he really was was an iron man who would never dream of handing off work to the on-call resident.

Interactional Identity

While situational aspects of identities enable organization members to categorize particular situations and encode appropriate behavior for these situations, and personal identities enable them to shape their actions in relation to a consistent personal narrative, organization members are also guided by what I call their "interactional identities"--their sense of themselves in relation to their specific interaction partners. As Blumer (1969) suggests, the activities of others enter as positive factors in the formation of an organization member's own conduct; in the face of actions of others, an organization member may abandon an intention or purpose or revise it. The actions of others influence what attempts to do, may oppose or prevent such attempts, and may demand a different set of attempts altogether.

Cultural aspects of interactional identities include the appreciation that participants have of their interaction partner(s) in this particular interaction given either the type of character that they think this partner is in their social world or given their history of past interactions with this partner. Positional aspects of interactional identities have to do with one's position relative to one's interaction partner, ones sense of social

place and entitlement, power, status, and privilege. They provide an organization member with an apprehension, depending on the other present, of his greater or lesser access to spaces, activities, genres, and through those genres, authoritative voices or any voice at all.

At ACADEMIC before the work hours changes, interactional identities and situational identities in signout situations provided organization members with roughly the same set of guidelines for action and interpretation because actions in signout situations were institutionalized. While these actions could have, in theory, varied with the character of a particular interaction partner, the collective prescriptions that guided action most often resulted in a common response on the part of all members of the surgical resident community to this particular situation. It is likely for these reasons that I never observed a resident attempt to hand off work to the on-call resident during signout before the work hours change. Residents knew that they were expected to hand off only patient information and not work, and that when they did so they could count on any of their interaction partners to cover any emergencies that arose in regard to their patients overnight.

Interpretation and Action

Organization members draw on their situational identity, their personal identity, and their interactional identity in particular situations to develop what Blumer (1969) calls a "definition of the situation." This definition enables them to forge a line of action that they hope is appropriate to the situation, consistent with their own ongoing subjective narrative about themselves, and accepted by their interaction partner. Organization

members orchestrate prescriptions for action and interpretation from these identities in what Holland et al. (1988) call their own "spaces of authoring" in order to craft their actions in particular situations.

In settled situations, the authority of one set of prescriptions prevails. The authoritative prescriptions are objectified so that there is not a question of choosing one among other possible prescriptions that are its equal. It is fused with authority and it stands or falls together with that authority (Bakhtin, 1981).

Before the work hours changes at ACADEMIC, in signout situations, a resident shaped action by drawing on his interpretation of self in relation to the situation (situational identity), in relation to his or her own personal narrative (personal identity), and in relation to his or her interaction partner (interactional identity). The prescriptions from the situational identity were institutionalized, objectified, so arrested the dialogue of residents in their spaces of authoring. As a result, residents consistently chose to not to attempt to hand off their work to the on call resident.

Interaction

Many instances of interaction are repetitive and stable. In most situations in which people act toward one another they have in advance a firm understanding of how to act and of how other people will act. Their action is institutionalized--they share common and pre-established meanings of what is expected in the action of participants, and accordingly each participant is able to guide his own behavior by such meanings. Members attempt actions and these are unlikely to be contested by others.

Before the work hours changes at ACADEMIC, interactions in signout situations were guided by collective prescriptions and were not contested. In signout situations, a resident shaped action by drawing on his or her interpretation of self in relation to the situation (situational identity), in relation to his or her interaction partner (interactional identity) and in relation to his or her own personal narrative (personal identity). For iron men, the dominant members of the community, the prescriptions provided by all three identities were consistent with one another. The habitual actions in this situation—no attempt to hand off work and no attempt to take it from the resident going home that night—were consistently enacted by the residents. Through their joint actions, the residents produced the interaction of no handoffs. This, in turn, reproduced their situational identities, the personal identities of the iron men, and their interactional identities in relation to their interaction partner.

The Relationship between Institutions, Identities, and Interactions

These concepts form the basis of my framework of the relationship between Institutions, Identities, and Interactions. As shown in **Figure 11a**, *cultural and positional prescriptions for action and collective prescriptions for interpretation—institutions--* shape the *situational identities* of organization members in particular situations. Members draw on these identities as well as on their *personal identities* and *interactional identities* in particular situations to craft internal, subjective interpretations of their surroundings in the *space of authoring*. Drawing on the repertories of prescriptions for action and interpretation offered by these three identities, organization members orchestrate their *actions*. These actions are both instrumental and expressive of identities, and they must be accepted by interaction partners in order for members to accomplish

joint action--*interaction*. Through their interactions with one another, members continuously shape *identities* which either reproduce or recreate *institutions* over time.

Institutional Stability and Change

Since institutions are related to identities, actions, and interactions then the dynamics of institutional stability and change can be explained by stability or change in each of these elements.

Identities

Identities that shape action are not necessarily unitary. Each identity provides a specific point of view on the situation at hand. As such, identities may all be juxtaposed to one another, mutually supplement one another, or contradict one another as they coexist in the consciousness of the organization member. In the context of such diverse perspectives, organization members create by orchestration, by arranging elements of each identity (Holland et al., 1988). They work within a set of constraints that are a set of possibilities for action.

The vantage point rests within the "I" and creating comes from the "I", but the forms of action and interpretation that the "I" brings together in novel combinations come from collective experience. The freedom of action comes from what Bakhtin (1981) calls an internal "dialogue"--the ways differing identifications can be counterposed, brought to work against one another, to create a position, a member's own voice, from which he or she works Members can create new actions and interpretations by recombining elements from those they know.

In situations where the usual authorities are unsettled, there is little agreement about how organization members should coordinate these various identities. In these situations, members can significantly reorient their own actions and can even participate in the creation of new identities and the cultural and positional institutions that are constituted by them.

At ACADEMIC, to forge a line of action in signout situations, residents drew on their situational, personal, and interactional identities. Their situational identity--sense of self in relation to traditionally expected actions in signout situations—provided them with prescriptions for actions based on traditional surgical interpretations. Their personal identity—sense of self in relation to their own personal narrative over time—provided them with prescriptions for action based on their own history of past actions and interpretations drawn from the other social domains in which they participated. Their interactional identity—sense of self in relation to their interaction partner—provided them with prescriptions for action based on their judgment of the likely response of their interaction partner to various actions.

Before the Directors created the night float team and encouraged day interns to hand off work to moonlighters, institutionalized prescriptions for demeanor and relations of authority in signout situations had prevailed and had meant that the surgical situational identity silenced other potential voices in the space of authoring. Once the Directors disturbed conventional prescriptions, this enabled residents who wanted to change actions to significantly reorient their behavior in some of these situations.

In the context of disturbed prescriptions for demeanor and deference in signout situations, residents were given the capacity to create new actions by orchestrating

elements of each identity. In these situations, by combining and counterposing their different identities, these residents were able to act in new ways. Some residents were better able to develop their own voice than others because they had greater exposure to and experience with using other prescriptions. Residents who had personal identities that differed from the surgical situational identities had a wider repertoire of prescriptions to draw on for change.

Space of Authoring and Actions

Not all members are equally motivated to make change. Members whose personal identities are consistent with the collective situational identities derive their self-esteem and their high status from making traditional identity claims. They have no reason to question instiutionalized arrangements.

Other members have less interest in maintaining the status quo, because they are less able to compete effectively in attaining the shared cultural persona of a member in good standing and the elite position associated with it. These "latent challengers" hold personal identities whose prescriptions for action and interpretation conflict with those of the situational identities in the organizational social world. Because of their diverse personal identities, they hold inferior positions in this world. In addition, they are not able to achieve a consistent personal narrative across the various social worlds in which they participate.

On the one hand, in spite of the tensions between their various identities and their inferior positioning, latent challengers develop an understanding of the cultural and positional prescriptions for action and interpretation of their social world, and an

emotional attachment to that world. They come to describe themselves in ways that define them as members in good standing, and they attempt to avoid or dispute negative labels. They not only know the prescribed actions and interpretations for the situational identities, but they also embrace them as ways to define themselves. Because their senses of self are tied to these situational identities, they sometimes avoid violating them because doing so would lower their value in their own eyes.

On the other hand, while they are emotionally attached to their situational identities, they have also developed a sense of themselves as different from the valued cultural persona and as recipients of unfair treatment because of their diverse identities. Because of the tension between their personal and situational identities and because of their lower status in the organizational world, they are more reflective about the traditional institutions than are those residents who benefit from the status quo. However, through their early encounters at the organization, they have likely learned to act in ways consistent with the prescribed demeanor and deference structure, even though their own positioning within that system is inferior.

Ruptures in the taken-for-granted can remove prescriptions of the situational identity from automatic performance to commentary. In these instances, some aspects of the situational identity become available for reflection and comment. Then, those with inferior positioning may begin to grasp consciously the emotional, evaluative nature of prescriptions that are used to position them as inferior. When members fix upon objectifications of themselves that they find unacceptable, these objectifications often motivate plans for new kinds of actions. They author new actions by drawing on their identity repertoires.

In these situations, members draw on their personal identities to shape actions that are consistent with their personal narratives, and they draw on their interactional identities to shape actions that are likely to be accepted by their interaction partners. Since attempts to change actions are also new identity claims, these actions may threaten interaction partners. Thus, challengers are very careful about when they risk confrontation by attempting new actions because of potential rejection and embarrassment or loss of resources.

At ACADEMIC, not all residents were equally able to accomplish the iron man persona through their actions and interactions. These latent challengers with diverse identities included 1) residents for whom general surgery was not their ultimate career path,. 2) women who felt they could not get away with acting like iron men without being labeled overly aggressive ,and 3) male residents who wanted to take on responsibilities in personal relationships with significant others outside the hospital.

Their personal identities provided them with inferior positioning in the surgical world. Because of these identities, they were not allowed to enter certain spaces, use certain language, wear certain clothes, express certain emotions, or engage in certain deeds that were integral parts to achieving the iron man persona. In addition, for these latent challengers, there was a disparity between how they were expected to act in surgical residency versus how they had historically acted in the other domains in which they participated. This disparity in their personal narrative over time and place created a tension for them.

In spite of the tensions between their various identities and their inferior positioning, before the work hours changes were initiated at ACADEMIC, latent

challengers had developed an understanding of themselves in the surgical world and they were emotionally attached to their surgical senses of self. They had come to describe themselves in ways that defined them as good residents, and they had attempted to avoid or dispute negative labels. Because their senses of self were tied to the surgical situational identities, they had avoided attempting new actions in signout situations because doing so would have lowered their value in their own eyes as well as in the eyes of others.

The rupture in the taken-for-granted occasioned by the work hours changes led them to see their positioning as socially constructed rather than preternaturally given. They began to find it unacceptable that they were unable to act as "good" surgical residents in addition to acting as "good" significant others, women, or residents in other specialties. In the context of unsettled prescriptions for demeanor and deference in signout situations, latent challengers were able to envision new actions in signout situations by drawing together prescriptions for action and interpretation offered by each of their identities in new ways. By combining and counterposing their different identities, these latent challengers began to try to act differently.

But they did not attempt to change their actions in all signout situations. Attempting handoffs was a potential identity confrontation--handing off threatened the iron man demeanor and the moonlighter's prescribed senior positionality. Thus, latent challengers were very careful about when they risked confrontation by attempting handoffs because of potential rejection or loss of access to further training from the iron men. When they entered signout situations, latent challenger interns carefully judged the likely response of their interaction partner given the demeanor he had shown in past

interactions and given his likelihood of wanting to receive deference in lieu of his more senior position. Challenger interns' assessments of their interactional identity vis-à-vis a particular moonlighter in signout situations enabled them to weigh potential consequences of new actions. In some cases, latent challengers chose to repeat traditional actions in order to avoid sanction from their particular interaction partners. In others, they attempted new actions.

Interactions

Organization members can succeed in efforts to change actions only as part of a collective. While they may attempt new actions, these new actions may not be accepted by their interaction partners. Interaction proceeds through a process of interpretation and action. As members act, they make identity claims and they interpret the identity claims made by others. As members fit their lines of action to one another, their actions give rise to interaction. Since attempts to change actions are not only new instrumental actions but are also new identity claims, members who benefit from the status quo are likely to experience these new actions as personal challenges.

In order for new institutions to be created, members who benefit from the status must accept new actions. This can happen in several ways. First, powerful challengers can remove die hard defenders from situations critical to the change effort. Then when challengers attempt new actions they can do so without violating the highly valued persona or status of the defender. Challengers' change attempts with other challengers in these situations lead to new forms of interaction which transform situational identities for

these kinds of situations. However, unless situational identities are transformed across a wide variety of situations, institutions will not be noticeably changed.

Second, as challengers attempt new actions, defenders may be put in situations where their identities provide them with conflicting prescriptions for action. In order to decide how to act in these situations, a defenders will weigh choices offered to him by the situational identities, his own personal identities, and his interactional identity vis a vis his interaction partners. In these situations, a defender will need to choose to enact some elements of the persona and not others, and to give up some possibilities for resources or status and not others. His choice to use particular prescriptions for actions over others will reshape the defenders's own personal identity as well as the situational identity and his interactional identity. Once a defender begins to change his actions, he may reinterpret traditional institutional prescriptions to support these new actions. Other defenders may be persuaded to accept these reinterpretations since they are supported by another powerful defender.

At ACADEMIC, for an iron man whose personal identity was consistent with the situational identity in the signout situation, the confirmation of his signout behavior as proper by others in the situation was vital to him if he was to retain a view of himself as worthy and a status that this worthiness ensured. When latent challengers began to attempt new actions in signout situations, these new actions challenged not only the institutionalized situational identity but also the personal identities of the iron men.

Iron men, whose character and authority in the setting were predicated on traditional arrangements, resisted change in a variety of ways—teaching, beating, gossiping about, and isolating the challengers—and were, for a time, quite successful.

By retaliating directly, they prevented challengers from realizing new situational identities in interactions and they dissuaded members who depended on the resources of iron men from attempting further new actions. By retaliating indirectly, they publicly reinforced traditional institutions and isolated members who continued to challenge.

Interns and moonlighters did not act in signout situations only in relation to the traditional situational identity, their own personal identity, and their interactional identity vis-à-vis particular interaction partners. Challenger Directors and chiefs also provided new cultural and positional prescriptions for action in signout situations which shaped the actions of the interns and moonlighters. These new prescriptions were initially resisted by iron man chiefs. However, once some of the interns began using these prescriptions to hand off work and moonlighters failed to do this work, particular tasks began falling through the cracks. This made the chiefs look bad in front of the attendings, on whom they depended for teaching and recommendation letters for future fellowship training. In order to avoid further negative evaluation by the attendings, the iron man chiefs worked with the challenger chiefs and the Directors to redesign the signout situation. They replaced the senior moonlighter with an intern so that challenger interns could attempt new actions in a way that minimized the challenge to the traditional surgical demeanor and deference structure. In addition, the iron man chiefs reinterpreted traditional prescriptions for action in signout situations in order to support handoffs. Interns drew on these new prescriptions to attempt and accept handoffs from one another in signout situations.

Institutions

As members attempt new actions and recreate situational identities, they also recreate their own personal identities and those of their interaction partners. Since selves are constituted by their organized social relations to one another, members cannot reconstruct those selves without also reconstructing, to some extent, the institutional order (Mead, 1962 [1934], 1977 [1956]). As members communicate that which is socially defined as real to the next generation of members, their actions and interpretations become taken-for-granted (Zucker, 1977). When acts have ready-made accounts, they are what Zucker (1977) calls "institutionalized"—they are both objective (consistent interpretation of the actions across instances of these actions) and exterior (reconstructed in intersubjective understanding so that the actions and interactions are seen as part of the external world). While these actions and accounts are socially created, they function as objective prescriptions because their social origin is ignored.

After the Directors and Chiefs redesigned the signout situations at ACADEMIC, the residents began to change their interactions and the shared situational identity for signout situations. In order to describe the micro-dynamics that occurred in situations between challengers and iron man in great detail, I have focused on one situation that was particularly important to institutional change at ACADEMIC-- the signout situation. The changes I saw in signout situations were similar to those I saw across a range of situations from morning rounds, to midday operating, to afternoon work up on the patient floors. By changing their interactions across these situations, ACADEMIC residents changed the prescribed identity for many situations. As the Chiefs and residents taught these new prescriptions to new recruits, they took on a social facticity and became taken-

for-granted by these new interns. In this way, over time, ACADEMIC residents changed not only their actions, interactions, and identities, but also the institutions that shaped them.

The dramatic changes that I saw occur over the course of a few years at ACADEMIC would have been unlikely to happen had it not been for multiple new prescriptions for action and interpretation offered by actors outside of ACADEMIC in response to changing historical conditions. In addition to new prescriptions for action and interpretation offered in relation to the work hours regulation, new prescriptions were offered in response to the declining status of the profession of surgery and the increasing national interest in time for family and community life on the part of residents across medical and surgical specialties. ACADEMIC challengers were able to draw on all of these new prescriptions for action and interpretation to shape their change attempts.

Implications for Theory

Institutional Stability

This framework makes several contributions to existing theory of institutional stability. Institutional theorists have suggested that institutions remain stable and shape patterned behavior because of three institutional: 1) members cannot conceive of working in other ways (DiMaggio et al., 1983; Meyer et al., 1977; Zucker, 1977), 2) members have internalized values from their communities and feel obligated to use particular forms of action that have been legitimated (Hughes, 1971; Parsons, 1951; Selznick, 1949) and 3) members fear the sanction that would stem from breaking formal regulations (Scott, 2001). Some theorists criticize this "new" institutionalist attention to cognition, norms, and regulations as overly structuralist, as presenting an image of a passive,

malleable member who is driven by internalized cognitions, norms, or regulations. They argue that "old" institutionalists' elaboration of the role of agency and power are necessary to explain institutional dynamics (Hirsch, 1997; Hirsch et al., 1997).

My study explores these issues in relation to institutional stability. First, I demonstrate that even when members fail to challenge institutions, they do not do so unreflectively. Instead, they choose how to act by gauging actions appropriate to the situation, their own personal narrative, and their interaction partners. Even when they choose to act in traditional ways, they do so only after defining the situation they are in and shaping their action accordingly.

Second, I show that not all members hold similar values; some groups of members are more likely to question and challenge institutional prescriptions than others. Members with diverse personal identities are likely to reflect upon potential new actions. Because the prescriptions for action provided by their personal identities and their situational identities conflict, they feel tensions associated with an inability to maintain a consistent personal narrative across their different social worlds. This motivates them to attempt change. Also, because of their diverse personal identities, they are afforded inferior positioning in the organizational world to those whose personal identities are consistent with situational identities in this world, so they have less to lose by attempting new actions. Finally, their diverse personal identities provide them a wider repertoire of prescriptions for action so they have an easier time envisioning new ways of acting and are more practiced in acting in different ways.

Finally, I show that institutional stability is constituted not only by members silencing themselves to avoid sanction. Even when some members challenge existing

arrangements in particular situations, institutions may appear stable on a more macro-level because their challenges may be rejected by those who benefit from the status quo. Members who benefit from the status quo are likely to experience new actions as personal challenges because the identity and authority of these members is predicated on traditional arrangements. By retaliating directly and indirectly, these defenders shape the actions and interactions of members. This coercion of some members by others to repeat traditional actions may seem from the outside like "institutional stability."

Institutional Change

My framework also contributes to analyses of institutional change. Existing theory of institutional change focuses on the winning of new governance structures by social movements (Fligstein et al., 1996; Haveman et al., 1997; Holm, 1995; Lounsbury, 2001; McAdam et al., 1996) and the creation of new cultural logics by institutional entrepreneurs (DiMaggio, 1988; Garud et al., 2002; Hardy & Clegg, 1996). This theory presents the construction of new governance structures or logics as emergent, dynamic processes, forged in the interaction between challengers and defenders outside of workplaces. Exploration of these processes has provided us with considerable insight into the political dynamics of mobilizing actors and sustaining the cohesion necessary for collective action. However, as Barley and Tolbert (1997) have noted, institutions are only maintained or changed as they are enacted in practice, and there has been surprisingly little examination of these micro-dynamics of institutions.

Theorists who describe processes of institutional change through collective action and institutional entrepreneurship tend to depict governance structures and logics as

relatively stable prescriptions for action and interpretation that, once created by members outside of workplaces, can be appropriated by those inside workplaces. This representation of governance structures and logics as contested initially and then stabilized for use by members is a reification of disparate and continuous processes of action formation and meaning making that organization members engage in as they interact with one another in day-to-day work situations. In my study, I show that challengers are not able to simply abide by prescriptions stemming from new governance structures nor appropriate new cultural logics created by institutional entrepreneurs created outside of their organization.

Instead, these prescriptions for action and interpretation become elements in the repertoire of prescriptions for interpretation and action offered by their situational identity for particular situations. As members enter particular situations, they draw on these new prescriptions in addition to those offered by their traditional situational identity and those offered by their other identities. They shape their definition of the situation in relation to past expectations, their own personal narratives, and their judgment of the likely responses of their interaction partners. They orchestrate different prescriptions from each of these identities to develop a definition of the situation that enables them to shape their action attempts in the particular situation. Even if they attempt an action that is consistent with new prescriptions for action and interpretation offered by social movements and institutional entrepreneurs outside the workplace, organization members' actions only creates change in situational identities and institutions if these actions are accepted by their interaction partners.

Since changes in governance structures and logics may be created outside of workplaces, but are not merely appropriated and implemented by members within workplaces, it is insufficient to study macro-level change dynamics alone. We must also explore the micro-level mechanisms through which change occurs. At the micro-level, members choose to combine new prescriptions for action and interpretation with others offered by other dimensions of their identities when these prescriptions help them to better navigate the tensions presented by their multiple identities and to improve their position in their organizational world. They succeed in accomplishing their new actions only when their new identity claims are accepted by their interaction partners. New actions are negotiated with these interaction partners who are also shaping their own actions in relation to the prescriptions provided to them by their different identities. When new actions are attempted and accepted, new forms of interaction occur and reshape identities and institutions. It is only by looking closely at these relational, identity-based dynamics that we can fully understand institutional change.

Relational, Identity-Based Dynamics of Institutional Stability and Change

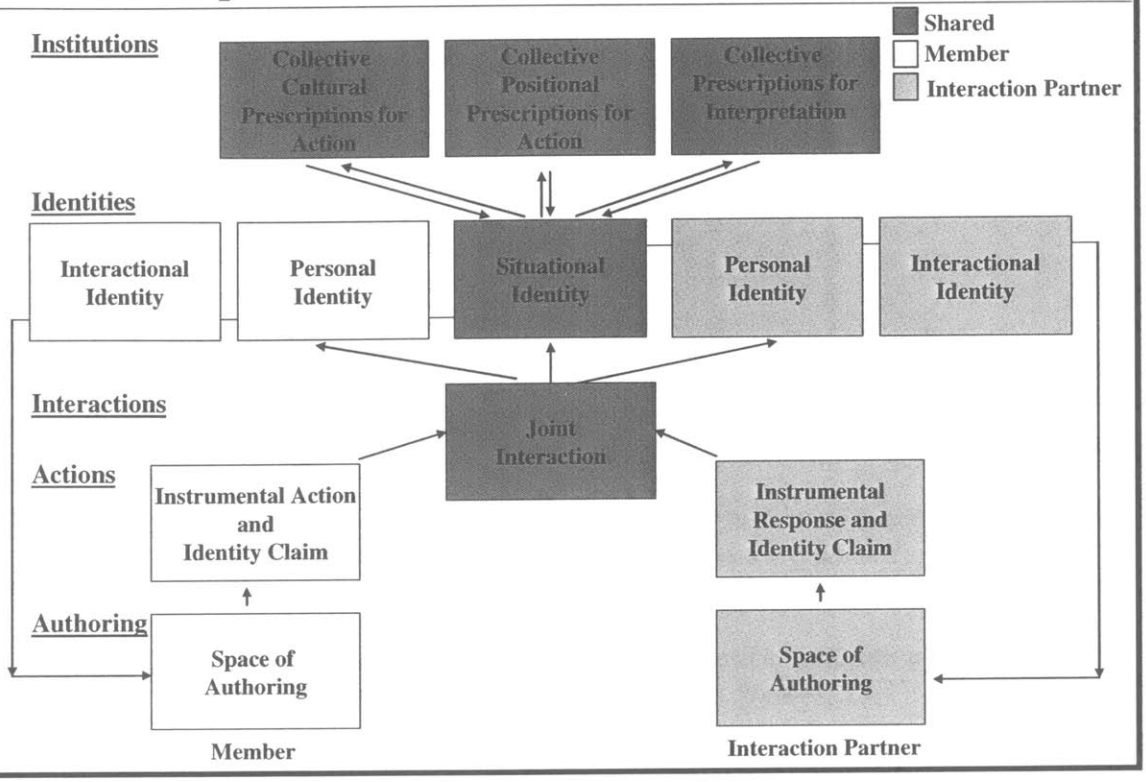
In this dissertation, I have told the story of surgical residents at ACADEMIC hospital who accomplished both institutional stability and institutional change in their interactions with one another in the wake of nationwide changes occurring outside their hospital. Through this story, I have shown that social movements and institutional entrepreneurs may attempt to maintain institutional stability or to promote institutional change through their actions outside of workplaces, but that institutional stability and change occur only insofar as they are negotiated in the interactions of workplace members. Members negotiate stability and change in particular situations as they shape

their actions according to their sense of self in relation to the situation, their own personal narrative, and their judgment of the likely response of their interaction partner to their various actions.

Processes of institutional stability and change may appear global, but they are highly personal. Some members, because of personal problems they face in navigating the conflicting demands in their daily life, desire change. Others, because their sense of self is tied up in displaying a particular persona and because their high status is contingent upon it, fiercely resist attempts by others to make change.

To the outsider, these contests between one action or another in familiar situations may appear trivial, even petty. But it is in these contests around small actions in mundane situations that the deeply-held beliefs, emotionally-laden values, and positions of power and privilege that constitute the institutional order are accomplished. Institutions are maintained and changed every day by particular people in particular situations in relation to one another as they each fight to either preserve or change their sense of self and the day-to-day privileges or costs associated with it.

Figure 11a:
Relationship between Institutions, Identities, and Interactions



References

Altman, L. K., & Grady, D. 2002. Hospital accreditor will strictly limit hours of residents, *The New York Times*, Late edition ed.: 1. New York.

Bakhtin, M. M. 1981. *The dialogic imagination* (M. Holquist, & V. Liapunov, Trans.). Austin, TX: University of Texas Press.

Barley, S. R. 1986. Technology as an occasion for structuring: Evidence from observations of CT Scanners and the social order of radiology departments. *Administrative Science Quarterly*, 31(1): 78-108.

Barley, S. R. 1996. Technicians in the workplace: Ethnographic evidence for bringing work into organization studies. *Administrative Science Quarterly*, 41(3): 404-441.

Barley, S. R., & Tolbert, P. S. 1997. Institutionalization and structuration: Studying the links between action and institution. *Organization Studies*, 18(1): 93-117.

Becker, H. S., & Carper, J. W. 1956a. The development of identification with an occupation. *American Journal of Sociology*, 61(4): 289-298.

Becker, H. S., & Carper, J. W. 1956b. The elements of identification with an occupation. *American Journal of Sociology*, 21: 341-348.

Berger, P. L., & Luckmann, T. 1967. *The social construction of reality*. New York: Doubleday Anchor.

Bosk, C. L. 1979. *Forgive and remember: Managing medical failure*. Chicago: University of Chicago Press.

Brint, S., & Karabel, J. 1991. Institutional origins and transformations: The case of American community colleges. In W. W. Powell, & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 337-360. Chicago: University of Chicago Press.

Chang, A. 2004. Group says new doctors work fewer hours, *Associated Press*.

Cooley, C. H. 1902. *Human nature and the social order.* New York: Scribner.

DiMaggio, P. J. 1988. Interest and agency in institutional theory. In L. G. Zucker (Ed.), *Institutional patterns and organizations: Culture and environment*: 3-21. Cambridge, MA: Ballinger.

DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2): 147-160.

DiMaggio, P. J., & Powell, W. W. 1991a. Constructing organizational field as a professional project: U.S. art museums, 1920-1940. In W. W. Powell, & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 267-292. Chicago: University of Chicago Press.

DiMaggio, P. J., & Powell, W. W. 1991b. *The new institutionalism in organizational analysis.* Chicago: University of Chicago Press.

Edelman, L. B., Uggen, C., & Erlanger, H. S. 1999. The endogeneity of legal regulation: Grievance procedures as rational myth. *The American Journal of Sociology*, 105(2): 406-454,449 pages.

Fligstein, N. 1987. The intraorganizational power struggle: Rise of finance personnel to top leadership in large corporations, 1919-1979. *American Sociological Review*, 52: 44-58.

Fligstein, N. 1991. The structural transformation of American Industry: An institutional account of the causes of diversification in the largest firms, 1919-1979. In W. Powell, & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis.* Chicago: The University of Chicago Press.

Fligstein, N., & MaraDrita, I. 1996. How to make a market: Reflections on the attempt to create a single market in the European Union. *American Journal of Sociology*, 102(1): 1-33.

Galaskiewicz, J. 1991. Making corporate actors accountable: Instituion-building in Minneapolis-St. Paul. In W. W. Powell, & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 293-310. Chicago: University of Chicago Press.

Garud, R., Jain, S., & Kumaraswamy, A. 2002. Institutional entrepreneurship in the sponsorship of common technological standards: The case of Sun Microsystems and Java. *Academy of Management Journal*, 45(1): 196-214.

Giddens, A. 1984. *The constitution of society: Outline of the theory of structure*. Berkely, CA: University of California Press.

Giddens, A. 1991. *Modernity and self-identity*. Cambridge: Polity.

Giddens, A. 1993. The Giddens Reader. In P. Cassell (Ed.). Stanford, CA: Stanford University Press.

Goffman, E. 1959. *Presentation of self in everyday life*. Garden City, NY: Doubleday.

Goffman, E. 1961. *Asylums: Essays on the social situation of mental patients and other inmates* ([1st] ed.). Garden City, N.Y.: Anchor Books.

Goffman, E. 1983. The interaction order. *American Sociological Review*, 48: 1-17.

Greenwood, R., Suddaby, R., & Hinings, C. R. 2002. Theorizing change: The role of professional associations in the transformation of institutionalized fields. *Academy of Management Journal*, 45(1): 58-80.

Hardy, C., & Clegg, S. 1996. Some dare call it power. In S. Clegg, C. Hardy, & W. R. Nord (Eds.), *Handbook of organization studies*: 77-114. London; Thousand Oaks, Calif.: Sage Publications.

Haveman, H. A. 1992. Between a Rock and a Hard Place: Organizational Change and Performance Under Conditions of Fundamental Environmental Transformation. *Administrative Science Quarterly*, 37(1): 48,28 pages.

Haveman, H. A., & Rao, H. 1997. Structuring a theory of moral sentiments: Institutional and organizational coevolution in the early thrift industry. *American Journal of Sociology*, 102(6): 1606-1651.

Hewitt, J. P. 1991 (1976). *Self and society*. Boston: Allyn and Bacon.

Hirsch, P. M. 1975. Organizational effectiveness and the institutional environment. *Administrative Science Quarterly*, 20(3): 327.

Hirsch, P. M. 1997. Sociology without social structure: Neoinstitutional theory meets Brave New World. *American Journal of Sociology*, 102: 1702-1723.

Hirsch, P. M., & Lounsbury, M. 1997. Ending the family quarrel: Toward a reconciliation of the "old" and "new" institutionalisms. *American Behavioral Scientist*, 40: 406-418.

Holland, D., Lachicotee, W., Skinner, D., & Cain, C. 1988. *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.

Holm, P. 1995. The dynamics of institutionalization: Transformation processes in Norwegian fisheries. *Administrative Science Quarterly*, 40(3): 398.

Holzman, I. R., & Barnett, S. H. 2000. The Bell Commission: Ethical implication for the training of doctors. *Mount Sinai Journal of Medicine*, 67(2): 136-139.

Hughes, E. C. 1971. *The Sociological eye*. New York: Aldine.

Jepperson, R. L. 1991. Institutions, institutional effects, and institutionalization. In W. W. Powell, & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 143-163. Chicago: University of Chicago Press.

Lounsbury, M. 2001. Institutional sources of practice variation: Staffing college and university recycling programs. *Administrative Science Quarterly*, 46(1): 29-56,29 pages.

Lounsbury, M. 2002. Institutional transformation and status mobility: The professionalization of the field of finance. *Academy of Management Journal*, 45(1): 255-266.

Maguire, S., Hardy, C., & Lawrence, T. B. 2004. Institutional entrepreneurship in emerging fields: HIV/AIDA treatment advocacy in Canada. *Academy of Management Journal*, 47(5): 657-679.

McAdam, D., McCarthy, J. D., & Zald, M. N. 1996. *Comparative perspectives on social movements*. Cambridge: Cambridge University Press.

Mead, G. H. 1962 [1934]. *Mind, self, and society; from the standpoint of a social behaviorist*. Chicago: University of Chicago Press.

Mead, G. H. 1977 [1956]. *On social psychology; selected papers* ([Rev. ed] ed.). Chicago: University of Chicago Press.

Meyer, J. W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2): 340-363.

Mukherjeee, S. 2002. Are medical residents working too hard? *New Republic*.

Orlikowski, W. J. 2000. Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization Science*, 11(4): 404-428.

Orr, J. E. 1996. *Talking about machines: An ethnography of a modern job*. Ithaca, N.Y.: ILR Press.

Parsons, T. 1951. *The social system*. Glencoe, Ill.: Free Press.

Rao, H., Monin, P., & Durand, R. 2003. Institutional change in toque ville: Nouvelle cuisine as an identity movement in French gastronomy. *The American Journal of Sociology*, 108(4): 795-843.

Scott, W. R. 2001. *Institutions and organizations: Second edition*. Thousand Oaks, CA: Sage Publications.

Scott, W. R., Ruef, M., Mendel, P. J., & Caronna, c. A. 2000. *Institutional change and healthcare organizations: From professional dominance to managed care*. Chicago: University of Chicago Press.

Selznick, P. 1949. *TVA and the grass roots*. Berkeley: University of California Press.

Strazouso, J. 2004. Young doctors working too many hours, *Associated Press*.

Thornton, P. H., & Ocasio, W. 1999. Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958-1990. *The American Journal of Sociology*, 105(3): 801-843,843 pages.

Tolbert, P. S. 1985. Institutional environments and resource dependence: Sources of administrative structure in institutions of higher education. *Administrative Science Quarterly*, 30(1): 1.

Tolbert, P. S., & Zucker, L. G. 1983. Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880-1935. *Administrative Science Quarterly*, 28(1): 22.

Tolbert, P. S., & Zucker, L. G. 1996. The institutionlization of institutional theory. In S. Clegg, C. Hardy, & W. R. Nord (Eds.), *Handbook of organization studies*: xxix, 730. London; Thousand Oaks, Calif.: Sage Publications.

Van Maanen, J. 1976. Breaking in: Socialization to work. In R. Dubin (Ed.), *Handbook of work, organization, and society*: 67-101. Chicago: Rand McNally College Pub. Co.

Van Maanen, J. 2001. *Identity work: Notes on the personal identity of police officers.* Paper presented at the American Sociological Association, Chicago.

Van Maanen, J., & Barley, S. R. 1984. Occupational communities: Culture and control in organizations. *Research in organizational behavior*, 6: 287-365.

Van Maanen, J. E., & Schein, E. 1979. Toward a theory of organizational socialization. In B. M. Staw (Ed.), *Research in Organizational Behavior*, Vol. 1: 209-264. Greenwich, CT: JAI Press.

Vinitzky-Seroussi, V. 1998. *After pomp and circumstance: High school reunion as an autobiographical occasion.* Chicago and London: University of Chicago Press.

Zucker, L. G. 1977. The role of institutionalization in cultural persistence. *American Sociological Review*, 42: 726-743.

Zucker, L. G. 1987. Institutional theories of organization. *Annual Review of Sociology*, 13: 443-464.