

**Moving Targets: Managing Interinstitutional Relationships
in Green Building Design and Construction**

by

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A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Natural Resources and Environment)
in the University of Michigan
2013

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To Gram, mom, dad, Lisa,
& the five boys who have made me smile:
Lou, Bug, Lava, Kusha,
& Loüf

Acknowledgements

This document would have been impossible without individuals who supported and believed in me and my work, fully realizing that I would be the only listed author. I have been humbled by their generosity.

Because of my promises of confidentiality, I can only thank my research participants collectively. In many cases, they extended unearned trust that was necessary for me to understand what they understood. This industry works under tight time and budget constraints, so I fully realize their generosity in the gifts of time they provided.

Without the financial support of the Frederick A. and Barbara M. Erb Institute Doctoral Fellowship, I would not have made it past my first year. Specific thanks go to Tom Lyon for supporting my project in its formative years. Dominique Abed and Karen Houghtaling were joys to work with on many projects. They and Henry Ladd provided perfect support for the Constructing Green conference, accommodating my juggling of priorities and travel schedules. In addition to the faculty and staff of Erb, I could not have made it through my “cohort of one” without the friendship and inspiration of the Erb Masters’ students.

Without the financial support of the Graham Environmental Sustainability Institute Doctoral Fellowship, I would not have been able to perform the research in this document. Thanks go to Brian Talbot and Don Scavia for their flexibility and creativity, in addition to their help in facilitating some of my research challenges.

Without the financial support of the Horace H. Rackham School of Graduate Studies Dissertation Fellowship, writing this dissertation would have been delayed between a year to indefinitely. The Interdisciplinary Committee on Organizational Studies (ICOS) provided key funding for the pilot study of this dissertation work.

Within the strange process of an SNRE doctoral program, enormous thanks goes to Sondra Auerbach, Diana Woodworth, Karen Force, and Jennifer Taylor for helping me comb through the

bramble bushes of matriculation, funding sources, and deferment. Both Rackham and SNRE also provided important conference funding support.

Extraordinary appreciation goes to those whose software makes every single moment of writing this dissertation pleasurable: the folks at Literature & Latte for Scrivener, Third Street Software for Sente, Omni for OmniFocus, Jaysen Marais for Daily Routine, Pockeysoft for UPad, and Apple for too many things to count.

My colleagues at Penn State provided me with flexibility to finish this dissertation. My new department head Mehrdad Hadighi brought with him refreshing management policies that encourage colleagues to “leave alone” those who are on summer, sabbatical, or full course release to pursue their research work. Senior colleagues Darla Lindberg and Jawaid Haider understood why I was undertaking this task, and gladly played substitute teacher while I was in Ann Arbor. I must also thank my students of architecture who were undergoing essentially the same process I was, and therefore kept me humble. As I tried to make them comfortable with the uncertainty of an architectural design concept, I became more comfortable with the uncertainty of a doctoral dissertation.

Tim Simpson and Matt Parkinson warmly welcomed me into the PSU interdisciplinary group thinking about design. They allowed me to be a participant observer, helping to understand the seeds of alternative logic structures.

The Penn State Organizational Research Group at the Smeal College of Business extended a warm welcome to this displaced doctoral student. Raghu Garud showed interest in my work from my first visit, while feedback from Denny Gioia, Vilmos Misangyi, Barbara Gray, Forrest Briscoe, and Joel Gehman was invaluable. Every other Wednesday at noon, the sparks of my mind light up in Happy Valley.

I thank Greg Keoleian for seeing the potential in my work from the first phone interview, and for his graciousness when I realized that I could only do one dissertation at a time. Rachel Kaplan’s reminder that you should leave something to study for the rest of your career stayed with me through each page.

My committee provided unwavering support, even when I was unsure of what I was doing. They are also “wickedly smart,” as one friend observed. MaryCarol Hunter showed me that a

simple investigation can yield meaningful discoveries, and provided welcome skepticism when I did not explain clearly or adequately. Victoria Johnson shared with me her thinking, support, encouragement, and her valuable tips on gaining research access. Her reviews of my work were incredibly generative, helping me to streamline my arguments.

Early on, I was told to take any class that Jason Owen-Smith taught because he was “brilliant.” (I also heard this rule as an undergrad at Carnegie Mellon while Herb Simon was teaching, but didn’t think the Administrative Science stuff very interesting!?! I listened this time.) Jason’s course introduced me to sociological thinking, and showed me his pair of x-ray glasses. I would bring him my mess of enthusiastic thoughts, and he would show me the structure of the argument I was dancing around. “Rebecca, you have many threads but no weave” was the most valuable phrase that launched me into pursuit of meaningful contributions to the organizational literature. Thank you for grumping at me.

There are not enough words of thanks for Andy Hoffman, who saw potential in my naïve launch into this doctoral program. He focused on the context, while I worked on the content. Andy is my biggest critic, can immediately point to the weakness in my argument, and holds me to high standards. I want nothing less for an advisor. Yet somehow, he is able to do this and provide a supportive “You can do it!” when my doubts run high. Andy first introduced me to the lens of organizational theory as something that “may interest” me. I came back to his own work not through his urging, but through its theoretical alignment with my own epistemology. It would be difficult—if not impossible—to find a more supportive and responsive doctoral advisor.

Catherine Benson Wahlén was supposed to be my “Greenbud mentee” at SNRE but has instead become my mentor. She doubled my doctoral cohort from one to two, and reminds me that the invisible college is our most important resource. She has edited every paper, every funding application, every job application, every research access email I sent her while doing her own fieldwork in Cambodia and Papua New Guinea, and now living in Kuala Lumpur. Her positive energy lifts me up when the dissertation work feels like Groundhog Day.

Nardia Haigh, Yin, and Yang, provided me with a true second home for my Ann Arbor visits. Nardia served as friend, mother, instigator, consoler, skeptic, cheerleader, editor, chef, and more. I will need to make a lot of karma deposits to balance this account.

Judith Walls provided me with inner strength through some of the really, really hard parts, and gave me faith that I really could do this. Her September 2010 edits were crucial to my progress. Steve Walls made us all remember that the rest of the world could be both fun and exciting in case we wanted to jump ship!

I would have never made it through my first year without the advice and help of Melissa Forbes. Tim Baird, John Barbera, Sean Burkholder, Mike Collins, Kristen Dotson, Beth Duckles, Maria Farkas, Jason Good, Lisa Henn, Halle & Darin Jensen, Shaw Lacy, Kilolo Luckett, Nick White and my USGPRU racing friends all treated me as though I was a real human being despite my temporary loss of identity. I also thank Eric Fisher, Neil Kittredge, Laura Lee, Tom Sokolowski, and Richard T. T. Forman for not thinking that David and I were crazy to go back to graduate school after so many years of practice.

Vivian Loftness pointed out to me in 1990 that a building should create pleasant places for people to be in, and technology should be in the service of people. This has shaped my thinking about architecture ever since. Gary Carlough opened my eyes in 1988 to what the profession of architecture was really about, assuring that “bored” would never be in my lexicon again.

Mom provided me with the institutional logic of my life that valued education and the pursuit of knowledge so that we can better understand the world around us. Thanks for always being on the other end of the phone when the challenges became too big to bear, and for your scrupulous editing services. Dad has fully supported me in every new adventure I’ve ever pursued. I don’t think it’s possible for anyone to have more supportive parents.

And most importantly, my five boys: David, Lou, Bug, Lava, and Kusha. Thank you for always being happy when I came home, for being patient with this process, and for providing a houseful of love, fun, and laughter. With David, it is such a pleasure to be tourists in each other’s intellectual landscapes, trying on ideas, and making sure that they fit with our knowledge of the world. Thank you for supporting this crazy endeavor, and helping my work come to a conclusion. I look forward to our next chapters!

Preface

Inevitably, the world changes during the process of doctoral studies. Returning to graduate school in 2005, David and I drove our 8-year-old Ford van and 1957 Airstream full of furniture, supplies, and cats from Pittsburgh to Cambridge on the day that Katrina hit New Orleans. Gas prices spiked, and we were ironically moving 567 miles with our lowest miles-per-gallon vehicle. In subsequent years, attention to green building has gone from “Why?” to “Why not?” thereby requiring corresponding changes in my research focus.

Before the move, we were practicing architects partnered in our own firm, and both teaching as adjunct professors at Carnegie Mellon. We thought that earning a master’s degree would help us answer some burning questions about both sustainability and digital fabrication, and lead to academic positions that would allow the firm to be more selective about its projects—we considered our firm in “suspended animation” for one year.

My initial research inquiries therefore stemmed from practice, creating in me a passionate drive to understand why environmental sustainability was a low-status practice in the dominant architectural conversation; why clients would not use “greener” materials even when presented with the environmental damage facts of existing materials; how architects could more quickly access the life cycle information of materials they specified; and how our society understands responsibilities and unintended consequences of our actions. Luckily, all of that did not have to fit in one master’s thesis or doctoral dissertation. My greatest challenge has been deciding which of these questions to give up so that I can more accurately answer at least one of them. Or part of one of them.

The following dissertation emerges from my realization that I must first understand the context and underlying structure of the social system within which I was enmeshed before I can answer any of these questions. Through my investigations I realized that the supposed technical and economic barriers presented to me in practice were mere smokescreens covering the more embedded social barriers at work throughout the field/industry/system of building design and

construction. In this process I discovered organizational theory, which I now claim provides me with a set of x-ray glasses to see through superficial explanations of why actors “cannot” attend to environmental concerns. I look forward to enhancing the focus of my lenses in the coming years.

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List of Acronyms

AIA	American Institute of Architects
LEED	Leadership in Energy and Environmental Design
USGBC	United States Green Building Council
VE	Value Engineering

Abstract

The act of building typically results in significant consumption of land and natural resources through both construction and building use, as well as the production of both indoor air pollution and landfill waste. Yet green building, which reduces these negative environmental impacts, still constitutes a minority of building practices despite its rapid increase in popularity. Significant technical and economic hurdles to green building have been overcome, but societal barriers remain that include norms, values, and expectations of what is “the right thing to do” when designing and constructing a building. Little is known about how emergent concerns such as green building influence and disseminate through fragmented fields such as building design and construction, where a multiplicity of required actors coordinate their work among multiple meaning systems, backgrounds, and traditions. To address this gap in knowledge, I use an inductive, qualitative approach to examine the engagement of individuals who bring multiple values and meanings to their material practices, using the following three research questions: How is the professional jurisdiction of new tasks determined in an emergent field? How do actors negotiate situations of institutional complexity? How can managers better prepare for emergent expectations? My data suggest that (a) the determination of professional jurisdiction over new green building tasks relies on the non-material professional resources of expertise, interest, voice, and time; (b) a limited set of institutional orders structure society, and exist in a distinct hierarchy for each individual, organization, and profession. The execution of a green building requires advocates who view green building practices as a method to achieve high worth within the orders they value highly; and (c) emergent expectations such as green building become central to a manager’s concern when advocates for green practices gain the triple characteristics of power, legitimacy, and urgency. These findings provide an enhanced understanding of the social barriers to green building, as well as how multiple values and emergent meanings are negotiated by professionals in a fragmented industry.

Chapter 1

Introduction

Buildings consume 40 percent of the world's materials, 14 percent of all freshwater, 40 percent of U.S. energy, 40 percent of the world's energy, 73 percent of U.S. electricity; they produce 40 percent of U.S. nonindustrial waste, and create 39 percent of the carbon dioxide emissions that cause climate change (Kelso, 2011; Roodman & Lenssen, 1995; USGBC 2009). The U.S. Environmental Protection Agency (EPA) reports that indoor air contains pollutant levels two to five times higher than outdoor air (2008). The built environment is also rapidly encroaching on natural spaces—"urbanized land consumes natural space and agricultural land at a rate 2.6 times the population growth in the United States" (Center for Sustainable Systems, 2011). Yet green building, which reduces these negative environmental impacts still constitutes a minority of building practices despite its rapid increase in popularity (USGBC, 2011). With significant technical and economic hurdles overcome, societal barriers remain that include not just structural misalignment of budget incentives, for example, but also general norms, values, and expectations of what is "the right thing to do" when designing and constructing a building (Henn & Hoffman, 2013).

This dissertation examines the sources of norms, values, and expectations within the building design and construction industry in an effort to better understand both the barriers still constraining greener building as well as the implications of emergent concerns (such as green building) in an existing, fragmented industry (such as building design and construction). This latter understanding allows my study of a particular sector of the economy to inform the operation of other sectors where multiplicity of values come into conflict and compromise with existing material practices and meanings. For example, the field of biotechnology produced the bodybugg health and fitness tracker, requiring venture capitalists, scientists, doctors, equipment manufacturers, designers, and computer programmers across the world to produce a single object despite holding different sets of norms, values, and expectations. Similarly, the building design

and construction industry relies on engineers, carpenters, building owners, window manufacturers, interior designers, fire marshals, lawyers, bankers, architects, and many more, including the newly-created profession of environmental consultants.

I use an inductive, qualitative method of investigation to uncover the norms, values, and expectations of members of the building design and construction team. I interviewed 49 industry professionals, many of which worked on the same building project to promote triangulation of data where multiple meanings came to bear on particular situations. I used the following research questions to guide my analysis of the data:

- How is the professional jurisdiction of new tasks determined in an emergent field?
- How do actors negotiate situations of institutional complexity?
- How can managers better prepare for emergent expectations?

Each of these questions correspond to an article-length chapter that follows. In Chapter 2, I investigate the availability and activation of non-material resources such as expertise, interest, voice, and time that professionals can stockpile and use to determine who will perform an emergent task within the project. In Chapter 3, I analyze the discourse and rhetoric used by different actors in different project phases to better understand the timing, invocation, and influences of different institutional orders. In other words, when multiple meaning systems come to bear on a project, what determines the value hierarchy when tradeoffs are required? In Chapter 4, I examine emergent expectations' content (e.g., aesthetic, environmental, and civic values) and their path through power, legitimacy, and urgency to determine which expectations become central to a project's goals in three different projects.

In Chapter 5, I outline the main question of how emergent issues influence and disseminate through fragmented fields, the existing understandings that inform this question, and the remaining gaps in the literature and how they may be filled. Finally, Chapter 6 concludes with a conclusion that summarizes my findings, presents contributions to both theory and practice, outlines the limitations of the study as well as directions for future research.

REFERENCES

- Center for Sustainable Systems 2011. *Residential Buildings Factsheet*. http://css.snre.umich.edu/css_doc/CSS01-08.pdf.
- Kelso, J. D. 2011. *2010 buildings energy data book*. Washington, DC: Building Technologies Program, US Department of Energy.
- Henn, R. L., and Hoffman, A. J. (Eds.). 2013. *Constructing green: The social structures of sustainability*. Cambridge, MA: MIT Press. In Press.
- Roodman, D. M. & Lenssen, N. K. 1995. *A building revolution: How ecology and health concerns are transforming construction*. Ed. J. A. Peterson. Washington, DC: Worldwatch Institute.
- U.S. Environmental Protection Agency 2008. *The Inside Story: A Guide to Indoor Air Quality*. <http://www.epa.gov/iaq/pubs/insidest.html>.
- USGBC 2009. *Building Impacts*. <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1720>. Retrieved February 12, 2012.
- USGBC 2011. *About LEED*. <https://www.usgbc.org/ShowFile.aspx?DocumentID=4687>. Retrieved March 13, 2012.

Chapter 2

Border Patrol: Activating Professional Resources in the Negotiation of Jurisdictional Boundaries

Abstract

This study examines the rise of sustainability concerns in the building design and construction industry to discover how professionals negotiate jurisdictional boundaries in the workplace. Investigations of archival, interview, and observational data from five building projects show that professionals activate a set of intangible resources to determine task assignment, thus giving a clearer view of the initial stages of jurisdictional modification. I find that professionals both adopt and reject equivocal tasks on a situational basis, dependent on the uniquely professional resources of: (a) individual and firm expertise, (b) individual and firm interest, (c) the relative power of the professional's voice, based on experience and project-specific formal and informal structures, and (d) the task's inherent time pressure and time commitment. The study's findings shed light on the micro-processes of governance, vacancy, and strategy issues inherent to professional jurisdictional claims.

INTRODUCTION

“The ductwork has a duct detector that detects smoke and it's attached to the fire alarm. The detector itself is EMT which is part of the electrician's materials, but it's in a duct so that's the sheet metal worker's installation. Who's going to say where the detector goes? Where are the [EMT] tubes? And who's going to hook it to the duct detector? You have an electrician, a fire alarm contractor, and a sheet metal contractor. And it's like [this for] every job! You can talk to those guys and they'll laugh, 'Yeah, this does come up every time.' Why we can't we resolve this?” Interviewer: “You mean in the industry?” Respondent: “Yeah, in the industry.”

Who decides responsibility for border tasks among groups of interacting professionals? How are those jurisdictional boundaries understood, coordinated, and decided? The quote above illustrates a typical engagement at a commercial construction site, and as the superintendent indicated, the same or similar task negotiation can happen frequently until (or unless) professional jurisdictions “settle” on specific task assignments. But how does this happen? How do jurisdictional settlements emerge and institutionalize?

Scholarly discussions on the division of expert labor rely on the “system of professions” model developed by Andrew Abbott in 1988. This model argues that professions exist within an ecological system, where each profession claims jurisdiction over a group of tasks that could be considered an exclusive ecological “niche” of activity. The determination of which profession lays claim to which sets of activities is a constantly negotiated and contested social struggle, where professional boundaries are constantly in flux. Each profession publicly defends its territory through a link to an abstract body of knowledge—typically a “know how” rather than a “know what.” In addition to battles over existing territory, new territorial wars can emerge through change in the professionals’ external environment, involving “technology, politics, and other social forces” (Abbott, 1988: 35). These professional jurisdictional battles play out in three main arenas: the law, public opinion, and the workplace, where “jurisdictional invasion generally begins in the workplace, then moves to the public mind, and then into the law” (1988: 139).

The following study fills three gaps in understanding the nature and negotiation of professional jurisdictional boundaries. First, most studies of professional boundaries examine the public and legal expression of disputes (Greenwood, Deephouse, & Li, 2007; Oliver & Montgomery, 2005; Suddaby & Greenwood, 2005), ignoring the disputes’ genesis in the workplace. Correcting this imbalance can help scholars understand how a profession creates, maintains, or disrupts jurisdictional boundaries *in situ* (Battilana & D’Aunno, 2009; Bechky, 2011; Zietsma & Lawrence, 2010)—in other words, how a profession’s “border patrol” does its work. Second, as a form of governance, the ecological model neglects boundary implications of workplace contracts and other temporary organizational structures that typically accompany professional work. Third, the ecological model and subsequent studies assume a professional

strategy of constant expansion, with little recognition of the professional resources used for expansion efforts.

In this article, I draw on a qualitative study of participants in the building design and construction industry to show how professionals negotiate task jurisdiction in the workplace. Building on the professions, governance, and strategy literatures, the study offers a number of project-specific dependencies that moderate efforts of professional jurisdiction expansion. These findings inform understandings of jurisdictional boundary movement, as well as explain puzzling situations of jurisdictional retreat or relinquishment. The context for this study is the building design and construction industry, specifically investigating tasks related to green building, which is a relatively new, contested, and somewhat “vacant” professional territory within the industry. The study relies on interviews with participants, archival project documents, and field observations to understand the microprocesses of jurisdictional contestation.

The following section outlines existing understandings of inter-professional engagement, reviewing contributions from literature on professions, temporary organization governance, and professional strategy. I then delineate the building design and construction industry setting and qualitative methods used in the study. Subsequently, my findings include a framework of intangible professional resources, with demonstrations in the data of how professionals use these resources to negotiate professional boundaries. Finally, I discuss how my findings contribute to the literatures that inform my study, as well as how professionals can use this work to guide governance and strategy decisions in practice.

THEORIES OF INTER-PROFESSIONAL ENGAGEMENT

The Professions View of Inter-Professional Engagement

Abbott’s contribution to studies of professions lies in his interactive ecological model, which contrasted sharply with the sequence (Wilensky, 1964) or monopolistic power (Larson, 1977) models proposed earlier. Greenwood, Suddaby, and McDougald (2006: 13) suggest that Abbott’s “profound influence nearly silenc[ed] academic discourse on professions for over a decade.” Despite this success, scholars continue to focus on a *single* profession’s “professionalization” (1988: 33; Goodrick & Reay, 2010; Groß & Kieser, 2006; Haveman, 2012) or attempts at expansion (Gardner, Anand, & Morris, 2008; Greenwood, Suddaby, & Hinings,

2002; Suddaby & Greenwood, 2005), rather than the interactions and struggles among adjacent occupational communities within a larger field or industry. Some work shows a struggle between “professional” and “non-professional” competition (Anteby, 2010; Nelsen & Barley, 1997; Randall & Munro, 2010), but this is competition for an existing coherent territory (a “core” jurisdiction), rather than competition along the boundaries of regularly-interacting professions. For example, in healthcare, doctors, nurses, social workers, lab technicians, and many others regularly work together on a patient’s problem. These professions may at times publicly compete for core jurisdiction (McMurray, 2010; 1964), but most days, the professionals engage with *in situ* negotiation along the borders—“the public fiction survives that only doctors can do certain kinds of things, when nurses and others are in fact doing them all over the professional world” (Abbott, 1988: 68). This daily work engagement provides a more nuanced and micro-level understanding of the emergence of larger shifts in the organization of expert work, and the genesis of core jurisdiction competition. Even Abbott (1988: 325) suggested that “we must stop studying single professions—medicine especially—and start studying work.”

This study’s findings fill a distinct gap in the professional literature on jurisdictional struggle by understanding the microprocesses and *in situ* negotiation involved along the boundaries of multiple professions or occupational communities. The ecological model of inter-professional engagement suggests that “a profession’s success reflects as much the situations of its competitors and the system structure as it does the profession’s own efforts” (Abbott, 1988: 33). This ecological dependency—holding a jurisdiction as long as your claim is tighter than your neighbors—and the attendant “jostling and readjustment” play out in three main arenas: the law, public opinion, and the workplace. Abbott argues that “jurisdictional invasion generally begins in the workplace, then moves to the public mind, and then into the law” (1988: 139), but he does not provide evidence for this process. Therefore, examining the workplace promises to provide a view into the genesis of jurisdictional change.

In addition to the regular jurisdictional disputes, factors external to the professions can also influence boundary modification. In other words, the territory underfoot is constantly shifting and transforming through outside forces, which create or modify existing professional tasks. Abbott (1988: 33, 35, 92) suggests four sources of tasks: technology, organizations, natural facts,

and cultural facts (e.g., these sources would give rise to the professional tasks of programming computers, marketing products, prescribing medications, and composing music, respectively), while “politics and larger social forces” divide, abolish, reshape, and regroup tasks, changing professional jurisdiction “through structure rather than directly.” Therefore, professions must not only patrol borders with other professions, but also keep tabs on the wider natural and social environment that could produce tasks worthy of competition and control. In this study, the rise of environmental concerns in the building design and construction industry provide one of these external forces that expose the criteria for inter-professional jurisdictional claims.

Most scholars assume that all professions aim for jurisdictional expansion into this new or emergent territory (Anteby, 2010: 611; Gardner et al., 2008; Suddaby & Greenwood, 2005). However, Abbott (1988: 91) suggests that these attempts leave a profession’s “other jurisdictions... vulnerable to invasion.” Unfortunately, he does not provide any indication of the mechanisms that leave such a jurisdiction vulnerable. Elsewhere, he suggests that excess demand for a profession’s services could lead to vulnerability, but nowhere does he link jurisdictional expansion to reduced supply of professionals. Because my study examines the negotiation of inter-professional boundaries, one profession’s advance is likely accompanied by another profession’s retreat, thereby informing this additional gap in jurisdictional understanding.

Inter-Professional Governance Structures

Though the professions literature builds a strong case for the structuring of expertise in society, it does little to address the governance structure of professional work itself, which provides the material conditions for each profession’s workplace boundaries. Current work investigating governance forms in the professions focuses primarily on the organization of professional service firms (Brivot, 2011; Greenwood & Empson, 2003; Greenwood et al., 2006; Malhotra & Morris, 2009; Suddaby, Greenwood, & Wilderom, 2008; Thornton, 2002; von Nordenflycht, 2007, 2010), which has little to do with the structures of projects that constitute the everyday work of professionals.

Scholars who recognize temporary (Jones & Lichtenstein, 2008; Kenis, Janowicz-Panjaitan, & Cambré, 2009; Lundin, 2011; Thornton, 2002)—or project-based (Ebbbers & Wijnberg, 2009; Hobday, 2000; Sedita, 2008; van Donk & Molloy, 2008)—organizations more accurately

describe the governance of inter-professional work, where enduring structured role systems and networks of relationships within the field provide a tacitly understood structure to inter-professional engagements (Bechky, 2006; Jones, Hesterly, & Borgatti, 1997; Powell, 1990). This more recent work rejects earlier views that temporary organizations rely on “swift trust” (Meyerson, Weick, & Kramer, 1996) to organize quickly. How individuals learn this tacit structure within a temporary organization has not been fully investigated, despite an understanding of inter-professional structures being key to a professional firm’s jurisdictional strategy. Bechky (2006) outlines the social reproduction of this understanding in the film industry, where early-career individuals have a great deal of mobility among professional positions, creating a widespread knowledge of tacit structure through complementary role experience. However, this work does not apply to a more rigidly structured industry such as building design and construction—where early-career individuals are already bound to a single current and future role, such that they cannot circulate among roles to understand the industry expectations of professional boundaries.

My investigation of professional jurisdictions acknowledges multiple forms of governance within a professional project. Beyond the ecological model of “links to abstract knowledge” to structure expertise, the professional project also includes potentially conflicting structures that require multiple individual allegiances due to “relational overlap that generates conflicts between individuals’ relationship to the firm (as their employer) versus their relational embeddedness within the field or industry (i.e. as a member of a profession or industry)” (Jones & Lichtenstein, 2008: 249; Lauber, Taylor, Decker, & Knuth, 2010). Further, contracts outline firm performance and legally overrule “enduring structured role systems” outlined above that are inherent to the governance of professional work. As a consequence, professional projects are “independent and sovereign organizations” (Janowicz-Panjaitan, Cambré, & Kenis, 2009: 2) that do not have a single binding governance structure. Instead, scholars name the resulting multi-organizational alliance a “constellation,” where “complex tasks require integrating many different specialists to complete a service,” with customization that “demands in-depth knowledge not only of client needs and preferences but also of partners’ work styles” (Jones, Hesterly, Fladmoe-Lindquist, & Borgatti, 1998: 396). This constellation understanding allows for multiple sources of

jurisdictional border influence in addition to professional “claims to abstract knowledge” (Abbott, 1988: 8).

Professional Strategy

Abbott (1988: 71) argues that every profession aims not only to possess “a heartland of work over which it has complete, legally established control” but also “to defend and expand it.” This strategic defense and expansion requires the allocation of resources, which in a knowledge economy differ substantially from classic manufacturing resources of “funds, equipment, or personnel” (Chandler, 1962: 11). In particular, Hitt and colleagues (Hitt, Bierman, Shimizu, & Kochhar, 2001: 13-14; Hitt, Bierman, Uhlenbruck, & Shimizu, 2006) argue that intangible resources such as human capital and relational capital “are more likely to produce a competitive advantage because they are often rare and socially complex, thereby making them difficult to imitate” as well as “difficult to change except over the long term” (Barney, 1991; Greenwood & Empson, 2003; Peteraf, 1993). Human capital comprises tacit knowledge (a “know how” rather than a “know what”), gained through both education and experience, while relational capital “includes knowledge and understanding of the other party leading to shared meaning, commitment, and norms of reciprocity” with three components: trust, information transfer, and joint problem solving (Hitt et al., 2006: 1140). These intangible resources reside in individual professionals, who therefore have more power than a typical employee to activate the “firm’s” resources. However, by restricting investigations to the firm level of analysis, researchers cannot identify additional resources found in the individual, the project, or even the profession as a whole that may be used for professional jurisdictional modification. My study remains open to multiple levels of analysis to better understand the full resource base that a profession may use for boundary movement. Further, conceptually linking strategic resource use to jurisdictional modification allows a profession to not just expand, but also engage in either retreat or relinquishment of a territory—a possibility that few scholars acknowledge.

Taken together, the literatures on professions, temporary organizations, and professional strategy shed significant light on how professional boundaries shift and transform. However, this work does not adequately illustrate the everyday mechanisms for professional jurisdictional claims-making. Accordingly, a workplace research focus promises to illuminate the genesis of

jurisdictional modification, whether the boundaries move in expansion or retreat. I now turn to a description of my data and empirical context.

RESEARCH CONTEXT

Inter-Professional Engagement in Building Design and Construction

The construction and real estate industry accounts for between 15-18% of the U.S. GDP—a percentage that does not include the contributions of construction financing, component manufacturing, or professional or government employment associated with the industry (US Department of Commerce & Bureau of Economic Analysis, 2012). Given this economic importance, it is surprising that construction and real estate are significantly undersampled settings for leading organizational research (2009). Recent work in professional studies investigate architecture (Brown, Kornberger, Clegg, & Carter, 2010; Groleau, Demers, Lalancette, & Barros, 2012; Jones, Maoret, Massa, & Svejenova, 2011; Kornberger, Kreiner, & Clegg, 2011; Vough, 2012), and other work examines the governance forms of construction alone (Baiden, Price, & Dainty, 2006; Eccles, 1981a, 1981b; Stinchcombe, 1959), but few studies venture into the broader context of inter-professional relationships (cf. Boland, Lyytinen, & Yoo, 2007).

I studied the building design and construction industry because it brings the professional jurisdiction phenomena into sharp relief (Glaser & Strauss, 1967), and the theoretical issues of jurisdiction, governance, and strategy are readily transparent (Eisenhardt, 1989; Yin, 2009). There are three motives for using the building design and construction industry to examine inter-professional engagement.

First, the industry comprises multiple professions with legal, public, and workplace boundaries that have shifted over time (Haviland, 1994: 353). Unlike law and medicine where it is possible to be the sole professional on a case, a building project's division of labor, risk, and professional responsibility require multiple inter-professional relationships. In Abbott's terms, the diagnosis, inference, and treatment of a client's problem can be performed by a single individual in both law in medicine. Rarely in building design and construction does the same individual or firm both diagnose (design) and treat (build) a client's case (project). Further, the specialization of building design and construction—much like medicine—has multiplied the

number of individual professionals and firms involved in a project as illustrated in table 2.1 (Davis, 1999: 12), providing increased competition among the traditional jurisdictional holders of owner, architect, and contractor.

I include owners, contractors, and others as professionals by using Abbott's (1988: 8) definition: "exclusive occupational groups applying somewhat abstract knowledge to particular cases." This definition is therefore not restricted to only individuals who already have a legal jurisdiction, elite university education, or a number of other criteria frequently used to delineate professionals from "non-professionals." Instead, my expanded use of "professional" encompasses Van Maanen and Barley's (1984: 287) view where professions "differ from other lines of work (and each other) only by virtue of the relative autonomy each is able to sustain within the political economy of a given society." Using these criteria, I include as professionals traditional craft industries such as carpentry or masonry that rely on autonomous decision-making, based on the idiosyncratic technical problems that arise in the normal course of work. These occupational communities are able to claim an area of "abstract knowledge" (how materials durably come together, taking into account schedule and cost concerns) that is distinct from the cultural and calculative determinations of architects and engineers. In other words, craft work is entirely able to compete in the system of professions.

The second motive for studying building design and construction rests in its complex yet well established governance structures. Figures 2.1 and 2.2 display the organization of a building design and construction project in Renaissance Florence and today. These figures illustrate how the industry involves coordinating actors with parallel hierarchies. Each of the boxes in the figures represent a semi-autonomous expertise. Though the identity of actors has shifted considerably over the centuries with increased specialization, the complexity—such as the unclear relationships among the superintendent (*provveditori*), the "paymaster", architect, and master builder (*capomaestri*)—has not changed.

TABLE 2.1
Stakeholders
 from Davis 1999, p. 12.

Stage of building	Institutions and Actors
Making the decision to build	Developers, pension funds, large corporations
Choosing and developing building sites	Developers, government planning departments, regulatory bodies, banks, title companies, appraisers, environmental groups, soils engineers, lawyers
Regulating the placement and character of building	Zoning bodies, utility districts, neighborhood organizations, lawyers, environmental and other regulatory bodies
Finance	Banks, savings and loan organizations, escrow companies, large private investors, appraisers, community development corporations, accounting firms
Design	Institutional clients, architectural firms, large materials suppliers, civil engineering firms, landscape architects, consultants
Materials	Materials suppliers and manufacturers, producers' and manufacturers' cartels, trade associations, banks, fabrication shops, testing laboratories, truckers, truckers' unions
Construction	Contracting firms, construction management firms, building trades unions, safety regulating bodies, banks, manufacturers and distributors
Regulation of construction	Building code regulating bodies, workplace safety regulating bodies, testing laboratories, insurance companies

FIGURE 2.1
The organization of a construction project in Renaissance Florence
adapted from Davis 1999, Figure 2.11, p. 53

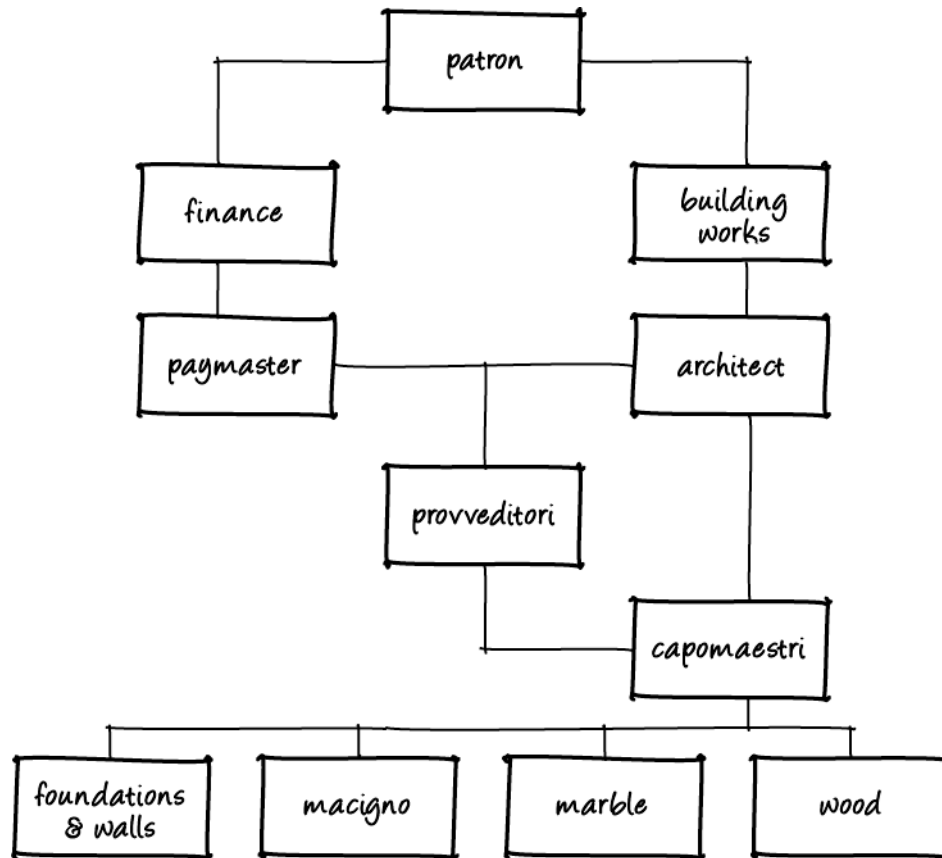
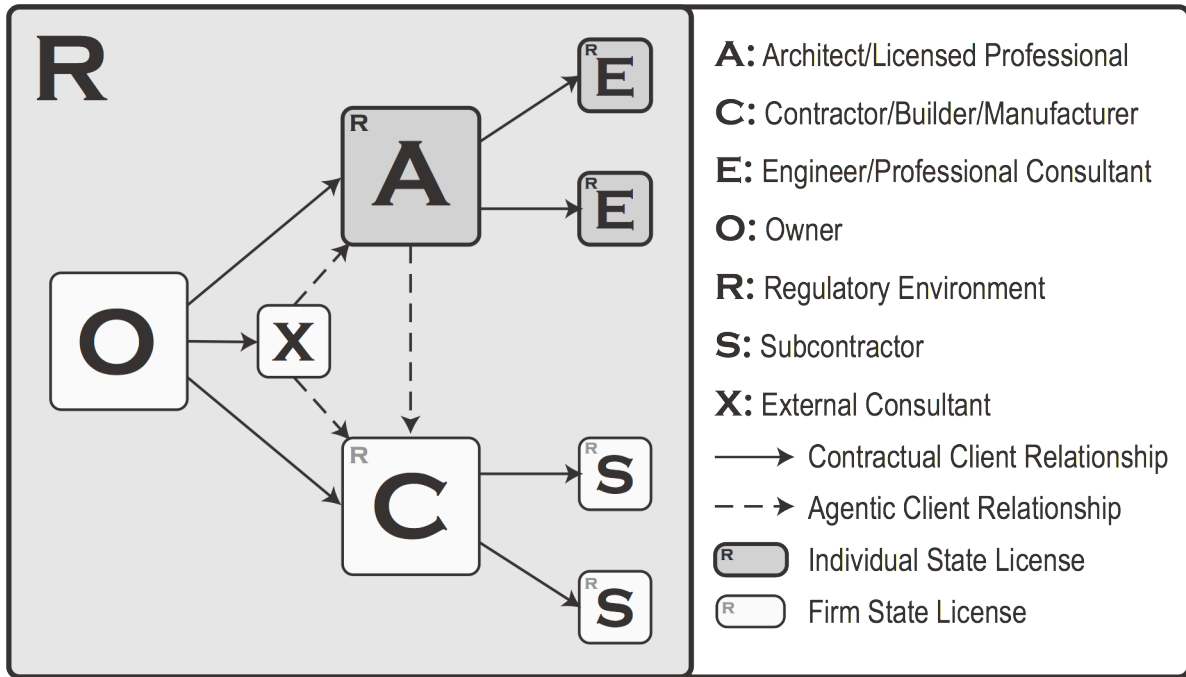


FIGURE 2.2
Archetypal Contract Structure in Building Design and Construction



Green Building and Inter-Professional Engagement

The third motive for studying building design and construction relates to the emergent territory that green building and the rise of environmental concerns creates. The nonprofit United States Green Building Council (USGBC) was formed in 1993 by a group of developers, building product manufacturers, lawyers, and architects. The organization subsequently developed a “voluntary, consensus-based, market-driven, third-party verification” program to measure and rate “greenness” or improved environmental practices and products used in the design and construction of buildings. The USGBC launched the Leadership in Energy and Environmental Design (LEED) green building rating pilot program in 1998, which was based on the Austin Energy program in Texas, as well as the BREEAM system in the UK. LEED is a checklist system that requires both performance and documentation of performance in categories such as sustainable sites, water efficiency, energy & atmosphere, material & resources, and indoor environmental quality. To achieve certification, a project must first meet prerequisite “credits” and thereafter achieve a minimum number of credits that correspond to increasing levels of certification—Certified, Silver, Gold, and Platinum.

There are a number of ways to gauge increased interest and influence of the USGBC and LEED rating system on the building design and construction industry. For example, after an attendance of 4,185 in 2002, the USGBC's Greenbuild conference & expo had over 28,000 attendees in 2010. Over 400 U.S. localities have adopted LEED and green building-based policies. In 2001, the USGBC first offered a professional accreditation exam to receive the LEED Accredited Professional designation (LEED AP). As of 2011, there are 192,000 LEED professional credential holders across the globe. There are now 79 local U.S. Chapters of the USGBC, and the organization's 2011 revenue was \$73 million. In 2005 there were 289 certified projects and 2,069 registered projects (those which have not yet undergone USGBC certification, but registered with LEED to receive project-specific feedback for achieving credits). By 2011, there were 125,000 projects that were either certified or registered. Exact numbers for certified buildings has become difficult because the LEED system now includes "volume" certification, often used in retail where a prototype store is certified rather than each one; there are different products for the "core and shell" of a speculative office building versus tenant fitout; the LEED for Homes product involves local certifiers rather than the centralized USGBC offices in Washington D.C; buildings can be certified for both new construction as well as maintenance and operations; and finally, LEED for Neighborhood Development involves building locations and site conditions rather than the construction of the building itself. Finally, recent market studies show that LEED office buildings earn increased rents when controlling for both location and quality (Eichholtz, Kok, & Quigley, 2010).

So not only has the USGBC and the LEED program infiltrated the building design and construction industry, but it is important to note that the LEED system demands specific tasks to achieve credits. The documentation alone is a new task that was not previously undertaken by building design and construction professionals. Achieving other credits creates increased complexity, where a building with less glass may enjoy higher energy efficiency, but not meet the minimum requirement for indoor daylight exposure. Consequently, the building designer, mechanical engineer, electrical engineer, and window supplier must work more closely to create synergies in the system using each others' knowledge. Further, window details require a specific sequence or process of construction to achieve airtightness, thereby requiring the contractor to

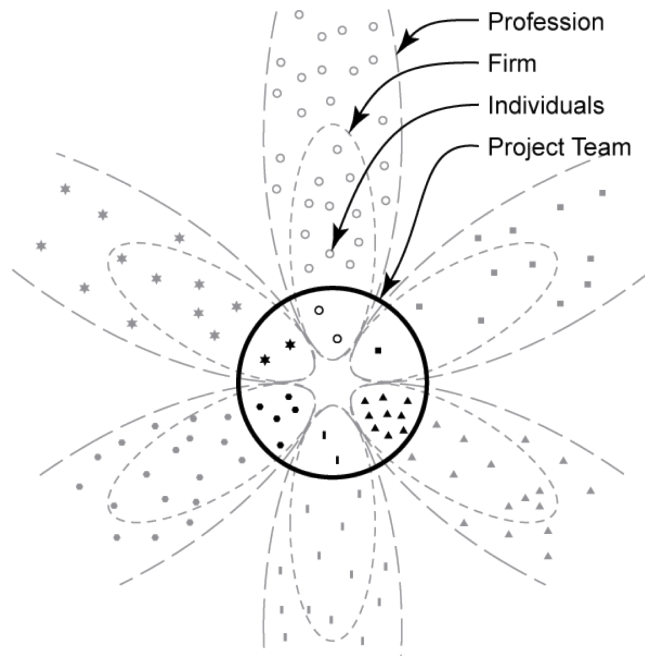
endorse the method of construction as well. Because the time, effort, and funds spent on pursuing certification is significant, the consequence of non-performance is no longer just marginally higher energy bills. Additionally, one credit is earned by having a LEED accredited professional on the project team. This situation is a prime example of Abbott's (1988: 33) "larger social forces" that reconfigure existing territory, creating gaps and overlaps that spark jurisdictional battles. I now turn to the methods used in my study.

METHODS

Research Design

In aiming to examine professional boundaries in the workplace, I began with the project level of analysis—"a nexus of activity that allows multiple organizations to collaborate to achieve their individual and collective goals" (Jones & Lichtenstein, 2008: 234; Kaghan & Lounsbury, 2011: 75). Though this approach could be viewed as an organizational level (with the project being a temporary organization), it is important to note the overlapping allegiances of project team members. The members' multiple embeddedness makes an interview with an individual potentially representative of the individual, the project, the employing firm, the profession, and possibly more, as illustrated in figure 2.3 (Jones & Lichtenstein, 2008: 249). This project approach, then, provides links among the micro, meso, and macro levels of analysis (Hitt, Beamish, Jackson, & Mathieu, 2007).

FIGURE 2.3
Nested & Overlapping Allegiances



Data Sources

To answer my research question about how professionals negotiate jurisdictional boundaries in the workplace, I selected a grounded, interpretive approach, permitting me to build a contextual understanding of each point of negotiation. Moreover, it allowed for an understanding of multiple engagements among professionals, not just those relating to the emergent territory of green building. This approach led me to collect three types of qualitative data: interviews with industry participants, archival project data, and observations of both private (within-project) and public behavior and events.

Interviews. To examine how participants understand and negotiate professional jurisdictional borders, I interviewed 49 individuals. Appendix A provides demographic information of the interviewees. The majority of interviewees (35) participated in at least one of the five university building projects that I studied more closely so that I could garner triangulated accounts. All five projects pursued either LEED certification or other green building goals. I interviewed all the major categories of participants (owner, architect, and contractor representatives) as well as other building design and construction team members. I gained access to three university projects with

my identity as a student, and two university projects through my relationship with the owner of an architectural firm. I sent my semi-structured interview protocol to the participants in advance of the interview, and included questions regarding the individual's involvement in a particular project, a reconstruction of events that required team interaction, their feelings toward reward and accomplishment, and if they did not already describe an interaction related to green building, a specific question about the achievement of LEED certification and team processes. The full set of questions is listed in appendix B. Each interviewee is identified in this text by a pseudonym or title only.

Archival data. Despite recent developments in password-protected online data exchange within the field of building design and construction, hard copies and digital files of documents still proliferate the industry. I examined initial project proposals, requests for information, and project meeting minutes. In addition to these project-specific documents, I also examined news or public coverage of the projects, as well as the architectural firm's published work in books. These sources provided both triangulation of events, as well as an understanding of the projects' context for both internal and external audiences.

Observational data. I spent approximately two weeks in an architecture firm where I was able to observe the "regular work" of multiple projects. The firm has an open-office layout, where everyone is able to hear phone and in-person conversations and ad-hoc meetings throughout the day. Private meetings happened in a conference room. Participants were aware of my presence, and each acknowledged informed consent of my observations. Examples of data include: phone conversations to quickly assemble a team for a high-profile government request for qualifications; a speaker-based conference call involving a project manager, a project architect, and two engineers regarding the quantity and placement of gas tubes for a lab; casual conversations about the staffing of the firm and how it changed in recent years; relationships of the firm with its other offices, including a "lessons learned" lunchtime video conference; and meetings among architects, engineers, and contractors.

I also attended a public lecture and student workshop by the firm's principal architect, and attended the American Institute of Architects convention where the firm won a prestigious award. During the week-long convention, I was able to observe other professionals in public interactions

in sessions regarding integrated design, green building, and other topics. Further, I thrice attended GreenBuild, the conference and expo of the USGBC, where I engaged a number of industry professionals on topics of inter-professional engagement. During all of the observations, I kept copious real-time notes, and further refined impressions through the creation of field notes and memos later that evening. These reflections allowed me to continuously refine my interviewing techniques and develop preliminary theoretical understandings of inter-professional engagement.

Data Analysis

Because of the high number of interactions in a single building design and construction project, my *first step* of analysis was to examine project documents, searching for moments of significant team engagement to solve a problem or assign a new task to a team member. In this way, I could better focus the interviews, and probe for each interviewee's specific understanding of the event. This process also aided in triangulating specific situations of inter-professional engagement.

As I completed interviews, I entered the transcripts, field notes, and memos into NVivo, a qualitative research software that allows for content coding and development of categories, themes, and concepts based on data excerpts. In the *second step* of analysis, I performed initial coding with a three pronged approach: First, I structurally coded the interview answers, as well as topical content (e.g., "like about job," "frustrating," "job well done," "LEED"). Second, with an orienting theoretical perspective of task jurisdiction, I coded statements and discussions with concepts such as "roles," "defending task," "adopting task," "jurisdiction-self," "jurisdiction-other," "jurisdiction-emerging," and "coordinating." Third, following the guidelines for qualitative data analysis and grounded theory work (Locke, 2001; Miles & Huberman, 1994), I performed *in vivo* and open coding (Corbin & Strauss, 2008; Locke, 2001: 65) to provide conceptual categories that did not fit the task jurisdiction framework.

The *third step* of analysis involved looking for codes across data that could be collapsed into first-order categories (Van Maanen, 1979). For example, a comment about "the cards we were dealt" or generalizations about "what you have to work to" could be grouped into a node labeled "subordinate position." When possible, I tried to retain the language used by participants. Examples of first-order categories include "staying on schedule," "contract structure," and "full

plate.” At this step, I corroborated findings among multiple participants to both strengthen the validity of the findings, as well as to mitigate problems with retrospective accounts (Gioia, Price, Hamilton, & Thomas, 2010).

The *fourth step* of analysis involved axial coding, looking for links among first-order categories (Corbin & Strauss, 2008) so that I could collapse these into second-order themes and aggregate theoretical dimensions. This recursive and iterative process involved both collapse as well as differential parsing, as some first-order categories crossed multiple second-order themes, such as the thematic distinctions between firm/individual and formal/informal. I allowed concepts to continue emerging until additional analysis failed to reveal new categories or themes (Eisenhardt, 1989). Four distinct dimensions emerged as resources (or lack of resources) invoked as reasons for a specific task assignment. The first dimension was the resource of expertise, or the public ability to perform a task; the second dimension recognized participants’ interest in performing a task; the third theme emphasized the power of an actor’s voice among team members for task determination; finally, the fourth theme emphasized the erratic resource of time.

Figure 2.4 illustrates my final data structure, showing the full set of categories, themes, and aggregate theoretical dimensions. Additional supporting evidence is shown in table 2.2 and keyed to figure 2.4. This table contains representative first-order data, which underpin the categories, themes, and theoretical dimensions.

FIGURE 2.4
Data structure

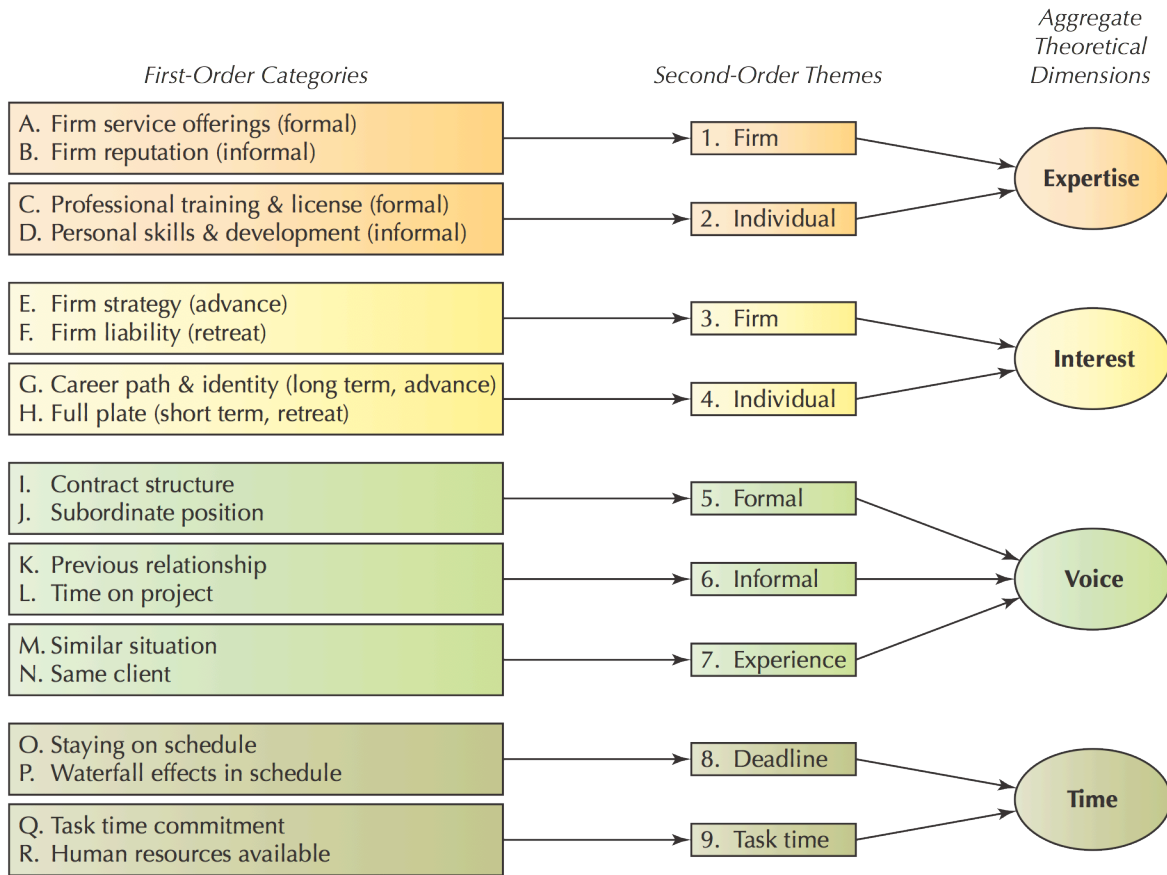


TABLE 2.2
Representative data

Representative Data	
Professional Resource: Expertise	
1. Firm expertise	
A. Firm service offerings (formal)	<ul style="list-style-type: none"> • "We're an interactive global network of mechanical, electrical, plumbing and energy engineers collaborating under a single deep green engineering umbrella. We specialize in the design of simple, elegant, cost-effective systems for high performance buildings." (EngCo website) • We encourage you to make sure the architectural firm selected---ZArchitects or otherwise--has LEED-Accredited Professionals (AP) on staff and staffed on our project. Then, charge the architectural firm with designing buildings that meet LEED Gold or Platinum certification requirements. (student group request to dean)
B. Firm reputation (informal)	<ul style="list-style-type: none"> • "There is absolutely a cost factor for different architects in this country. Some will do work that is more expensive than others. But that was known going into the project. [The client] is very good on that front, understanding that they wished to play in a certain league, in a certain zone of architectural design, for this building." (cost consultant) • OK, there was a question I failed to ask, "Will my floors be able to take the glue?" Not thinking I'd have to ask that question because I've got two nationally-renowned entities working here. (university project manager)
2. Individual expertise	
C. Professional training & license (formal)	<ul style="list-style-type: none"> • I kind of thought everyone knew what I knew. And the architect who draws something and says "Which one?" And you're thinking, "Come on, obviously it's 'A'." But then you think, "Well, this isn't their world." Then we ask, "Can we put the door there?" And they say, "That's an egress, what do you mean put the door there?" So you think, "OK, I guess I thought I knew their world and I don't. And I guess I thought they knew our world and they don't." (construction superintendent) • Say I'm drawing a concrete retaining wall. I can guess that it's probably eight inches thick, but I don't do calculations to determine it. I don't have the expertise to say that that wall is not going to fall over. That's why we need the structural engineer." (landscape architect)
D. Personal skills & development (informal)	<ul style="list-style-type: none"> • I have a slight drafting background from high school. I'm very comfortable drawing up things. I'm more comfortable on the computer now to grab a blow-up of a drawing, cloud it, mark it, arrow it. ...I learned the basics from the [construction] engineers so I don't have to wait. (construction superintendent) • [The architecture staff persons'] background was residential. And there were a couple of situations where we were brainstorming, and his ideas were coming from dealing with residential and wood. He said he never used metal studs! Whereas I've got superintendents who've been in the industry for 20-plus years and know more of the commercial side of things. (construction project engineer)
Professional Resource: Interest	
3. Firm interest	
E. Firm strategy	<ul style="list-style-type: none"> • "My folks don't do any design. In fact one of the biggest things that I have to do is say to my team, "Don't tell them what to do. Just highlight that there's a problem." ...It is hard. Because we do know what to do a lot of the times. That's the hardest part of our job, is to shut up. [laughs] "Let them do their jobs."" (university project manager) • I was trying to push green building at our Florida office, and one of our firm principals volunteered, "Why don't you come out here and talk to [this university] and let's sell them on sustainability?" (MEP engineer)
F. Firm liability	<ul style="list-style-type: none"> • [Landscape architects] often do the whole grading plan. But we don't issue that as a drawing because of liability. Basically we turn that over to the civil engineer. I'll just give them my CAD file. They might tweak a few things and set the pipe elevations, [but the grading] is on their drawing and not ours, even though I drew it. (landscape architect) • When we share the digital model with the contractor, at least until insurance companies get their arms around this, it's stripped of all the data. And if they use it, they're using it at their own risk. The basis of our contract is still this printed set of paper plans and specifications. There's too much room in the digital model for us to introduce an error that puts too much pressure on us to be perfect. And that's not what we do--[we're paid for design intent only]. (architect)

Table 2.2 (continued)

Representative Data	
Professional Resource: Interest	
4. Individual interest	
G. Career path & identity (long term interest)	<ul style="list-style-type: none"> We had another construction engineer on the project to oversee a lot of the LEED documentation. His time was initially included as a construction engineer. But he was really interested in green and jumped to say, "Hey, I really want to follow this. I'm planning on taking the [LEED Accreditation] exam." (contractor project engineer) I don't want to have anything to do with negotiating contracts [e.g., a project manager's task]. [As a construction superintendent] I will gladly confront somebody because they're not showing up, they're not on schedule, quality looks crappy, they've got some guy that's ready to cut off his thumb because he's an idiot, whatever horrible thing you can imagine in the field. But you put me in money, behind a computer, in a contract, that's just not my thing. (construction superintendent)
H. Full plate (short term interest)	<ul style="list-style-type: none"> We want to focus more on sustainability versus just getting the glitz of the LEED certification. We just posted two positions, because we just need more help to do it. There's just not enough hours in the day. To get it done, we actually need to get some more bodies in here. That'll be part of their sole focus to allow others to just participate part time. (architect) To go back to the sustainability things, I think that's where a lot of us are struggling. We have a feeling we all could be doing more if we had the time. You know, that there is more investigation, more testing, more thinking about how to do it. Because there's still a lot to learn about all that. ...but we're having trouble, you know, things are moving fast these days. (architect)
Professional Resource: Voice	
5. Formal voice	
I. Contract Structure	<ul style="list-style-type: none"> For example, the landscaper raises attention that the green roof is going to carry more load. With the architect/structural engineer, we decide to upsize the beams. On a private project we request to revise the steel order immediately, so we don't impact the schedule. But with California's OSHPD (Office of Statewide Health Planning & Development) for hospitals, if there's any deviation to the drawings, the architect has to send a request into the State agency, and they have up to 40 days to give their approval. (contractor project engineer) All through this [the local architect] has been very organized and calm, except when it comes to [the university project manager]. [The university PM] is this person who wants to come in and save the day. He's calling other people. Like, he'll call me to talk about stone. He'll call the structural engineer and say, "Hey, can you look at this alternate structural method?" ...He won't call [the local architect PM], so her structural engineer says, "Oh I couldn't get what you needed 'cause I'm working on this alternate structural method." (design architect)
J. Subordinate position	<ul style="list-style-type: none"> There is a standard code called the IBC, International Building Code. States can adopt it as is, or they can adopt it with amendments. In this state, I get the feeling that somebody misread [the code] and then created a little paragraph on their reading of it. And that little paragraph, even though it was contrary to [IBC's published commentary] code analysis, has in a sense become law in the state. But because somebody [at the state] wrote it, and it's been passed down... it's now what you have to work to. (design architect) The stone came from Switzerland. In trying to get a LEED certification, we were looking to possibly find something within a 500-mile radius, something nearby. But we didn't know if it was more [the architects] really wanting to have that actual stone, or if we could look for more local stone that gave the same color, same look, the same edginess. It was one of those situations where we wondered whether [the architects] really wanted to enforce this specific stone or was it [the client]? (construction engineer)
6. Informal voice	
K. Previous relationship	<ul style="list-style-type: none"> Now that we're working all parts of the country, the consultants tend to be closer to the project. That being said, we do have some of our favorites that given the choice in that part of the country, we'll work with. (architect) We like that university campus, and we do a lot of work there. Up front we're able to get selected not through lump sum of the whole project. We're able to get selected through fees and general conditions. (contractor)

Table 2.2 (continued)

Representative Data	
Professional Resource: Voice	
6. Informal voice	
L. Time on the project	<ul style="list-style-type: none"> • [The architecture firm owner] is there in the beginning for the big ideas--and very [forceful] about them, but when it came down to the details and the final decision, [the project architects] didn't ask him at all. (landscape architect) • I am the type who'll keep a camera in my pocket so I'm often the person who's doing the progress photos. It tends to be a construction engineer's job to manage them and process them, but I'm down there anyway doing my job walk. (construction superintendent)
7. Experience	
M. Similar situation	<ul style="list-style-type: none"> • We do a lot of work there and so we're familiar with the topographic and location impact on costs. What wasn't ordinary was working with AArchitects and they had never done a project on campus. They have done similar building types, and other university work, but they weren't familiar with the impact of the remoteness of building on construction costs. (construction estimator) • At times, I help the construction engineer with submittals to review – that's usually the engineer's job, but superintendents make time to also review them, because engineers are not always trained in the field as much. So they don't always have the experience to know what to look for, as far as how to build the product. And also we need to make sure that they really are chasing the right things. (construction superintendent)
N. Same client	<ul style="list-style-type: none"> • Interviewer: "How did [the architects] find you?" Oh, through [the university], we've done five different jobs with them, and they liked us. [The university architect] knew us and they just gave our name to [the architects] to interview us. (landscape architect) • Everyone around the university took from [the first LEED university building] the lesson that green building costs a fortune and the advocates of it lie. So if you need an explanation for the deep institutional hostility towards LEED in the university facilities office, I suspect much of it arose from the experience of that building. (faculty)
Professional Resource: Time	
8. Deadline	
O. Staying on schedule	<ul style="list-style-type: none"> • "My primary responsibility... is schedule. And that is also falling back with the engineers. Are you reviewing the right proposal right now? Has that subcontractor given you the materials that we need because it's a 10 week lead time and we need to have it in the field next week." (construction superintendent) • At a stage of a job where you have 10 subs on board and you have multiple phases going on, or you have multiple floors going on, [the construction engineers] could be chasing down answers for immediate need and reacting instead of prepping for what's coming up. (construction superintendent)
P. Waterfall effects in schedule	<ul style="list-style-type: none"> • Sometimes you might get [an architect] who says "I need this now!" and sometimes, well, I can't do it now. I need time to coordinate, like with the structural engineer. If I can't figure out how it's going to look until I get the input from the engineers, because I might want to change it based on what they say, I can't just draw it and hand it over. (landscape architect) • Steel is number one priority. Steel is critical path. And when you're building out of the ground, one of the first things you ask is 'What's my steel date?' Because you have to make that date, no matter what. It doesn't matter if you're suddenly working 24/7 to get that date. You don't push steel. Because when you push steel everything else pushes." (construction superintendent)
9. Task time	
Q. Task time commitment	<ul style="list-style-type: none"> • We wanted to make LEED documentation an addition to our fee, because there's effort involved. So we tried to make the case that it shouldn't be considered basic services, it should be extra, because there's a lot of time to file all the damned paperwork. That was to make the point, "We can do it or somebody else can do it, but there's a cost to doing it. Time involved." (architect)

Table 2.2 (continued)

Representative Data	
Professional Resource: Time	
9. Task time	
Q Task time commitment	<ul style="list-style-type: none"> I think the sheer volume of our work in the last few years [has prevented the university from working more on sustainability and energy conservation]. I mean, we had a tremendous amount of projects come through. And now that, to some degree, the economy and the downturn? We all just kind of looked and said, "My god, we have time to do this!" (university project manager)
R. Human resources available	<ul style="list-style-type: none"> In some cases—which sometimes gets my seniors pissed off with me—if I see that the [construction] engineer is overwhelmed, I'll put the RFI (Request for Information to the architect) together and say 'Process it. Here's the detail, here's the sketch, here's my note. Send it out.' Especially if it's a critical path and I have a hot item that just came out on the field. (construction superintendent) Interviewer: "Isn't working with lab planners a duplication of what you've always done?" Respondent: Yes, we just don't have to do it anymore. Someone else does it. Some of the labs have gotten more complicated too, so it's good to have them on board early. And sometimes it's just the time – it goes so fast when there are extra hands and people doing all that. (architect)

AVAILABILITY AND ACTIVATION OF INTANGIBLE PROFESSIONAL RESOURCES

My investigation of jurisdictional boundaries and task assignments *in situ* resulted in a clear dependency on the availability of and willingness to activate four general intangible professional resources: expertise, interest, power of voice, and time. The first general resource of *expertise* refers to both firms and individuals, and recognizes the “public face” of both—firm service offerings, reputation, credentialed professional training, or longstanding professional practice. By invoking expertise, professions lay claim to an abstract body of knowledge that links specific job tasks to the profession (Abbott, 1988). *Interest* is the second general resource, and recognizes that a firm’s strategy or an individual’s career trajectory plays a large part in the adoption or rejection of an emergent task that may be related to jurisdictional expansion or contraction. By the same logic, a firm’s evaluation of the possible risk involved in the task, as well as an individual’s cognitive burden on existing tasks can reduce firm and individual interest in expanding professional jurisdictional boundaries. The third resource of *voice* is closely linked with both formal and informal power. I found three dimensions to this resource: formal structures, informal structures, and prior experience. Formal financial and contractual structures give a less-expert team member a stronger voice over a task that would otherwise fall under a specific professional’s jurisdiction. These formal structures can therefore trump professional jurisdiction if the professionals would like to “keep the client happy” in their service orientation. Informal structures of friendship, and even time spent on the project can provide some

individuals with a stronger voice that is similarly outside of publicly-agreed-to jurisdictions. Finally, prior experience can give voice to any—even quite remote—individual on the team that has had an experience similar to the emergent task-at-hand. The fourth and final resource of *time* can differentially create pressure on individuals due to the concept of critical path, where there is always some task—owned by some profession—that must be completed for the remaining parts of the project to proceed. Further, time is often the only commodity that professional firms have to sell. Therefore, availability of this resource at crucial points during the critical path influences decisions to expand or contract jurisdictional claims. Below, I explain my findings in greater detail.

Expertise

Professional expertise resides in both firms and individuals in the building design and construction industry, and develops both formally and informally, as figure 2.5 illustrates. Formally, individuals with professional licenses—engineers, architects, lawyers, accountants—hold the legal right to perform certain generalized tasks for a project, regardless of their employing firm’s market position. According to the state, firms may only offer certain services if they have appropriately licensed individuals on staff, and in some cases firms must also have a minimum percentage ownership of licensed professionals. Informally, individual and firm expertise involves many tasks outside of the health, safety, and welfare criteria for state regulation. For example, engineers can become expert at complex structures, contractors can be known for meeting large and complex projects’ budgets and schedules, and architects can build an expertise in aesthetic achievement. These factors influence how professionals claim jurisdiction over specific tasks based on expertise.

Firm expertise. The first step in staking a claim to a professional task is offering to provide services. This jurisdictional claim is in advance of any project-specific contingencies, and lays the general boundary conditions when hired for a project. The professional firm’s website often performs this function, and gives potential clients an understanding of which tasks lie within the firm’s expertise. Contracts also outline the general division of tasks. In one field example, the architect’s contract with the university provided “basic services” of architecture, cost estimating (to be performed by a sub-consultant to the architect), and the following engineering services

from a single engineering firm (also as a sub-consultant to the architect): structural, mechanical, electrical, and fire protection. The same engineering firm also provided four (of ten) “specialty consultant” services to the contract, cited as “not normally included in basic services”: civil engineering; lighting and daylighting design; telecom, signal, and data systems; and sustainability. By indicating the difference between basic and specialty services, as well as the separation of primary and sub consultants, the contracts outline the central, distinctive, and enduring tasks “owned” by each profession, versus the emergent, contingent, and possibly peripheral tasks performed by each party. Contracts list these service offerings primarily to avoid a gap in the service provision. However, since the project is inchoate when participants sign the contract, task vacancies emerge as the project’s design develops and details come into focus.

In the following example, the architect describes a reluctance by multiple team members to “take responsibility” for the design of a small pool of water outside:

But when it got right down to how you engineer the system for the [exterior water feature]? Our best bet would have been to have on our side somebody who specializes in the engineering of those things. Nobody seemed to really want to step up and take responsibility for the design, which was a problem. (architect)

In this example, the water feature sat at the border of a number of professions, so it held the potential to be a contentious issue. Because it was part of the greater project, the team as a whole needed to complete the design and construction. However, who *exactly* should perform each task was unclear, as the responsibilities spanned more than five specialties. The design phase alone involved plumbing, civil, and structural engineers, the architect, and landscape architect according to the following division, taken from a six-person conference call’s meeting notes:

LandArch will design the visible water/planting feature and coordinate design with CivilEng (ie., overflow to storm drainage system, etc). CivilEng will design/size the pump and filtration system/size piping to irrigation source and size the site water holding tank. StructurEng will need to assist in structural design and specifications for the water/planting feature concrete retaining wall. AArchitects will also coordinate the size requirements for the site water pump/filter crawlspace area with StructureEng. NOTE: Final Irrigation System will be Design/Build by the Landscape contractor and is not included.

In the end, rather than asking the landscape contractor to design and build the water feature as indicated above, the general contractor hired the “ecology” firm that provided final design and installation of the green roof elsewhere on the project for this task. Of all the firms engaged with the water feature, the ecology firm most prominently displays an image of it on its website home page. In speaking with the ecology firm’s owner, it became clear that he—and others like him—fill an expertise gap that the integrated nature of sustainability features creates. The vacancy appears exactly at professional—which in this case is also physical—borders: The civil engineer traditionally works with utility grid infrastructure and the flow of water outside the building (i.e., rain and melting snow), and supplies through his design one cold water pipe and one sanitary (sewer) pipe to the building at location X (typically 5 feet from the building). The plumbing engineer then designs the pipes from location X and designs water flows indoors. However, when green design crosses these boundaries by using rainwater to flush toilets (which this project also implemented in conjunction with the green roof) or restroom sink water to irrigate outdoor plants, both the civil and plumbing firms take a step back, creating a professional vacancy for the “ecology” firm to fill. Ecology firms are a new type of consultant that offer “ecology” services, and they typically include a mixture of professionals such as biologists, designers, civil engineers, horticulturalists, and architects.

In addition to published service offerings, firms can also gain a reputation for specialization in a certain type of practice, which can influence a variety of factors such as cost and impressions of professional competency. In this theme of reputation, I found a number of team members invoking architectural firm reputations related to aesthetics and “playing in a certain league of architectural design,” which in turn implied both increased cost implications as well as increased “incompetencies” at basic services. For example, one university hired an internationally-renowned architect for a very modern, visionary addition to a traditional, collegiate gothic law school. The architect produced conceptual designs that proved to be “too expensive” and somewhat “impractical” for the school. A few years later, the project re-emerged, and the university hired an architectural firm for their reputation of knowing “about law schools and how to design a modern building that fit like a cousin or a family member to the existing campus.” So even though the second architecture firm’s reputation contributed to their winning the project,

they still faced legacy effects from the previous architect's reputation and experience with the university:

The university project manager was like, [wispy voice] "Oh... Mr. Starchitect was just wonderful... so charming" and so we were working against this god. His previous presence was also a hindrance because it took us *months* to prove to the faculty that we weren't messing up like he was. (design architect)

The resource of firm reputation, therefore, provides various forms of deference as well as expectations regarding the performance of tasks. While some team members believed that "Mr. Starchitect" provided inconvenient and inadequate spaces *because* he was so famous, faculty assigned "Mr. Starchitect's" failures in planning to be evident of the entire architectural profession's reputation, and therefore provided a field-level expectation that all architects would not perform a professional core planning task acceptably. As a result, the faculty in this project oversaw the architects' professional tasks with more scrutiny. As the second architecture firm suitably performed its tasks, the faculty receded in their oversight. However, this example illustrates the importance of iteration in experiencing (and perhaps institutionalizing) professional boundaries. At the time, faculty only had experience with one architect previously, whereas the university project manager had experiences with many—but only one "star" architect, and this exceptional experience influenced her relationship and expectations to the subsequent professionals.

Individual expertise. The boundaries between professions also rely on an individual's acquisition and use of expertise. Formal expressions of individual expertise lie in professional training and licensure. Examples of this resource include the basic abilities to calculate the strength of a wall, or to understand and have mentally-on-hand building code constraints on the project. A civil engineer described an archetypal professional boundary situation at universities, where—unlike a singular building that holds all mechanical equipment within the building—the campus steam system runs throughout the site, typically underground where the civil engineers hold jurisdiction. However, as the engineer stated:

Some MEPs [mechanical, electrical, plumbing engineers] say, 'We stop five feet from the building.' But in reality, that's not how it needs to be done. I can't design a steam system. It's not part of the civil role or our professionally licensed responsibilities. It has to be designed and specified by a mechanical [engineer]. We don't have the expertise in specifying the pipe or all the appurtenances to it. (civil engineer)

So in a single university building project, the engineer encounters this situation because the mechanical engineer hired to design the heating system only has expertise in singular building designs. The task of designing a connection to the campus steam system, therefore, fell between the civil and mechanical professionals in this case. In a counterfactual situation, the mechanical engineering firm could have had expertise with steam systems, thereby precluding the gap in expertise. In the civil engineer's account above, he invoked the individually licensed expertise that also includes the professional training to acquire such expertise.

Informally, individuals idiosyncratically acquire skills and go through discrete professional development, as not every professional can train for every situation. So similarly-licensed individuals therefore are not interchangeable, and some are qualified at border tasks through specific skills and abilities developed outside of the standardized learning. Likewise, some individuals are not qualified to perform certain border tasks due to general inexperience in the profession, as one construction manager described:

They gave us what's called 'Team B.' They trained a lot of young construction project engineers straight out of college here. And the consequences were late responses and some confusion on who's doing what. So the architects and I, we really put a lot of management time augmenting their lack of presence and lack of experience. (construction manager)

In this situation, the bordering professionals' expertise at boundary tasks "augmented" the situation to assure that the team achieved all project tasks. In another instance, a construction superintendent—traditionally only a "hands-on" professional—had a high school background in drafting, and therefore felt comfortable doing tasks for the inexperienced construction project engineer in the firm. With informal individual expertise, team members are able to fill gaps for each other, which allows the less experienced members to observe these skills and gradually acquire them for future iteration on projects. This professional "covering" also prevents a true

“professional vacancy” from emerging, making the gap invisible to outsiders or emergent professions.

FIGURE 2.5
Dimensions of expertise

	Firm	Individual
Formal	Firm service offerings	Professional training & license
Informal	Firm reputation	Personal skills & development

Interest

Whereas the resource of expertise is backwards-looking, drawing on previous experiences and reputation, the resource of interest looks forward and informs decisions based on future predictions. Further, the resource of interest is more idiosyncratic, differing atomistically, since individuals do not have the same relationship to the same role, and firms do not have the same relationship to the same market. Another important dimension of interest is *lack* of interest in adopting a border task, since it goes against assumptions of monopolistic or expansion goals of professions and firms. The interest resources described below show both advances into and retreat from professional border tasks.

Firm Interest. Despite the formal structure of a building team, firms attempt to leverage their voice by framing their own strategy as in the other building team members’ interest as well. The excerpt below illustrates how the architect aims to influence both the university client as well as her consultants to increase the green building commitment:

When we took on Colony U, it was not our firm's initiative to go seeking sustainability. If the owner was not so clear about their goals for energy management [and willing to pay for it], it would not end up as an almost Platinum building. They didn’t really care about LEED. But when you’re looking at energy management, a lot of LEED points fall into place. We’re only contracted to do Silver. Then the contractor’s saying “You want me to work on all this Gold stuff.” And I had a pep talk with consultants saying “Yeah, but wouldn’t you like a Platinum job under your belt? Wouldn’t we all be really proud? It’d be good for our marketing if we all try to make this Platinum.” (architect)

In this instance, because the LEED certification documentation and process requires components from across the pre-existing task jurisdictions, any individual firm aiming for a “Platinum” LEED project must have buy-in from all of the design and construction team parties. This example, then, illustrates an emergent situation in the project that modified the architectural firm’s strategy toward LEED and sustainability, and subsequently gave them the jurisdiction of the coordinating border tasks. An open question is whether the other parties, in their subsequent projects with different teams, expected architects to “own” the jurisdiction of LEED coordination and leadership. Also worth noting in this example is the contractor’s retreat from performing LEED tasks. Though some of the reasons may involve the lack of time and human resources (listed later in my analysis), it is clear that the contracting firm did not have adequate (or any) interest beyond other resource constraints to pursue high levels of LEED certification for their marketing efforts.

A firm’s professional liability represents another resource rarely invoked in studies of professional jurisdictions, but strongly influences firm interest in jurisdictional expansion or retreat. In the building design and construction industry, there are a number of hand-offs and task overlaps that mirror guidelines for good verbal communication, where you restate something that someone has just said to you. In this field, you may often redraw something that an associated professional drew for you. However, this overlap in communication is carefully pruned when it comes time to officially issue drawings. If a piece of information is found on more than one drawing, there is always the potential for conflicts, resulting in confusion and cost. Therefore, in some cases the professionals decide who will take ultimate responsibility for certain decisions, even if the *responsibility* lies with a professional who did not actually *make* the decision. For example, a civil engineer produced a drawing stamped with his state registration and license that the landscape architect actually drew. In this case, the engineer checked the drawing for professional competence, but did not redraw the information, as it was the landscape architect’s design. This example is one in the design phase. But the transfer from design to building can involve similar situations. In the following statement, an architect invokes his professional liability to prevent the construction manager from changing a detail:

The construction manager convinced the owner to build the exterior wall in a way that didn't make any sense to me. I refused to sign the drawings and said "Guys, there's no argument, because I'm the architect of record and this is not a safe thing to do. You can't indemnify me enough because if the brick falls off the building and kills somebody, I'm going to be liable." (architect)

In the field, construction managers regularly invoke their cost and "buildability" expertise as more relevant than the architect's "design aesthetic" expertise so that they may own the task of construction detailing. However, in this case the architectural firm's liability for the resulting structure trumped the construction manager's claim. As a result, the architect defended his task jurisdiction of exterior wall detail design from adoption by the construction manager.

Individual interest. Individuals adopt, share, or reject tasks based on both long term career strategy as well as short term workload projections. Because so many tasks in a fragmented, project based industry are emergent, individuals can rarely plan their exact career path since it typically involves increased responsibility based on expertise, rather than a progression through titles or multiple hierarchical positions. What you want to be known as an expert on depends on your portfolio of work, and your role in that work. Therefore, with so many tasks to divvy up among the team, volunteering to complete a specific task may reflect an interest on the part of the individual to increase his or her level of responsibility in a certain area. However, both identity and workload issues restrain this interest in task adoption, either shying away from a task that an individual does not want to become expert in (due to either unpleasant tasks or undesirable identities associated with the task), or having a full plate of work that prevents capitalizing on an opportunity.

At one university, a project manager described how busy the staff had been in recent years with multiple projects across campus. This issue appears later under the time resource heading. However, the retreat from sustainability efforts due to workload was not an accurate reflection of the staff's or the university's interests, as she describes below:

I think the university engineers have been wanting to do [green design] because of the savings that they see. ...And there's a bunch of people that have been working here many, many years, who want nothing better than to be at the forefront and setting the bar for a lot of other people. (university project manager)

As I will discuss later, all of the resources I list exist at different levels and with different hierarchies of order and value. When the time constraints of a “full plate” of work fall, the interest resource that may have always existed can rise in both importance and therefore activation. It is crucial, however, to include individual time constraints here as a component of individual interest because the following statement illustrates how interest can influence task adoption, even when the individual’s plate of work is quite full:

Sometimes we find that people are – without telling you, they got themselves overworked, overbooked, and so you’ll see some lack of follow-up on certain initiatives. They sit there and promise, promise that they’ll come through and realize later that [they won’t]. That happens with us sometimes too. (architect)

The juggling act required by the erratic ebb and flow of work due to critical path items described earlier, coupled with an unpredictability of time for task performance, often results in the bottlenecks described by this architect. The consultants she describes are interested in performing the tasks, but the execution becomes difficult to plan and accomplish. When an individual constantly performs with a full plate of within-jurisdiction tasks (due to market conditions, poor management, or other factors), their interest in adopting edge-of-jurisdiction or out-of-jurisdiction tasks may fall permanently.

Voice

The general resource of voice refers to the ability of certain team members to have decision-making power—or voice—over tasks that reside outside of his or her professional jurisdiction. In other words, even though there are specific professions that lay claim to a task through a link to abstract knowledge, the specific iteration of this task involves power flows outside of the ecological model of professional jurisdiction. The use of voice can follow formal financial flows, informal relationship flows, or invocation of previous experience. The formal and informal dimensions of voice are illustrated in figure 2.6.

Formal voice. Formally, there are myriad contracts in any one building design and construction project. Figure 2.2 shows an archetypal contract structure where the contractual hierarchy can suppress professional jurisdictions in claiming territorial tasks. In other words, even though the engineer has a jurisdictional territory, in this scenario the architect is the engineer’s client, and therefore the engineer serves in a subservient role. In the following

example, a cost consultant describes the difference between position “E” versus position “X” in figure 2.2:

I’d rather work for the owner. When all of the consultants funnel through the architect, there’s a filter there. And generally it’s not a bad filter, but for this project we helped [the owner] put together their entire project budget, not just a construction cost. We also wrote the agreement that [the architects] signed, and helped the college negotiate it, and put together some early project schedules. I think it all fit under the cost consulting umbrella, but it clearly was a little wider than that. (cost consultant)

In this very explicit case, the consultant made his professional jurisdiction “a little wider” because he was not working as a sub-consultant to the architect. In other words, the consultant became the owner’s agent by having the owner hire his firm directly. In other cases, engineers stated a preference for working directly with the architect, because then they could shed responsibility for coordination, invoking the resource of interest—or rather, lack of interest due to liability issues.

In addition to contracts within the design and construction team, there are a number of subordinate positions that undermine a professional’s power and voice over task jurisdiction. One of those positions is the regulatory environment, which provides a hierarchical challenge to professional jurisdiction either through prescriptive practice or through direct oversight. Another subordinate position is the contractor’s relationship to the architect, with whom they do not have a contract, but from whom they must receive instruction, as illustrated in figure 2.2. Finally, within-firm internal hierarchies also provide instances of subordination outside of professional jurisdiction, whether it is the units of a university, the owner/employee relationship in a professional firm, or a superintendent/foreman position in construction. In the following example, the university hospital functioned as an internal client to the university project manager:

The other thing is ...I’m not sure, I’m not convinced personally, that a hospital lends itself to fast-track construction. Can I just say that out loud? In fact, I don’t even have to say I’m not sure. I am sure. It doesn’t lend itself to fast-track construction. But that’s the animal ... those are the cards we were dealt. Dealt by the hospital pushing very hard for an end date and a construction manager telling us that the only way they were going to meet it was to do it fast-track. When ConstructCo ordered steel for this building, it was

done off a schematic design set. Yeah. Yippee-ki-yay. But we're through it. ...You learn to play chicken with the best of 'em. (university project manager)

In this case, the university project manager's professional opinion was to not perform the project via fast-track construction (where construction begins before design is complete). However, the cards "dealt by the hospital" showed an internal hierarchy that trumped the manager's professional jurisdiction of determining the best form of construction sequencing for the proposed project. In further elaboration of the project, it seemed that the hospital representatives were not fully aware of the kind of cost, coordination, and quality tradeoffs required to reach the end date they put in place, and did not learn those tradeoffs until the project was substantially underway and it was too late to revise their approach. Learning "to play chicken" meant hoping that the hospital would not require significant changes in subsequent design phases to the already-ordered steel configuration.

Informal voice. Other ways that professionals increase task jurisdiction is through their informal voice, acquired through both prior personal relationships as well as having a regular presence on a project. When professionals are brought on board because of prior work experience together, there is already an element of trust and goodwill established, as well as a working relationship that may have already determined professional boundaries. These relationships also involve friendships which were a recurrent theme expressed among some team members. Cultivating friendships with clients in particular seemed to produce more secure professional boundaries, where the client's formal voice/hierarchy was not used to trump professional expertise. In the following situation, a change in staff resulted in a breakdown of task performance because the relationships had been broken by the change:

We had a very good university project manager who had pretty good control over what is a very loosely organized group. But when she left, things... they didn't unravel, but they became more difficult to navigate. The [new] project manager was not nearly as strong from the standpoint of timely decision-making, working within his group. (engineer)

Another way to gain informal voice is through "seat time" where the person who works on the project the most or the longest often performs extra-professional tasks and makes decisions because others are not available or do not have the project-specific knowledge. Simply, when an individual stays in touch with team members, communication paths stay fluid:

The owner rep that's on the site now happens to be quite involved. ...she shows up on site and does a walk once to four times a week. She doesn't expect me to be there, but this afternoon I heard she was there, so I went to her office and checked in. My opinion is, the jobsite team and the contract decides how and how often we interact. But I'd prefer to just be one-on-one with people as much as possible. It often clarifies RFIs and intents [much more quickly]. (construction superintendent)

In this example and many others, because site superintendents tend to be physically closer to the client more frequently, they often hold a stronger voice through increased communication and common physical presence. This communication path directly between the owner and contractor frequently excludes the design team (contrary to the contractual structure in figure 2.2), yet just as frequently involves resolution of design details, thereby modifying professional boundaries *in situ*.

Experience. Unlike expertise which is generalizable, specific experience with a similar task can qualify someone for task performance—even if they do not have the formal expertise, license, or contract hierarchy to perform the task. Here, the definition of “similar task” is relative, contingent on the gap between each professional’s resource base and the specificity of the task in question. For example, when the LEED building certification program began in the late 1990s, many “green” professionals who understood the LEED system but had neither designed nor constructed buildings before had a stronger voice on the project—directing architects, engineers, and contractors—because of this asymmetrical knowledge of and experience with the LEED system. Sometimes this specific experience is with a technical component of the project, and other times it relates to preferences and relationships among team members. In the following example, students advocating for LEED certification for the building previously worked on LEED projects built by their employing corporations. The faculty advocated for the students’ involvement, even though there was no formal role that they proposed to fill:

I proposed that we bring two students on as advisors, and the [university project manager suggested that the students could play] a trivial role, you know, on the side with unimportant things. But then the students asked a series of questions, to which his answer was, "Gosh, we haven't thought about that." After three questions in a row like this, the whole tone of the meeting shifted, and he started to realize, "Oh, they could actually be a resource rather than just a nuisance." (faculty)

Though the formal LEED submission on this project happened through the engineer as an additional service, the fee to the university was significantly lower because of the “free” work that the students performed. In this case, most professionals welcomed the students’ adoption of green building design tasks, despite these tasks involving performance within the professionals’ jurisdiction.

In another example, a green consulting firm interviewed for a project with a developer, where the consultant confronted a significant anti-green bias. However, given the consultant’s established experience with the projected financial services tenant (who was also present at the meeting), the developer subsequently trusted the consultant’s task performance:

My boss began his presentation on the triple bottom line [people, profit, planet] and about three minutes into it the president of the development company turned to him and said “Are you a Communist?” But we had a long established relationship with the main tenant for the project. In the end, we also worked with the developer in trying to green their organization. So it was a rapid transition from asking if he was a Communist to three months later helping them to be one of the leading green developers in the city.
(sustainability consultant)

This resource of experience is not the same as the informal voice gained by previous relationships, since it is more a knowledge of how a client operates or an understanding of the client’s value system that makes one team member able to garner the trust of other team members.

FIGURE 2.6
Two dimensions of voice

	Firm	Individual
Formal	Contract structure	Subordinate position
Informal	Previous team knowledge	Time on project

Time

When examining project-based industries, scholars must investigate the issue of time, since the temporary organizations of projects are defined by a fixed duration, either by a specific date or conditional upon completion of the project (Janowicz-Panjaitan, Kenis, & Vermeulen, 2009:

143). As noted earlier, the work of professionals often involves time-limited projects—an operation, a court case, an audit, or a building project. At some point, externally dependent deadlines guide the professional’s work and determine which tasks an actor or set of actors takes on. Time therefore affects task jurisdiction in two main ways. The first way is the pressure posed on the building design and construction team by the “substantial completion” deadline. This is a date when the owner may take possession of the building and its operation, even if there are still minor details (a “punch list”) for the contractor to complete. The second effect of time involves the human (and therefore financial) resources available for the task’s completion.

Deadline. By definition, the temporary organizations of building design and construction projects have an implied—or more typically quite specific—end date to achieve completion. Due to the emergent nature of one-off building projects, a number of contingent situations arise to push “backwards” from this completion date. The rigidity of the date is often directly related to financial penalties, either for the owner by paying additional construction loan interest and experiencing a delay of gaining occupancy rents, or transmitted to other team members in the form of “liquidated damage” charges for missing the substantial completion deadline. Regardless of the severity of the financial penalties, clients desire a building rather than a construction project, and when construction lingers too long clients become impatient, thereby affecting future work possibilities desired by the building team. The following example illustrates how a breakdown in the communication stream (which was supposed to be: slate quarry in Switzerland <—> importer/distributor sales staff <—> contractor <—> architect <—> university architect) required the architect project manager and the university architect to quickly fly to Switzerland for a 48-hour round trip visit to look at the slate in person:

They flew [to Switzerland] to go look at the finish on [the slate], because it supposedly came down to the interpretation of horizontal versus vertical. ...It had to come off the mountain to the plant before they went on their winter break for two or three months. (construction engineer)

When an unforeseen issue arises, team members engage in *bricolage*, understanding that the penalties of delays—including negative waterfall effects of pushing the schedule on other parts of the project—may be worse than any unpaid compensation for the extra time and materials spent on the solution. At this moment, every resource of every team member becomes more critical so that the team achieves a viable solution. These events may therefore ignore more

formal boundaries, whether they are professional jurisdictions or contractual hierarchies. For example, on a hospital project the drawings indicated that an exterior wall must have a large removable panel so that the MRI machine could be installed post-construction. When the team realized that the exterior wall was installed without the panel, everyone got involved to find a solution. As the team brainstormed, everyone stayed fairly silent about the cost since the cost of the solution was unknown and all knew that the cost of delay (either to determine the solution cost or even who was going to pay for the solution) would be greater because of the project's complexity and fast-track schedule.

Task time. Though most contracts aim to adequately compensate firms and workers for time and materials spent on the project, building projects' uncertainties require an accounting for emergent issues. Claims to expertise involve a confidence that all situations that may arise during the project—though unique in themselves—are still similar enough to other situations the expert has encountered, that a certain amount of contingency has been built into the professional's fee. Sticking points occur when the “unforeseen” situation is actually an expansion of the professional's scope of work beyond the initial contract. Negotiating tasks in this situation involve a compensation calculation such that a professional may decide NOT to expand his or her jurisdiction into the emergent area because the initial fee or projected payoff is not adequate to cover the expanded expense. For example:

A couple of times we've asked them to do a little more work on the energy modeling to test maybe a sun study or something, a couple of 'what if's.' If you buy those extra services up front, or agree to pay them more, you can actually do some testing with the energy model. Sometimes there just isn't enough time. Or, you don't buy into their contract all these little tests, even if there's enough time for it. (architect)

When firms hire consultants, they are often hiring a subordination of their responsibilities, hoping that the consultant not only will provide competent expert(s), but also an assortment of “extra hands” when the project demands in that task territory get intense. Otherwise, the firm can struggle with scarce or slack resources, juggling tasks among staff, regardless of the official “qualifications” of the individual performing the task. In my study, this emergent situation only occurred within-firm, as most firms are not willing to admit to the others that the appropriate staff assigned to the project cannot handle the workload:

Tim was overwhelmed too. He had a ton of work to do. Because we were on a tight budget too. He was doing part-time project managing, construction engineering, the only engineer, full-time on the project. Sometimes we'd bring in other people to help. Josh and I were full time. And then Josh had a six week leave of absence because of health issues. So that was a really intense time too. But we made it through it. (construction superintendent)

DISCUSSION

My objective in this study was to understand how professionals negotiate and modify jurisdictional boundaries. I studied inter-professional engagement in the building design and construction industry and showed how legitimized claims to task jurisdiction draw from more than just a theoretical link to abstract knowledge. Specifically, I found that the availability and activation of intangible resources determine the assignment of an existing or emergent task. My findings allow me to make three distinct theoretical contributions, related to the literature on professions, governance, and professional strategy. My observations also suggest recommendations for both professional and sustainability practice. In this section I outline these contributions and consider avenues for future research.

Inter-Professional Border Patrol

Abbott (1988: 8) claims that “only a knowledge system governed by abstractions can redefine its problems and tasks, defend them from interlopers, and seize new problems.” The data in this study show that abstractions alone rarely prevent one profession from performing an equivocal or “foreign” task. Instead, professionals rely on a complex suite of intangible resources that exist in different quantities at different times for different individuals. Though abstracted claims to expertise are included in these resources, I specified *expertise* more completely and added *interest, voice, and time* to the reasons invoked by various participants to situationally claim a task.

With few exceptions, most studies of professional boundaries examine the public and legal expression of disputes (Greenwood et al., 2007; Oliver & Montgomery, 2005; Suddaby & Greenwood, 2005), neglecting the disputes' genesis in the workplace. As my data demonstrated, “claims made in the workplace blur and distort the official lines of legally and publicly established jurisdictions” (Abbott, 1988: 60). Reconciling the public and workplace position becomes complicated by the situational demands of a project (Ross & Nisbett, 1991), which

trigger the activation of various resources to achieve project goals. By studying the workplace, I provide illustrations of how a profession can create, maintain, or disrupt jurisdictional boundaries *in situ* (Battilana & D'Aunno, 2009; Bechky, 2011; Zietsma & Lawrence, 2010)—in other words, how a profession's "border patrol" does its work. Workplace examination provided "empirically the most freely competitive of the three arenas, and the one in which the forces of subjective jurisdiction, abstraction, and differentiation have their freest play" (Abbott, 1988: 139).

Though my study provided rich evidence of workplace task negotiation, it remains to be seen what enduring effect these claims have on a profession's public or legal boundaries. Abbott's (1988) argument is that the legal jurisdictional battles begin in the workplace, but there is little research on this link and its mechanisms. Giddens' (1984) structuration theory suggests that a professional's experience through repetition and iteration would transform the individual claims illustrated in this study into the public mind and thereafter into legal success. Perhaps this "public mind" actually begins with associated professionals' minds first, as they repeatedly lose ground to inter-professional colleagues. Jones and Lichtenstein (2008: 250) support this assertion, proposing that the understanding of roles is "embedded in the collective experience of market or field participants who carry them from one project to another." Understanding the mechanisms of this iterative process will be important for future research.

The Governance of Professional Work

The ecological model of professions may be seen as a form of governance when multiple professions interact on a project, as many professions in the building design and construction industry have legal authority over certain sets of tasks. However, my data illustrate a number of additional formal and informal governance forms and mechanisms that create conflicting lines of authority within a building project's temporary organization. First, there exist multiple formal agreements. Professional licensure, signed contractual agreements, and certain employment relationships can be legally enforced, yet their combination on a project may contain conflicting assignments of tasks to participants. Individuals and firms, therefore, have a choice of which formal structure to invoke when aiming to acquire or repel a particular project task. The issue of professional autonomy has been a longstanding point of discussion in the institutional logics literature, generally suggesting that professional authority is in decline in many arenas (Scott,

Ruef, Mendel, & Caronna, 2000; Thomas & Hewitt, 2011; Thornton, 2002). However, my data demonstrate a more opportunistic situation, where actors may select among multiple governance structures (e.g., professional, contractual, bureaucratic) for their benefit.

Second, my data elucidated multiple informal paths of influence on the governance and control of work. Firm reputation, friendships, and experience with similar situations can inflate the authority of an “illegitimate” voice over the “proper” task owner. One observation from my data that merits further research is where informal voices such as friendship with the client reinforced the ecological governance model (where the client “trusts” the professional), while the invocation of a formal voice reinforced the contractual hierarchy, undermining a professional’s ecological position or authority. I also did not specifically address the links of these resources and their usage to network governance (Jones et al., 1997), which would revive the Eccles and Stinchcombe debate on the construction industry (Eccles, 1981a; Eccles, 1981b; Stinchcombe, 1959).

In addition to strategic efforts of task acquisition and jurisdictional expansion, my data also showed emergent situations that produced new activities with no readily apparent or available task “owner.” At these points, the team engaged in *bricolage* (Lévi-Strauss, 1962), connoting “resourcefulness and improvisation” (Garud & Karn\vre, 2003). Key to task assignment was the availability and willingness to activate resources for the benefit of the temporary organization, rather than the individual, firm, or profession. Using the intangible resources enumerated in this study, future research can investigate multiple levels of analysis regarding their development and activation for either selfish or “altruistic” benefit.

Professional Strategy

My findings build on the work of Hitt and colleagues, who examine the strategic performance of intangible resources in professional service firms (Hitt et al., 2001; Hitt et al., 2006). Going beyond their dual model of human and relational capital, I sharpened these resources to illustrate how they work through their availability and activation. In particular, my identification of resources also produced four observations related to professional strategy:

First, as Hitt and colleagues’ analysis show, increasing levels of intangible resources benefit firm performance, and the resources have interaction effects. For example, the effect of human

capital on firm performance is both direct and indirect (2001), and relational capital only had positive effects when firms also had strong human capital (2006). Given the multiplicity of resources identified in my data, understanding their development and interaction may involve further qualitative work on their mechanisms of use before propositions can be formed and tested. For example, many of these intangible resources are not able to be “depleted” by use, and in fact may be enhanced by it. Nevertheless, this study underscores the importance of intangible resource acquisition, and in a professional setting, this involves multiple levels of attention—the individual, the firm, and the profession.

Second, my resource elaboration included what I call “negative” resources such as subordinate position, full plate, firm liability, and others. These are distinct constraining conditions that should be strategically managed if a profession aims to expand its jurisdiction. Further, future research can investigate which resources (or negative resources) result in jurisdictional expansion or contraction. For example, is one profession constantly operating at slim margins due to intra-professional competition such that their “plates are always full” and therefore has “negative” resources for expansion? Alternatively, is one profession prepared to strategically take on liability because their members believe that they have adequate alternative resources to compensate for the risk? Future work can examine these resource tradeoffs.

Third, Abbott’s (1988: 71) model accounts for intra-professional dominance, referring to a “core” jurisdiction, constituting elite practice. This “heartland of work” provides the enduring identity of a profession, and may not only receive the focus of a profession’s defensive resources, but also create a blind spot to emergent practice, and therefore expansion opportunity, at the profession’s boundaries. This is the paradox of professional expansion, where opportunities lie in weakened professional locations (i.e., those farthest from the core). Fligstein and McAdam’s (2012: 8) recent strategic action field model supports this interpretation, where incumbent actors aim to protect the status quo from challengers’ advances, which in this case would include protection of the profession’s elite practice/core jurisdiction. However, the ecological model does not account for “insiders” and “outsiders.” Rather, the interactions among the boundaries puts all professions in both roles of incumbent and challenger. Therefore, it may be in a “challengers” interest to exploit a gap and subsequently “create” territory by creating new tasks in the

ecological system. My data showed this happening through the LEED green building rating system.

Fourth, though I identified my findings as resources, ambiguities in practice may challenge the concept of exactly what a resource is, its value, or inter-resource dependency links (2012: 181). As my data illustrated how participants understood and activated these resources, my study left room to examine the logic structures participants use to understand the availability of, and their own power to activate, the resources available to them. In examining inter-professional work, it is worth recognizing that a project's temporary organization also may comprise interinstitutional situations, such that each participant views the same resource's value quite differently (Dille & Söderlund, 2011). This interinstitutional focus acknowledges multiple and possibly contradictory interpretations of the character of emergent territory as well.

Practical Implications

My findings provide practitioners with a framework to focus resource development efforts. The data suggest that many resources are substitutable in the field—that a deficiency in one can be compensated by a surplus of another. For example, individuals with a particular career path interest may be willing to take on additional work (e.g., “fill their plate”) in a certain area so that they can develop individual skills and reputations. In the case of intangible resources, it is important to recognize that the development of resources often takes place within the context of a project (e.g., gaining experience) rather than outside through training seminars or credential certifications. Therefore, professionals should reconceptualize a professional project not just as a place to perform work, but also as an area to amass resources for future projects—relationships, experience, reputation, etc. My work also suggests that informal resources such as friendships, reputations, and constancy of time on projects can surpass formal agreements in the governance of the temporary organization. These resources are able to be cultivated as well.

This study also informs the practice of sustainability by illustrating possible components of success in green building efforts. The LEED rating system created new tasks that were not governed by existing jurisdictions. Further, the USGBC created its own professional accreditation system that both traditional building team members and outsiders could achieve. With new university degrees in sustainable design, this specialty now has a stronger hold on

territory adjacent to existing professions, through amassing resources I describe in this study. The rise of the LEED system therefore supports Wilensky's (1964) model that outlined "steps" to professionalization, but my data show *how* these steps work by contributing to resource acquisition for future boundary skirmishes. Therefore, future efforts at increased environmental responsibility should first develop new tasks in a self-created professional vacancy, which then develops a core of "elite practitioners" of the new territory that then have the power to fight jurisdictional battles.

Conclusion

Given the rise of a service economy based on expertise (Barley & Kunda, 2004), it is crucial to better understand how professional jurisdictions negotiate boundaries to acquire, defend, or cede territory. Though the empirical site of green building provided a very specific context for this study, the findings are likely to apply to other project-based industries that engage temporary organizations such as political elections, cultural events, legal cases, police actions, or film crews (Bechky & Okhuysen, 2011). Further, the rise of project-based forms of organizing within corporations makes further research in this area important so that managers understand alternatives to hierarchical governance mechanisms, as well as the resources required to pursue strategic goals in such an environment.

REFERENCES

- Abbott, A. D. 1988. *The system of professions: An essay on the division of expert labor*. Chicago: University of Chicago Press.
- Anteby, M. 2010. Markets, morals, and practices of trade: Jurisdictional disputes in the U.S. Commerce in cadavers. *Administrative Science Quarterly*, 55: 606–638.
- Baiden, B. K., Price, A. D. F., & Dainty, A. R. J. 2006. The extent of team integration within construction projects. *International Journal of Project Management*, 24: 13–23.
- Barley, S. R. & Kunda, G. 2004. *Gurus, hired guns, and warm bodies: Itinerant experts in a knowledge economy*. Princeton, NJ: Princeton University Press.
- Barney, J. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17: 99-120.
- Battilana, J. & D'Aunno, T. 2009. Institutional work and the paradox of embedded agency. In T. B. Lawrence, R. Suddaby, & B. Leca (Eds.), *Institutional work: Actors and agency in institutional studies of organizations*: 31–58. New York: Cambridge University Press.
- Bechky, B. A. 2006. Gaffers, gofers, and grips: Role-based coordination in temporary organizations. *Organization Science*, 17: 3-21.
- Bechky, B. A. 2011. Making organizational theory work: Institutions, occupations, and negotiated orders. *Organization Science*, 22: 1157–1167.
- Bechky, B. A. & Okhuysen, G. A. 2011. Expecting the unexpected? How SWAT officers and film crews handle surprises. *Academy of Management Journal*, 54: 239–261.
- Boland, R. J., Lyytinen, K., & Yoo, Y. 2007. Wakes of innovation in project networks: The case of digital 3-D representations in architecture, engineering, and construction. *Organization Science*, 18: 631–647.
- Brivot, M. 2011. Controls of knowledge production, sharing and use in bureaucratized professional service firms. *Organization Studies*, 32: 489–508.
- Brown, A. D., Kornberger, M., Clegg, S. R., & Carter, C. 2010. ‘Invisible walls’ and ‘silent hierarchies’: A case study of power relations in an architecture firm. *Human Relations*, 63: 525.
- Chandler, A. D. 1962. *Strategy and structure: Chapters in the history of the American industrial enterprise*. Cambridge, MA: MIT Press.
- Corbin, J. M. & Strauss, A. 2008. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. (3rd ed.): Sage.
- Davis, H. 1999. *The culture of building*. New York: Oxford University Press.

- Dille, T. & Söderlund, J. 2011. Managing inter-institutional projects: The significance of isochronism, timing norms and temporal misfits. *International Journal of Project Management*, 29: 480—490.
- Ebbers, J. J. & Wijnberg, N. M. 2009. Latent organizations in the film industry: Contracts, rewards and resources. *Human Relations*, 62: 987-1009.
- Eccles, R. G. 1981a. Bureaucratic versus craft administration: The relationship of market structure to the construction firm. *Administrative Science Quarterly*, 26: 449–469.
- Eccles, R. G. 1981b. The quasifirm in the construction industry. *Journal of Economic Behavior and Organization*, 2: 335–357.
- Eichholtz, P., Kok, N., & Quigley, J. M. 2010. Doing well by doing good? Green office buildings. *American Economic Review*, 100: 2492–2509.
- Eisenhardt, K. M. 1989. Building theories from case study research. *Academy of Management Review*, 14: 532–550.
- Fligstein, N. & McAdam, D. 2012. *A theory of fields*. New York: Oxford University Press.
- Gardner, H. K., Anand, N., & Morris, T. 2008. Chartering new territory: Diversification, legitimacy, and practice area creation in professional service firms. *Journal of Organizational Behavior*, 29: 1101–1121.
- Garud, R. & Karn\vre, P. 2003. Bricolage versus breakthrough: Distributed and embedded agency in technology entrepreneurship. *Research Policy*, 32: 277–300.
- Giddens, A. 1984. *The constitution of society: Outline of the theory of structuration*. Berkeley: University of California Press.
- Gioia, D. A., Price, K. N., Hamilton, A. L., & Thomas, J. B. 2010. Forging an identity: An insider-outsider study of processes involved in the formation of organizational identity. *Administrative Science Quarterly*, 55: 1-46.
- Glaser, B. G. & Strauss, A. L. 1967. *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Goodrick, E. & Reay, T. 2010. Florence Nightingale endures: Legitimizing a new professional role identity. *Journal of Management Studies*, 47: 55–84.
- Greenwood, R. & Empson, L. 2003. The professional partnership: Relic or exemplary form of governance? *Organization Studies*, 24: 909–933.
- Greenwood, R., Deephouse, D. L., & Li, S. X. 2007. Ownership and performance of professional service firms. *Organization Studies*, 28: 219–238.
- 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: 58–80.

- Greenwood, R., Suddaby, R., & McDougald, M. 2006. Introduction. In R. Greenwood & R. Suddaby (Eds.), *Research in the sociology of organizations: Professional service firms*, vol. 24: 1-16. San Diego: Elsevier.
- Groleau, C., Demers, C., Lalancette, M., & Barros, M. 2012. From hand drawings to computer visuals: Confronting situated and institutionalized practices in an architecture firm. *Organization Science*, 23: 651–671.
- Groß, C. & Kieser, A. 2006. Are consultants moving towards professionalization? In R. Greenwood & R. Suddaby (Eds.), *Research in the sociology of organizations: Professional service firms*, vol. 24: 69-100. San Diego: Elsevier.
- Haveman, H. A. 2012. Seizing opportunity in emerging fields: How institutional entrepreneurs legitimated the professional form of management consulting. *Organization Science*, 23: 651–671.
- Haviland, D. (Ed.) 1994. *The architect's handbook of professional practice*. (12th ed.). Washington, DC: The American Institute of Architects Press.
- Hitt, M. A., Beamish, P. W., Jackson, S. E., & Mathieu, J. E. 2007. Building theoretical and empirical bridges across levels: Multilevel research in management. *Academy of Management Journal*, 50: 1385–1399.
- Hitt, M. A., Bierman, L., Shimizu, K., & Kochhar, R. 2001. Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal*, 44: 1385–1399.
- Hitt, M. A., Bierman, L., Uhlenbruck, K., & Shimizu, K. 2006. The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly. *Academy of Management Journal*, 49: 1137–1157.
- Hobday, M. 2000. The project-based organisation: An ideal form for managing complex products and systems? *Research Policy*, 29: 871 – 893.
- Janowicz-Panjaitan, M., Cambré, B., & Kenis, P. 2009. Introduction: Temporary organizations – a challenge and opportunity for our thinking about organizations. In P. Kenis, M. Janowicz-Panjaitan, & B. Cambré (Eds.), *Temporary organizations: Prevalence, logic and effectiveness*: 1-12. Northampton, MA: Edward Elgar.
- Janowicz-Panjaitan, M., Kenis, P., & Vermeulen, P. A. M. 2009. The atemporality of temporary organizations: Implications for goal attainment and legitimacy. In P. Kenis, M. Janowicz-Panjaitan, & B. Cambré (Eds.), *Temporary organizations: Prevalence, logic and effectiveness*: 142–154. Northampton, MA: Edward Elgar.
- Jones, C. & Lichtenstein, B. B. 2008. Temporary inter-organizational projects. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of inter-organizational relations*: 231–255. New York: Oxford University Press.

- Jones, C., Hesterly, W. S., & Borgatti, S. P. 1997. A general theory of network governance: Exchange conditions and social mechanisms. *Academy of Management Review*, 22: 911–945.
- Jones, C., Hesterly, W. S., Fladmoe-Lindquist, K., & Borgatti, S. P. 1998. Professional service constellations: How strategies and capabilities influence collaborative stability and change. *Organization Science*, 9: 396–410.
- Jones, C., Maoret, M., Massa, F. G., & Svejenova, S. 2011. Rebels with a cause: Formation, contestation, and expansion of the de novo category “modern architecture,” 1870–1975. *Organization Science*, AiA: 1-23.
- Kaghan, W. & Lounsbury, M. 2011. Institutions and work. *Journal of Management Inquiry*, 20: 73.
- Kenis, P., Janowicz-Panjaitan, M., and Cambré, B. (Eds.). 2009. *Temporary organizations: Prevalence, logic and effectiveness*. Northampton, MA: Edward Elgar.
- Kornberger, M., Kreiner, K., & Clegg, S. R. 2011. The value of style in architectural practice. *Culture and Organization*, 17: 139–153.
- Larson, M. S. 1977. *The rise of professionalism: A sociological analysis*. Berkeley: University of California Press.
- Lauber, T. B., Taylor, E. J., Decker, D. J., & Knuth, B. A. 2010. Challenges of professional development: Balancing the demands of employers and professions in federal natural resource agencies. *Organization & Environment*, 23: 446–464.
- Lévi-Strauss, C. 1962. *The savage mind*. (5 ed.). Chicago: University of Chicago Press.
- Locke, K. 2001. *Grounded theory in management research*. London: Sage.
- Lundin, R. A. 2011. Researchers of projects and temporary organizations – one happy family? *International Journal of Project Management*, 29: 357–358.
- Malhotra, N. & Morris, T. 2009. Heterogeneity in professional service firms. *Journal of Management Studies*, 46: 895–922.
- McMurray, R. 2010. The struggle to professionalize: An ethnographic account of the occupational position of advanced nurse practitioners. *Human Relations*, 64: 801–822.
- Meyerson, D., Weick, K. E., & Kramer, R. M. 1996. Swift trust and temporary groups. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research*: 166–195. Thousand Oaks, CA: Sage.
- Miles, M. B. & Huberman, A. M. 1994. *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks: Sage.
- Nelsen, B. J. & Barley, S. R. 1997. For love or money? Commodification and the construction of an occupational mandate. *Administrative Science Quarterly*, 42: 619–653.

- O'Leary, M. B. & Almond, B. A. 2009. The industry settings of leading organizational research: The role of economic and non-economic factors. *Journal of Organizational Behavior*, 30: 497–524.
- Oliver, A. L. & Montgomery, K. 2005. Toward the construction of a profession's boundaries: Creating a networking agenda. *Human Relations*, 58: 1167–1184.
- Peteraf, M. A. 1993. The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14: 179–191.
- Powell, W. W. 1990. Neither market nor hierarchy: Network forms of organization. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior*, vol. 12: 295–336. Greenwich, CT: JAI Press.
- Randall, J. & Munro, I. 2010. Institutional logics and contradictions: Competing and collaborating logics in a forum of medical and voluntary practitioners. *Journal of Change Management*, 10: 23–23.
- Ross, L. & Nisbett, R. E. 1991. *The person and the situation: Perspectives of social psychology*. New York: McGraw-Hill.
- 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.
- Sedita, S. R. 2008. Interpersonal and inter-organizational networks in the performing arts: The case of project-based organizations in the live music industry. *Industry & Innovation*, 15: 493–511.
- Stinchcombe, A. L. 1959. Bureaucratic and craft administration of production: A comparative study. *Administrative Science Quarterly*, 4: 168–187.
- Suddaby, R. & Greenwood, R. 2005. Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, 50: 35–67.
- Suddaby, R., Greenwood, R., & Wilderom, C. 2008. Introduction to the journal of organizational behavior's special issue on professional service firms: Where organization theory and organizational behavior might meet. *Journal of Organizational Behavior*, 29: 989–994.
- Thomas, P. & Hewitt, J. 2011. Managerial organization and professional autonomy: A discourse-based conceptualization. *Organization Studies*, 32: 1373–1393.
- Thornton, P. H. 2002. The rise of the corporation in a craft industry: Conflict and conformity in institutional logics. *Academy of Management Journal*, 45: 81-101.
- US Department of Commerce & Bureau of Economic Analysis 2012. Value Added by Industry as a Percentage of Gross Domestic Product. *Interactive Access to Industry Economic Accounts Data*. <http://www.bea.gov/iTable/iTable.cfm?ReqID=5&step=1#reqid=5&step=4&isuri=1&402=5&403=1>. Retrieved February 17, 2013.

- van Donk, D. P. & Molloy, E. 2008. From organising as projects to projects as organisations. *International Journal of Project Management*, 26: 129–137.
- Van Maanen, J. 1979. The fact of fiction in organizational ethnography. *Administrative Science Quarterly*, 24: 539–550.
- Van Maanen, J. & Barley, S. R. 1984. Occupational communities: Culture and control in organizations. *Research in organizational behavior*: 287–365. Greenwich, CT: JAI Press.
- von Nordenflycht, A. 2007. Is public ownership bad for professional service firms? Ad agency ownership, performance, and creativity. *Academy of Management Journal*, 50: 429–445.
- von Nordenflycht, A. 2010. What is a professional service firm? Toward a theory and taxonomy of knowledge-intensive firms. *Academy of Management Review*, 35: 155–174.
- Vough, H. 2012. Not all identifications are created equal: Exploring employee accounts for workgroup, organizational, and professional identification. *Organization Science*, 23: 778–800.
- Wilensky, H. L. 1964. The professionalization of everyone? *American Journal of Sociology*, 70: 137–158.
- Yin, R. K. 2009. *Case study research: Design and methods*. (4th ed.): Sage.
- Zietsma, C. & Lawrence, T. B. 2010. Institutional work in the transformation of an organizational field: The interplay of boundary work and practice work. *Administrative Science Quarterly*, 55: 189–221.

Chapter 3

Conflict, Compromise, and Coalition: Inhabiting Institutional Complexity

Abstract

Business interactions must abide by various formal and informal rules to be considered legitimate. To understand those rules and how they change, scholars investigate the structuring abilities of institutional logics, and how those logics compete for dominance within fields of engagement. My interest is how individual actors work through the demands of multiple institutional pressures—recently known as institutional complexity. I draw on the orders of worth and inhabited institutions literatures to understand how actors both invoke societal level orders, as well as rhetorically link the orders to advance their emergent positions and interests. Employing data from the field of building design and construction, I demonstrate more nuanced hierarchical relationships among institutional orders beyond simple dominance and settlement from earlier studies. In doing so, I provide a model of institutional complexity that illustrates the mechanisms with which actors navigate institutional complexity and inhabit multiple institutional orders.

INTRODUCTION

As hierarchical organizations give way to fragmented, and dynamic systems of organizing (Davis & Eisenhardt, 2011), the resulting institutional complexity leads actors to wonder not just what the rules of the game are, but also what game is even being played—or as Davis and Marquis (2005: 338) ask, “whose language and assumptions about organizing wins when there is no hegemon to enforce the rules?” Recent empirical studies examining the competition between two dominant institutional logics demonstrate the parsing and competition between meaning systems that provide such rules (Dunn & Jones, 2010; Suddaby & Greenwood, 2005; Thornton, 2002). In increasingly plural and complex fields however, manifold meaning systems engage to provide a mosaic of variously sympathetic and conflicting logics. Scholars have been criticized for

neglecting “settings in which more than two competing logics are to be found” (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011: 332), prompting calls to pay closer attention to situations of “relational overlap” or “multiple embeddedness”—a situation frequently found in temporary organizations (Battilana, Leca, & Boxenbaum, 2009: 90; Jones & Lichtenstein, 2008: 249).

I respond to these calls by studying the building design and construction industry, where the multiple logics used to create cultural artifacts coalesce into a single project. I apply the “inhabited institutions” perspective, where “interpretation and action at work grounds theory and uncovers fundamental mechanisms in organizations’ relationships to environments” (Bechky, 2011: 1158). I uncover how individuals and organizations navigate situations of institutional complexity. By directly observing institutions in practice, I focus not merely on action, but *interaction*, which is key to understanding the coalitions and conflicts among institutional orders (Becker, 1986; Hallett & Ventresca, 2006). With this approach, I propose a combined hierarchical and process model—“the ordering of orders”—that can inform which of the myriad logics available are selected by a particular actor in a particular situation. This model differs from existing theories and offers four contributions to understanding of institutional complexity:

First, my model builds a fuller account of plurality by showing how an everyday workplace engages all seven orders of worth (Boltanski & Chiapello, 2005/1999; Boltanski & Thévenot, 2006/1991), even if individuals engage one order as a “home.” Accommodating manifold orders allows for socially skillful coalitions and generalizations that yoke two or more logics together during negotiation of action. Further, this yoking allows for easier transport of value from one order to another—e.g., the “halo” effect. Additionally, by suggesting that multiple logics bear on a situation, this view allows for latent critiques by exclusion of logics.

Second, my model contrasts with existing accounts of logic transposition suggested by institutional logics scholars. In existing studies, scholars conflate the logics provided by “cornerstone institutional orders” (Friedland & Alford, 1991) with field-specific logics. The result is a theoretically fluid garbage can model (Cohen, March, & Olsen, 1972) where actors are free to cherry-pick elements from multiple logics to create an (always successful) “hybrid” logic. Instead, I argue that the “cornerstone institutional orders” remain intact, and attempts at

“hybridization” are more accurately described as temporary coalitions among orders. This view endorses Simon’s (1962: 475) “near-decomposability” conception of social systems, where an order tends to have strong internal bonds that make it act coherently and separate from other systems in most cases (the “decomposable” part), but is influenced by other systems in aggregate over the long term (the “near” part). In other words, subscribing to near-decomposability necessarily rejects the possibility of hybrids, and suggest situations of multiplicity instead.

Third, the distinctive aspect of my model is the hierarchy of orders that informs an actor’s commitment to a course of action. The tradeoff “price” for states of worthiness in different orders differs among actors, though it is not randomly determined. Through social reproduction this tradeoff price is influenced by the constituent group that the actor is a part of, but it is also influenced by a particular actor’s *habitus*—individual set of experiences and dispositions. This individual “order of orders” bears on situations of institutional complexity as an organization determines priorities among incommensurable project demands as the building project moves from vision statements to construction invoice payments.

Finally, I provide a closer connection between orders of worth and the materiality found in everyday work. With the building project as an outcome and goal of the participants, each actor frames material constraints by various orders of worth. This engagement addresses a number of critiques that studies of institutionalism do not adequately engage with the materiality of organizations and their work.

Together, these insights show the value of incorporating the orders of worth perspective to produce micro- and meso-views of institutional complexity. Institutional theorists have longed for studies of more than two institutional logics, and this study furnishes a substantial response, providing a clearer understanding of institutional complexity as a negotiation among ordered hierarchies rather than a random or entrepreneurial selection of orders, logics, and dimensions. This study is the first empirical account of hierarchical organization of society’s cornerstone institutional orders.

THEORETICAL CONTEXT

Institutional complexity results when incompatible prescriptions from multiple institutional orders come to bear on individual or organizational decision making¹ (Greenwood et al., 2011: 317). Institutional orders provide assumptions, values, beliefs, and rules with which actors not only win and lose positions in a field of engagement, but also desire or abhor various positions (Friedland & Alford, 1991). These orders are “nearly decomposable,” suggesting that complying with a single order’s prescriptions for action is relatively clear and uncontested (Simon, 1962; Thornton, Ocasio, & Lounsbury, 2012). When multiple orders come to bear on a situation however, tensions and opportunities emerge as multiple prescriptions for action create both incompatibilities (Greenwood et al., 2011) as well as synergies (Kraatz & Block, 2008). Understanding how individuals and organizations navigate situations of institutional complexity requires first to understand where and how institutional complexity emerges, and then to understand how the institutional orders provide their assumptions, values, beliefs, and rules to actors.

Locations of Institutional Complexity

Institutional complexity is particularly likely to emerge in both *fragmented* and *moderately centralized* fields (Pache & Santos, 2010). Fragmentation refers to a state of having multiple uncoordinated constituents on which field members depend for legitimacy or material resources (Greenwood et al., 2011; Meyer, Scott, & Strang, 1987; Pache & Santos, 2010), while moderate centralization involves “multiple and misaligned players whose influence is not dominant yet is potent enough to be imposed” (Pache & Santos, 2010: 458). As the corporate world moves away from hierarchies and towards fragmented and dynamic systems of organizing (Davis & Eisenhardt, 2011), these characteristics cover a wide range of sectors, including microfinance (Battilana & Dorado, 2010), symphony orchestras (Glynn, 2000), pharmacists (Goodrick & Reay, 2011), university technology licensing (Owen-Smith, 2011), biotechnology (Powell,

¹ The terms “institution,” “institutional order,” and “institutional logic” have overlapping definitions in the literature. Institutions are “simultaneously symbolic systems and material practices,” (Friedland & Alford, 1991: 249) while institutional logics are “a set of material practices and symbolic constructions” (Friedland & Alford, 1991: 248). On those two pages, the authors also use the terms “institutions” and “institutional order” interchangeably. For my purposes, I use institutional *order* in this text, yet acknowledge the imperfect fungibility of the terms elsewhere in scholarly literature.

White, Koput, & Owen-Smith, 2005), alternative dispute resolution (Purdy & Gray, 2009), and public employment (van Gestel & Hillebrand, 2011). In these fields, the division of labor involves multiple experts who use different institutional orders to both produce and evaluate their work.

To the conditions of fragmentation and moderate centralization, Greenwood and colleagues (2011) add *emerging* fields where multiple “groups have roughly equal resource endowments” (Fligstein & McAdam, 2012: 90), and actors, roles, values, and interests are not yet clear or well understood. Examples of emerging fields include technological innovation and standards development (Garud & Rappa, 1994; Garud, Jain, & Kumaraswamy, 2002; Hargadon & Douglas, 2001), art museums (DiMaggio, 1991), nongovernmental organizations (Lawrence, Hardy, & Phillips, 2002), HIV/AIDS treatment advocacy (Maguire, Hardy, & Lawrence, 2004), the founding of an academic college (Gioia, Price, Hamilton, & Thomas, 2010), gastronomy (Ferguson, 1998), nouvelle cuisine (Rao, Monin, & Durand, 2003), and sustainability reporting (Etzion & Ferraro, 2010). In each of these studies, “business as usual” confronts change, with new material practices symbolically floating among multiple meanings before settling (sometimes only temporarily) into a field-negotiated institutionalization.

The above structural descriptions of fragmentation, moderate centralization, and emergence involve concepts of multiplicity and situations of institutional plurality, which are “faced by an organization that operates within multiple institutional spheres” (Kraatz & Block, 2008: 243). While institutional complexity focuses on *incompatibilities* among orders, institutional pluralism suggests that organizations are able not only to “simultaneously meet the expectations imposed by various institutional spheres in which they operate,” but also to find *synergies* between orders such that “the organizations’s ability to be one thing actually enhances its ability to be others.” (Kraatz & Block, 2008: 244-5). Relating the two concepts, authors suggest that institutional pluralism provides the context for institutional complexity by providing “the potential for fragmentation, incoherence, conflict, goal-ambiguity, and organizational instability” (Greenwood et al., 2011; Heimer, 1999; Kraatz & Block, 2008: 244; Stryker, 2000). Further, authors recognize that there are locations of *enduring* institutional complexity due to the “sheer array of occupations, which tend to be motivated and conditioned by different

logics” (Greenwood et al., 2011: 323), such as the health sector and organizations delivering professional and educational services (Dunn & Jones, 2010; Goodrick & Reay, 2011; Heimer, 1999; Jarzabkowski, Sillince, & Shaw, 2010; Reay & Hinings, 2009; Scott, Ruef, Mendel, & Caronna, 2000; Thornton, Jones, & Kury, 2005).

Given these locations of institutional plurality and complexity, I now turn to existing understandings of how institutional orders come to structure thought and action in fields, organizations, and individuals.

Existing Understandings of Institutional Influence

There are three main understandings of how institutional orders provide their structures and prescriptions for action to actors. The first is through social reproduction. The second is through institutional order dominance, and the third is through entrepreneurial activity that recombines elements of different orders to create new inter-order structures, norms, and prescriptions for action. I delineate each of these mechanisms below before presenting what this literature leaves unexplained.

Social reproduction. “Every established order tends to produce... the naturalization of its own arbitrariness” (Bourdieu, 1977/1972: 164). Each individual, organization, and field is born into an existing set of structures where a single institutional order or collection of orders provide rules for social interactions. Bourdieu calls this initiation *doxa*, to refer to situations where acting other than is prescribed by the institutional order is quite unthinkable (Zucker, 1977). To exist means to engage with your environment’s meaning system, and to be legitimate means to comply with such a system (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Such compliance has the effect of reproducing the bounding order (Giddens, 1984).

Dominant institutional orders. Though scholarship on social reproduction explains how things stay the same while existing within a single institutional order, it does not fully acknowledge that each field, organization, and individual lives among multiple institutional orders in the “interinstitutional system” (Friedland & Alford, 1991). In trying to understand which order influences which actor, scholars investigate how one order comes to dominate a specific environment (whether that environment is a field or organization). One of the earliest and frequent themes examines “winners” and “losers,” such as in the field of publishing, where

the market logic displaced the professional editorial logic (Thornton, 2002). In the field of banking, the stable regulatory logic was dismantled and replaced by market logic (Lounsbury, 2002), though elsewhere the existing community logic won against the challenger banking logic (Marquis & Lounsbury, 2007). In French gastronomy, nouvelle cuisine eclipsed classical cuisine (Rao et al., 2003). This work tends to examine overarching and long term change, with a singular and sustainable outcome of dominance (Greenwood et al., 2011: 351; Hoffman, 1999).

Sometimes the “losers” of such a battle are not completely eliminated from ongoing contention, as in the health care field in Alberta where business-like health care became dominant and overshadowed—but did not completely replace—previously dominant medical professionalism, and resulted in an “uneasy truce” (Reay & Hinings, 2005). In other examples, the “official” logic of the field is not what is “actually” used in practice. This is termed as decoupling or loose coupling (Orton & Weick, 1990; Pfeffer & Salancik, 2003/1978; Selznick, 1949; Thompson, 2003/1967), and can be found in settings “rife with competing demands, overworked staff, and limited resources” (Bromley & Powell, 2012: 488) such as schools (Meyer & Rowan, 1978; Meyer et al., 1987; Weick, 1976), courts (Thomas, 1983), and prisons (Thomas, 1984). Studying official dominance in these settings may provide an inaccurate picture of what rules actors adhere to when performing their work.

The battle for dominance over rules and prescriptions for action may be ongoing in a field such as medical education where logics of care and science “are supported by distinct groups and interests, fluctuate over time, and create dynamic tensions” (Dunn & Jones, 2010). In the field of alternative dispute resolution, multiple local contexts allow each logic (judicial/bureaucratic or social services/democratic) to be dominant in different locations (Binder, 2007; Lounsbury, 2007; Purdy & Gray, 2009).

Institutional entrepreneurs. While investigations of dominance tend to focus on field-level battles and give little agency to individual actors, literature on institutional entrepreneurship examines how individuals can shuttle among institutional orders within the interinstitutional system to “realize interests that they value highly” by creating new institutions or transforming existing ones (DiMaggio, 1988: 14; Maguire et al., 2004). As these individuals gather resources at their disposal, they both segregate and blend “categorical elements” from different institutional

orders (Thornton et al., 2012: 107). These categories include root metaphors; sources of legitimacy, authority, and identity; bases of norms, attention, and strategy; and economic systems. Table 3.1 illustrates how three institutional entrepreneurs—J.C. Penney, John Sperling, and R.P. Ettinger transposed elements from different institutional orders to appeal to different communities (Thornton et al., 2012: 108).

Similarly, literature on hybridity focuses on this same kind of transposition and recombination across institutional orders. Resultant hybrid organizational forms (Battilana & Dorado, 2010; Binder, 2007; Pache & Santos, 2010; Tracey, Phillips, & Jarvis, 2011), hybrid logics (Djelic & Ainamo, 2005; Glynn & Lounsbury, 2005; Smets, Morris, & Greenwood, 2012), hybrid practices (Goodrick & Reay, 2011), or hybrid identities (Lok, 2010) provide a conceptualization that pulls from different logics to create coherent prescriptions for action (Greenwood et al., 2011: 332).

TABLE 3.1
Interinstitutional System Ideal Types
 (from Thornton et al., 2012: 108, Table 5.1)

Y AXIS: Categories	X AXIS: Institutional Orders						
	Family	Community	Religion	State	Market	Profession	Corporation
Root Metaphor	Family as firm	Common boundary	Temple as bank	State as redistribution mechanism	Transaction	Profession as relational network	Corporation as hierarchy
Sources of Legitimacy	Unconditional loyalty	Unity of will believe in trust & reciprocity	Importance of faith & sacredness in economy & society	Democratic participation	Share price	Personal expertise	Market position of firm
Sources of Authority	Patriarchal domination	Commitment to community values & ideology	Priesthood charisma	Bureaucratic domination	Shareholder activism	Professional association	Board of directors top management
Sources of Identity	Family reputation	Shared emotional connection	Association with deities	Social & economic class	Faceless	Association with quality of craft	Bureaucratic roles
Basis of Norms	Membership in household	Group membership	Membership in congregation	Citizenship in nation	Self-interest	Membership in guild & association	Employment in firm
Basis of Attention	Status in household	Personal investment in group	Relation to supernatural	Status of interest group	Status in market	Status in profession	Status in hierarchy
Basis of Strategy	Increase family honor	Increase status & honor of members & practices	Increase religious symbolism of natural events	Increase community good	Increase efficiency profit	Increase personal reputation	Increase size & diversification of firm
Economic System	Family capitalism	Cooperative capitalism	Occidental capitalism	Welfare capitalism	Market capitalism	Personal capitalism	Managerial capitalism

Note: Dashed-lined cells indicate categories used by Penney, solid-lined cells by Sperlring, and dotted-lined cells by Ettinger. Cells with an X indicate segregation of institutional logics.

Critique of Existing Understandings of Institutional Influence and Complexity

Despite these advances, current understandings of institutional influence still do not fully explain how actors select either orders or elements of orders within an institutionally complex environment. Here, I provide five critiques of the existing literature.

First, few existing studies on institutional plurality study more than two competing logics (Goodrick & Reay, 2011; Greenwood et al., 2011; Zilber, 2011). By limiting “plurality” or “multiplicity” to a *duality*, it is not clear if findings will translate to situations where more than two logics or orders compete.

Second, by starting with a competition between orders (Goodrick & Reay, 2011; Greenwood, Diaz, Li, & Lorente, 2010)—rather than a location of institutional complexity—the “other” orders that may be in play are ignored. Including more than two orders, as well as orders that may not be competing for the dominant position, may provide a more comprehensive understanding of what happens “when there is no hegemon to enforce the rules” (Davis & Marquis, 2005: 338). Work on institutional logics and definitions of institutional complexity imply that logics are inherently incompatible, while “relatively few studies examine the *degree* to which logics are incompatible” (Cloutier & Langley, 2013; Greenwood et al., 2011: 332). Kraatz and Block’s (2008) work on institutional plurality suggests that synergies are possible, yet by focusing on few orders and conflict, synergies and strategies for synergies among orders may be overlooked.

Third, existing literature does not fully explain how hybridization and transposition affect the “cornerstone” institutional orders. Currently, the cornerstone orders exist as resources for hybridization and transposition. Invoking a “nearly decomposable system” suggests that the cornerstone orders remain intact, unaffected by the entrepreneurial bartering between the orders, except in the long-term. There is little work that shows how the internal coherence of an order is affected by such hybridity and transposition activities, or even if it is affected at all. Existing studies also focus on successful hybridization and transposition. When are hybrid or transposing efforts rejected? In other words, what kind of strategies are used by actors to productively span orders (Cloutier & Langley, 2013), and which actions across orders invoke critique and failure?

Fourth, despite Friedland and Alford’s (1991: 248-9) inclusion of “material practices” in the definitions of institutions and institutional logics, categories of logics do not include tangible objects that can connect the material practice with the symbolic system (Cloutier & Langley, 2013; Thornton, Ocasio, & Lounsbury, 2012). A notable exception is the “archetypal ingredients” used in the Rao, Monin, and Durand (Rao et al., 2003) study on French Nouvelle Cuisine. Other studies examine practices (Glynn & Lounsbury, 2005; Lounsbury, 2007; Smets et al., 2012), but this focus is still one step removed from engaging material objects.

Finally, though there has been some study on micro level engagement of institutional orders (Lawrence, Suddaby, & Leca, 2009; Reay & Hinings, 2009), few studies “open the ‘black box’

of institutional processes under conditions of multiplicity (Zilber, 2011)” and demonstrate how conflicts among multiple orders are experienced, negotiated, and resolved at this level (Cloutier & Langley, 2013: 3; Smets et al., 2012).

Approaching Institutional Complexity Through Orders of Worth

The orders of worth framework offers an investigatory path to address the five critiques above (Boltanski & Chiapello, 2005/1999; Boltanski & Thévenot, 2006/1991; Cloutier & Langley, 2013). Similar to the institutional logics perspective, it provides a grammar to understand various dimensions of each institutional order (also known as an “order of worth”), as illustrated in table 3.2. The table draws from three sources: the original Boltanski & Thévenot (2006) model, the addition of the Project order by Boltanski & Chiapello (2005), and the addition of the time dimension by Annisette & Richardson (2011). Here, I review how the orders of worth framework addresses my five critiques of existing institutional complexity scholarship.

TABLE 3.2
Orders of Worth

(Annisette & Richardson, 2011; from Boltanski & Chiapello, 2005/1999; Boltanski & Thévenot, 2006/1991).

Boltanski & Thévenot 1991/2006	Inspired	Domestic	Fame	Civic	Market	Industrial	(B. & Chiapello 1999/2005) Project
higher common principle	the outpouring of inspiration	engenderment according to tradition	reality of public opinion	preeminence of collectives	competition	efficiency	activity
state of worthiness	inexpressible and ethereal	hierarchical superiority	fame	rule governed and representative	desirable	efficient	engaged, engaging, mobile
dignity	anxiety of creation	poise of habit	the desire to be recognized	the aspiration to civil rights	interest	work	need to connect
subjects	visionaries	superiors and inferiors	stars and their fans	collective persons & their representative	competitors	professionals	mediator, project head
objects	waking dream	rules of etiquette	names in the media	legal forms	wealth	means	all the instruments of connection
investment	escape from habits	rejection of selfishness	giving up secrets	renunciation of the particular	opportunism	progress	adaptability
relation of worth	universal value of uniqueness	respect and responsibility	being recognized and identifying	relation of delegation	possess	control	redistribution of connections
relationships	alchemy of unexpected encounters	company of well-brought-up people	persuasion	gathering for collective action	interest (to)	function	connection
figures	reality of the imaginary	soul of the home	public image	democratic republic	market	organization	the network
test	vagabondage of the mind	family ceremonies	presentation of the event	demonstration for a just cause	deal	trial	end of a project, beginning of another
judgment	stroke of genius	knowing how to bestow trust	judgment of public opinion	verdict of the vote	price	effective	being called on to participate
evidence	certainty of intuition	exemplary anecdote	evidence of success	legal text	money	measure	
the fall OR state of unworthiness	temptation to come down to earth	lack of inhibition	indifference and banality	division	unwanted, enslavement to money	inefficient, instrumental action	unemployable
time formation (Annisette & Richardson 2011)	rupture, revolution	customary path	vogue trend	perennial	short-term flexibility	long term planned future	enduring relationships

First, the orders of worth framework starts with the assumption of pluralism, rather than treating situations of multiplicity as an exception to normal practice (Cloutier & Langley, 2013: 5). All persons exist in all orders, and “are inherently endowed with the equipment they need to adapt to

situations” in each of the orders (Boltanski & Thévenot, 2006/1991: 145). In order to function in a situation, actors must recognize which order an object (or a subject) belongs to, and involve it in ways “appropriate to [its] nature” (Boltanski & Thévenot, 2006/1991: 146). Identifying the object or subject’s corresponding order from all available orders involves this assumption of plurality, and allows actors greater agency for order selection (Cloutier & Langley, 2013: 6).

Second, the orders of worth framework addresses situations, rather than conflict. Boltanski and Thévenot (2006: 37-8) suggest that “persons face an obligation to answer for their behavior... to other persons with whom they interact.” Therefore, *all* action and manipulation of objects involves justification to some order of worth. These situations do not necessarily involve conflict per se (though they may), but can involve critiques from one order addressed to others, or compromises which are “fragile” when not embedded in specific pre-determined arrangements (2006: 20).

Third, through inter-order critique and compromise, the orders of worth framework leaves the “cornerstone” orders intact. Fourth, the framework includes objects and subjects and their manipulation such that the issue of materiality is intimately linked with the framework. Finally, the framework engages with discourse to bring to light a subject’s particular interests, drives, and passions that belie the order of worth they invoke (Boltanski & Thévenot, 2006/1991: 39). Analysis of a subject’s discourse and rhetorical strategies thereby focus not just on individual action, but on *interaction* (Hallett & Ventresca, 2006; Suddaby & Greenwood, 2005). This focus on individual forms of justification illustrates the micro level “inhabiting” of societal level institutions (Barley, 2008; Hallett & Ventresca, 2006).

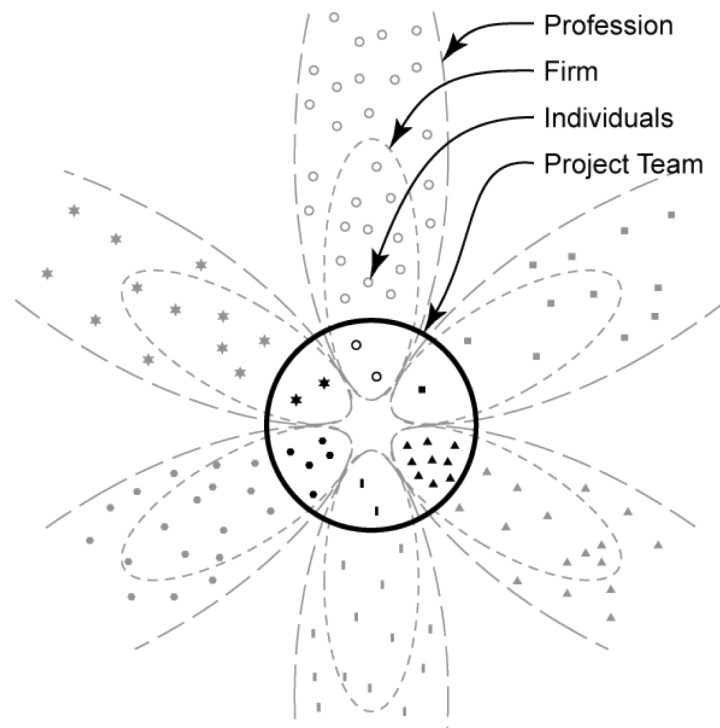
METHODS

To examine institutional complexity, I identified an empirical site where institutional complexity is likely to occur. The building design and construction industry is *fragmented, moderately centralized*, and currently experiencing a challenge with an *emergent* field of green building that focuses on environmental sustainability goals for the built environment. My central goal is to identify values of project participants, and value expression that takes place in everyday work—in other words, how actors “inhabit” the institutions that structure their lives and work (Hallett & Ventresca, 2006).

Research Design

By examining “inhabited institutions,” my research design crosses levels of analysis, with the understanding that individuals are multiply embedded in professions, firms, and the temporary organization of a building project. I began the study at the project level of analysis because a building project creates more “frequent and fateful” (Scott & Meyer, 1994) connections among participants than those participants may have with their employing firm. See figure 3.1 for a visual representation of these nested and overlapping allegiances.

FIGURE 3.1
Nested & Overlapping Allegiances



This project focus provides a diversity of participants collected together for their complementary expertise. In turn, this diverse expertise is likely accompanied by differential adherence to the cornerstone orders. I purposefully selected five building projects designed by nationally-renowned architects, designed for nationally-renowned universities, and with the projects having some relationship to environmental sustainability goals. I selected dominant architectural firms and universities because dominant organizations have tighter links to field-level change (Smets

et al., 2012), either by holding greater formal leadership positions within their professions and fields, or through lower field actors' isopraxis—imitating the practices of field leaders (Erlingsdóttir & Lindberg, 2005). In other words, by engaging with dominant field actors, there is a tighter link among the levels of analysis. I selected university projects because (a) they have a long term relationship with their buildings, thereby providing more complex incentive structures in the pursuit of green buildings, and (b) universities are another instance of an institutionally complex field (Kraatz, 2009).

Data Collection

I drew on three qualitative data sources—interviews, archives, and observations—to capture the activities and ascribed meaning systems of project participants. My collection included behavior and speech on a continuum between private and public. In other words, an IRB-protected interview with me would be the most private data I gathered, while a firm website would be the most public data. By assuring that data collection happened along this private-public continuum, it subsequently represents behavior and speech that actors intended for communication to a variety of audiences. This approach comes from the school of symbolic interactionism which assumes that “human behavior is to be understood as a process in which the person shapes and controls his conduct by taking into account (through the mechanism of "role-taking") the expectations of others with whom he interacts” (Becker, Geer, Hughes, & Strauss, 1961: 19). I accessed the data through both architecture firm and university contacts, variously using my identity as either student or architect. Because the universities were clients in all cases, permission was sought by my contact to the appropriate university representative, who authorized my investigation into both documents and participants. However, I stayed alert to instances where my method of access could influence my interviewee's responses.

Archival data. The building design and construction projects I investigated lasted anywhere from two to five years, with a number of variables affecting the exact determination of length—e.g., internal university determination that a new building “is needed” before any external professionals are involved, projects that go on hold due to funding restrictions or unexpected delays, or lingering payment issues that extend beyond the date of project turnover to the university's operations unit. Almost all details of all phases of a project are documented, whether

it is a press release to alumni about the project's progress, or a set of meeting minutes between the architect and structural engineer. When investigating a project, I began with archival data on the project so that I could efficiently use the time of my interviewees by focusing on particular situations or events I found in archival sources that triggered multiple orders of evaluation.

Interviews. I interviewed 49 individuals associated with the building design and construction industry, representing all major categories of participants (owner, architect, and contractor representatives), as well as other participants in the projects (e.g., lighting designer, cost estimator, engineer, landscape architect, university student, etc.). Appendix A provides demographic information of the interviewees. I sent my semi-structured interview protocol to the participants in advance of the interview, and included questions regarding the individual's involvement in a particular project, a reconstruction of events that required team interaction, their feelings toward reward and accomplishment, and if they did not already describe an interaction related to green building, a specific question about the achievement of green building goals and team processes. The full set of questions is listed in appendix B. Each interviewee is identified in this text by a pseudonym or title only.

Observations. I spent approximately two weeks in an architecture firm where I observed the "regular work" of multiple projects. The firm has an open-office layout, where everyone can hear phone and in-person conversations, as well as ad-hoc meetings throughout the day. Private meetings happened in a conference room. Participants were aware of my presence, and each acknowledged informed consent of my observations. Examples of data include: phone conversations to quickly assemble a team for a high-profile government request for qualifications; a speaker-based conference call involving a project manager, a project architect, and two engineers regarding the quantity and placement of gas tubes for a lab; casual conversations about the staffing of the firm and how it changed in recent years; relationships of the firm with its other offices, including a "lessons learned" lunchtime video conference; and meetings among architects, engineers, and contractors.

I also attended a public lecture and student workshop by the firm's principal architect, and attended the American Institute of Architects convention where the firm won a prestigious award. During the week-long convention, I was able to observe other professionals in public interactions

in sessions regarding integrated design, green building, and other topics. Further, I thrice attended GreenBuild, the conference and expo of the USGBC, where I engaged a number of industry professionals on topics of inter-professional engagement. During all of the observations, I kept copious real-time notes, and further refined impressions through the creation of field notes and memos later that evening. These reflections allowed me to continuously refine my interviewing techniques and develop preliminary theoretical understandings of institutional complexity.

Data analysis

In my inductive analysis, I traveled among the data, literature, and emerging theory. In the first phase of analysis, I examined project documents from initial requests for qualification (RFQ) where the university provided a set of expectations for the project, through applications for payment which highlighted (un)met expectations. In between, there are a number of documents, email messages, and public statements that provide an expression of the speaker/writer's system of values. I quickly zeroed in on situations where there was an involvement of a number of actors across a number of fields of expertise. I aimed to study "matters which seemed to be of importance to the people [I] studied" as well as moments of tension or conflict, since those moments are most likely to reveal expectations by their violation or frustration (Becker et al., 1961: 20-21).

Throughout the research process, I entered documents into NVivo, a qualitative research software that simplifies the coding of text. To code, a researcher reads through the text, and highlights a section of it that represents a conceptual "whole." He or she then applies to that portion of text a "code" that captures the essence of the text's meaning. *In vivo* coding produces a code name that comes directly from the text. This text processing aims to collapse a large volume of data into a manageable form, where codes can be further collapsed into themes and categories that relate to emergent theory. Constant comparison between codes, and between coded passages provides rigor to the process, staying aware of the similarities and distinctions among conceptual categories.

In my second phase of analysis, I began interviews and performed initial coding on both project documents and emergent interview data. I performed initial coding with a three pronged

approach: First, I structurally coded the interview answers, as well as topical content (e.g., “like about job,” “frustrating,” “job well done,” “LEED”). Second, with an orienting theoretical perspective of institutional complexity and orders of worth, I coded statements and discussions that identified the speakers’ norms, values, and assumptions, especially how they related to material practices (Boltanski & Thévenot, 2006/1991; Thornton et al., 2012). Codes during this phase included “tradeoffs,” “assumption,” “rule,” “expectation-exceeded,” “value-financial,” “value-aesthetic,” and “background.” Third, following the guidelines for qualitative data analysis and grounded theory work (Locke, 2001; Miles & Huberman, 1994), I performed *in vivo* and open coding (Corbin & Strauss, 2008; Locke, 2001: 65) to provide conceptual categories that did not fit the institutional order framework.

In the third phase of analysis, I selected data that had multiple “values” (e.g., value-environmental, value-aesthetic, value-reputation, etc.) coded to the same portion of text. In these excerpts, I identified words and concepts that invoked specific orders of worth as described by Boltanski, Thévenot, and Chiapello (2005; 2006), whether these concepts involved states of worthiness or states of unworthiness. This coding is illustrated in table 3.3.

In the fourth phase of analysis, I developed a conceptual process diagram, where I mapped the expansion or contraction of goals onto project phases from vision statement to instantiation, illustrated in figure 3.2. This figure conceptually demonstrates the project-level negotiation of multiple orders of worth in one building project. Five distinct phases demonstrated the push-and-pull of multiple orders. The *Vision Statement* typically invoked many—if not all—orders of worth when setting aspirations, and was careful not to invoke any states of worthiness in one order that constituted a state of unworthiness in another order. *Hiring Consultants* involved contracting with firms to defend concerns within a consultant’s “home” order. The hiring process inherently privileged some orders over others, depending on the service offerings and state of dominance a service provider held within the order. *Setting Priorities* came to terms with limited resources and established minimum achievement goals in each order (though rarely so explicitly as this explanation suggests). *Value Engineering* compared orders to each other, and required tradeoffs to meet resource limitations. Both aspirational and minimum goals were adjusted in this phase. *Final Instantiation* is a representation of the material object left after the project is over,

and the data provided examples of value transport that explains why actors argue for goals outside of their “home” order.

TABLE 3.3
Representative Data

Vision Statement and Request for Proposals								
V1. Dean	Our distinctive program is limited only by facilities that simply do not do justice to [our] team-based, collaborative educational approach. State-of-the-art facilities will make a critical difference in our ability to recruit faculty and students in a highly competitive arena. [This] gift will enable us to create an even more exciting learning environment, accommodate future growth , and provide an integrated look and feel to our facilities.							
	+	distinctive, create, exciting, look and feel	learning, educational	distinctive	justice, team-based, collabora-	difference, recruit, highly competitive	state-of-the-art, future growth	team-based, collabora-tive
	-	Inspired	Domestic	Fame	Civic	Market	Industrial	Project
		-	-	-	-	-	-	-
V2. University Project Manager	This building was to be a signature building, in a prominent location on campus, that was a visual and physical manifestation of our goals of bringing women leaders to the 21st century . That a business degree would propel women into this broader field of business and of leadership in a way that maybe other							
	+	signature	leaders	signature, prominent	women (cause)	other schools	goals, 21st century	-
	-	Inspired	Domestic	Fame	Civic	Market	Industrial	Project
		-	women, 21st century	-	-	-	-	-
Hiring professionals								
H1 Architect	Even in the most serious architectural circles, intellectual games and superficial dogma can take the place of affirmation , and the mediocrity and deadness of much of our environment continues to spread... Belief in the sensuality of place, the emotive qualities of materials and the ability to give pleasure and insight , to comfort , and to transport , can produce humane and spirited architecture. It is our belief that exceptional architecture comes from the search for solutions which respond to the particular circumstances inherent in							
	+	serious, sensuality, emotive, pleasure, insight, comfort, transport, humane, spirited, particular	serious, dogma	superficial		games		
	-	Inspired	Domestic	Fame	Civic	Market	Industrial	Project
		-	mediocrity, deadness	spirited			particular	
H2 Cost Consultant	[Cost Consulting Firm] has developed sought after benchmarking datasets and is further developing these on a global basis. These, along with our extensive experience and specialist knowledge of end markets and building types, enable us to accurately advise on the cost implications of our clients' requirements. Successful cost management requires the adoption of optimum procurement strategies , designed to balance the, at times, conflicting requirements of risk, certainty, speed, design, quality, budgets and							
	+	risk, design, quality	certainty	sought after, global		markets, risk	benchmark, experience, accurately, cost management, optimum, strategies, quality, certainty, speed, budgets	balance
	-	Inspired	Domestic	Fame	Civic	Market	Industrial	Project
		-	benchmark, datasets, optimum	risk		-	risk	

TABLE 3.3 (continued)

Experiencing Tradeoffs, Creating Oppositions, Conflicting Prescriptions							
T1. Faculty Leader	Another issue has to do with money . All money is not fungible . Donors give money for capital expenses . They don't give money for maintenance . So I'll put \$100 million into the building, but then you figure out how to maintain it for the next 50 years . Heat, lighting, all that stuff.						
	+		donor	capital expense		money, fungible	capital expense, maintenance, next 50 years
		Inspired	Domestic	Fame	Civic	Market	Industrial
-		money				next 50 years	
T2. Finance Director	We have two rules : 80% of capital funding must be in place before the building project starts and 10% of the money raised must be devoted to a maintenance endowment .						
	+		rules, money raised, endowment			capital funding	capital funding, money, maintenance
		Inspired	Domestic	Fame	Civic	Market	Industrial
-						maintenance	
T3. Faculty Leader	Because of the long time frame , you put a green roof on today , it's gonna cost more than a conventional roof. But you don't really see that capital investment again until it has to be replaced, which is 20, 25 years out. Any kind of discount [rate/NPV calculation] is gonna make that useless. So unless you look at health impacts, water impacts, or other, you can't justify it, just by pure economics .						
	+		conventional		health, water	today, discount rate, economics	long time frame, conventional, capital investment, discount rate, economics
		Inspired	Domestic	Fame	Civic	Market	Industrial
-						cost more, 20, 25 years	cost more
T4. Faculty Leader	We have green roofs but they're gimmicks , they're so small. They have some impact, but we have them more because we can now say we have green roofs . We got push-back from facilities with " complexity ," " fire issues " —as if sedum [a succulent plant] is gonna catch fire! The groundspeople didn't know how to get lawn mowers up there to cut the grass or, "How we gonna water the grass up there?" Well, of course, it's not grass. Initially you need to set the sedum and after that you just leave it alone , except for pulling out tree roots. So it was ignorance . The roofing maintenance people at the university asked "How can we repair the roof if you've got plants growing up there?" They had no idea that it probably doubles the life of the roof, and you don't have to get up there as often .						
	+	?green roofs?	push-back	gimmicks	we have green roofs	leave it alone	maintenance, doubles life, don't have to get up there as often
		Inspired	Domestic	Fame	Civic	Market	Industrial
-		gimmicks				maintenance	complexity, fire issues, ignorance
T5. Architect	There were a lot of discussions on plant material. Because [for LEED], you need to have native plants , but how does one do that in a way that is appropriate to be near a law school? So it couldn't just be native plants, it had to be native plants that were appropriately picked, cause you don't want a wild garden outside this place. Whether it's a cost , or whether it's an aesthetic issue, or whether it goes against the guidelines , and things like that.						
	+	wild, aesthetic	appropriate, guidelines		native plants, law		
		Inspired	Domestic	Fame	Civic	Market	Industrial
-		wild				cost	cost

TABLE 3.3 (continued)

Experiencing Tradeoffs, Creating Oppositions, Conflicting Prescriptions (continued)								
T6. Student	There was always a view that green was an additional thing. You were always giving something up, be it an aesthetic goal or otherwise. We were going to have terra cotta tiles from Italy and I did some research and suggested recycled clay ones from Ohio that have the same aesthetic look. And that was a non-starter , because the architect had already picked the terra cotta clay source in Italy, and the “exact” look . So the perception was that even if you can get something that looks 95% the same , that’s incredibly more environmentally effective because it’s local , and recycled content , the administration was not willing to push that envelope .							
	+	aesthetic goal, look	non-starter, already, administration		green, recycled, environmentally effective, local	the same		
		Inspired	Domestic	Fame	Civic	Market	Industrial	Project
-		<i>push that envelope</i>			<i>additional</i>			
T7. Architect	People were going through the LEED checklist and trying to decide how to get the most points for the least cost . You had people adding dollar signs to each of those points and they were going for the easy points. That wasn’t necessarily the best use of those dollars. If you think about the long term goals of trying to save the planet , some of those items – getting a point for operable windows – you’d probably do operable windows anyway if you’re worth your salt.							
	+	operable windows			save the planet	dollar signs	checklist, most points for least cost, easy, long term	
		Inspired	Domestic	Fame	Civic	Market	Industrial	Project
-		<i>checklist, dollar signs, easy</i>						
T8. Engineer	The problem? LEED gives “green” points for construction factors and building features that have more to do with “ feel good ” aesthetics than energy conservation . “A bike rack? You get a green point for a bike rack?” he said incredulously, pointing out that as important as that might be to some people, it has nothing to do with building performance .							
	+	“feel good,” aesthetics					energy conservation, performance	
		Inspired	Domestic	Fame	Civic	Market	Industrial	Project
-		<i>conservation, performance</i>				<i>“feel good”, aesthetics</i>		
T9. Media	“Transportation energy intensity” is a metric that has long been used to measure such things as how efficiently freight is transported. We’re proposing it here as a metric of building performance . The transportation energy intensity of a building is the amount of energy associated with getting people to and from that building, whether they are commuters, shoppers, vendors, or homeowners .							
	+		homeowners			shoppers, vendors	metric, efficiently, performance, commuters	
		Inspired	Domestic	Fame	Civic	Market	Industrial	Project
-								

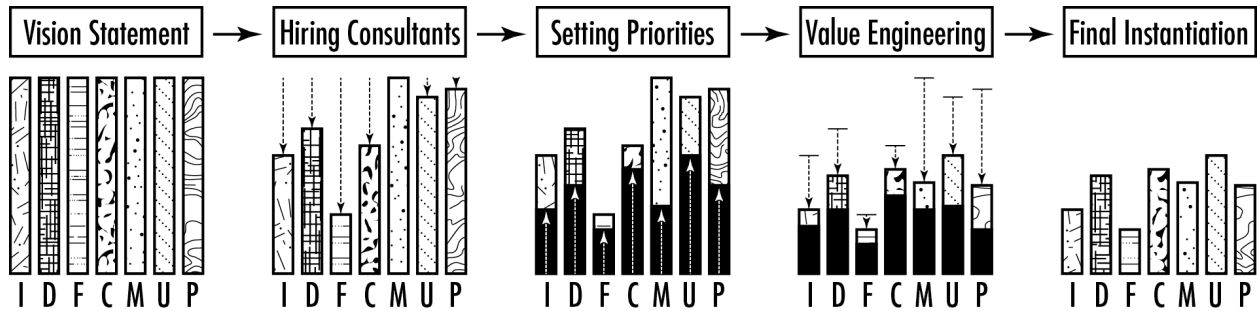
TABLE 3.3 (continued)

Value Engineering								
E1. Architect		Being able to successfully whittle away efficiencies where you don't perceive that you're missing something. How much selective reduction ? So how much can you take away before somebody notices that there's a significant reduction of materials or quality ?						
	+	perceive, quality				reduction	whittle away efficiencies, reduction of quality	
		Inspired	Domestic	Fame	Civic	Market	Industrial	Project
	-	<i>missing something, reduction of quality</i>						
E2. Cost Consultant		It was a very ... articulated building. Lots of materials on the building for how small it is. And so that added a great deal of complexity or a premium on the cost . [VE is] redesign , it's working with the architect to understand what they could achieve, it was the owner seeing what else they can do in terms of funding . And we got additional funding . It wasn't enough to get everything done , but it accommodated some of the pain . So there was a collective contribution from everybody's part.						
	+	articulated, get everything done	owner, understand				working, funding	collective contribution
		Inspired	Domestic	Fame	Civic	Market	Industrial	Project
	-	<i>pain</i>				<i>premium on cost</i>	<i>complexity, premium on cost, redesign, additional funding</i>	
Final Instantiation								
F1. Engineer		I like a building to get recognition . I like a building to feed my egoI can go to one of these conferences and meet people and say "I was working on this." And they [say], "Wow that's good, cause I work on strip malls ." ...a good space, a beautiful space. I mean, a lot of the time we ride on the architect's coattails. Some of the things we did, like the [well-published high-rise], it just meets energy code . But, it's a different building, and it gets a lot of press , and people talk about it because of its look .						
	+	ego, good, beautiful, different, its look		recognition, ego, a lot of press, people talk		different	energy code	
		Inspired	Domestic	Fame	Civic	Market	Industrial	Project
	-	<i>strip malls</i>	-	-	-	-	<i>just meets</i>	-
F2. Contractor		I'd rather be building what the architect wants as well... if the money's there. ...better job satisfaction . Something nicer to tell the guys back at the office. Something nicer to tell my family about... jobs that you want to drag your family out to at the end and show them.						
	+	satisfaction, nicer	drag, family	tell, show		money, job	money, job	
		Inspired	Domestic	Fame	Civic	Market	Industrial	Project
	-	<i>money</i>	-	-	-	-	-	-

FIGURE 3.2

Project’s Process: A Project-Level Model of Institutional Complexity.

Black bars represent minimum achievement goals. Patterned bars indicate aspirational goals.



INSTITUTIONAL COMPLEXITY IN BUILDING DESIGN AND CONSTRUCTION

The Nature of Building Design and Construction Projects

Building projects are marked by the inclusion of innumerable actors—e.g., firms, individuals, professional organizations, states, material objects—who each have a part to play in a typical two-to-five year project. Rarely is there a single list that includes credit for all actors (let alone having it animated and set to music as in the similarly complex field of movie production).

Instead, the public typically hears about only the “opening credit” participants, and indeed the building owner, the architect, and the contractor are the most central individuals and organizations within the project. But they are far from the only ones that the project relies on.

Each individual and organization in a building project plays a critical role in moving the project from an idea in the minds of faculty and deans to the first teaching session in a classroom. The actions of each party are *consequential* due to the interdependence of work that intersects the socially constructed division of labor. Below, I demonstrate how the field of building design and construction is fragmented, moderately centralized, and engages with the emergent field of green building. I then go deeper into the data to demonstrate how actors within this field manage its complexity.

A fragmented and moderately centralized field. Table 3.4 outlines a handful of the institutions and actors involved in the “culture of building,” illustrating their “individually legitimate but often contradictory agenda” (Davis, 1999: 127-8), displaying the *fragmented* nature of the field where “multiple independent groups and organizations make demands that are, at best, uncoordinated” (D'Aunno, Sutton, & Price, 1991: 636; Meyer, Scott, & Strang, 1987).

This list still does not encompass additional constituents such as material suppliers, real estate brokers, or building users. Using the Boltanski & Thévenot (2006) framework to analyze the few statements in the table, it is easy to distinguish the myriad orders of worth bearing on a project, not only between constituents but also within each constituent group. Table 3.4 also illustrates the *moderate centralization* of the field by indicating actors that neither have “the legitimacy and authority to... impose relatively coherent demands on organizations”—as in a highly centralized field, nor can the actors “be easily ignored... since the referents... have little ability to monitor and enforce them”—as in a decentralized field (Pache & Santos, 2010: 457-458). Therefore, the moderate centralization of the field ensures a level of institutional complexity for actors to manage.

TABLE 3.4

Constituents in the building design and construction field

(from Davis, 1999: 127-128, with Boltanski & Thévenot 2006/1991 world assignment by author).

Institutions and Actors	Goal	Method	Inspired	Domestic	Fame	Civic	Market	Industrial Project
Developers and banks	maximizing the ratio between profit and risk	concentrating their investment in projects that are predictable and not innovative		■			■	■
Planning departments	furthering the city's political and economic concerns by developing growth policies, master plans, and zoning ordinances	involving development interests as well as citizens' groups in their work				■		
Zoning review boards	interpreting zoning laws in a way that is in accord with relevant law and constitutional protection of rights	instructing staff to evaluate project and variance proposals according to strict interpretations of the law		■		■		
Transportation departments	are interested in keeping vehicles moving smoothly	balancing relationships between street design, traffic control, and traffic flow and by basing their capital funds requests on this issue				■		■
Building departments	minimizing the risk of life-threatening conditions in buildings	utilizing nationally promulgated codes and by authorizing plan checkers and building inspectors to interpret the law strictly		■		■		■
Architectural firms	the design quality of their buildings and the life of the city, with the highest possible profit margin for their professional services		■			■	■	■
General contractors	the construction quality of their buildings while maintaining the highest possible profit margin for *their* services	developing expertise in bidding and contracting and by building up a network of subcontractors on whom they can rely		■			■	■
The public	a lively and prosperous downtown, safe and pleasant neighborhoods, and humane and affordable housing		■			■		

An emergent field. The third characteristic of fields where institutional complexity is likely to exist includes *emergent* fields. The nonprofit United States Green Building Council (USGBC) was formed in 1993 by a group of developers, building product manufacturers, lawyers, and architects. The organization subsequently developed a “voluntary, consensus-based, market-driven, third-party verification” program to measure and rate “greenness” or improved environmental practices and products used in the design and construction of buildings. The USGBC launched the Leadership in Energy and Environmental Design (LEED) green building rating pilot program in 1998, which is a checklist system that requires both performance and

documentation of performance in categories such as sustainable sites, water efficiency, energy & atmosphere, material & resources, and indoor environmental quality. To achieve certification, a project must first meet prerequisite “credits” and thereafter achieve a minimum number of credits that correspond to increasing levels of certification—Certified, Silver, Gold, and Platinum.

There are a number of ways to gauge the emergent nature of green building, noting in particular the increased interest and influence of the USGBC and LEED rating system. For example, after an attendance of 4,185 in 2002, the USGBC’s Greenbuild conference & expo increased attendance by 670% in eight years to over 28,000 attendees in 2010. Over 400 U.S. localities have adopted LEED and green building-based policies. In 2001, the USGBC first offered a professional accreditation exam to receive the LEED Accredited Professional designation (LEED AP). As of 2011, there are 192,000 LEED professional credential holders across the globe. After fifteen years of existence, there are now 79 local U.S. Chapters of the USGBC, and the organization’s 2011 revenue was \$73 million. In six years, from 2005 to 2011, the number of projects registered with the USGBC increased from 2,358 to over 125,000. Leading mainstream companies such as Bank of America, PNC Bank, Starbucks, Home Depot, McDonald’s, UPS, and many others have very publicly adopted the LEED rating system for their facilities. In terms of changing the industry, Home Depot now caters to customers aiming to achieve LEED for Homes rating. Finally, recent market studies show that LEED office buildings earn increased rents when controlling for both location and quality (Eichholtz, Kok, & Quigley, 2010).

As the green building field emerges within the mainstream client set of the building design and construction industry, a “perfect storm” of institutional complexity provides situations of contestation from which I am able to discover sets of assumptions, norms, beliefs, and expectations that actors assign to fragmented and emergent material practices. The following text outlines the phases of a building project, focusing on the types of interactions as well as the invocation of institutional orders. Subsequently, I discuss these findings and outline a model of institutional complexity.

Vision Statements and Requests for Qualifications

University building projects start within academic units who express a “need” to the university administration for additional or improved space. A “unit” tends to be defined by a separate budget, a separate degree offering, or more likely, both. The separation of budget responsibilities at a university is complicated, obscure, and often unclear even to the unit-level budget managers (Archibald & Feldman, 2010; Ehrenberg, 2002; Goldstein, 2012). Funding for buildings is actually a bit more straightforward at most institutions, where capital projects (e.g., constructing or renovating buildings) require fundraising—often through alumni of the program that seeks to expand or renovate—rather than any links to tuition or endowment income. At most universities, the Board of Trustees (or equivalent) must approve all new building projects, as well as the dean of the unit, since the deans present the main request to university administration.

The impetus to build a building comes from a number of realms that rarely have to do with “needing more space.” Academic buildings are intricately linked with a university’s set of priorities, whether it is an issue of creating legitimacy for a department, raising program rankings, keeping a high-earning research faculty member, or pleasing a major donor with attention to a particular program. The arguments used in press releases and public statements focus on continuing success, and qualitative goals of achievement:

Our distinctive program is limited only by facilities that simply do not do justice to [our] team-based, collaborative educational approach. State-of-the-art facilities will make a critical difference in our ability to recruit faculty and students in a highly competitive arena. [This] gift will enable us to create an even more exciting learning environment, accommodate future growth, and provide an integrated look and feel to our facilities.
(V1)

This statement from the dean of a business school includes elements of all seven orders of worth, as indicated in table 3.3. In all cases, the dean focuses on elements that earn high states of worthiness within the orders. Note that positive elements in one order that may constitute a state of unworthiness in another order elude his statement. This selection of values also skillfully “blames” material objects (e.g., existing “facilities”) for any current state of *unworthiness*.

More difficult but similar situations involve vision statements that necessarily include elevation of an element that represents a state of unworthiness in one of the orders:

This building was to be a signature building, in a prominent location on campus, that was a visual and physical manifestation of our goals of bringing women leaders to the 21st century. That a business degree would propel women into this broader field of business and of leadership in a way that maybe other schools don't. (V2)

This statement regarding a new building at a women's college necessarily included a domestic state of unworthiness (e.g., women, Boltanski & Thévenot, 2006/1991: 168). However, the concepts "leaders" and "leadership" are states of worth in the domestic order, thereby compensating for any diminishment in the domestic order by focusing on women.

Hiring professionals

Once the unit has achieved fundraising goals and permission from the board of trustees to pursue the building project, the university's facilities office sends out a Request for Proposals (or Request for Qualifications) for design services. In recent years, universities have also retained the services of a construction manager early in the design process to consult on cost and constructability issues. Eventually, the project team sends out drawings and specifications for either competitive bidding or invited pricing. Each proposal for services offers a view into not just the orders of worth that the firm adheres to, but also the order of worth that the firm is essentially hired to defend within the project. The following excerpt from an architect's proposal to a university system sets their identity and expertise squarely within the inspired order:

Even in the most serious architectural circles, intellectual games and superficial dogma can take the place of affirmation, and the mediocrity and deadness of much of our environment continues to spread... Belief in the sensuality of place, the emotive qualities of materials and the ability to give pleasure and insight, to comfort, and to transport, can produce humane and spirited architecture. It is our belief that exceptional architecture comes from the search for solutions which respond to the particular circumstances inherent in each situation. (H1)

In setting this identity, they also assuage the client's possible fear of what this means in terms of typical compromises the inspired order makes with other orders. For example, by rejecting the "intellectual games and superficial dogma" of "serious architectural circles," they are distancing themselves from "starchitects" (star architects) who are popularly seen to engage the domestic and fame orders by paternalistically using clients to achieve their own renown. The authors above suggest that architects who engage the order of fame (as well as the domestic order

through either bringing their ego to a client project or leading the field by being “in” the “serious architectural circles”) results in a state of unworthiness (mediocrity and deadness) in the inspired order. This is a skillful manipulation of orders that can both increase their own worth in the inspired order, as well as blast apart public assumptions of typical compromises between orders.

Firm websites also illustrate the organization’s adherence to orders of worth since it is the main location for the firm to express its value proposition—with value expressing a state of worthiness within one or more orders.

[Cost Consulting Firm] has developed sought after benchmarking datasets and is further developing these on a global basis. These, along with our extensive experience and specialist knowledge of end markets and building types, enable us to accurately advise on the cost implications of our clients’ requirements. Successful cost management requires the adoption of optimum procurement strategies, designed to balance the, at times, conflicting requirements of risk, certainty, speed, design, quality, budgets and benefits.
(H2)

This excerpt from a cost consulting firm’s website provides an adherence to qualities that provide worthiness in the industrial order, as expected. This order appreciates careful planning to ensure “optimum procurement strategies” as well as professionals with “extensive experience” and “specialist knowledge” so that the project moves efficiently with “speed.” The firm does not mind invoking terms that involve a state of unworthiness in orders that they will not be hired to defend but they know will be a part of building projects, such as the inspired world that eschews “datasets” or embraces risk. Further, by acknowledging the value to manage the products of the inspired world by “balanc[ing]” the requirements, they adhere to the project world in suggesting that they can productively engage with the building team.

Experiencing Tradeoffs, Creating Oppositions, Conflicting Prescriptions

At one architecture firm, a residential client would provide designers with the latest issue of *Elle Décor* or *Martha Stewart Living* and proclaim “This is the exact kitchen I want!” despite the architects already having designed the “exact kitchen” from the previous month’s issue. One month it was a country farmhouse kitchen, the next a modern laboratory design, the next a post-modern Disney-esque harlequin. In the end, they explained to the client that she was only going to have *one* kitchen, and that at some point in the future, all but one of those fantasies were not going to be hers, much to her disappointment. This anecdote serves to illustrate the reality of

materiality in building projects. All projects include conflicting desires, whether it is an apportioning of the budget, a selection of the window supply firm, or even paint colors. These situations of tradeoff highlight the orders of worth that actors bring to their professional engagements. Below, I outline how actors both understand and strategically engage with multiple orders of worth inherent to tradeoff situations.

Measuring payback. As concerns for environmental sustainability invoke longer term futures than have traditionally been considered in the building project, the concept of payback—where long-term operational savings offset short-term increased capital expense—engages multiple conversations throughout the building process (Kats, Braman, & James, 2010). There are debates over calculating simple payback versus a net present value calculation, as well as the time frame to take into account when calculating savings. In other words, some organizations may save thousands of dollars over the life of the investment, but when using a 5-year limit for payback calculations, the investment does not look as attractive. At one university, an economist suggested that if the university facilities office did not want to invest in higher efficiency equipment, then the university's endowment investment office should reallocate investments from stocks and bonds and provide the improvements for the university since by his calculations, the financial returns would be greater (Bazerman, Wade-Benzoni, & Benzoni, 1996). How can this happen? How can a facilities department be so resistant to these improvements? A division between budgets, and consequently, orders of worth can explain:

Another issue has to do with money. All money is not fungible. Donors give money for capital expenses. They don't give money for maintenance. So I'll put \$100 million into the building, but then you figure out how to maintain it for the next 50 years. Heat, lighting, all that stuff. (T1)

This typical university division between capital projects and maintenance shows a division between short-term cost of constructing a building (market order) and the long-term costs of operation (industrial order). Constructing a building is much more attractive to donors, who can achieve higher worthiness in multiple orders—they are lauded (fame) for the leadership (domestic) of their donation (civic) that creates an iconic (inspired) building for the program. But maintenance and operation? Donations or savings there do not increase worthiness in the same way. Further, creating an efficient building is an industrial state of worth, which requires capital

investment rather than increased operation budgets. One university changed the incentive structure so that investments in operations and maintenance are connected to the capital project:

We have two rules: 80% of capital funding must be in place before the building project starts and 10% of the money raised must be devoted to a maintenance endowment. (T2)

Rather than competing (market worth) for yearly funds with other university priorities, this facility group is able to make investments into energy efficiency (industrial worth) that payback to its own budget.

Other payback discussions involve a more complicated “calculation” because the benefits accrue to society (civic order) rather than to the building owner (market/industrial order). Adequate water supply, water quality, air pollution from energy use, and heat island effects (where the temperature of an urban area raises due to black surfaces and thereby requires additional air conditioning in summer) are just a few examples of these environmental externalities:

Because of the long time frame, you put a green roof on today, it's gonna cost more than a conventional roof. But you don't really see that capital investment again until it has to be replaced, which is 20, 25 years out. Any kind of discount [rate/NPV calculation] is gonna make that useless. So unless you look at health impacts, water impacts, or other, you can't justify it, just by pure economics. (T3)

Further, the effects of a university “going green” is unquantifiable, but nonetheless influential on a program’s reputation. Though payback calculations on solar panels, for example, may not provide adequate financial savings, it may provide a significantly enhanced image that attracts more resources, as well as reducing air pollution generated from other forms of energy (Duckles, 2013). A green roof, on the other hand, has been more equivocal, where its benefits and reputational effects (and the connection between those effects) can be multiply interpreted, depending on the order of worth making the evaluation:

We have green roofs but they're gimmicks, they're so small. They have some impact, but we have them more because we can now say we have green roofs. We got push-back from facilities with “complexity,” “fire issues”—as if sedum [a succulent plant] is gonna catch fire! The groundspeople didn't know how to get lawn mowers up there to cut the grass or, “How we gonna water the grass up there?” Well, of course, it's not grass. Initially you need to set the sedum and after that you just leave it alone, except for pulling

out tree roots. So it was ignorance. The roofing maintenance people at the university asked “How can we repair the roof if you've got plants growing up there?” They had no idea that it probably doubles the life of the roof, and you don't have to get up there as often. (T4)

The above situation shows a battle within the industrial order (and surprisingly doesn't include the legitimate higher initial cost argument). However, in this situation the facilities staff viewed green roofs as providing worth external to their “home” industrial order, so the speaker responded to their concerns *within order*. In this articulation, he also derided the size of the green roofs as “gimmicks” which suggests that their installation was more the result of aims for increased fame or an appearance of civic worth (e.g., green roofs seen as an external indicator of adherence to sustainability goals). Discussions of green roofs display the equivocality typical in an emergent field and its corresponding institutional complexity.

Situations of conflict. Some tradeoffs are more straightforward in that the orders at stake are clear to most participants. The following description illustrates the institutional multiplicity present in the selection of plants around a law school:

There were a lot of discussions on plant material. Because [for LEED], you need to have native plants, but how does one do that in a way that is appropriate to be near a law school? So it couldn't just be native plants, it had to be native plants that were appropriately picked, cause you don't want a wild garden outside this place. Whether it's a cost, an aesthetic issue, or goes against the guidelines, and things like that [were all debated]. (T5)

Law schools, though part of the civic order, are conservative (perhaps through the tradition and practice of case law), and therefore also adhere to the domestic order. Native plants require fewer resources such as water and pesticides, so they contribute to environmental sustainability. However, native plants are not cultivated (i.e., domesticated) plants, and many have a “wild” quality that invokes the lack of control in the inspired order, which constitutes a state of unworthiness in the domestic order. The architect understood those tradeoffs, and proceeded to make sure that the domestic value of “appropriateness” was brought to bear on the native plant selection that would meet the civic order's sustainability concerns.

On the surface, the following example seems to be a simple battle between the inspired order (“exact look”) and the civic order (“environmentally effective”):

There was always a view that green was an additional thing. You were always giving something up, be it an aesthetic goal or otherwise. We were going to have terra cotta tiles from Italy and I did some research and suggested recycled clay ones from Ohio that have the same aesthetic look. And that was a non-starter, because the architect had already picked the terra cotta clay source in Italy, and the “exact” look. So the perception was that even if you can get something that looks 95% the same, that's incredibly more environmentally effective because it's local, and recycled content, the administration was not willing to push that envelope. (T6)

However, this situation is layered with the domestic order when considering the status of the student speaker who served in a voluntary consulting role for “greening” the project after student activism pressured the dean and the university to adopt LEED certification. “Not willing to push that envelope” did not mean that the student’s suggestion failed the aesthetic test (though at 95% the same, rather than 100%, it is possible that it could fail). Instead, the administration invoked the domestic order, where the student’s contribution was less worthy because that order values proper behavior, subordination, and respect for authority. The student was free to make suggestions because faculty—by using the administration’s public expressions of holding civic and industrial values—earlier had invoked these orders to arrange for the student group’s participation, due to the students’ experience in the professional world. But the students were *only* allowed to make suggestions. Once “inside” the project, their identities in the view of university administration retained the status of “student” in the domestic order, where their state of worthiness involves an acceptance of decisions made by the subjects of higher value (e.g., administration) or those tasked with defending the inspired order that involves aesthetics (e.g., the architect).

Buying a point. A touchstone for a number of participants is the concept of “buying a point.” The implication of this phrase is that a project can gain LEED points and a subsequently higher certification by “throwing money” at the LEED checklist so that an adequate number of points would be gained for the goal certification level. Another implication contained in the disdain associated with this phrase is that meeting the point either does not achieve a positive environmental outcome (i.e., the purported goal of engaging LEED certification), or does not achieve the intended environmental outcome in proportion to the cost. Therefore, there is an implied critique of the LEED system that inexpensive points are not as “valuable” in the

speaker's world as those that are expensive or difficult to attain. In essence, this is a criticism for using the industrial order to evaluate civic worth:

People were going through the LEED checklist and trying to decide how to get the most points for the least cost. You had people adding dollar signs to each of those points and they were going for the easy points. That wasn't necessarily the best use of those dollars. If you think about the long term goals of trying to save the planet, some of those items – getting a point for operable windows – you'd probably do operable windows anyway if you're worth your salt. (T7)

In the analysis of this quote in table 3.3, the term “operable windows” is included in the inspired state of worthiness because in architectural circles, operable windows provide an emotional and experiential connection to nature outside (Kellert & Wilson, 1993). Operable windows' relationship to the industrial world is more equivocal, where there is data that natural ventilation can save energy costs and therefore *achieve* efficiency (i.e., the industrial order's higher common principle), while on the other hand, allowing users to operate the windows *diminishes* control of the energy system and thereby its efficiency. The speaker—an architect—implies that “easy” points were both inexpensive and the result of good practices any competent practitioner would perform. In the inspired world, the quest and tortured path is valuable—easy things are in states of unworthiness. His deeper implication is that “to save the planet,” more difficult-to-achieve points should be pursued rather than “buying a point” to achieve certification.

The “buy a point” argument typically hits the bicycle rack, whose presence in a project earns a point in the LEED system. At the USGBC, the point is listed under “alternative transportation” and suggests that in areas that are friendly to bicyclists, workers are more likely to use their bicycle for commuting if there is a secure place to lock it and shower facilities in the building. In the following news piece reporting on an Oklahoma Green Building Summit event, an engineer who provides building performance consulting places the bike rack in the inspired order, and opposes it to his own, industrial order:

The problem? LEED gives "green" points for construction factors and building features that have more to do with "feel good" aesthetics than energy conservation. "A bike rack? You get a green point for a bike rack?" [the engineer] said incredulously, pointing out that as important as that might be to some people, it has nothing to do with building performance. (T8)

Competitively, with his services offering value within the industrial order, it benefits his firm and profession to devalue LEED points that do not engage his services. Within the media, there are battles over the “bike rack” issue, including a rejoinder by using logic *within* the above speaker’s order. Using the industrial order’s higher common principle of efficiency, advocates for the bike rack provide a calculation for the “transportation energy intensity” of buildings:

“Transportation energy intensity” is a metric that has long been used to measure such things as how efficiently freight is transported. We’re proposing it here as a metric of building performance. The transportation energy intensity of a building is the amount of energy associated with getting people to and from that building, whether they are commuters, shoppers, vendors, or homeowners. (T9)

By including this calculation of transportation energy intensity, the overall energy performance of the building increases in efficiency (i.e. worthy in the industrial world) when building users commute by bicycle. However, looking deeper into the invoked orders of worth, the “transportation energy intensity” argument finds more resonance in the civic order where building users—rather than building owners who pay for the bike racks—enjoy the financial savings in energy conservation, and society overall enjoys the reduced pollution that results from reduced energy consumption. The rejoinder’s skillful neglect of these civic benefits keeps the test of worth within the original speaker’s order. By keeping quiet about the civic benefits, the second speaker avoids an interinstitutional battle that would involve setting a hierarchy of orders, i.e., opposing public and private benefits, with one achieving dominance.

Value Engineering

All projects I encountered planned for a “value engineering” (VE) phase at the end of design development (i.e., when most of the major decisions have been made, but the details of those decisions have not been fleshed out in construction documents yet). In VE, the project team aims to reduce the cost of the project without losing significant functionality, whether that function is energy consumption, use value, or aesthetics. However, it is clear that VE is an act of efficiency from the industrial order. Therefore, decisions are more easily made within the orders that can engage numerical measurements, such as the market and industrial orders. One architect describes the difficulty in defending the inspired order during the VE discussions:

Being able to successfully whittle away efficiencies where you don't perceive that you're missing something. How much selective reduction? So how much can you take away before somebody notices that there's a significant reduction of materials or quality? (E1)

Other actors also suggested that the difficult VE discussions were encountered with the inspired order:

It was a very ... articulated building. Lots of materials on the building for how small it is. And so that added a great deal of complexity or a premium on the cost. [VE is] redesign, it's working with the architect to understand what they could achieve, it was the owner seeing what else they can do in terms of funding. And we got additional funding. It wasn't enough to get everything done, but it accommodated some of the pain. So there was a collective contribution from everybody's part. (E2)

Despite an acknowledgement that there was a "collective contribution from everybody's part," this cost estimator suggests that the cost "premium" is due to the architect's design that has "complexity" and is "very articulated." In other words, it is easy for voices from the industrial order to compare a proposed design to what a plain box would cost to build, due to the incommensurability of aesthetic achievement and financial prudence.

Final instantiation

At the end of a project, service providers have completed their work and no longer must fight to defend their order of worth. At these moments, actors are able to provide retrospective insight into the process without the constraints of multiple institutional pressures among orders within the project. In more broad reflective conversations, the actors' approaches to the multiple orders begins to reveal more underlying structures of synergy among the orders:

I like a building to get recognition. I like a building to feed my ego. ...I can go to one of these conferences and meet people and say "I was working on this." And they [say], "Wow that's good, cause I work on strip malls." ...a good space, a beautiful space. I mean, a lot of the time we ride on the architect's coattails. Some of the things we did, like the [well-published high-rise], it just meets energy code. But, it's a different building, and it gets a lot of press, and people talk about it because of its look. (F1)

This engineer provides a surprising account of projects that are meaningful to him. When he states "it just meets energy code," he suggests that his "own" industrial order value of efficiency needed only meet a minimum standard, and that he enjoys most the halo effect of riding "on the architect's coattails." This provides him with value in the order of fame ("it gets a lot of press")

as well as an attachment to the inspired order “a good space, a beautiful space” that results in fame. This view is also held by a contractor on one of the projects:

I'd rather be building what the architect wants as well... if the money's there. ...better job satisfaction. Something nicer to tell the guys back at the office. Something nicer to tell my family about... jobs that you want to drag your family out to at the end and show them. (F2)

This is practically the same situation as the one from the engineer, but in this case, the contractor's “own” order of worth is either the market or the industrial order, specifically related to money. Like the engineer above, the contractor had a minimum requirement for his own order (“if the money's there”), but he finds rewards in his association with the project that earns high value in other orders of worth.

The process of putting a building project together starts with vision statements that adhere to many—if not all—institutional orders. However, the process of negotiation and navigation of institutional complexity after that moment has rarely been studied. I develop a model illustrated in figure 3.2, representing the project level of analysis from vision statement to final instantiation of a project, where the estimation of value for each of the orders inheres in the built form (Gieryn, 2002). Negotiating a hierarchy among orders happens through three main phases within the project: hiring consultants, where clients can select professionals that have higher or lower value within an order; setting priorities, where tradeoffs within a project give differential power to orders and provide “minimum standards” to meet in each order; value engineering where there are more explicit team-based, inter-order tradeoff negotiations; and then the final instantiation, where the transport of value settles among team participants. In the following text, I highlight specific contributions that this study provides to current understandings of institutional complexity.

DISCUSSION AND CONTRIBUTIONS

In this study, I showed how actors invoke different orders of worth depending on audience, goals, and phase of project. In the building design and construction industry, the situation of institutional complexity is a daily norm that all actors must navigate. In these navigations, actors promote one order that they most closely associate or identify with, but not always at the expense of other orders as many scholars suggest when looking solely at situations of conflict. Instead, I

demonstrated situations where actors attempted to achieve high value in multiple orders (though not always with equal effort), particularly where an associate's success reflected positively on their own identity. Leveraging this transport of high worth from one order to another requires insight into material synergies, as well as social skill. Below, I further explore the implications of these findings.

Order Ownership and Affinity

One of the distinctive findings of my study is that each professional adheres to an order, not just due to training and social reproduction, but also because they are hired to defend project achievement within a specific order. When clients select consultants, they determine an initial commitment to—and hierarchy of—orders by selecting professionals that have high or low within-order value. For example, hiring a “starchitect” underscores the owner's commitment to the order of fame, and implies the owner's commitment to the inspired order.

However, client-architect relationships in this realm may subsequently rely on tests in the domestic order. Does the building owner see him/herself in a dominant domestic position of “client,” or more in a subordinate role of “patron,” where the starchitect “knows what's best” for the project and the client defers to his/her decisions? In other words, locating subject positions within each relevant order can help clarify which interaction styles are more or less productive. Given institutional complexity, while order ownership (and subsequently dominance for that order) may be clear, determining subject positions and inter-order relationships in the remaining six orders is still open to contestation.

A second implication of order ownership relates to minimum levels of achievement that the project must meet. These are levels of “just meeting energy code” and “if the money's there” or “selective reduction” in Value Engineering that each actor will defend for his or her order's value in the project. Levels above that are used for negotiation among the orders to go beyond minimum levels and achieve high value. Unfortunately the exact “minimum” level of achievement within many orders is not a simple calculation, making tradeoffs between orders imprecise and subject to material interdependencies.

Transport

Boltanski and Thévenot (2006: 220) address the *transport of worth* and *transport of deficiency* when speaking about spillover effects across orders. If one actor's reputation in the inspired realm, for example, is earned only from renown (in the order of fame) rather than talent, Boltanski and Thevenot suggest that this *transport of worth* is unfair, and subject to critique that the person benefited from a "privilege." The concept of transport works in the negative sense as well when it becomes a *transport of deficiency*. My study showed, however, that transport is a critical mechanism to achieve consensus and negotiation. Rather than the architect considering it unfair if an engineer enjoys fame from the project's aesthetic achievement, this situation of transport actually produces an advantage, and promotes synergies within the project. For example:

For us, buying a point to get Platinum meant a lot, because we were trying to really put it out there, "West University is going green, West University believes in sustainability." And it was a bit of a feather in our cap. The students loved it. The board loved it. We got tons of media attention.

The situation illustrated here highlights the transport of worth among orders. The pseudonymous West University was the first organization in its area to achieve Platinum certification, making it a leader (domestic order), providing it with press coverage by being the first (order of fame), having its customers/students value the rating (market order), having its board value it (domestic order), in addition to the underlying civic order implied by sustainability. Therefore, rather than judging the fairness or unfairness of transport, actors can use the mechanism more strategically in negotiations. Looking more closely, I find two forms of transport that I call *parametric transport* and *yoking*.

Parametric transport. Parametric transport is the achievement of value within one order *on the condition* that some minimum is met in another order. Again, these examples can be seen in the contractor stating "if the money's there." In that case, he would rather "build what the architect wants" because doing so provides him with value in the domestic, fame, and even inspired realms—none of which he was hired by the client to provide or defend. In a counterfactual example, if the money is *not* there, his identity and competence is threatened because it is a sign of unworthiness in his "own" order. This concept begins to show that the

institutional orders may actually be hierarchically *ordered* in an actor's understanding and assumptions.

Yoking. Yoking is the tying together of two or more “other” orders when launching a critique. The bike rack example illustrated this situation when the engineer yoked the inspired and civic realms by suggesting that the bike racks were about “feel good aesthetics.” Yoking—as well as any blatant critique of what another order values—is dangerous because even if it gains the speaker a few supporters within his or her own order, it offends representatives of other orders and allows them to form a coalition in response. The rejoinder to the bike rack comment subsequently received support from the media (fame), lauding the industrial and civic values that the bike rack brings to a project.

Social Skill

This study contributes to investigations of social skill (Fligstein & McAdam, 2012) and uncovers the mechanisms of its achievement. By understanding one's audience's order of worth affinities, the framing of arguments becomes a much clearer exercise. Not only can an actor frame a situation that invokes higher states of worthiness, but he or she can also be careful to not invoke states of unworthiness. When the audience is broad, such as in vision statements for new buildings, the speaker (typically a dean or university president) must be all things to all people (Kraatz & Block, 2008: 248; Wolfe & Putler, 2002). Social skill can also involve the mechanisms listed above by recognizing the power of transport, and carefully expressing dependencies within the “parametric” transport that relates to identities and order ownership. Further, social skill is involved when deciding to exclude an order of worth from issue framing. Exclusion can signify either a latent critique, or perhaps a hybrid situation such as “women leaders” which invokes both high and low states of worthiness in one phrase. Finally, one aspect of social skill cited by Boltanski and Thévenot (2006: 280) includes the rhetorical diminishing of one's own order to gain legitimacy in making compromises with representatives of other orders. This is done by “criticizing what is most worthy in the world from which one is extending one's hand toward a foreign nature.” The authors call this an act of desecration, escaping one's closed world to “indicate an openness to an association between incompatible principles.”

Materiality

My study also focused on a materially-based industry. The objects and selection of objects are used not just as tools for one order to “win” over another, but they also provide the requirement for negotiation and decision making. One spot in our Cartesian world can only hold one thing in a single moment. Deciding on what that thing will be, what it’s made of, and how long it remains, is what the battles in this industry are over. There is no relationship without the object. This addresses Cloutier and Langley’s (2013) criticism that institutional logics literature does not adequately involve materiality in its analysis.

Relative Values and Measurement

Though objects of value within many orders are difficult if not impossible to numerically measure, they still have relative states of worth, i.e., you can have more or less of aesthetic achievement or influence over others, even if they are not quantifiable per se. These relative values *mean something*, and they are key to processes such as value engineering, meeting a budget, or achieving a LEED rating. Though seemingly incommensurable, each participant has a sense of the state of worthiness or unworthiness a situation has within each of the various orders. Conflicts can arise when actors claim expertise in an order that they are not hired to defend, as in the student claiming to find recycled tiles that were “95%” the same in aesthetic look. Actors can work towards goals outside of their “own” order, but they will typically not be considered legitimate representatives of the foreign order unless they have created masterfully skillful compromises.

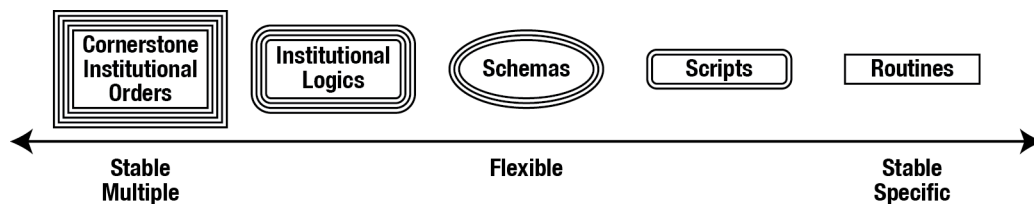
Orders, Logics, and Schemas

Literature discussing institutional orders and logics often conflates the two, leaving unexplained the effect that hybrid logics have on the cornerstone institutional orders. If the cornerstone orders are instead thought of as stable sources of values and possibly governance structures, the recent work on hybrid logics could be reframed as field-level schemas that represent temporary settlements involving coalitions among orders. Supporting this view, Thornton and colleagues suggest that both schemas and logics provide “permissions, obligations, and causations” (Cheng & Holyoak, 1985; Thornton et al., 2012: 89). However, the authors also point out shortcomings in work that examines the relationship between institutional logics and schemas, with one area

suggesting that logics generate cognitive schemas (Misangyi, Weaver, & Elms, 2008; Seo & Creed, 2002; Thornton, 2004), while another area conflates logics and schemas (Bingham & Kahl, 2013; Creed, Scully, & Austin, 2002).

I argue that hybrid logics and schemas are patterns of behavior that aim to achieve states of worth in multiple orders. In doing this, I separate the concepts of institutional orders from institutional logics, and suggest that it may be worthwhile for scholars to embrace a continuum of flexibility when locating concepts, as illustrated in figure 3.3. Both cornerstone orders and routines are rigid, but the multiplicity of institutional orders allows for the hybridization and flexibility between meaning systems such that logics, schemas, and scripts can allow agency between structures. For example, compromises between orders can provide templates for action. Carefully selecting native plants that are not “wild” when dealing with a conservative institution that is aiming to achieve LEED certification is a schema that addresses civic, domestic, and inspired orders of worth. One order does not provide this schema, and the success of the schema does not modify the cornerstone orders. Eventually, there may be a list of pre-selected plants for just this purpose, and the selection becomes routine.

FIGURE 3.3
Continuum of Institutional Flexibility.



My proposal therefore questions notions of institutional logic hybridity, suggesting that *all* logics are agentic hybrids that draw from the relatively inflexible institutional orders. Thornton, Ocasio, and Lounsbury (2012) call the pulling of elements from multiple orders *transposition*, but I argue that the elements are not transposed in the sense that the elements do not “change places with each other” within the orders. Instead, the emergence of “new” institutional logics involves pulling elements from cornerstone orders that have enough support to dominate a particular field.

As I show, situations of institutional complexity engage all possible orders at different times and situations. Which order “wins” or becomes “most” dominant may be part of a logic within

that industry. Yet because schemas can change with every iteration of a new project with a new project team, contestation may always be at play below the surface of “dominant” orders. The unique collection of consultants on a project determines relative levels of dominance, and orders that are not in “the” dominant position are still represented somewhere. Even if the focus of an industry or field is on one order, there are many situations that rearrange orders down the hierarchy.

Further, in examining the individual level of analysis, actors may have their own internal hierarchy due not only to their training, but also to their unique *habitus*, influenced by their distinct lifetime of experience, current situation, and general disposition towards the various orders. This internal “order of orders” provides individual agentic compromises among orders that may not align with “typical” members of their profession. The engineer who wanted to “feed his ego” by “riding on the architect’s coattails” likely does not represent the entirety of the engineering profession. First, many of his colleagues do not have the same opportunities he has in working with prestigious architects. Second, because his colleagues do not have this opportunity, they likely determine the meaning they derive from their work from different orders than he does. Further, professional jurisdictions are fractal such that sub-specialties of a profession lean their practitioners toward compromises with different orders of worth (Thornton et al., 2005).

My distinction between stable institutional orders and institutional logics, hybrids, and schemas addresses the problems that the institutional logics literature has when speaking about “near-decomposability.” In Simon’s original contribution (1962: 474), he referred to a rare gas, and how its “intermolecular forces will be negligible compared to those binding the molecules—we can treat the individual particles... as if they were independent of each other.” This is *decomposability*. *Nearly* decomposable systems involve interactions among the subsystems that are weak, but not negligible. Transferring this concept to institutional orders, we would find that each order acts “as if [it was] independent.” Arguments of hybridity imply tighter bonds than the independence suggested by the concept of near-decomposability. Further, I find that the links between orders happen through logics and schemas, and even if those links may be strong, they are not as strong as the intra-order structures. Therefore, the Boltanski and Thévenot (2006)

model of multiple orders of worth seems to be a more accurate representation of the near-decomposable system than the hybrid orders prevalent and proliferating in the institutional logics literature.

Prioritization

My final contribution is the concept of prioritization and hierarchy among orders. This concept appeared briefly in the discussion of transport, and provides an intriguing opportunity for future study to determine whether individuals, organizational strategy, professions, industries, and even society hold a specific hierarchy or tradeoff values among the orders. For example, as a project moves from design through construction, the more quantitative orders increase in dominance. Is this a move toward compliance with societal-level hierarchies where the market and industrial orders dominate? Or is this a lack of societal-level education in design and its value, as many have claimed? . Finally, is there a way to determine profession-level “exchange values” between orders? Given the choice between virgin Italian clay tile for an American project versus recycled clay tile from Ohio that is 95% the same aesthetically, how would a representative of each order handle that kind of tradeoff?

Conclusion

In this study, I investigated a situation of institutional complexity and remained open to any institutional order that bore upon the situations investigated. In doing so, I demonstrated how actors navigate among all of the cornerstone institutional orders in everyday work, negotiating tradeoffs and providing a hierarchy among the orders depending on their professional and personal preferences and situations. My model of institutional flexibility offers a way to conceive of both structure and agency, highlighting the role of institutional logics and schemas as more flexible patterns for action that draw from more rigid institutional orders.

By integrating the orders of worth framework with current understandings of institutional complexity, I was better able to highlight situations of plurality that drew from much more than two institutional orders. In fact, I demonstrated that all orders were influential over actors’ justifications and behavior. In investigating a situation of institutional complexity in a fragmented, moderately centralized, and emergent field—rather than studying a situation of clear conflict—my model avoided situations where one order or logic overshadowed all others in a

situation of dominance. This focus thereby allowed the cornerstone institutional orders to emerge intact, and provide an alternative understanding of hybrid logics that is closer to the concept of schemas and scripts prevalent in studies of organizations.

Finally, my approach permitted the more micro-level discourse to display the “inhabiting” of institutions through both a focus on interactions among building team members, as well as a building design and construction project team’s inextricable attachment to negotiation over material objects. This connection to the final instantiation of an academic building and its precise configuration presents a stronger link between visions, ideas, values, and materiality.

My analysis presents a new way to investigate the influence of multiple institutional orders by aligning statements with the orders’ high and low states of worthiness. This approach provides a means for more directly uncovering the values publicly adhered to by the speaker, and provides some indication of which audiences the statements are directed at. Future research can more comprehensively investigate a single building project, and aim to more precisely identify these audiences. This single-project focus can also draw on quantitative measures of discourse and rhetoric to define individual and project level hierarchies of orders, providing a clearer view of an institutional logic’s internal structure.

In advancing the orders of worth approach to institutional complexity, however, I am mindful that my findings have been derived from a single prototypically complex field—building design and construction. Future research should, therefore, explore whether the enduring presence of all institutional orders holds in other complex fields—and whether they do so in ways similar to this one.

In pursuing such research, it is important to be sensitive to the field’s governance structure, as well as the state of “creativity” claimed by the industry. In this study, the field is governed by temporary organizations that implies a level of equality in the sense of professionals holding ownership over a “professional jurisdiction” of tasks. This open, networked structure (which is part of the project order) may permit the orders to emerge more equally than in a more highly structured field. My study also investigated a “creative industry” that included architecture. It is worthwhile to see whether this presence of the inspired order, for example, holds just as strongly in fields not considered “creative industries.”

It is also important to be more sensitive to issues of both time and turnover. In a multi-year project, individuals come and go, both in terms of their project responsibilities that call for their expertise, as well as inevitable intra-firm turnover that shifts staff on the project. The implications of these moves, especially combined with an individual's position of power, could have a significant bearing on how the institutional orders shift in importance throughout the project.

Finally, it is also important to remember that the building design and construction sector I investigated is a customized product and service, and therefore the client co-produces the outcome. Though the production of an iPhone, for example, still involves a high level of aesthetic design, it is worth investigating how a less open production system engages the institutional orders, and whether it does so on the same individual levels I presented.

In conclusion, I suggest that a theoretical separation of institutional orders, logics, and schemas can provide a more accurate view of institutional structuring and agentic entrepreneurial efforts. In particular, the clarification between orders and logics allows the cornerstone orders to remain as "decomposed" resources for entrepreneurial combinations. By combining the logics of worth framework with investigations of institutional complexity, scholars and practitioners can better understand the true multiplicity of institutional constraints and opportunities, view complex situations before moments of contestation, engage the micro, meso, and macro levels of institutional influence, and understand the role of material objects in institutional stability and change.

REFERENCES

- Annisette, M. & Richardson, A. J. 2011. Justification and accounting: Applying sociology of worth to accounting research. *Accounting, Auditing, & Accountability Journal*, 24: 229-249.
- Archibald, R. B. & Feldman, D. H. 2010. *Why does college cost so much?* New York: Oxford University Press.
- Barley, S. R. 2008. Coalface institutionalism. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The Sage handbook of organizational institutionalism*: 491–518. London: Sage.
- Battilana, J. & Dorado, S. 2010. Building sustainable hybrid organizations: The case of commercial microfinance organizations. *Academy of Management Journal*, 53: 1419–1440.
- Battilana, J., Leca, B., & Boxenbaum, E. 2009. How actors change institutions: Towards a theory of institutional entrepreneurship. In J. P. Walsh & A. P. Brief (Eds.), *Academy of Management annals*, vol. 3: 65-107. Essex, UK: Routledge.
- Bazerman, M. E., Wade-Benzoni, K. A., & Benzoni, F. J. 1996. Environmental degradation: Exploring the rift between environmentally benign attitudes and environmentally destructive behaviors. In D. M. Messick & A. E. Tenbrunsel (Eds.), *Codes of conduct: Behavioral research into business ethics*: 256–274. New York: Russell Sage Foundation.
- Bechky, B. A. 2011. Making organizational theory work: Institutions, occupations, and negotiated orders. *Organization Science*, 22: 1157–1167.
- Becker, H. S. 1986. *Doing things together: Selected papers*. Evanston, IL: Northwestern University Press.
- Becker, H. S., Geer, B., Hughes, E. C., & Strauss, A. L. 1961. *Boys in white: Student culture in medical school*. Chicago: The University of Chicago Press.
- Binder, A. 2007. For love and money: Organizations' creative responses to multiple environmental logics. *Theory and Society*, 36: 547–571.
- Bingham, C. B. & Kahl, S. J. 2013. The process of schema emergence: Assimilation, deconstruction, unitization and the plurality of analogies. *Academy of Management Journal*, 56: 14–34.
- Boltanski, L. & Chiapello, E. 2005/1999. *The new spirit of capitalism*. New York: Verso.
- Boltanski, L. & Thévenot, L. 2006/1991. *On justification: Economies of worth*. Princeton: Princeton University Press.
- Bourdieu, P. 1977/1972. *Outline of a theory of practice*. New York: Cambridge University Press.
- Bromley, P. & Powell, W. W. 2012. From smoke and mirrors to walking the talk: Decoupling in the contemporary world. *The Academy of Management Annals*, 6: 483–530.

- Cheng, P. W. & Holyoak, K. J. 1985. Pragmatic reasoning schemas. *Cognitive Psychology*, 17: 391 – 416.
- Cloutier, C. & Langley, A. 2013. The logic of institutional logics: Insights from French pragmatist sociology. *Journal of Management Inquiry*, online before print (Jan 24): 1-21. doi: 10.1177/1056492612469057.
- Cohen, M. D., March, J. G., & Olsen, J. P. 1972. A garbage can model of organizational choice. *Administrative Science Quarterly*, 17: 1-25.
- Corbin, J. M. & Strauss, A. 2008. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. (3rd ed.): Sage.
- Creed, W. E. D., Scully, M. A., & Austin, J. R. 2002. Clothes make the person? The tailoring of legitimating accounts and the social construction of identity. *Organization Science*, 13: 475–496.
- D'Aunno, T., Sutton, R. I., & Price, R. H. 1991. Isomorphism and external support in conflicting institutional environments: A study of drug abuse treatment units. *Academy of Management Journal*, 34: 636–661.
- Davis, G. F. & Marquis, C. 2005. Prospects for organization theory in the early twenty-first century: Institutional fields and mechanisms. *Organization Science*, 16: 332–343.
- Davis, H. 1999. *The culture of building*. New York: Oxford University Press.
- Davis, J. P. & Eisenhardt, K. M. 2011. Rotating leadership and collaborative innovation. *Administrative Science Quarterly*, 56: 159–201.
- DiMaggio, P. 1988. Interest and agency in institutional theory. In L. G. Zucker (ed.), *Institutional patterns and organizations: Culture and environment*: 3-21. Cambridge, MA: Ballinger Publishing Company.
- DiMaggio, P. 1991. Constructing an organizational field as a professional project: US art museums, 1920-1940. In W. W. Powell & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: Chicago: University of Chicago Press.
- DiMaggio, P. J. & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48: 147–160.
- Djelic, M. L. & Ainamo, A. 2005. The telecom industry as cultural industry? The transposition of fashion logics into the field of mobile telephony. *Research in the Sociology of Organizations*, 23: 45–80.
- Duckles, B. M. 2013. Conveying greenness: Sustainable ideals and organizational narratives about LEED certified buildings. In R. L. Henn & A. J. Hoffman (Eds.), *Constructing green: The social structures of sustainability*: Cambridge, MA: MIT Press.

- Dunn, M. B. & Jones, C. 2010. Institutional logics and institutional pluralism: The contestation of care and science logics in medical education, 1967-2005. *Administrative Science Quarterly*, 55: 114–149.
- Ehrenberg, R. G. 2002. *Tuition rising: Why college costs so much*. Cambridge, MA: Harvard University Press.
- Eichholtz, P., Kok, N., & Quigley, J. M. 2010. Doing well by doing good? Green office buildings. *American Economic Review*, 100: 2492–2509.
- Erlingsdóttir, G. & Lindberg, K. 2005. Isomorphism, isopraxis and isonymism: Complementary or competing processes? In B. Czarniawska & G. Sevón (Eds.), *Global ideas: How ideas, objects and practices travel in the global economy*: 47–70. Malmö: Liber.
- Etzion, D. & Ferraro, F. 2010. The role of analogy in the institutionalization of sustainability reporting. *Organization Science*, 21: 1092–1107.
- Ferguson, P. P. 1998. A cultural field in the making: Gastronomy in 19th-century France. *American Journal of Sociology*, 104: 597–641.
- Fligstein, N. & McAdam, D. 2012. *A theory of fields*. New York: Oxford University Press.
- Friedland, R. & Alford, R. R. 1991. Bringing society back in: Symbols, practices, and institutional contradictions. In W. W. Powell & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 232–260. Chicago: University of Chicago Press.
- Garud, R. & Rappa, M. A. 1994. A socio-cognitive model of technology evolution: The case of cochlear implants. *Organization Science*, 5: 344–362.
- 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: 196–214.
- Giddens, A. 1984. *The constitution of society: Outline of the theory of structuration*. Berkeley: University of California Press.
- Gieryn, T. F. 2002. What buildings do. *Theory and Society*, 31: 35–74.
- Gioia, D. A., Price, K. N., Hamilton, A. L., & Thomas, J. B. 2010. Forging an identity: An insider-outsider study of processes involved in the formation of organizational identity. *Administrative Science Quarterly*, 55: 1-46.
- Glynn, M. A. 2000. When cymbals become symbols: Conflict over organizational identity within a symphony orchestra. *Organization Science*, 11: 285–298.
- Glynn, M. A. & Lounsbury, M. 2005. From the critics' corner: Logic blending, discursive change and authenticity in a cultural production system. *Journal of Management Studies*, 42: 1031–1055.

- Goldstein, L. 2012. *A guide to college & university budgeting: Foundations for institutional effectiveness*. (4th ed.). Washington, DC: NACUBO.
- Goodrick, E. & Reay, T. 2011. Constellations of institutional logics. *Work and Occupations*, 38: 372–416.
- Greenwood, R., Diaz, A. M., Li, S. X., & Lorente, J. C. 2010. The multiplicity of institutional logics and the heterogeneity of organizational responses. *Organization Science*, 21: 521–539.
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. 2011. Institutional complexity and organizational responses. *Academy of Management annals*, vol. 5: 317–371. Essex, UK: Routledge.
- Hallett, T. & Ventresca, M. J. 2006. Inhabited institutions: Social interactions and organizational forms in Gouldner's patterns of industrial bureaucracy. *Theory and Society*, 35: 213–236.
- Hargadon, A. B. & Douglas, Y. 2001. When innovations meet institutions: Edison and the design of the electric light. *Administrative Science Quarterly*, 46: 476–501.
- Heimer, C. A. 1999. Competing institutions: Law, medicine, and family in neonatal intensive care. *Law & Society Review*, 33: 17.
- Hoffman, A. J. 1999. Institutional evolution and change: Environmentalism and the U.S. Chemical industry. *Academy of Management Journal*, 42: 351–371.
- Jarzabkowski, P., Sillince, J. A., & Shaw, D. 2010. Strategic ambiguity as a rhetorical resource for enabling multiple interests. *Human Relations*, 63: 219–248.
- Jones, C. & Lichtenstein, B. B. 2008. Temporary inter-organizational projects. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of inter-organizational relations*: 231–255. New York: Oxford University Press.
- Kats, G., Braman, J., & James, M. 2010. *Greening our built world: Costs, benefits, and strategies*. Washington, DC: Island Press.
- Kellert, S. R. & Wilson, E. O. 1993. *The biophilia hypothesis*. Washington, DC: Island Press.
- Kraatz, M. S. 2009. Leadership as institutional work: A bridge to the other side. In T. B. Lawrence, R. Suddaby, & B. Leca (Eds.), *Institutional work: Actors and agency in institutional studies of organizations*: 59–91. New York: Cambridge University Press.
- Kraatz, M. S. & Block, E. S. 2008. Organizational implications of institutional pluralism. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The Sage handbook of organizational institutionalism*: 243–275. London: Sage.
- Lawrence, T. B., Hardy, C., & Phillips, N. 2002. Institutional effects of interorganizational collaboration: The emergence of proto-institutions. *Academy of Management Journal*, 45: 281–290.

- Lawrence, T. B., Suddaby, R., & Leca, B. 2009. *Institutional work: Actors and agency in institutional studies of organizations*. New York: Cambridge University Press.
- Locke, K. 2001. *Grounded theory in management research*. London: Sage.
- Lok, J. 2010. Institutional logics as identity projects. *Academy of Management Journal*, 53: 1305–1335.
- Lounsbury, M. 2002. Institutional transformation and status mobility: The professionalization of the field of finance. *Academy of Management Journal*, 45: 255–266.
- Lounsbury, M. 2007. A tale of two cities: Competing logics and practice variation in the professionalizing of mutual funds. *Academy of Management Journal*, 50: 289–307.
- Maguire, S., Hardy, C., & Lawrence, T. B. 2004. Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. *Academy of Management Journal*, 47: 657–679.
- Marquis, C. & Lounsbury, M. 2007. Vive la résistance: Competing logics and the consolidation of U.S. Community banking. *Academy of Management Journal*, 50: 799–820.
- Meyer, J. & Rowan, B. 1978. The structure of educational organizations. In M. W. Meyer (ed.), *Environments and organizations*: 78-109. San Francisco: Jossey-Bass.
- Meyer, J., Scott, W. R., & Strang, D. 1987. Centralization, fragmentation, and school district complexity. *Administrative Science Quarterly*, 32: 186.
- Meyer, J. W. & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83: 340–363.
- Miles, M. B. & Huberman, A. M. 1994. *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks: Sage.
- Misangyi, V. F., Weaver, G. R., & Elms, H. 2008. Ending corruption: The interplay among institutional logics, resources, and institutional entrepreneurs. *Academy of Management Review*, 33: 750–770.
- Orton, J. D. & Weick, K. E. 1990. Loosely coupled systems: A reconceptualization. *The Academy of Management Review*, 15: 203.
- Owen-Smith, J. 2011. The institutionalization of expertise in university licensing. *Theory and Society*, 40: 63–94.
- Pache, A. C. & Santos, F. 2010. When worlds collide: The internal dynamics of organizational responses to conflicting institutional demands. *Academy of Management Review*, 35: 455–476.
- Pfeffer, J. & Salancik, G. R. 2003/1978. *The external control of organizations: A resource dependence perspective*. Stanford: Stanford Business Books.

- Powell, W. W., White, D. R., Koput, K. W., & Owen-Smith, J. 2005. Network dynamics and field evolution: The growth of interorganizational collaboration in the life sciences. *American Journal of Sociology*, 110: 1132–1205.
- Purdy, J. M. & Gray, B. 2009. Conflicting logics, mechanisms of diffusion, and multilevel dynamics in emerging institutional fields. *Academy of Management Journal*, 52: 355–380.
- Rao, H., Monin, P., & Durand, R. 2003. Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy. *American Journal of Sociology*, 108: 795–843.
- Reay, T. & Hinings, C. R. 2005. The recomposition of an organizational field: Health care in Alberta. *Organization Studies*, 26: 351–384.
- Reay, T. & Hinings, C. R. 2009. Managing the rivalry of competing institutional logics. *Organization Studies*, 30: 629–652.
- Scott, W. R. & Meyer, J. W. 1994. *Institutional environments and organizations: Structural complexity and individualism*. Thousand Oaks, CA: Sage.
- 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: A study in the sociology of formal organization*. Berkeley: University of California Press.
- Seo, M. G. & Creed, W. E. D. 2002. Institutional contradictions, praxis, and institutional change: A dialectical perspective. *Academy of Management Review*, 27: 222–247.
- Simon, H. A. 1962. The architecture of complexity. *Proceedings of the American Philosophical Society*, 106: 467–482.
- Smets, M., Morris, T., & Greenwood, R. 2012. From practice to field: A multilevel model of practice-driven institutional change. *Academy of Management Journal*, 55: 877–904.
- Stryker, R. 2000. Legitimacy processes as institutional politics: Implications for theory and research in the sociology of organizations. *Research in the Sociology of Organizations*, 17: 179–223.
- Suddaby, R. & Greenwood, R. 2005. Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, 50: 35–67.
- Thomas, J. 1983. Justice as interaction: Loose coupling and mediations in the adversary process. *Symbolic Interaction*, 6: 243–260.
- Thomas, J. 1984. Some aspects of negotiated order, loose coupling and mesostructure in maximum security prisons. *Symbolic Interaction*, 7: 213–231.
- Thompson, J. D. 2003/1967. *Organizations in action: Social science bases of administrative theory*. New Brunswick, NJ: Transaction Publishers.

- Thornton, P. H. 2002. The rise of the corporation in a craft industry: Conflict and conformity in institutional logics. *Academy of Management Journal*, 45: 81-101.
- Thornton, P. H. 2004. *Markets from culture: Institutional logics and organizational decisions in higher education publishing*. Stanford, CA: Stanford University Press.
- Thornton, P. H., Jones, C., & Kury, K. 2005. Institutional logics and institutional change in organizations: Transformation in accounting, architecture transformation in cultural industries. In C. Jones & P. Thornton (Eds.), *Research in the sociology of organizations: Transformation in cultural industries*, vol. 23: 125–170. San Diego: Elsevier.
- Thornton, P. H., Ocasio, W., & Lounsbury, M. 2012. *The institutional logics perspective: A new approach to culture, structure, and process*. New York: Oxford University Press.
- Tracey, P., Phillips, N., & Jarvis, O. 2011. Bridging institutional entrepreneurship and the creation of new organizational forms: A multilevel model. *Organization Science*, 22: 60–80.
- van Gestel, N. & Hillebrand, B. 2011. Explaining stability and change: The rise and fall of logics in pluralistic fields. *Organization Studies*, 32: 231–252.
- Weick, K. E. 1976. Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 21: 1-19.
- Wolfe, R. A. & Putler, D. S. 2002. How tight are the ties that bind stakeholder groups? *Organization Science*, : 64–80.
- Zilber, T. B. 2011. Institutional multiplicity in practice: A tale of two high-tech conferences in Israel. *Organization Science*, 22: 1539–1559.
- Zucker, L. G. 1977. The role of institutionalization in cultural persistence. *American Sociological Review*, 42: 726–743.

Chapter 4

Moving Targets: Managing Interinstitutional Expectations in Building Design and Construction

Abstract

Determinations of success or failure are intimately linked to expectations for performance, yet little is known about how actors manage emergent expectations to achieve success. Using an inductive study of three building design and construction projects, I identify stakeholder strategies to control positions of power, legitimacy, and urgency in an effort to promote their expectations as central concerns. I further examine the content of expectations and propose a model of stakeholder risk for managers to foresee or prevent emergent expectations from disrupting workflow or negative reputational effects.

INTRODUCTION

Expectations are used to evaluate performance, yet some expectations are considered more legitimate than others, depending on their source and content. Without foresight and preparation, emergent expectations can frustrate a manager's attempt to keep a project on schedule and staff on task. Mismatched expectations can lower stock prices whether announcements of quarterly earnings are lower *or higher* than expectations. Other effects can include negative media attention, product boycotts, or unfriendly corporate takeovers. Yet few studies examine how emergent expectations gain the legitimacy, urgency, and power to influence organizational performance goals. The standards to which an organization adheres relates to its categorization (Zuckerman, 1999), legitimacy, reputation, and status (Bitektine, 2011) in the minds of

evaluators. But who are legitimate evaluators, and what expectations are they likely to bring to their demands on an organization?

This study examines the strategies stakeholders use to maneuver themselves and their expectations into a position of power, legitimacy, and urgency (Mitchell, Agle, & Wood, 1997). I develop an integrated model of attention for managers to foresee and possibly prevent emergent expectations from disrupting or destabilizing the organization's productive workflow by paying more attention to the cornerstone institutional orders (Boltanski & Thévenot, 2006/1991), analyzing how each order could come to bear on the organization, and which stakeholders are likely to carry the expectations of an order to the organization. I use three case studies in the building design and construction industry where unexpected institutional orders came to bear on the building project. The cases illustrate sources of expectations from individual, group, and societal levels of judgement. In two cases, emergent expectations arrived mid-process, and created a readjustment of priorities and expansion of staff time on the project. In the third case, intra- and inter-order rhetoric shaped the expectations placed on an individual, supported by the myth of individual creation within the Inspired institutional order (Becker, 2008/1982).

This study differs from existing stakeholder scholarship in three ways. First, it equalizes the institutional orders, recognizing the embedded or interinstitutional nature of all individual, organizational, and societal actions. Existing scholarship assumes that the economic success or market order takes priority within firms, and that, for example, "corporate social responsibility" is a normatively necessary expansion of the firm's responsibilities within society. Alternatively, scholars examine competition for power or dominance between only two stakeholders or orders within a field (Dunn & Jones, 2010; Rojas, 2010). Instead, I examine the relationships among all seven cornerstone orders in my data, and how stakeholders prioritize the orders in their sets of expectations. My examination of green buildings designed by dominant architectural firms enhances the participation of the inspired, civic, and fame orders to compete more equally with the market and industrial orders that dominate existing scholarship on corporate activities. Further, this industry requires tradeoffs between quantifiable and non-quantifiable values, and each of the case studies illustrate how stakeholders manage the incommensurable exchange values.

Second, my study focuses on the strategies of all stakeholders—powerful and powerless, legitimate and illegitimate, those with urgent concerns and those unconcerned—in shifting their positions or the position of their concerns from latent to expectant status. Accordingly, I illustrate the path that each type of stakeholder takes to influence or arrive at the final definitive stakeholder position.

Third, existing studies examine organizational strategies and responses to both unexpected events and conflicting institutional prescriptions (Bechky & Okhuysen, 2011; Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011). In Bechky and Okhuysen's (2011) work, the authors examine surprises that are material or situational, rather than stakeholder or value-based. In contrast, my work examines *how* multiple stakeholder expectations arrive at the manager's desk. Meanwhile, Greenwood and colleagues (2011) examine organizational responses to institutional complexity, but this analysis is more static, relying on pre-determined knowledge of which institutional orders come to bear on a situation.

This study responds to calls for more attention to process studies, which can help to answer “how and why things emerge, develop, grow, or terminate over time” (Langley, Smallman, Tsoukas, & de Ven, 2013). I develop a model of how managers can understand and prepare for “unexpected” expectations. By understanding how the cornerstone institutional orders relate not just to the organization's goals, but also to the organization's set of stakeholders, managers can create strategies to mitigate the disruptive power of emergent expectations.

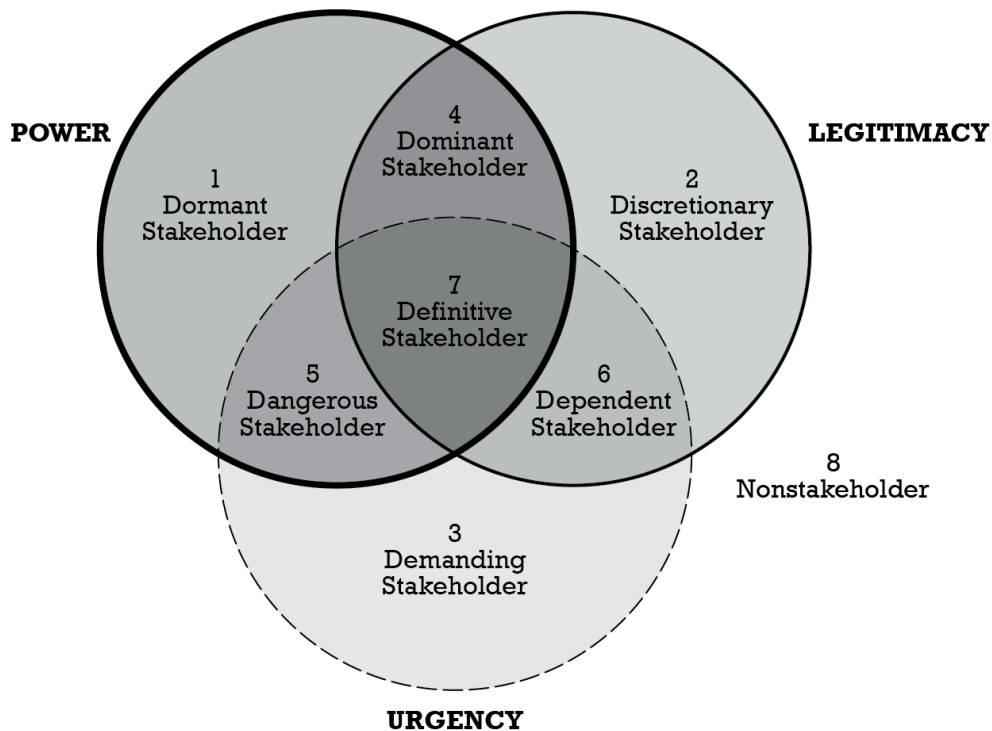
THEORETICAL CONTEXT

Scholars argue that attention to stakeholders can provide practical benefits when corporations respect the legitimate interests of their multiple constituencies (Donaldson & Preston, 1995; Freeman, Harrison, Wicks, Parmar, & de Colle, 2010). However, stakeholder research is frequently criticized for being based too much on moral philosophy and practical reasoning rather than empirical research (Kraatz & Block, 2008: 264). This study applies the theory of stakeholder identification developed by Mitchell, Agle, and Wood (1997) to three situations of stakeholder influence. However, I separate a stakeholder's *position* relative to issues of power, legitimacy, and urgency, from the *content* of the stakeholder's expectation relative to the institutional orders. For example, the institutional order that informs the power and governance

structure (e.g., domestic) does not have to align with the source of a powerful stakeholder’s expectation (e.g., civic). By teasing apart the source and content of expectations, stakeholder theory becomes a more objective and useful tool to understand influences over organizational action.

FIGURE 4.1
Stakeholder Typology

(from Mitchell et al., 1997: 874) Line weights and shading modified by author.



Instrumental Stakeholder Theory

Mitchell and colleagues (1997) developed a theory of stakeholder identification and salience that provides managers with a view of “illegitimate” stakeholders that still may have an influence over the organization. Their model is shown in figure 4.1. The authors posit that each stakeholder has varying levels of power, legitimacy, and urgency in relationship to the organization. Power encompasses the ability of a stakeholder to influence the organization by providing or withdrawing necessary resources for the continued survival of the organization, as well as the ability to affect the achievement of the organization’s objectives. Legitimacy is the right to ownership or management of the organization, providing “socially accepted and expected

structures or behaviors” (Mitchell et al., 1997: 866). Unfriendly corporate takeovers, for example, exhibit power without legitimacy. Middle managers, meanwhile, often have legitimacy without power. Finally, urgency exists when “a relationship or claim is of a time-sensitive nature and... that relationship or claim is important or critical to the stakeholder” (Mitchell et al., 1997: 867). A stakeholder that has urgency with no power or legitimacy is like a buzzing fly whose actions may be insistent, but not necessarily influential.

Manager attention to stakeholders depends on stakeholder position. In figure 4.1, positions 1, 2, and 3 are considered “latent” stakeholders whose expectations are either not known or not predicted to be influential. Stakeholders in this position either aren’t actively engaged with the organization or can only hope for their concerns to be recognized. Mitchell and colleagues argue that once a stakeholder acquires a second attribute, they move into positions 4, 5, and 6, which are “expectant” positions, where the stakeholders expect that their concerns will be attended to. Finally, stakeholders in position 7—the definitive stakeholders—have both power and legitimacy such that their urgent expectations are immediately and fully attended to. Table 4.1 illustrates examples of the various stakeholder classes within a university building design and construction project.

TABLE 4.1
Stakeholder Examples
(stakeholder types from Mitchell et al., 1997)

Stakeholder Type		P	L	U	Examples
Latent	1 Dormant	P			Board trustee, Wealthy alumni, Recruiters
	2 Discretionary		L		Maintenance staff
	3 Demanding			U	Activists, Students
Expectant	4 Dominant	P	L		Finance director, Trustee on building committee
	5 Dangerous	P		U	National media
	6 Dependent		L	U	University project manager, Faculty
	7 Definitive	P	L	U	Dean, University president
	8 Nonstakeholder				General public

P=Power L=Legitimacy U=Urgency

The theory of stakeholder identification and salience also includes two key features that make the somewhat static diagram in figure 4.1 a more dynamic description of stakeholder influence. First, stakeholder attributes are variable, not steady state. Therefore, an empirical analysis will show movement of stakeholders from one class to another class. Second, stakeholder attributes are socially constructed and therefore subject to misperception either by managers or stakeholders. Board members, for example, tend to be both powerful and legitimate, placing them in the dominant stakeholder position 4. However, minority board members have little power, and therefore actually exist as discretionary stakeholders in position 2, consulted at the more powerful members' discretion.

Finally, I propose a third key dynamic feature, suggesting that the three attributes are not equally accessible. I posit that power is the most difficult attribute to acquire, represented by the thick circle in figure 4.1, while urgency emerges easily as soon as a topic is salient to a stakeholder, and therefore is represented by the dashed circle. These representations better illustrate the effort required to move between stakeholder classes, with the most laborious efforts coming from position 3, the demanding stakeholder. This stakeholder typology provides structure for the strategies of stakeholders in making their expectations more central to the organization's concern.

Cornerstone institutional orders

Expectations derive from values, and values rest within society's cornerstone institutions (Friedland & Alford, 1991). Institutions are "supraorganizational patterns of activity through which humans conduct their material life in time and space, and symbolic systems through which they categorize that activity and infuse it with meaning" (Friedland & Alford, 1991: 232). This connection between material life and meaning is differently configured according to the referent societal institution. For example, sexual intercourse "can be an expression of affection, of passion, of power, of a divine commandment to reproduce, or of property" (Friedland & Alford, 1991: 250), depending on which institutional order is used as a referent for the activity. Though there could theoretically be any number of institutions, there are two main literatures that list which institutions are central or "cornerstone" institutions that shape most of modern life. In the first, Friedland and Alford (1991: 232) suggest that the "capitalist market, bureaucratic state,

democracy, nuclear family, and Christian religion” compose the central institutions of the “contemporary capitalist West.” Thornton and colleagues (Thornton & Ocasio, 1999; Thornton, Ocasio, & Lounsbury, 2012) add *profession* and *community* to the original five listed above. In doing so, the scholars also outline the components of a logic that structures an individual institution’s meaning system, providing, for example, the root metaphor, sources of legitimacy, bases of attention, informal control mechanisms and others. However, this system has shortcomings in that it stays at a more abstract level, falling short of “providing an actual repertoire of tools and specific resources that actors can draw on” (Cloutier & Langley, 2013: 4). In addition, although institutional logics scholars recognize that society comprises an inter-institutional system, their work tends to focus on just a few institutional orders in competition (Greenwood et al., 2011).

The second main literature to address cornerstone institutions is the orders of worth framework provided initially by Boltanski in Thévenot in French in 1991, translated into English in 2006. The authors propose six orders of worth that actors use for justification of actions and events, tests for worthiness of subjects and objects, as well as “investment decisions” to achieve higher states of worth within an order. In this literature, the six “common worlds of worth” are the Inspired world, the Domestic world, the world of Fame, the Civic world, the Market world, and the Industrial world. To these, Boltanski and Chiapello (2005) add the Project or “networked” world. Similar to the institutional logics literature, the authors list components of each order that structure justifications. These orders and categorical descriptions are illustrated in table 4.2. As in recent institutional logics literature focused on plurality and complexity, the orders of worth framework assumes that all persons regularly encounter situations in daily life that arise from all of the orders. In other words, if there are two orders vying for dominance, or even a single dominant order, the other institutional orders still meaningfully influence actors’ behavior and that behavior’s meaning. Further, this framework allows both regular compromise and conflict among the orders. Whereas the institutional logics literature suggests that compromises among orders result in transposition and hybridity, the orders of worth framework leaves each cornerstone institution influential and intact.

TABLE 4.2
Orders of Worth

(Annisette & Richardson, 2011; from Boltanski & Chiapello, 2005/1999; Boltanski & Thévenot, 2006/1991)

Boltanski & Thévenot 1991/2006	Inspired	Domestic	Fame	Civic	Market	Industrial	(B. & Chiapello 1999/2005) Project
higher common principle	the outpouring of inspiration	engenderment according to tradition	reality of public opinion	preeminence of collectives	competition	efficiency	activity
state of worthiness	inexpressible and ethereal	hierarchical superiority	fame	rule governed and representative	desirable	efficient	engaged, engaging, mobile
dignity	anxiety of creation	poise of habit	the desire to be recognized	the aspiration to civil rights	interest	work	need to connect
subjects	visionaries	superiors and inferiors	stars and their fans	collective persons & their representative	competitors	professionals	mediator, project head
objects	waking dream	rules of etiquette	names in the media	legal forms	wealth	means	all the instruments of connection
investment	escape from habits	rejection of selfishness	giving up secrets	renunciation of the particular	opportunism	progress	adaptability
relation of worth	universal value of uniqueness	respect and responsibility	being recognized and identifying	relation of delegation	possess	control	redistribution of connections
relationships	alchemy of unexpected encounters	company of well-brought-up people	persuasion	gathering for collective action	interest (to)	function	connection
figures	reality of the imaginary	soul of the home	public image	democratic republic	market	organization	the network
test	vagabondage of the mind	family ceremonies	presentation of the event	demonstration for a just cause	deal	trial	end of a project, beginning of another
judgment	stroke of genius	knowing how to bestow trust	judgment of public opinion	verdict of the vote	price	effective	being called on to participate
evidence	certainty of intuition	exemplary anecdote	evidence of success	legal text	money	measure	
the fall OR state of unworthiness	temptation to come down to earth	lack of inhibition	indifference and banality	division	unwanted, enslavement to money	inefficient, instrumental action	unemployable
time formation (Annisette & Richardson 2011)	rupture, revolution	customary path	vogue trend	perennial	short-term flexibility	long term planned future	enduring relationships

Finally, it is important to note that each institutional order provides a source of “morality” for adherents. The inspired realm (often associated with religion) does not have an exclusive right to

claim or defend morality—all of the orders can claim that their adherence is a moral act. Further, each order purports to achieve greater common good through adherence to its values. Issues of “fairness” rest on institutional principals that base “equality” on quite different characteristics, as illustrated in table 4.2. Examining the moral dimension of institutional orders can illuminate “one of the most powerful motivators for why organizational actors endorse a particular [order] over another, or why they would so vehemently defend a different [order] from the prevailing one... and can deepen our understanding of institutional dynamics” (Cloutier & Langley, 2013: 4).

Combined, this scholarship suggests that managers can predict the source of impinging expectations by examining stakeholder attributes of power, legitimacy, and urgency. Further, the institutional order framework provides an understanding of the content of expectations by analyzing the stakeholder’s value alignment. However, research is less informative about how stakeholders and their expectations move within the stakeholder framework. In this study, by examining how emergent expectations influence the production and evaluation of architectural projects, I demonstrate the strategies that differently-endowed stakeholders use to move their concerns into the center of an organization’s agenda.

METHODS

To understand the source and content of stakeholder expectations, I investigated a setting in which multiple institutional orders vie for organizational attention and resources, and multiple stakeholders—from central to peripheral—make claims on the organization. In this study, I consider a building project as the focal organization, similar to the way Hoffman (1999) describes issues as field-forming. In this context, legitimate stakeholders are those tasked with the design, construction, approval, funding, use, or maintenance of the building. These legitimate stakeholders tend to be the “managers” that must determine which stakeholder claims must be attended to.

To examine the paths that different stakeholders take for their concerns to arrive at the “definitive” position, I examined three instances of unexpected expectations becoming relevant to managerial concern. In the first case, individuals with power gained both legitimacy and urgency. In the second case, a group with urgency aligned with powerful and legitimate actors.

And in the third case, an external “nonstakeholder” gained urgency, power, and legitimacy through engagement with the media. The first two cases involved a significant reconfiguration of the work and project budget, and the third case provides a view of societal expectations coming to bear on an individual practice. A brief summary of the three cases is found in table 4.3.

TABLE 4.3
Stakeholder Movement

	Signature Building	LEED Certification	Ground Zero Competition
Disruptive stakeholder	board member + president	student + faculty	outside media + general public
Disruptive stakeholder's original position*	Dormant (1) + Dominant (4) Stakeholder	Demanding (3) + Dependent (6) Stakeholder	Dangerous (5) + Nonstakeholder (8)
Method of becoming Definitive stakeholder	Board meeting provided legitimacy, speaking provided urgency	Alignment with Dormant & Dependent stakeholders	Power, and urgency provided through media publication, legitimacy provided through engagement with Discretionary stakeholder

*Numbers refer to classifications in Figure 4.1.

Data Collection

I gathered data on the first two projects while investigating interinstitutional processes related to environmentally sustainable building. In the first case, however, the unexpected change related more to the overall aesthetic expectations of the building than the environmental attributes. I draw on three qualitative data sources—interviews, archives, and observations—to capture the activities and ascribed meaning systems of project participants. The third case involves a public exchange within *The New York Times* regarding the architect Frank Gehry’s (non) involvement with the Ground Zero design competition.

Archival data. The building design and construction projects I investigated lasted anywhere from two to five years, with a number of variables affecting the exact determination of length—e.g., internal university determination that a new building “is needed” before any external professionals are involved, projects that go on hold due to funding restrictions or unexpected delays, or lingering payment issues that extend beyond the date of project turnover to the university’s operations unit. Almost all details of all phases of a project are documented, whether it is a press release to alumni about the project’s progress, or a set of meeting minutes between

the architect and structural engineer. When investigating a project, I began with archival data on the project so that I could efficiently use the time of my interviewees by focusing on particular situations or events I found in archival sources that triggered multiple orders of evaluation.

Interviews. I interviewed 49 individuals associated with the building design and construction industry, representing all major categories of participants (owner, architect, and contractor representatives), as well as other participants in the projects (e.g., lighting designer, cost estimator, engineer, landscape architect, university student, etc.). Appendix A provides demographic information of the interviewees. I sent my semi-structured interview protocol to the participants in advance of the interview, and included questions regarding the individual's involvement in a particular project, a reconstruction of events that required team interaction, their feelings toward reward and accomplishment, and (if they did not already describe an interaction related to green building) a specific question about the achievement of green building goals and team processes. The full set of questions is listed in appendix B. Each interviewee is identified in this text by a pseudonym or title only.

Observations. I spent approximately two weeks in an architecture firm where I observed the “regular work” of multiple projects. The firm has an open-office layout, where everyone can hear phone and in-person conversations, as well as ad-hoc meetings throughout the day. Private meetings took place in a conference room. Participants were aware of my presence, and each acknowledged informed consent of my observations. Examples of data include: phone conversations to quickly assemble a team for a high-profile government request for qualifications; a speaker-based conference call involving a project manager, a project architect, and two engineers regarding the quantity and placement of gas tubes for a lab; casual conversations about the staffing of the firm and how it changed in recent years; relationships of the firm with its other offices, including a “lessons learned” lunchtime video conference; and meetings among architects, engineers, and contractors.

I also attended the American Institute of Architects convention where the firm won a prestigious award. During the week-long convention, I was able to observe other professionals in public interactions in sessions regarding integrated design, green building, and other topics. Further, I thrice attended GreenBuild, the conference and expo of the USGBC (United States

Green Building Council), where I engaged a number of industry professionals on topics of inter-professional engagement. During all of the observations, I kept copious real-time notes, and further clarified my impressions through the creation of field notes and memos later that evening. These reflections allowed me to continuously refine my interviewing techniques and develop preliminary theoretical understandings of institutional complexity.

Research Setting

Whereas the creative industry of art follows a more industrial mode of production where the “piece” or “song” or “film” is either purchased (or not) in the market, the field of design involves co-creation of the product with the consumer. This co-creation provides a curious intersection of multiple institutional orders, whereby the products of the inspired order are shaped by forces in the market, industrial, or domestic orders in the form of a client. The client has some authority over the production of the work, even if the designer (e.g., architect or graphic/industrial/environmental designer) as expert is hired to produce and defend the product’s worthiness within the inspired order. Because worthiness in the Inspired order is unable to be measured during production (if ever), determining the appropriate aesthetic frequently involves iteration between production by the designer and reaction by the client, especially since few clients have the language needed to clearly and directly communicate their visual and aesthetic aims at the outset. Further, because the clients hire the designer to produce an “inspired” creation, an overly-prescriptive aesthetic description from the client precludes opportunities for “accidental innovation” (Austin, Devin, & Sullivan, 2012). Designers “prefer to be told the overall goal in functional or market terms... as long as they are not told how to do that” because when clients over specify what they want, they “unduly limit possibilities” (Molotch, 2003: 37).

This description of design does not just represent the inspired order of worth. It also shows how multiple orders must be balanced continuously throughout a design project. In 1973, Rittel and Webber posited a theory of “wicked” problems to describe the unbounded and continuously evolving nature of architectural and planning projects. This description has recently been extended to all design problems, whose solution set is limited if the problem is prematurely constrained. Briefly, a “wicked” problem has the following characteristics:

1. The problem has no definitive formulation.

2. There is no “natural” stopping point in formulating a solution.
3. Solutions are better or worse, but not objectively measurable.
4. Solution evaluation includes unintended consequences in the eternal future.
5. There is only one opportunity for a solution.
6. There are unlimited potential solutions.
7. The problem involves a unique combination of variables.
8. The problem is a symptom of another problem.
9. Each different description of the problem pre-determines a solution.
10. The implementer is responsible for all intended and unintended consequences.

In other words, a problem of this nature is hard-pressed to follow a simple or linear workflow from beginning to end. However, this does not mean that projects must necessarily be anarchic either. Yet, this description highlights how applying an industrial institutional order that highly values efficiency can be frustrated by the nature of a building project with components that cannot be “optimized.” Therefore, the setting of an architectural project provides ample material for analyzing interinstitutional influences. In this study, I identify the institutional orders at issue, analyze which stakeholders provide expectations from these orders, and then watch stakeholder attempts at movement to the central location of concerns.

Analytic Approach

While working on field-based research examining the influence that new green building requirements were having on a fragmented field, I remained open to emergent issues that were important to the participants (Corbin & Strauss, 2008). Through this grounded theory approach, I was able to uncover events where participants had emotional reactions to a topic, signifying a possible link to their morality, and therefore tapping into an order of worth that they held particularly close. From “Christ. I was so angry!” to “that was the drag,” “he was peeved,” “it’s a stupid thing to do,” “I get a kick out of that” etc., these emotional reactions to their work interactions helped to narrow down situations where multiple institutional orders were in conflict. I also coded situations that contained participants’ expectations, then further refined those codes into expectations “articulated,” “exceeded,” “met,” “thwarted,” and “of perfection.” These sub-codes allowed levels of expectation to vary, which began to give clues to the conflict

not in values (e.g., adherence or non-adherence to an order), but in trade-off values (e.g., *level of adherence to an order*). Though all participants wanted to achieve high worth in all institutional orders, my data uncovered where they had affinities and commitments to some orders more than others.

Once these expectations were identified, I reviewed the data to examine the approaches each party took to make their case—to advance their expectations as central concerns. The paths are illustrated in figures 4.2, 4.3, and 4.4. In these diagrams, I outline both the movement of stakeholders as they gain attributes of power, legitimacy, and urgency, as well as the alliances among stakeholders. In classifying the stakeholders, I did not simply drop an actor or group of actors into a particular stakeholder class. Instead, I examined their successful and unsuccessful strategies, and the reactions to those strategies, to better situate the actors within the proper classification. Put another way, for each stakeholder, I analyzed their sources of power, legitimacy, and urgency based on their interactions with other members of the project. This iteration between data and diagram through constant comparison produced the final diagrams shown here (Glaser & Strauss, 1967). By subsequently comparing the three cases, I identified the strategies used by each class of stakeholders to move their expectations toward the center of the organization's focus.

MANAGING, MOVING, AND MANIPULATING EXPECTATIONS

In the following text, I describe situations in three building projects that involve changing expectations applied to the projects. In each case, actors manipulated relationships among powerful, legitimate, and urgent stakeholders, at times creating communication bridges across stakeholder boundaries, and at other times maneuvering themselves across these lines. The parenthetical letters correspond to figures 4.2, 4.3, and 4.4, which illustrate stakeholder relationships, locations, and movement.

Creating a Signature Building

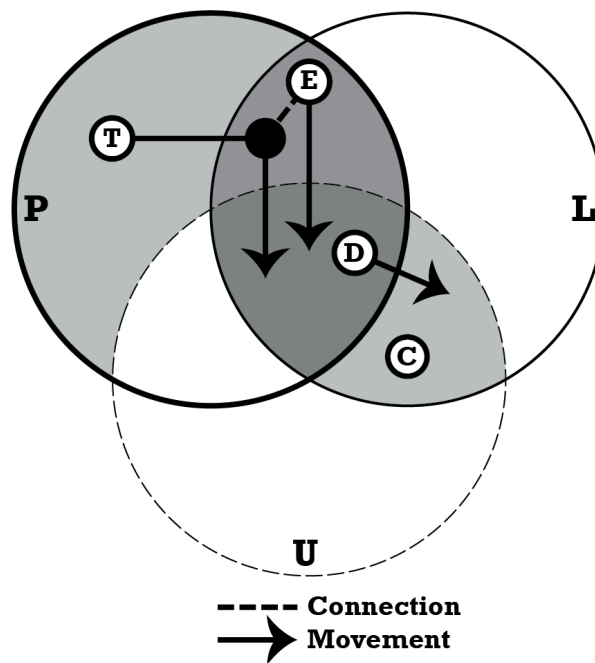
I am truly sorry for this turn of events and did not realize it had gotten to this point internally. We have never had such scrutiny on any project before... When board members come that have not been a part of the process thus far and have the ability to completely change the design, I'm not sure there is any way we could have foreseen or prepared for this.

After six months of design work, a meeting with board members required significant redesign, cost the university additional design fees, and risked delaying construction by almost a year due to weather constraints on foundation work during the rainy season. At issue was the concept of “signature building.” At the board meeting referenced above,

one of the trustees questioned whether it was the right kind of architecture for the school. He wanted to think about themselves as a future-looking institution. And then the president latched on to that and said, “Yeah, I want this to be a signature building. Why don’t you [architects] take Christmas break and come up with a new concept for what the building might look like?”

In figure 4.2, the board member (T)—who was not on the building committee—arrived at a board meeting in which members would review the building design. The arrival at the meeting provided the board member with legitimacy, and sharing his opinion constituted urgency, suddenly changing a latent, dormant stakeholder (1) into a definitive stakeholder (7). When the president (E) “latched on to that” in agreement during the meeting, she also moved into the definitive stakeholder position.

FIGURE 4.2
Signature Building Stakeholder Movement
 P=Power, L=Legitimacy, U=Urgency
 T=Trustee, E=University President, D=Dean, C=Consultants and university project manager



At issue in this case is whether the consultants (C) “could have foreseen or prepared for this.” Earlier in the process, the definitive stakeholder had been the dean of the school (D). And though the architects held a powerless position similar to the university project manager, to the architects the project manager was both “more legitimate” and “more powerful.” This history and these relationships matter because the dean and the university project manager, who were regularly involved in the project and therefore represented “legitimate” interests, continued to stress the “contextual fit” of the building’s aesthetic approach. For example, early in the process the project manager stated that “primarily the ‘homey’ residential quality is a real plus for the students as well as lots of light and lots of nooks and crannies.” Meanwhile, the dean continually raised concern in the schematic design meetings about the green roof. One set of meeting minutes states “the green roof at present is too big and have concerns that the more traditional building forms with a more modern flat green roof could be difficult to pull off.” In addition to this contextual aesthetic concern, a number of other “practical” concerns were expressed about the green roof. Meeting minutes summarized the dean’s concerns at the schematic kickoff meeting three months before the board meeting mentioned above:

Is green roof taking on too much importance? Maintenance concerns, view concerns, too wide, too modern, too costly??? Access and safety - do not want to see a rail but how can you keep people from walking across the plants and able to fall off the edge (could also be a code issue later on) ???

Because of these “practical” issues, the architects attempted to assuage the concerns by creating a specific presentation illustrating how the green roof design could address all of the above points. However, even after these assurances, the topic continued to emerge in different forms, whether the green roof would block views of the “meadow” or concerns that “inadequate maintenance would create unsightly view of the building.”

Even after the board meeting that requested a more “signature building,” the project manager’s summary notes of a debriefing meeting with the design team after the board meeting still indicated that “contextual fit is key.” These hand notes are illustrated in Appendices C and D. The notes contain references in particular to “Mr. Architect”—my pseudonym for the renowned founder of the architectural firm. As a “signature building” must have a signer, the post-meeting notes specifically asked for the founder to become more involved in the project and provide his vision of “what makes it signature to him.”

The battle between “contextual” and “signature” however, is not so clearly explained as a surprise request from a board member and the president. Eight months earlier, the call for architectural services requested “creative solutions that bring advanced technologies and commitment to sustainable and appropriate design that will complement the historic campus fabric.” This statement invokes multiple orders of worth as illustrated in table 4.2, setting expectations for achievement in the inspired order (“creative”), industrial order (“solutions,” “advanced technologies”), civic order (“sustainable”), as well as the domestic order (“qualified,” “appropriate,” “complement,” “historic”). This multiplicity is not unusual during the visionary period of a project (Henn, 2013), but as the project progresses, trying to be all things to all people becomes increasingly difficult, and near impossible.

Though the designers received consistent messages from the authorized project representatives, those who held more power than the dean had different concerns. The building would be the first and quite prominent graduate school of business for the university. The project manager had previously worked on projects that did not hold as much risk or promise as this one. Though the campus was traditional, the board’s concern over the future financial sustainability of the university compelled them to support the new graduate business program, and with that saw the new building as a signifier of this initiative. The designers actually received conflicting guidance throughout the design phase, but responded aesthetically to their more immediate client representatives of the dean and project manager. Early in the process, design workshop notes stated “signature presence, visibility, central ‘gateway’ location signals [West U.’s] commitment.” A month later, the design objectives asked to “create a prominent, unique, and intimate place for MBA students on the campus... create a signature presence, protect the ‘garden’ nature of the campus, create a ‘porch’ that promotes connections between program, green space, and campus.”

The contradictions in aesthetic direction continued:

[The business] building wants to be prominent, Academic in scale/feel as well as visually sustainable. The current design of the exterior façade closely resembles the adjacent residence hall scale and aesthetics. It was recommended that the building could be more academic and contemporary, rather than mimic the scale of the residential buildings adjacent. Multi-function room needs to have more prominence on the site.

Finally, in meeting minutes from the board meeting that opened this story, the implicit debate over aesthetic direction became explicit. The architects' meeting minutes illustrates both sides of the issue during the meeting:

The [business] Building will reflect [West University's] statement for educating in the 21st Century. Cutting things out of the budget solely to meet the previous budget would result in mediocrity. There was concern expressed about whether or not the current design represented [West business school] goal of a signature academic building.

The dean expressed that the current design for the [business school] does represent the goals of [West university] for the 21st century as well as pragmatic needs of the students and faculty. A few Trustees agreed that the current design was balanced in contextual fit and a progressive statement of the future of the University.

This is not a debate over aesthetics. It is a question of who holds power over decision-making. The board member who had headed the board's building sub-committee was either non-representative of the board's opinions, or did not hold power. After the board meeting mentioned above, the signature architect and the president held a private meeting and discussed the direction for the building. The architects were paid for the redesign workshops that lasted through the following month. The signature architect was closely involved, and showed his social skill when trying to accommodate all views. After the redesign, a board member asked, "Why is this building appropriate to [West University]? Is it unique to this site, campus? Or could it be found anywhere?" The signature architect's response was,

There is an ease that is [West University], in tune with the natural landscape that is powerful, strong yet graceful, light and engaging. The spaces, forms of the design reflect these qualities, strong yet graceful and transparent. The traditional forms of previous design was trying too hard to be like [West U.] in materials and form, but didn't truly capture the spirit of [West U.] which is dynamic, not static; unique, forward thinking and engaging.

In other words, he addressed the competition between the "future looking" industrial order of worth and the "appropriate" domestic order of worth by transporting their adherents to the inspired order of worth with conversations about the "spirit" of the university. In the end, the architects were delighted that the board and president wanted a more modern building. One of the project architects summarized:

Early on we [created] more modern [designs] and had been advised to not pursue them. ... We had gotten advice ... that the board is pretty conservative. So, we got bad advice, but were delighted that they asked us to look at it differently. They paid us to do a redesign and make it a better building.

To achieve client satisfaction, a firm must understand underlying hierarchies of power, expectations, and preferred tradeoff positions, especially where achieving high worth in one order precludes the achievement of high worth in another. Though the turn of events eventually benefited the architecture firm by providing a “better building,” and being paid for the redesign, it cost the university both time and money, and further strained relationships among the dean and upper administration.

Adopting LEED certification

At another university, the business school proposed the construction of a new building to house the program. The former facility was not “functional” for a number of reasons, the two main ones being contemporary fire code compliance and the structuring of classrooms for a team-based and collaborative teaching method. Significant funding for the facility arrived in fall 2004 with no indication of an intention to achieve LEED (Leadership in Energy and Environmental Design) certification—a national green building standard established seven years earlier. At the time, there were almost 250 LEED certified green buildings in the U.S. and Canada, with 1,800 additional projects underway worldwide with intentions for certification. By fall 2005, the program’s alumni magazine still had no mention of green building intentions in its description of the new facility, despite the magazine’s cover highlighting a story on climate change, and the magazine announcing both a significant donation to the business and environment program, as well as a national award for a student report on green building. In the background however, students and faculty of the business and environment program had begun advocating for the addition of LEED certification to the project’s goals.

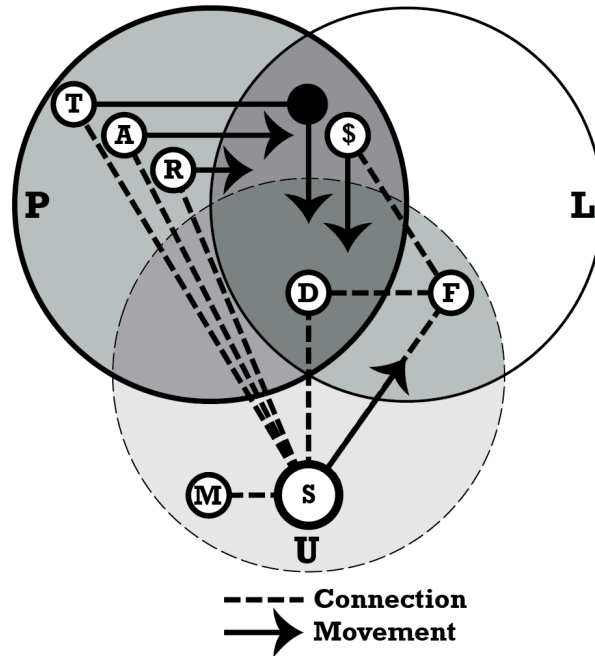
In February 2005, three students from the business and environmental program sent a letter to the dean, requesting all new construction “to be certified LEED Gold or higher.” In the letter, the students outline “the value of certification as well as provide evidence that pursuing LEED will not result in increased capital costs and will significantly reduce operational costs.” Citing quantitative studies of green buildings, the letter indicates that “it is critical to integrate [environmentally sustainable] principles from the beginning of the process” in order to “reap the financial benefits” of green buildings. In addition to a page of green building data, the authors also include a list of 475 students, faculty, staff, alumni, and environmental business institute

board members that reviewed the letter and “endorse the pursuit of LEED Gold or higher”; a list of “companies that recruit [the program’s] students” which “own LEED certified buildings”; and a list of other universities with LEED registered projects—specifically highlighting top schools and a sub-list of projects specifically for business schools. The letter also references the school’s position of leadership by citing high rankings of both its main program as well as its programs in “responsible business” including social and environmental leadership institutes. The students specifically asked the dean “to make sure the architectural firm selected... has LEED Accredited Professionals on staff and staffed on [the] project” and to “charge the architectural firm with designing buildings that meet LEED Gold or Platinum certification requirements.”

In analyzing this communication with the stakeholder model in figure 4.3, the students (S) sat within the “urgent” realm, where they were “demanding stakeholders” addressing the dean (D)—a definitive stakeholder. Because the letter also includes research on corporate recruiter behavior, the students deem the recruiters (R) as powerful stakeholders that have a legitimate relationship to the project’s green building goals since the recruiters engaged with LEED certification in their own facilities, thereby endorsing the practice and likely seeking similar behavior from organizations that produce their future employees. With this effort, the students bring a party previously considered a dormant stakeholder—since recruiters have power through their endorsement of, and resource contribution, to the school—and moves it into the dominant stakeholder position by suggesting isopraxis, i.e. imitating the behavior of those the school is resource-dependent on.

FIGURE 4.3
LEED Certification Stakeholder Movement

P=Power, L=Legitimacy, U=Urgency
 T=Board Trustee, A=Alumni, R=Recruiters, \$=Donor Alumni, D=Dean, F=Faculty, M=Media,
 S=Students



After sending this letter with little in the way of commitment in reply, the students then attempted to leverage the media (M). In April in the student newspaper, the letter authors provided an “update on LEED certification” for the project. They stated that the dean’s assistant for special projects was

supportive of the ideas in our request, but naturally cautious given the size and importance of the new facilities. As with all design considerations, [the assistant] is engaging several stakeholders, donors and experts on the issue of ‘greening’ before taking a position. ... [the assistant] also explained to us that they are still in the “conceptual” stages of the design process... assur[ing] us that the emphasis is doing this well, not hastily.

The short article concluded by indicating that in a recent presentation to the real estate club, an executive from the major school donor’s company “suggested to the audience that the new buildings are likely to be LEED certified.” Normally, communication through media channels resides in the “dangerous stakeholder” category because of the media’s combination of power

and urgency. However, student newspapers rarely achieve the same power as national news media, so the effect of this article was more symbolic than dangerous.

Concurrent with the student intentions for pushing the project toward LEED certification, faculty (F) associated with the business and environment program held internal discussions to strategize how to advance a greener design for the building. In late April 2005, the dean's project assistant sent the facilities sub-committee heads a meeting schedule for the building's schematic design. One faculty member sent a message to another:

I just looked at this schedule and it is much more aggressive than I thought... we are supposed to make all major design recommendations [within 10 weeks]. ...I suggest we try to hire [a student in the business and environment program] (or two) ASAP so they can start doing background research and be ready for crunch time. ...My own feeling is that we should be aggressive ourselves in proposing meaningful solutions rather than just reacting to what is put in front of us. The worst case scenario is that we don't have our homework done and/or we are perceived as trying to hold up the project. I'm sure delays won't be tolerated.

In this message, it is clear that faculty serve in a dependent role where they do not have power, yet they do have more legitimacy than the students. They pull the students in to the process by providing funding that legitimizes student involvement. Further, they are both closely connected to business and environment programs, which puts them in closer contact with donors (\$) of the school's programs and institutes. These relationships to donors can circumvent the dean's relationship with donors, and thereby pressure the dean to advance the environmental agenda for the building.

By the end of May, fifty alumni (A) of the business and environment program wrote a letter to the dean citing his intention to "construct a state-of-the-art facility that exemplifies the school's reputation as 'leading in thought and action.'" They continue:

One area that appears to have been missing from the recent official launch of the building project is a commitment to lead in yet another area by utilizing sustainable (or green) design concepts in the facility itself. ...it is critical that the new facility exposes students to the concepts that create the more positive impacts so that they may carry this learning into businesses and organizations where they may have influence over future designs.

As alumni, these stakeholders attempted to move from the dormant stakeholder location—where they hold power in their potential as donors—into the dominant stakeholder location by conceptually aligning the school and program's mission with the execution of a green building. In conclusion, the alumni "urged" the dean "to work with the planning committee to make a

commitment to include sustainable design concepts into the new facility.” This urging implies an expectant—rather than latent—stakeholder position.

Shortly after the building opened in 2009, the dean sent an announcement to the business school community. In it, the dean stated, “As you know, from the beginning we have had an eye on making our new building embody our commitment to environmental sustainability and the health of our community.” He continued, explaining that the food service company will provide “a variety of healthful eating options... from local sources as the seasons allow.” In this context, he stated, “In keeping with the requirements of LEED certification, we are implementing a system to compost as much food waste, food containers, and cutlery as possible... Therefore, your help in separating your waste in the appropriate containers will help us keep our commitment to environmental sustainability.” In response to this message, a faculty member associated with the business and environment program sent an email to that sub-community stating, “Some of you may have heard a rumor that the building will not be going for LEED certification. As you can see from [the dean’s] message, nothing could be further from the truth. I can’t tell you how pleased I was to see him highlighting LEED certification in the note...” In essence, the opening of the building was the first *public* indication that the building project would pursue LEED certification. Though the commitment to certification must be made early in the process because of its influence over the process of design and construction, the dean carefully controlled external expectations by not advocating his commitment until it was sure to happen.

As this project neared completion, another building at this university was in its planning stages. Again, the administration resisted student requests to achieve LEED certification. With less faculty support in this medical project, the students developed a postcard campaign addressed to the project’s administrators and the university board of trustees at both home and professional office locations. The text of the green postcard read, “To demonstrate stewardship of the public health, our community, and our natural environment, I urge the new [building] to do and document the following: 1. Obtain LEED certification, 2. Design for sustainable operations, including energy optimization and space for waste segregation and recycling, 3. Employ safer,

responsibly sourced building materials and cleaners.” There was space for a signature and two boxes to check whether the signer was a local resident or a university “student, staff, or faculty.”

This campaign raised awareness from the dormant position through the connection the postcards made between students (S) and trustees (T) or even administrators (D). Similar to the “signature building” situation, the board members’ arrival at a board meeting provided legitimacy, and their discussion of the topic placed them and their concern for environmental sustainability goals into the definitive stakeholder position.

Frank Gehry and Ground Zero

In 2002, the Lower Manhattan Development Corporation (LMDC) sponsored an architectural competition for the rebuilding of Ground Zero. Though the Port Authority of New York and New Jersey owned most of the site, Silverstein Properties held a 99-year lease on it as of July, 2001, and the two entities eventually received \$4.55 billion in insurance money as a result of the attacks. The LMDC was formed in 2002 to distribute nearly \$10 billion in federal funds provided for rebuilding the area. In January 2003, *The New York Times Magazine* published an interview by Deborah Solomon with the architect Frank Gehry. In this interview, Solomon asked Gehry why his “name was missing” when the LMDC “presented seven new proposals for the site.” Gehry’s response was published as:

I was invited to be on one of the teams, but I found it demeaning that the agency paid only \$40,000 for all that work. I can understand why the kids did it, but why would people my age do it? Norman Foster or Richard Meier or any of those people? When you’re only paid \$40,000, you’re treated as if that is your worth.

They continued:

Solomon: “But what about your sense of civic responsibility? Don’t tell me you built the Guggenheim Museum in Bilbao, Spain, simply to earn a buck.”

Gehry: “I refuse to work unless I get paid, so I don’t get a lot of work sometimes.”

Solomon: “But don’t you owe it to the public to try to help New York, not to mention the rest of the country?”

Gehry then explained that he was in New York when the towers fell, and while teaching an architecture class at Yale, he gave the students the Ground Zero project as an assignment. When Solomon asked if he had shared his ideas with any public officials, he responded, “I thought any moves in that direction would have been opportunistic.” To which Solomon replied, “Aren’t all

of you architects supposed to be megalomaniacs?” After discussing his general thoughts for what should be built at Ground Zero and the projects in his office, she stated, “I can’t let you go without asking what you think of your colleagues’ proposals for downtown. Giuliani has said he doesn’t like any of them.” Gehry’s answer was, “My only beef with them is that they did it for \$40,000. But maybe there’s a positive side. Now that the proposals are there, they open the public’s eyes to the possibilities of architecture.”

This conversation could have been nothing more than the “buzzing fly” of a demanding stakeholder in terms of Gehry’s reputation and reasons for not engaging with the Ground Zero project. However, in publishing her interview in the *New York Times Magazine*, Solomon held the power of the media, putting her in the “dangerous stakeholder” classification that holds both power and urgency. Using the orders of worth to examine this conversation, it is clear that the inspired order and industrial order are in direct competition, where Solomon expects Gehry—a lauded and perhaps the most famous architect in the world—to cling to the inspired order that is the source of his renown. It could be argued that he is at the pinnacle of the state of worthiness as an artist—Solomon’s reference to the Guggenheim in Bilbao alludes to this—and Solomon attempts to bind his identity and practice to remain within that order, suggesting that he should reject not just profit, but even adequate compensation for the work required of such a submission. Paul Goldberger, architecture critic for the *New Yorker* and formerly of *The New York Times* “estimated that \$40,000 covered little more than two hours of work on the competition” (Iovine, 2003). Further, Solomon invoked “civic responsibility” found in the civic institutional order—arguing that Gehry’s talents should be contributed to the “public.”

Later in the week, *Architectural Record* magazine, published by McGraw-Hill, held a forum and panel discussion on the design proposals. Spontaneous applause erupted twice:

The first round erupted when Richard Kahan... said that it was ‘ethically, morally and, possibly, illegally wrong for the Port Authority and a developer to be calling the shots’ about what will be built at ground zero. The second outburst came when [the architect] Peter Eisenman said, ‘It doesn’t matter a damn, Frank Gehry, that we were paid only \$40,000’ (Iovine, 2003).

In the final conversations of the evening, discussions focused on how the site should be developed and who, exactly, was the client.

‘We need a patron,’ [Mr. Kahan, the former chief executive of the Battery Park City Authority] said. But in the apparent absence of a political power broker and cultural visionary with the stature of a John V. Lindsay or a Nelson A. Rockefeller, he added ‘the mayor has to take over the process.’

The director of design and development for the LMDC stated that decisions on what would happen “will be made by listening to the public... the public will make the difference.” (Iovine, 2003).

And the public spoke—at least in reference to the Gehry interview—the following week in *The New York Times Magazine*’s letters to the editor:

I congratulate Deborah Solomon on her interview with Frank Gehry. I have read thick tomes that gave me less insight into an individual’s character than her brief interview did. Forty thousand dollars! Has it occurred to Gehry that because of the economic fallout of Sept. 11, the agency might not have been able to afford more than \$40,000? The high moral ground would have been to refuse the money and submit a proposal gratis (Wilson, 2003).

I wonder how many of the secretaries and other office workers who died in the World Trade Center even made \$40,000 a year. For their families, I think Gehry has redefined the word “demeaning” (McManamy, 2003).

Though these letters could be dismissed as uninformed, their selection by *New York Times* editors provided them with the power to influence the issue and level expectations on Gehry’s participation in the competition. The following week, Gehry responded:

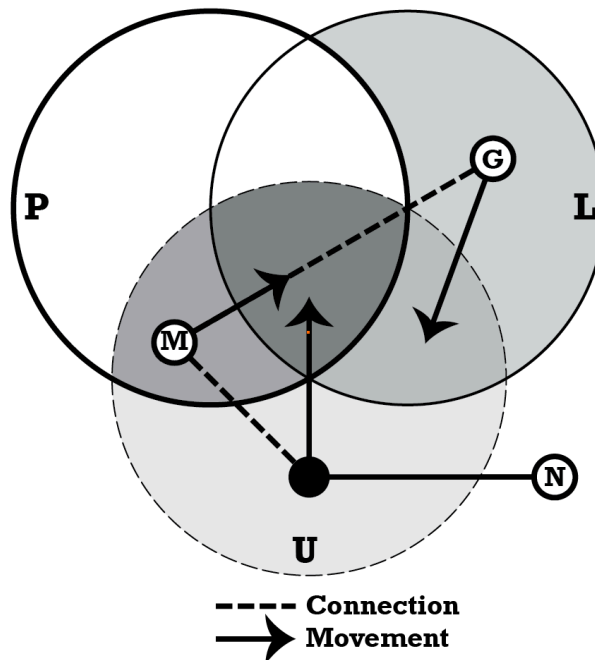
Regarding my interview with Deborah Solomon, the comments I made about the fees paid to the architectural teams that submitted proposals for ground zero were based on my opinion that when working on a commercial project that will certainly generate great financial gain, as opposed to when working solely on a memorial... everyone involved should be fairly compensated for the work. It might seem outrageous to anyone outside the profession, but I think most architects would agree that in any other situation a payment of \$40,000 for this level of work wouldn’t even go far enough for us to pay our own staff members for their efforts and their long nights. I shouldn’t have chosen this situation to use as an example of my opinions about the profession in general, and I should have applauded my colleagues for the civic responsibility they’ve shown. I think those who know me understood the intent of my words. To those who were offended, I offer my most sincere apologies (Gehry, 2003).

With this reply, Gehry tried to point out that he is not a sole author—that even (or especially) the “art” of architecture is a collective process (Becker, 1974). The architect Peter Eisenman does not pay all of his interns, even if they work on for-profit projects. Gehry, however, pays all of his employees and interns. In this letter, he reminds readers that the Ground Zero competition would result in a for-profit complex. This was not the memorial competition—which would happen a year later—but a proposal for rebuilding leasable space on the then-debris-filled land. Gehry attempts to both reframe the competition in the market institutional order, as well as elevate his worth as a civic-minded employer that compensates his employees fairly.

Figure 4.4 illustrates how the media and letter writers entered into the “definitive stakeholder” classification. First, *The New York Times* is a powerful media figure, and any media can be considered holding “urgency” in this case. By agreeing to the interview, as well as responding to the letters, Gehry legitimized the media. The nonstakeholders gained urgency when they wrote their letters, and gained both borrowed legitimacy and power when *The New York Times* agreed to publish their letters. Finally, Gehry was previously a latent legitimate stakeholder in his own work and reputation, but became a dependent stakeholder once the more powerful media began placing expectations on his practice and activities.

FIGURE 4.4
Gehry and the Ground Zero Competition Stakeholder Movement

P=Power, L=Legitimacy, U=Urgency
M=Media, G=Gehry, N=Nonstakeholder letter-to-the-editor



This story highlights the strategic use of institutional orders in providing different expectations for different actors. Silverstein Properties is a private corporation that aimed to make a profit on the rebuilding of the site, yet the architects—as-artists were expected to donate their skills to this corporation to “help New York, not to mention the rest of the country.” Both Silverstein and Gehry own corporations, but one is societally held to expectations within a different institutional order than the other.

DISCUSSION

In this section I outline the strategies of stakeholder movement, characterize interinstitutional battles in the cases, and provide a model process of stakeholder risk evaluation.

Strategies of Stakeholder Movement

In this section, I outline four strategies used by stakeholders in the stories above: including, legitimizing, separating, and monitoring.

Including Stakeholders. One strategy to survey as many expectations that might come to bear on a project is to include as many stakeholders as possible in the process. In the “signature building” example, the project team copied a number of board members on meeting notes, whether the board members attended or not. This inclusion is an attempt to elicit any disagreement on the progress of the project closer to the issues at hand, rather than later in the project. However, it is difficult to prompt unengaged yet powerful stakeholders to “pay attention” when they likely have multiple commitments that earned them the board seat in the first place. After realizing that the project team had inadequate guidance to fully understand the board and president’s aesthetic intentions for a “signature” building, the project team implored the administration for greater commitment from the vocal members to attend all redesign workshops. The vocal members did so, and after three workshops in the span of three weeks, the group agreed on a new direction for the design. Further, because the new scheme is what the powerful members of the administration “wanted,” the cost of the project almost doubled to accommodate multiple new features and treatment, while the essential square footage and configuration of the building was little changed.

In the LEED certification story, the dean assigned faculty to committees to provide input on the new building, covering topics such as classroom layout, faculty offices, etc. Though a faculty member associated with the business and environment program was selected for the “environment” committee, a colleague who had significantly greater knowledge, experience, and interest in green building was not selected. One participant wondered whether this was “incompetence, or strategic incompetence,” implying that selecting actors to serve as stakeholder representatives is a method of controlling expectations that are brought to bear on the project. Though the selected representative could bring communications to the committee from her

colleague, in committee discussions she could not draw on the deep knowledge and experience her colleague had and so the selection of the less experienced colleague could be seen as a strategic decision by the dean to control the project expectations.

In the Gehry story, public readers of *The New York Times* were “nonstakeholders” until they read the interview and wrote to the newspaper which created urgency. When the newspaper printed their letters, they included the public in the conversation about Gehry’s involvement.

Legitimizing Stakeholders. In the LEED certification project, the students moved from a position of “demanding stakeholder” to “dependent stakeholder” when the faculty advocated for their inclusion as active members of the project team, tasked with monitoring and researching opportunities for meeting LEED points. Moving into the dependent stakeholder position also moves actors from a latent position to an ‘expectant’ position through their gain in legitimacy. In other words, by including peripheral stakeholders, managers consequentially raise expectations for the *inclusion* of the stakeholders’ expectations. While still in the periphery (1, 2, 3)—i.e. outside of the “expectant” zone (4, 5, 6)—stakeholders do not assume that their concerns and expectations will be included in the project. Once in an expectant position, the concerns and expectations must be taken into consideration even if they are not met by the project team.

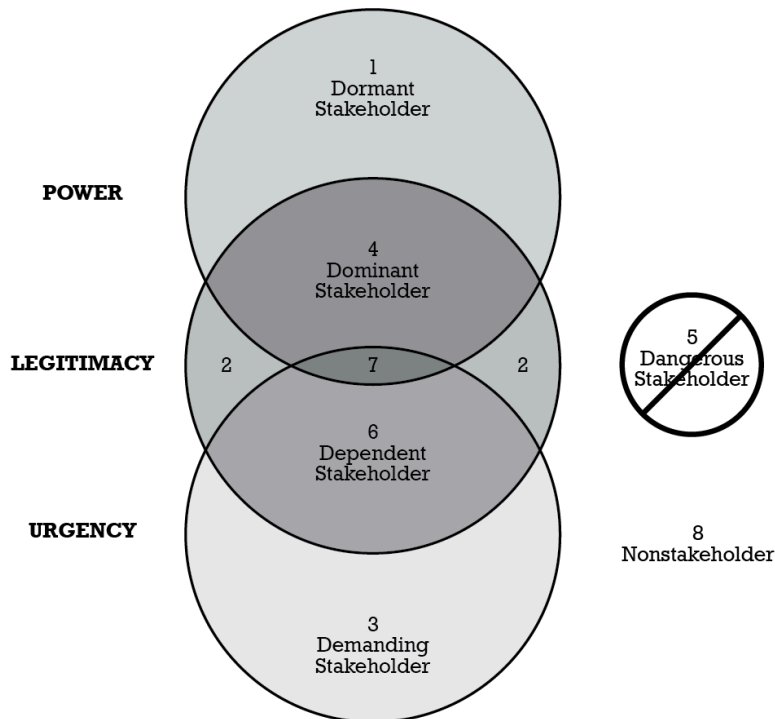
In the Gehry story, Gehry himself provided legitimacy to both the media and the letter writers through his initial granting of an interview and subsequently his response letter and apology.

Separating stakeholders. At a university, it is rare for students or faculty to have free communication with board members without the intervening level of administrative authority. The stakeholder model shows how the connection between dormant (powerful) and demanding (urgent) stakeholders can produce a group of “dangerous” stakeholders that do not have a legitimate involvement in a building project, yet can leverage influential resources through their coalition. As a result, one university clearly states that both faculty and students may only communicate to the board “through the President” and the student “participation in the deliberations of the faculty” may only happen “subject to the revisions and orders of the President.” At another university, the faculty “shall submit its communications to the board in writing through its dean... each dean shall endorse faculty communications, making appropriate explanatory statements as needed,” while students may speak to the board during a carefully

contained “public comment” period at the board meeting, limiting participation to ten speakers at five minutes each, vetted through a prior request to the office of the university’s executive officers.

This control of communication is an attempt to separate positions of power and positions of urgency such that the only communication between them is through the “definitive stakeholder” of the university president and deans. See figure 4.5 for the effect of this policy in eliminating the potential for “dangerous stakeholders” to emerge. The risk with this approach is that the definitive manager may not be able to control this separation as well as she would like to, and subsequently be subject to a greater threat if the association between dormant and demanding stakeholders does happen, as in the LEED certification example where a postcard campaign from students to the homes and offices of board members resulted in board attention to the topic of green building.

FIGURE 4.5
Efforts to Eliminate Dangerous Stakeholders.



Monitoring stakeholders. A final strategy managers use is monitoring stakeholders. In the case of LEED certification, the dean received a number of communications from the students,

yet held the announcement of LEED certification until after the building had opened. Because of the issue stated above where including stakeholders can legitimize their involvement and sets of expectations, the dean kept careful tabs on any statement that could be construed as a promise to meet certification expectations. This strategy of monitoring can also be distinguished from ignoring, though they appear the same to outside stakeholders. Ignoring actors who are not within the legitimate classifications risks future surprise demands if stakeholder movement puts previously ignored actors within either the dangerous or legitimate realm. In monitoring the students' demands, the dean was able to address inquiries about LEED relative to the power of the inquirer. Less powerful parties received noncommittal answers, which satisfied but did not squelch expectations, thereby preventing uproar. More powerful parties undoubtedly received more detailed and reassuring responses, providing the dean with an opportunity for outreach and possibly even fundraising points to help meet high values in multiple institutional orders.

Interinstitutional Alignments and Conflicts

In this section, I outline the institutional orders at play within each of the three case studies, and how they represent the content of expectations applied to the building projects. The institutional orders apply to realms of governance, aesthetics, project consequences, societal judgement, and more, yet actors who advocate a specific order's value in one realm do not necessarily advocate for the same order to take precedence in another realm.

Creating a signature building. The authority of the board in the “signature building” story stems from a domestic order, where those who are higher in the hierarchy have a more definite and stronger voice. The consequences of excluding those voices from the conversation threatens the university's resource supply in the form of donations as well as prestige of associated board members. Additionally, any dismissal of board concerns must threaten either the governance system that established the board's authority, or the employment status of the dismissive party that is not adequately serving in his or her “proper” subordinate position. The change in aesthetic direction in this project required a sacrifice of the industrial order's higher common principle of efficiency—the project increased in cost, and extended the schedule—in order to meet the domestic order's principle of hierarchical superiority. In addition to the governance system engagement, the battle over aesthetics can be similarly categorized as a battle between the

domestic and industrial orders, with “contextual fit,” “complementing the historic fabric,” and “traditional forms” of the domestic order conflicting with the “progressive institution,” “future-looking,” “21st century” of the industrial order as well. This power struggle among administrators and board members exhibited itself in the rhetoric of aesthetics, though somewhat ironically, the more powerful actors that held power within a domestic order adhered to the more progressive “future looking” aesthetic statement, while the lower-ranking staff adhered to the domestic principles of tradition in their aesthetic preference. This irony shows how actors manipulate the values within different orders for different purposes. It is not so simple to assume that board members or presidents, for example, will adhere to an order from which they derive power in all cases they consider. In fact, that assumption may be exactly what got the project manager into some trouble, as he had told the architects that the board was “pretty conservative” throughout the pre-design and schematic design process.

In examining the aesthetic battle more closely, it becomes clear that goals in multiple orders fought for preeminence. In creating a “signature building,” the university was seeking attention, to be the object of desire, media acclaim, to not engender indifference—in other words, to achieve a high state of worth in the order of fame. To achieve this recognition, the university sought to “win” the test of the inspired order—to have a “stroke of genius” touch their campus and their new graduate program. As a result of achieving a “signature building,” the organization envisioned market success, where their program would attract customers in the form of students as well as funding organizations to sponsor educational and research programs. Therefore, the test of efficiency in the industrial order was expanded to include not just the cost of producing a building, but the investment benefits that a “signature building” would allow the university to reap once achieved. As any market is embedded within social relations (Granovetter, 1985), this situation more precisely specifies the inter-embeddedness of each order amid, between, and within the other orders.

LEED Certification. In the battle over LEED certification, the certification is frequently a representation of the civic order’s value of collective benefit. An improved environment benefits all, including future beings who do not yet have a voice. However, the active student stakeholder group comprised mainly students of an integrated “business and environment” educational

program, and therefore the marketing of their own credentials would be improved by both participating in the “greening” of the project, as well as coming from a program whose new building holds a green identity through LEED certification. These two factors would increase the students’ value within the market order when they sought a job in sustainable business, while they could claim to be concerned about the civic order’s values of equality. The synergy of these two orders makes it difficult to know the “real” reasons the students advocated for LEED certification, and it may not matter which order provided individuals with the impetus for activism.

The disappointment of some members of the “greening” contingent—students and faculty alike—stemmed from the shortcomings of how green the building was, and indicates frustration by the sacrifice of civic goals for inspired/aesthetic goals, such as the presence of the glassed-in “winter garden” that significantly reduced energy efficiency. Efficiency, of course, is the industrial order’s higher common principle that enjoys a synergy with the civic order when greening a building and conserving resources creates a more temporally equal distributed use. This disappointment can also signify a failure in the order of fame. If the building was not a “winner” in either the aesthetic or civic realm, then it merited no attention to increase fame, which could have in turn increased the marketability of the university, program, and team members. Therefore, the compromised result translated into an average outcome in all orders.

Ground Zero. In the Gehry interview regarding Ground Zero, there is a clear battle between industrial efficiency—getting paid for one’s work—and civic responsibility. The content of the letter to the editor—suggesting that the “agency” did not have much money to spend on the competition is supposition and as Gehry pointed out, the developer “stands to financially benefit from any solution” proposed by the architects, yet this did not stop *The New York Times* from publishing the letters. Gehry specifically invoked the civic order of worth when confronted with a civic criticism, pointing out that he must ask his employees to work long nights without pay in order to perform what many considered his “civic duty” to participate in the Ground Zero competition. This situation endorses the view that valuable subjects within the inspired order—as Gehry is—are societally expected to operate their business at a loss in order to benefit the public. As pointed out above, the architects were asked to produce proposals for these organizations for

a nominal fee that would “only cover about two hours of work” on the project for another’s private gain. Societal expectations for civic duty, then, extended to actors within the inspired order but *not* to actors in the market order. This situation shows the stark cognitive division within public discourse, and merits significant further attention when considering the expectations set for creative actors and industries.

Another non-sequitur in the Gehry/Ground Zero debate is the Letter to the Editor suggesting that a “secretary in the Twin Towers” probably didn’t make \$40,000 per year. Comparing this to the operation of an entire staff in producing a competition entry further reinforces the inspired order’s myth of individual creation. The only way to use the \$40,000 number in comparison is to assume that Gehry works alone, would receive all of those funds for his own “mental labor” rather than paying staff time as well as materials and office overhead, and that all of this would take him less than a full year if he did the work himself—in other words, that he would receive the payment for the moment when the “stroke of genius” hit him. *The New York Times*, in its power and general societal legitimacy, further upheld this myth by publishing the letter.

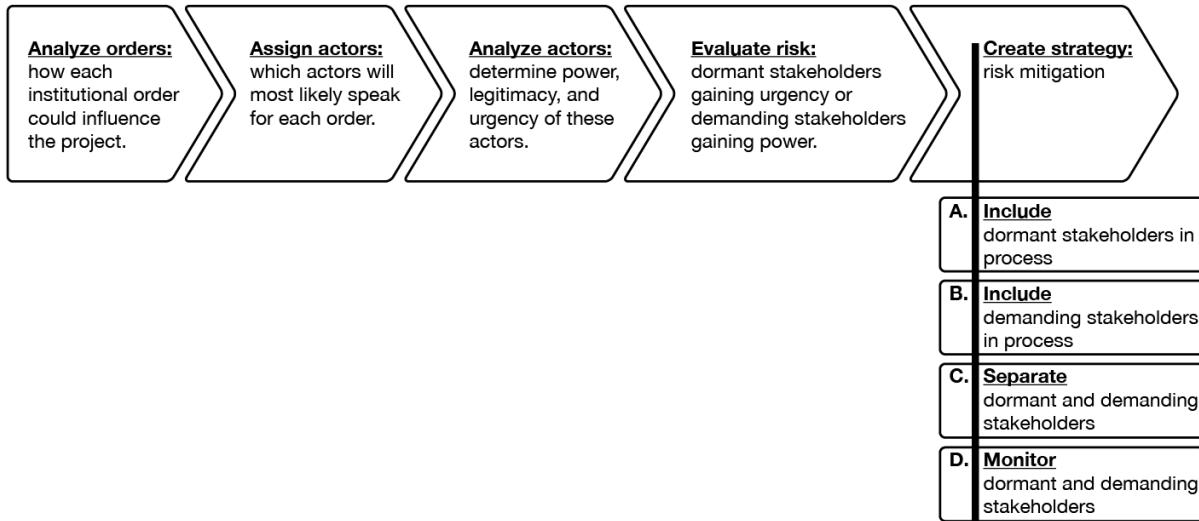
In this section, I provided an overview of the institutional *content* of the political battles over expectations. I showed how individuals can manipulate the different orders in either synergy or conflict, creating an intricate complexity for managers to decipher. However, I also showed that most, if not all, emergent expectations fell squarely within one of the seven orders of worth outlined in table 4.2. Therefore, the orders of worth framework provides a guide for managers to predict the *content* of emergent expectations. If an organization, such as a university (especially a land-grant university), embarks on a building project in the context of rising popularity of environmental (i.e. civic) concerns, it can predict a civic-order challenge where stakeholders hold the university’s proclaimed civic mission as a reason for adhering to the LEED system. In the Gehry/Ground Zero example, because Gehry’s identity stems from the inspired order, all of the internal structures, impressions, and tests of that order followed when the public’s criticism passed judgment. Further informing the criticism Gehry received, when asked about the civic-oriented project, he could have responded with his (later expressed) civic-oriented answer of being fair to his employees, rather than the market-justification answer he provided, where the organization that stood to financially benefit from the project should have paid the service

providers (i.e. architecture firms) for their work. This example demonstrates that using a high value of one order to answer for low performance in another order did not work, and suggests that preparation for such an interview could involve determining one's successful performances in each order, and having those examples on hand when faced with criticism.

Finally, in the “signature building” example, the new program represented a significantly new university initiative, while the project manager assumed that the “building” would involve the same aesthetic goal of “contextual fit” that previous buildings on campus were held to. Increased board engagement with the new program's initiation may have resulted in both the increased building project scrutiny, as well as the aesthetic expression that this would represent the “future” of the institution, literally, metaphorically, and therefore aesthetically. The bearing of the market order on the project—both through the housed program's identity of business leadership, as well as through the program's intent of “increasing market share” by attracting students and funders—translated into expectations from the university leadership for the building's visibility and aesthetics.

In summary, by analyzing the orders of worth and how they may come to bear on a project or initiative, managers can better prepare to address the content of emergent expectations. Understanding the institutional orders that govern the organization—as well as the orders' cognitive hierarchy in the minds of those in power—can provide a manager with tools to investigate likely tradeoffs when success in all orders is improbable or difficult.

FIGURE 4.6
Proposed process of Stakeholder Risk Evaluation



Towards a Model of Stakeholder Risk Evaluation

Figure 4.6 provides a model of stakeholder risk evaluation. The model draws together the empirical evidence from the three cases in this study with stakeholder theory and the orders of worth framework. The model illustrates the following process:

1. analyze each of the seven institutional orders, how each could influence the project, including an analysis of existing messages communicated on the project to date
2. determine who will most likely speak for each of the orders
3. determine the relationship of those actors to the firm with respect to power, legitimacy, and urgency
4. evaluate the risk of dormant or demanding stakeholders becoming dangerous stakeholders to the project & create a risk mitigation strategy that can include:
 - a. Inclusion of dormant stakeholders throughout the process
 - b. Inclusion of demanding stakeholders throughout the process
 - c. Separation of dormant and demanding stakeholders
 - d. Monitoring dormant and demanding stakeholders

In this model, risk evaluation involves a combination of analyses so that both the content and source of the expectations can be examined. In cases where dormant or demanding stakeholders have expectations that legitimate and powerful stakeholders already address, then there is little

need to take defensive action in preparation for the possibility that these stakeholders become dangerous to the organization through their acquisition of either power or urgency. Conversely, if the legitimate stakeholders have ignored one of the values present in the set of cornerstone orders, it is worthwhile to examine whether a dormant or demanding stakeholder will bring that value to the organization. Then, managers can prepare a response using one of the strategies for risk mitigation—including only private recognition of the stakeholders through monitoring.

Conclusion

In this chapter, I developed a model to guide managers when anticipating the direction and content of stakeholder expectations. I build on stakeholder theory (Mitchell et al., 1997) to not just identify the stakeholders in a multiple–stakeholder project, but also show the path that stakeholder interests follow in attempts to centralize their concerns within the organization. I also draw from the orders of worth framework (Boltanski & Thévenot, 2006/1991) to show the content of expectations likely to emerge when legitimate stakeholders do not address the values in each institutional order. This approach uncovers coalitions that form among differently-endowed stakeholders as each helps to move their common concerns to a more central focus of the organization.

I showed the perspective of those tasked with managing stakeholder expectations, and the strategies they can and do use to control the expectations that bear on a project so that their work will be evaluated positively. This model differs from existing business analysis techniques in that it focuses on socially constructed expectations, rather than competitive advantage (Porter, 1980) or the external environment.

Given my reliance on the Boltanski and colleagues' model, I do not claim that the authors have definitively identified “the” institutional orders. However, their model is robust, in that it includes principles and values that are different enough to come into conflict, yet the model is also inclusive enough to not pose problems to the researcher when identifying which order a particular action or meaning derives value from. In other words, the framework allows for action and meaning that falls within some orders and outside of others, with few actions that do not fall within at least one order. As Boltanski and Chiapello (2005) demonstrate when

creating the Project order, new orders can emerge within society when actions and meanings cannot be explained by the existing institutional orders.

This work provides not just tools for managers to predict emergent expectations, but also a new way to understand how some stakeholder expectations gain the power to determine the success or failure of a project.

REFERENCES

- Annisette, M. & Richardson, A. J. 2011. Justification and accounting: Applying sociology of worth to accounting research. *Accounting, Auditing, & Accountability Journal*, 24: 229–249.
- Austin, R. D., Devin, L., & Sullivan, E. E. 2012. Accidental innovation: Supporting valuable unpredictability in the creative process. *Organization Science*, 23: 1505–1522.
- Bechky, B. A. & Okhuysen, G. A. 2011. Expecting the unexpected? How SWAT officers and film crews handle surprises. *Academy of Management Journal*, 54: 239–261.
- Becker, H. S. 1974. Art as collective action. *American Sociological Review*, 39: 767–776.
- Becker, H. S. 2008/1982. *Art worlds*. Berkeley: University of California Press.
- Bitektine, A. 2011. Toward a theory of social judgments of organizations: The case of legitimacy, reputation, and status. *Academy of Management Review*, 36: 151–179.
- Boltanski, L. & Chiapello, E. 2005/1999. *The new spirit of capitalism*. New York: Verso.
- Boltanski, L. & Thévenot, L. 2006/1991. *On justification: Economies of worth*. Princeton: Princeton University Press.
- Cloutier, C. & Langley, A. 2013. The logic of institutional logics: Insights from French pragmatist sociology. *Journal of Management Inquiry*, online before print (Jan 24): 1-21. doi: 10.1177/1056492612469057.
- Corbin, J. M. & Strauss, A. 2008. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. (3rd ed.): Sage.
- Donaldson, T. & Preston, L. E. 1995. The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20: 65–91.
- Dunn, M. B. & Jones, C. 2010. Institutional logics and institutional pluralism: The contestation of care and science logics in medical education, 1967-2005. *Administrative Science Quarterly*, 55: 114–149.

- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & de Colle, S. 2010. *Stakeholder theory: The state of the art*. Cambridge, UK: Cambridge University Press.
- Friedland, R. & Alford, R. R. 1991. Bringing society back in: Symbols, practices, and institutional contradictions. In W. W. Powell & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 232–260. Chicago: University of Chicago Press.
- Gehry, F. 2003. Letter to the Editor. *New York Times*, January 26.
- Glaser, B. G. & Strauss, A. L. 1967. *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Granovetter, M. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91: 481–510.
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. 2011. Institutional complexity and organizational responses. *Academy of Management annals*, vol. 5: 317–371. Essex, UK: Routledge.
- Henn, R.L. 2013. *Conflict, compromise, and coalition: Inhabiting institutional complexity*. working paper, University of Michigan, Ann Arbor.
- Hoffman, A. J. 1999. Institutional evolution and change: Environmentalism and the U.S. Chemical industry. *Academy of Management Journal*, 42: 351–371.
- Iovine, J. V. 2003. Appraisals of Ground Zero Designs. *New York Times*, January 9.
- Kraatz, M. S. & Block, E. S. 2008. Organizational implications of institutional pluralism. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The Sage handbook of organizational institutionalism*: 243–275. London: Sage.
- Langley, A., Smallman, C., Tsoukas, H., & de Ven, A. H. V. 2013. Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy of Management Journal*, 56: 1-13.
- McManamy, R. A. 2003. Letter to the Editor. *New York Times*, January 19.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. 1997. Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22: 853–886.
- Molotch, H. L. 2003. *Where stuff comes from: How toasters, toilets, cars, computers, and many others things come to be as they are*. New York: Routledge.
- Porter, M. E. 1980. *Competitive strategy: Techniques for analyzing industries and competitors*.: Simon and Schuster.
- Rojas, F. 2010. Power through institutional work: Acquiring academic authority in the 1968 third world strike. *Academy of Management Journal*, 53: 1263–1280.

- 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. *American Journal of Sociology*, 105: 801–843.
- Thornton, P. H., Ocasio, W., & Lounsbury, M. 2012. *The institutional logics perspective: A new approach to culture, structure, and process*. New York: Oxford University Press.
- Wilson, A. 2003. Letter to the Editor. *New York Times*, January 19.
- Zuckerman, E. W. 1999. The categorical imperative: Securities analysts and the illegitimacy discount. *American Journal of Sociology*, 104: 1398–1438.

Chapter 5

Emergent Issues in Fragmented Fields

Between the [Ford] River Rouge plant and Linux—from a tightly bounded rational system par excellence to a loosely coupled open system that stretches the boundary of the concept “organization”—organizations have traveled a long distance during the twentieth century, with theorists often moving a step or two behind. (Scott & Davis, 2007: 343)

Through corporate hierarchy, social movements have been able to influence corporate actions through identity challenges regarding homelessness (Dutton & Dukerich, 1991), through boycotts (John & Klein, 2003; King, 2008) regarding human rights (Argenti, 2004) and factory relocation (Hoffmann & Müller, 2009), through unionized workforce demands (Chaison, 2006), and through legislative actions encompassing age, race, and disability discrimination, retirement (Barley & Kunda, 2004: 12), and environmental concerns (Hoffman, 2001/1997).

During the twentieth century however, hierarchical forms of organizing began to loosen and move towards open systems, summarized variously as a “nexus of contracts” (Davis & Marquis, 2005: 332; Jensen & Meckling, 1976: 311) or “networked” (Jones, Hesterly, & Borgatti, 1997; Powell, 1990) by organizational scholars, “outsourced” (Davis-Blake & Broschak, 2009), or as “temporary and contract employment” by scholars of work (Barley & Kunda, 2004; Scott & Davis, 2007: 341). As a result, the power of hierarchical organizational form to influence the adoption and dissemination of new practices has been altered. For example, hiring contract workers allows companies to circumvent legislative requirements for employment (Barley & Kunda, 2004), while a “nexus of contracts” organizational form provides society with a confusing shell game when trying to determine responsible parties for environmental damage, as in the Deepwater Horizon oil spill in April 2010 (Freudenburg & Gramling, 2010: 165; Kendall, 2010). Without a formal hierarchy, it is unclear how emergent issues disseminate through fields and industries which organize through projects rather than through hierarchies.

This dissertation contributes to an understanding of institutional change in an industry characterized by its non-hierarchical form of organizing. I pay special attention to the representations and expectations associated with individual roles, and how these understandings translate through collective levels of analysis—organizations, fields, and institutions—to answer my primary research question: ***“How do emergent issues both influence and disseminate through a fragmented field?”***

In this context, the term *fragmented field* refers to *a sector of economic activity where temporary inter-organizational projects serve as the default form of organizing, involving fateful but not necessarily frequent interactions among members*. Distinctively, organizational members in fragmented fields hold non-hierarchical—or even competing—allegiances to their client, to the project, to their employing firm, and to their occupational role. Therefore, it is not clear how emergent issues are received by actors within fragmented fields, which allegiance determines the actors’ interpretation of the emergent issue, what effect the issue may have on a member’s multiple relationships and responsibilities, and finally how the emergent issue may result in institutional change.

There are two main gaps in the literature related to change in fragmented fields. First, while previous research provides an adequate snapshot view of coordination and management of temporary project teams (Bakker, 2010; Bechky, 2006a; Okhuysen & Bechky, 2009), little is known about how individuals make sense of their place among bordering and overlapping fields, or conceptualize emergent issues with respect to professional and occupational boundaries. Second, research related to institutional change focuses primarily on how the the change-oriented organizers strategize to move an issue forward, which overlooks instances of social change that are integrated within the daily work experience—specifically, how individuals prioritize tasks and which dependencies influence their priorities.

To answer my research question, I examined individual understandings of work and coordination with 49 building industry professionals, and how individuals understood the emergent topic of green building. To triangulate data, most of the interviewees worked on one (or more) of five building projects—three projects associated with the same university client, and two projects associated with the same architecture firm. I also examined various documents

produced by the professionals: project documents (drawings, correspondence, specifications), websites, responses to request for proposals/qualifications, etc.

I use the empirical site of building design and construction for two reasons. First, the design and construction industry has a longstanding history of organizing on a per-project basis (Barley & Kunda, 2004: 8; Eccles, 1981a, 1981b). Second, LEED green building certification is emergent and growing, but remains a minority practice when considering the entire volume of building design and construction today (in 2013). As a representation of green building practices, LEED building certification is therefore an emergent issue. Further, its creators aim for institutional change.

In this chapter I review the current literature as it relates to emergent issues and fragmented industries to provide a context for my study.

PROBLEM STATEMENT

Research indicates that social movements can influence industries which organize according to formal hierarchies through identity claims, boycotts, and legislative action, and normative social influences. However, it is unclear how emergent issues of social concern influence and disseminate through industries which organize on a temporary, contractual, and per-project basis.

PURPOSE AND SPECIFYING QUESTIONS

The purpose of this multicase study is to understand how emergent issues both influence and disseminate through fragmented fields by exploring how individual project team members conceptualize emergent tasks, roles, and coordination in project-based industries. In learning how multi-disciplinary temporary team members understand their roles and work, scholars will better understand the nature of competition within institutional complexity. To shed light on the problem, I address the following specific research questions:

1. How do participants understand their own role in relation to other project team members?
2. How do participants evaluate their own work, and the work of other team members?
3. How do participants understand the goals and practices of an emergent set of tasks in relation to roles and responsibilities of all project team members?
4. What structures participants' understandings and value systems?

REVIEW OF FRAGMENTED FIELDS AND EMERGENT ISSUES

This section is organized in four parts. First, I clarify what I mean by the terms *fragmented field* and *emergent issues* by elaborating their meaning and distinguishing them from similar concepts in the literature. Second, I make the case for why the study of emergent issues within fragmented fields is important from both a theoretical and practical perspective. Third, I sketch the levels of analyses involved when examining change in fragmented fields. Finally, I outline what is known about emergent issues in fragmented fields, bringing together diverse literatures that inform understandings of project-based work, and support the idea that the unique structure of fragmented fields both instigates and constrains institutional change. This study aims to understand the conditions under which actors move toward or away from change, based on their inter-organizational and interinstitutional positions.

DEFINING TERMS

Defining Terms: Fragmented Field

Here, the term fragmented field refers to a sector of economic activity where temporary inter-organizational projects serve as the default form of organizing, involving fateful but not necessarily frequent interactions among members. I will unpack the three main components of that definition: first, the concept of multiple participants; second, the collective term “field”; and third, the notion of time.

Multiple participants. Organizational *members* in fragmented fields convene from multiple professions, occupational communities, organizations, and organizational forms. In this situation, a complex project outcome relies on diverse expert knowledge and skill, which likely involves members with different, multiple, or competing meaning systems. Distinctively, members likely hold non-hierarchical—or even competing—allegiances to their client, to the project, to their employing firm, and to their professional role. This difference in meaning system and diversity of allegiance are the primary reasons for using the term *fragmented*—certain meanings and allegiances align, while others fracture or come into conflict.

My definition also involves the concept of *inter-organizational* projects to distinguish this form of organizing from intra-organizational projects that are amenable to hierarchical control and established lines of authority which are independent of expertise.

Field. I adopt a definition of *field* from Emirbayer and Johnson (2008: 6-7), based on the work of Pierre Bourdieu: “a terrain of contestation between occupants of positions differentially endowed with the resources necessary for gaining and safeguarding an ascendant position within that terrain,” with boundaries that “extend only so far as the power relations – field effects – that are themselves constitutive of that field hold sway.” I am tempted to use the term “industry” rather than field, since I am specifically dealing with *a sector of economic activity*, rather than either “a community of organizations that partakes of a common meaning system” (part of Scott, 1995 definition of field), or actors coalescing around an issue of common concern (Hoffman’s suggestion for field coherence, 1999).¹ I would also use the term “industry” in the spirit of “industry attention” outlined by Hoffman and Ocasio (2001: 415; Ocasio, 1997), where the U.S. Chemical industry participants “attended to” certain environmental events.

To overcome my hesitation with the term *field*, I am supported by Maurer, Bansal, and Crossan (2011: 436) who acknowledge that “[m]ore recently, fields have been recognized as fragmented with multiple meaning systems (Armstrong, 2005; Hoffman, 1999, 2001; Wooten & Hoffman, 2008).” Other scholars find the term “industry” unsatisfactory because it “neglects the role of agencies such as professional and trade associations, regulators, the media and the State” (Greenwood, Oliver, Sahlin, & Suddaby, 2008). And decisively in favor of the term *field*, Emirbayer and Johnson (2008: 7) specifically warn against:

...a focus on particular ‘industries’ or ‘populations,’ thereby encouraging a similarly premature application of criteria – with some researchers analyzing all the firms producing the same product, offering the same service, or displaying the same structure, etc. – that may prevent the accurate assessment of which organizations actually belong to the field in question.

Further, the field definition from Emirbayer and Johnson aligns well with the system of professions framework used in the first chapter, as I will examine the contestations and position-

¹ Coalescing around an issue of common concern will happen within this field, however it is not my current focus for defining building design and construction.

takings among occupational communities during a period of change. Finally, the classic DiMaggio and Powell (1983: 148) definition of organization field seems closest to the *sector of economic activity*: “By organizational field, we mean those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products.”

I include the term *projects* in my definition of fragmented field to make clear my focus on interactions related to a goal/product/result, in which participants have a *fateful* stake in the outcome. Inclusion of the terms *projects* and *fateful* reaffirms that the actors under examination participate within the same field.

Time. Finally, I select the term *temporary* and the phrase *not necessarily frequent* to further underscore the fragmented nature of the fields I examine. Aligned with the nature of my study, temporary organizations are defined as “a set of diversely skilled people working together on a complex task over a limited period of time” (Goodman & Goodman, 1976: 494). The “supply chain” for such temporary organizations involves an implied termination date from the project’s inception, and the project’s “recurrence” rarely happens—and if it does, it very rarely includes the same configuration of actors.

In addition to the project’s transience, actors’ relationships to the project may also be transient, with some members on one project for many years while others may juggle multiple projects, attending to each one for only a few days (Dille & Söderlund, 2011). In this sense, then, fragmented also describes teams where the members change, emerge, and disperse according to roles and responsibilities on the project.

It is important to recognize that the term *frequent* as well as the term *interaction* is subject to broad interpretation. One team member may call another team member every day for a year or more to coordinate work on a project. This could be interpreted as *frequent interaction* to many analysts. However, if each team member represents a different firm, and this project is the only one that the two firms (or two individuals) have ever or will ever work on together, then the firms’ interaction would *not* be considered “frequent”, and evaluating the individuals’ frequency of interaction would depend on the time frame of analysis—a few months (frequent) or an entire

career (not frequent). This time-dependent determination again emphasizes my characterization of project-based fields being *fragmented*.

Defining Terms: Emergent Issues

By using the term *emergent issues*, I make clear that the source of change may be either varied or unknown, that attention to the issue is relatively new, and that the issue is not yet clearly defined. In some cases, events provide shocks, jolts, or discontinuities on which actors must take a position, sparking institutional change (Fligstein, 1991)(Hoffman & Ocasio, 2001). In other cases, social movements target specific organizations or organizational populations to induce change (Hiatt, Sine, & Tolbert, 2009; Ingram, Yue, & Rao, 2010; King, 2008). Within the social movement literature, sources of change often point to either purposeful collective action (Davis & McAdam, 2000; Hambrick & Chen, 2008; Weber, Heinze, & DeSoucey, 2008) or to uniquely located institutional entrepreneurs (DiMaggio, 1988; Garud, Jain, & Kumaraswamy, 2002; Maguire, Hardy, & Lawrence, 2004). My selection of the term *emergent issues* avoids this premature determination of the sources or effects of institutional change—whether there is a change in practice, rhetoric, social norms, or professional jurisdiction should be determined by my data.

THE CASE FOR STUDYING EMERGENT ISSUES IN FRAGMENTED FIELDS

Institutional change is a fundamental concern within organizational scholarship. Understanding the antecedents and consequences of change allows scholars and actors to better predict future resource flows, plan for contingencies, strategize actions, address problems, and seize opportunities. Unlike local policy change, institutional change prompts new or different understandings, assumptions, values, and norms among a group of diffuse and disparate individuals, organizations, and industries. This complexity makes institutional change difficult to study, with scholars challenged when accounting for a multitude of interacting variables.

Rao, Morrill, and Zald (2000: 259) identify fragmented fields as one of three “field conditions” where social movements can prompt the creation of new organizational forms. The authors suggest that fields become fragmented when multiple multi-level organizations hold “conflicting goals and overlapping jurisdictions.” They further explain:

Fragmentation is also exacerbated when professions have weak jurisdictions (Abbott, 1988), when producers are unable to band together into trade associations, and when consumers and suppliers exercise little influence and are disorganized (Powell, 1991) ... When organizational fields are fragmented and lack a clear center of power, elites are disorganized and possess little influence to change the system. ... Even when there is consensus about the need for structural innovation, there may not be an infrastructure to propagate and diffuse the innovation in question.

Studying emergent issues in fragmented fields is important because the description above applies to greater numbers of industries and organizations. During the twentieth century, hierarchical forms of organizing began to loosen and move towards open systems, summarized variously as a “nexus of contracts” (Davis & Marquis, 2005: 332; Jensen & Meckling, 1976: 311), “networked” (Jones et al., 1997; Powell, 1990) by organizational scholars, “outsourced” (Davis-Blake & Broschak, 2009), or as “temporary and contract employment” by scholars of work (Barley & Kunda, 2004; Scott & Davis, 2007: 341). Many scholars argue that network forms of organization may be more influential over our current economy and social interactions (Brass, Galaskiewicz, Greve, & Tsai, 2004; Fourcade, 2007; Jones et al., 1997; Owen-Smith & Powell, 2008; Powell, 1990).

As a result, the power of hierarchical organizational form to influence the adoption and dissemination of new practices has been altered. For example, hiring contract workers allows companies to circumvent legislative requirements for employment (Barley & Kunda, 2004), while a “nexus of contracts” organizational form provides society with a confusing shell game when trying to determine responsible parties for environmental damage, as in the Deepwater Horizon oil spill in April 2010 (Freudenburg & Gramling, 2010: 165; Kendall, 2010). Without a formal hierarchical organization, it is unclear how emergent issues disseminate through fields and industries which organize through projects rather than through hierarchies.

These two conditions—the ability of emergent issues to change the structure of organizations, and the increase in network forms of organizing—create the imperative to understand how emergent issues influence and disseminate through fragmented fields.

LEVELS OF ANALYSIS

An action net is not the same as an organization field, or industry. Rather, it denotes actual connections among actions, and although these connections will likely occur within the same industry, they will certainly never involve the whole of it. It is more likely that they will include actions reaching outside one given industry, as in the case of business professors contributing to the designing of their school. (Czarniawska, 2004a: 103)

When discussing project-based organizing, questions arise regarding proper levels of analysis. Frequently the question is whether the study is at the individual, organizational, field, or institutional level. Single answers are spurious because fields comprise both individuals and organizations, organizations comprise individuals, and institutions permeate all other levels. This dissertation will examine the phenomenon of emerging issues within fragmented fields from the field, organization, individual, and institutional levels. Below, I address difficulties faced in restricting my level of analysis to a single level, highlighting the interdependencies of data amongst all levels.

Fragmented field level

My study is bounded by two overlapping fields—one associated with designing and constructing buildings that people inhabit, and another associated with environmental sustainability concerns. However, by acknowledging that fields can be both overlapping and fractal (Emirbayer & Johnson, 2008), my study may encounter additional “fields” in which more local or more global struggles emerge. For example, many scholars have considered organizational populations as a field (publishing (Thornton, 2004), accounting (Suddaby & Greenwood, 2005), architecture (Jones & Livne-Tarandach, 2008), construction (Eccles, 1981a), etc.), as well as organizations-as-fields (Emirbayer & Johnson, 2008). Davis, Morrill, Rao, and Soule (2008: 393) suggest that future research “will need to pay attention to the dynamic nature of the phenomena under study.” They continue:

Given the increasingly permeable and blurry boundaries among organizations and social movements, it may become difficult to study a single “movement” or “organization.” The units of analysis that we have become accustomed to in much of the research in social movements and organizations may therefore need to change. We may increasingly need to study fields, networks, or narratives that cut across multiple sites. Techniques such as... multi-sited ethnography (Marcus, 1995) and “mobile ethnology” (Czarniawska, 2004b)

may facilitate understanding the constant organizing and reorganizing of information and people across time and space.

In particular, field level analysis of professions is understood both through professional association battles (Greenwood, Suddaby, & Hinings, 2002), as well as through individuals negotiating roles and responsibilities within their everyday work (Abbott, 1988). Scholars have studied how teams coordinate (Okhuysen & Bechky, 2009), but what happens when team members cross numerous professional and organizational boundaries? My study aims to not only connect macro- and micro-level analyses, but also suggest that evidence of macro-level change can be found in micro-level interactions (Rao et al., 2000), recognizing that everyday actions are the building blocks of future structures and constraints on subsequent actions (Giddens, 1984).

Organizing and organization level

As the introduction's opening quote indicates, defining an open system such as Linux's free, open-source software code as an organization "stretches the boundary" of a basic conceptual definition that literally defines the field of organization studies (Davis & Marquis, 2005: 332). Traditionally, the term "organization" was quickly confounded with the legally bounded firm or corporation. This dissertation retains the word "organization," but dissociates it from an assumption of traditional formal hierarchical corporations. In my context, I use Scott and Davis' (2007: 32) open system definition, where organizations are "congeries of interdependent flows and activities linking shifting coalitions of participants embedded in wider material-resource and institutional environments." This definition allows the object of study to reveal relationships among different traditional levels of analysis—occupational roles, organizations, organizational populations, organizational fields or industries, and societal institutions. For example, by considering a building design and construction team an organization, researchers are able to examine the nature and consequences of porous contemporary organizations. Further, Scott and Davis' definition recognizes the inchoate nature of organizing, evident in a move towards process-oriented theoretical models which focus on the mechanisms of both stability and change (Lawrence & Suddaby, 2006; Weick, 1979; Zilber, 2006).

Projects as a level of analysis

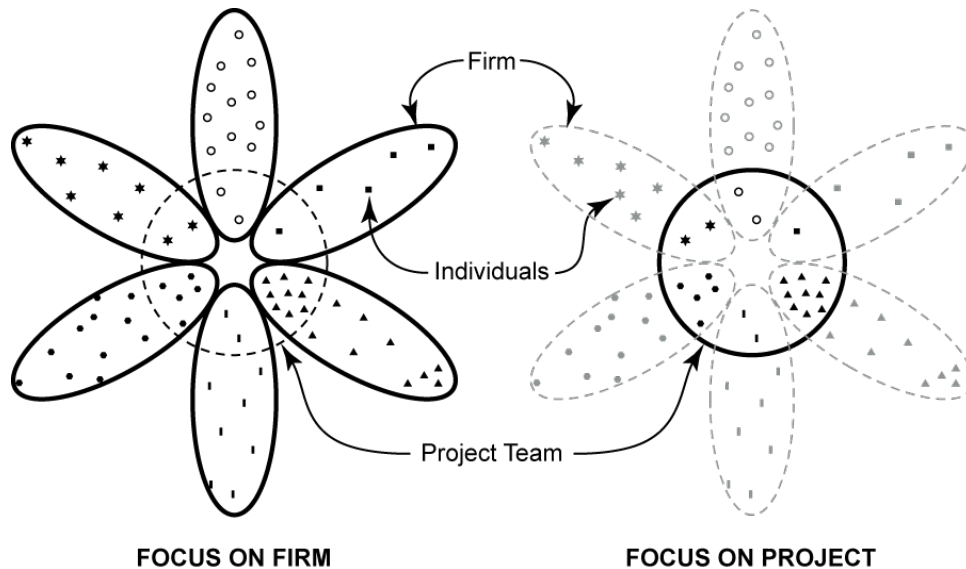
As indicated above, the term “organization” has often been too quickly confounded with the firm or corporation. Recently, scholars working at the organizational level have shifted their gaze to the *project* as a level of analysis—“a nexus of activity that allows multiple organizations to collaborate to achieve their individual and collective goals” (Jones & Lichtenstein, 2008: 234). O’Mahony and Bechky (2008: 427) argue that “[b]y focusing on the project level, we were able to engage in a micro-level study of interactions that would be more difficult to trace at the movement level ... A project [that] is... managed by a distributed group of individuals who do not share a common employer.”

European scholars in both organizational theory and project management literatures suggest that projects should be studied as temporary organizations, arguing that an examination of projects can provide a more action-based set of theories that may apply to latent characteristics within more “eternal” firms and corporations (Lundin, 2011; Lundin & Söderholm, 1995; Lundin & Steinthórsson, 2003; van Donk & Molloy, 2008). When projects are taken on within a single firm, the consequences of this shift in focus may be imperceptible. However, when dealing with inter-organizational projects, the consequences for researchers become more salient. The transition in focus from “firm-based” organizations to “project-based” organizations is illustrated in figure 5.1.

This shift in focus is important for two reasons. First, actors within a project team may interact much more frequently (at least in the short-term)—and fatefully—with project team members from other firms than with their “co-workers” employed by the same company. This raises questions about sources of identity and institutional logics. The second reason that this shift in focus is important is because the firm’s identity or reputation is represented to team members most saliently by the specific individuals assigned to a team. Generalizations about the firm filter through personal interactions with whichever employee happens to be on a given project. This dissertation examines both the firm and the project at the organizational level of analysis. Doing so provides a greater understanding of how each “organization” creates both the internal *and* external environment for a focal actor. Further, studying both the firm and the project triangulates data which refer to the boundary conditions of each “organization.” Garud,

Gehman, and Karnøe (2010) recently argued that organizations may in fact be both constituted and characterized by their associations, so these overlaps and adjacencies are crucial to understanding the organizations themselves.

FIGURE 5.1
Focal Organization in Project Teams



Inter-organizational projects

The management literature has a historical divide in the study of project-based organizing, and it coincidentally addresses the construction industry. I would like to weigh in on the debate here.

In 1959, Stinchcombe (1959: 169) argued that

the professionalization of the labor force in the construction industry serves the same functions as bureaucratic administration in mass production industries and is more rational than bureaucratic administration in the face of economic and technical constraints on construction projects. Specifically we maintain that the main alternative to professional socialization of workers is communicating work decisions and standards through an administrative apparatus. But such an apparatus requires stable and finely adjusted communications channels. It is dependent on the continuous functioning of administrators in official statuses. Such continuous functioning is uneconomical in construction work because of the instability in the volume and product mix and of the geographical distribution of the work.

In 1981, Eccles (1981a: 449) directly challenged and questioned Stinchcombe's thesis:

Stinchcombe confounded craft socialization with subcontracting, and in doing so, he mixed levels of analysis. In contrasting manufacturing firms with construction projects compris[ing] a general contractor and subcontractors, he was examining both firm and market characteristics. This confusion reflects the intimate relationship between firm and market structure in the construction industry.

I argue that Eccles' focus in his *ASQ* article was too narrow, and that he was incorrect when suggesting that Stinchcombe "mixed levels of analysis." Stinchcombe accurately observed a form of organization that relied on professionalization of the labor force. That form of organization was the project, as I illustrated above. Further, because Eccles focused only on the general contractor's receipt of a contract from the client, he overlooked the myriad consultants materially involved throughout the life of a construction project.² This omission allowed Eccles to characterize all non-employees or subcontractors of the general contractor as the "market environment."

Ironically, Eccles published another paper that same year in the *Journal of Economic Behavior and Organization* (1981b: 336) which suggests that the loose alliances between general contractors and subcontractors constituted a "quasifirm"—an "organizational form with characteristics of both markets and hierarchies, based on a set of stable relationships between a general contractor and special trade subcontractors." It seems that Eccles began to examine the Stinchcombe hybrid more closely, questioning what was truly meant by "organizational form."

At this point, I fast-forward to Powell's (1990: 295, 306) seminal piece on network forms of organization. Powell suggests that craft industries illustrate the network form—"typified by reciprocal patterns of communication and exchange"—highlighting the project-based nature of craft work, and specifically citing Eccles' quasifirm study. It is possible that *network* was the form that both Eccles and Stinchcombe were struggling to describe. However, I do not want to prematurely close the debate and settle on "networks" as the defining structure of the field(s) I examine, primarily because the building design and construction industry still involves both significant *market*-based exchanges (competitive bidding) as well as Fortune 500 corporations

² In the same *ASQ* article, Eccles agreed that general contractors subcontract work, but it was because of "uncertainty arising from complexity" due to competitive bidding, owner-determined specifications, on-site production, and custom building. On this point I believe that Eccles was splitting hairs differentiating his own "uncertainty" from Stinchcombe's "instability." In effect, I believe that they were in agreement on why subcontracting was employed by general contractors.

with significant formal *hierarchies* (AECOM, CH2M Hill, Home Depot, Lowe's, Shaw Group, Skanska, etc.).

I highlight this debate to illustrate the difficulty in settling on a “level of analysis” within fragmented industries. Now that I have addressed both field and organization levels, I next turn to examine the individual level of analysis.

Individual level and allegiances

In my description above of the organizational level of analysis, I indicated the simple overlap of two organizations—firm and project. However, team members may have overlapping allegiances to multiple organizations—and the project itself may be only one of many that an individual works on. For example, an engineer may work on a project for a client. But that same actor is also employed by a professional service firm, has a state-issued license to practice, may belong to a national trade organization, and may have additional training certifications. Each of these organizations hold the individual engineer to *standards of work performance*. Figure 5.2 provides a simple illustration of the nested and overlapping contextual levels must be recognized when trying to understand collective levels of analysis by examining individual behavior.

My point is to highlight that individuals in inter-organizational projects experience a number of overlapping allegiances to various organizations and fields, through the mechanisms of employment hierarchy, client-based market exchange, professional identity, and team-based coordination. Team member interactions may be multiply-interpreted as representative of a profession, a firm, or just the individual “personality.”

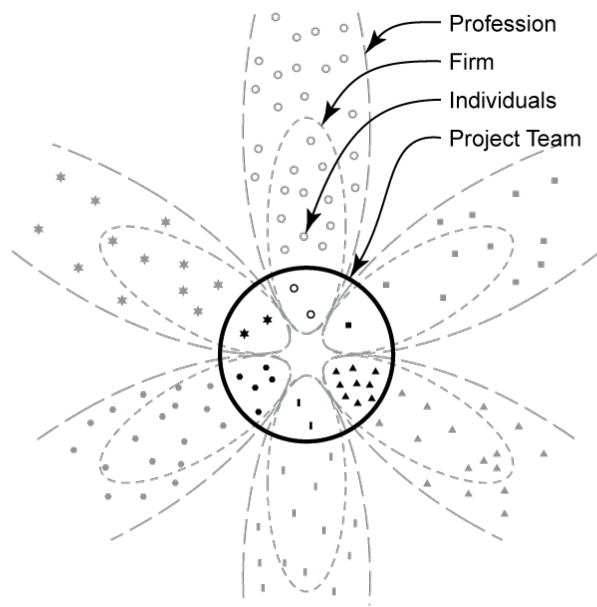
Scholars have long recognized the social embeddedness of organizational transactions (Granovetter, 1985; Uzzi, 1996), but few have specifically addressed the issue of “multiple” embeddedness that happens as a matter of course in inter-organizational projects:

...coordination in [inter-organizational] projects can become muddled due to relational overlap that generates conflicts between individuals' relationship to the firm (as their employer) versus their relational embeddedness within the field or industry (i.e. as a member of a profession or industry). In some cases these two types of embeddedness may be based on differing logics-of-action, and thus may result in very different expectations (Thornton, Jones, & Kury, 2005). Unfortunately, there is no research we could find that examines this issue. (Jones & Lichtenstein, 2008: 249)

Like Jones and Lichtenstein, I have found few studies that examine the phenomenon of multiple embeddedness. One study by Manning (2008: 30) takes a structural perspective, stating that “projects are embedded in multiple systemic contexts” and that embedding is “a continuous process linking projects to their environments.” He argues that “project constitution and embedding are inseparable systemic processes.” From this perspective, I argue that studying an individual actor’s understanding of emergent issues will illustrate the multiple and competing logics he uses to make sense of his work (Dille & Söderlund, 2011). This concept owes a debt to Bourdieu’s notion of *habitus*, “a mechanism linking individual action and the macro-structural settings... Attention to the role of the habitus in organizational life promises to shed considerable light on how organizational structure is built up from the microprocesses of individual behavior” (Emirbayer & Johnson, 2008: 4).

In this way, the individual’s values and value hierarchy may illustrate how he constructs his logic system, and what influences hold sway over his decision-making. Put another way, my analysis goes beyond mere multiplicity of social relations and commitments, and examines how individuals rank those relationships by asking them to elaborate on their evaluation metrics and understanding of emergent issues.

FIGURE 5.2
Nested & Overlapping Allegiances



Focusing on Work

Missing from such grand accounts of institutions and agency are the myriad, day-to-day equivocal instances of agency that, although aimed at affecting the institutional order, represent a complex *mélange* of forms of agency—successful and not, simultaneously radical and conservative, strategic and emotional, full of compromises, and rife with unintended consequences. (Lawrence, Suddaby, & Leca, 2011: 52-53)

Scholars from various corners of organizational theory have made a call for an increased focus on the “lived experience of organizational actors” for myriad reasons: to better connect the work people do and the creation, maintenance, or disruptions of institutions (Lawrence & Suddaby, 2006; Lawrence, Suddaby, & Leca, 2009, 2011); to better understand the nature of work, occupations, and professional expertise (Abbott, 1988; Barley, 2008; Bechky, 2006b); to understand the nature of coordination and team-based work (Okhuysen & Bechky, 2009); or to more accurately match our organizational theories to the organizations we know firsthand (Bechky, 2011).

My work responds directly to these calls, aiming to understand each actor’s “lived experience” and how that totality of experience relates to the potential institutionalization of emergent issues. Specifically, my focus on work—“the efforts of individuals and collective actors to cope with, keep up with, shore up, tear down, tinker with, transform, or create anew the institutional structures within which they live, work, and play, and which give them their roles, relationships, resources, and routines” (Lawrence et al., 2011: 53)—aims to uncover not just an individual’s stance on emergent issues, but also the integrative relationship of emergent issues with his or her existing rhythms, norms, and social structures. This acknowledges that people “do not directly respond to social structures, but rather to the situations they face and their interpretations of them” (Bechky, 2011: 1-2).

Further, studying work uncovers “the ‘side effects’ of institutions – the impacts of institutionalized practices and structures on the myriad actors who are neither part to their creation nor are contemplated in their design” (Lawrence, 2008: 191). This acknowledges that emergent issues can change not only target practices, but also other structures and value systems along the way. I stay open to the possibility that the institutional work of actors have unintended consequences that may shift the structure of a field.

In conclusion, this focus on *work* connects multiple levels of analysis. Its aim is to ground macro theories “in the individual action of people in organizations... uncovering the social mechanisms that link individuals and social systems, creat[ing] a fine-grained coupling between cause and effect” (Bechky, 2011: 1). Through an understanding of work and team/firm/organizational/field relationships, I hope to better understand how emergent issues both influence and disseminate through fragmented fields.

FRAGMENTATION, CHANGE, AND THE ORGANIZATIONAL LITERATURE

Despite the literature gap regarding multiple embeddedness, there are a handful of existing theories that help us understand what to look for in a study of emergent issues within fragmented fields. In this section, I will visit four foundational ideas which allude to the recursive connections between emergent issues and fragmented fields: profession(al)s, institutional logics, coordination, and institutional change. Finally, I will develop a framework for exploring answers to my four specifying research questions.

PROFESSIONS, PROFESSIONALS, AND PROFESSIONAL WORK

Literature on professions and professional work provides us with three perspectives to understand society’s structure of expertise and general divisions of labor. The first perspective suggests that professions (and more broadly, occupational communities) are defined by mutual social agreement over the jurisdiction of certain tasks and types of tasks. The second perspective argues that the professional’s brokerage role provides a platform to become “the most influential, contemporary crafters of institutions” (Scott, 2008: 223). And the third perspective looks specifically at the role of professional service firms in understanding new organizational forms in a knowledge-based economy.

Professions

The System of Professions published by Andrew Abbott in 1988 provides a seminal understanding of how professionals organize, and has become a canonical citation in any scholarly study of professionals. However, the subtitle *An Essay on the Division of Expert Labor* gets at the core of Abbott’s contribution to fragmented fields.

Abbott’s framework is most succinctly described in a book review by DiMaggio (1989: 534-535), and I borrow liberally from that text here. First, professions exist within an ecological

system, where each profession claims jurisdiction over a group of tasks that could be considered an exclusive ecological “niche” of activity. Second, determination of which profession lays claim to which sets of activities is a constantly negotiated and contested social struggle, where professional boundaries are constantly in flux. Third, this social struggle occurs at three levels: “the workplace, culture and public opinion, and legal and administrative rules. ...[M]ost shifts in jurisdictional control occur first in the workplace, second in public understandings, and finally, if at all, in the legal system.” Fourth, Abbott (1988: 8) suggests that professions lay claim to expertise over a body of “abstract knowledge” which groups similar activities together. “Natives” to the profession are the only ones qualified to (a) determine which tasks fall under the profession’s jurisdiction, (b) perform the tasks within the jurisdiction, and (c) determine who is able to join the profession, as well as the criteria for doing so. Fifth, professions tend to have a *core jurisdiction* related to their theory of abstract knowledge. Some professions may “maintain public hegemony over a type of work but relinquish all but elite practice to other practitioners” such as routinized work practices. Sixth, changes beyond the professional world can induce changes in jurisdiction within the system. As Abbott (1988: 35) states, “Technology, politics, and other social forces divide tasks and regroup them. They inundate one profession with recruits while uprooting the institutional foundations of another.”

There are three specific points in the above framework that will relate to other concepts within this literature review. First, Abbott’s claim that shifts in jurisdictional control occur first in the workplace further supports my focus on the “regular” work of project teams. It is through the *coordination* of tasks that we will see jurisdictional struggles play out. Abbott was not specific about how jurisdictional struggles are negotiated in the workplace. My study aims to fill this gap.

Second, the concept of core jurisdiction, and its relationship to abstract knowledge will relate to my discussion later regarding *institutional logics*. I will claim that each “new” task (whether phenomenally new, or new just to a profession) is tested against the core jurisdictional conception, which can be found in the professions’ (set of) institutional logics. The results of this “test” will help determine whether a task is adopted, rejected, or even relinquished.

Third, Abbott’s claim that “social forces” can divide tasks and regroup them relates to my study of emergent issues and my discussion of *institutional change*.

Abbott's framework helps to examine inter-organizational project teams, since separate organizations offer projects separate forms of expertise (rather than just additional manpower). As I mentioned earlier, the subtitle *An Essay on the Division of Expert Labor* gives the study of fragmented fields a powerful framework to understand the macro context of many team interactions and assignment of responsibilities. Importantly, I do not differentiate between Abbott's definition of "professionals" versus "non-professionals" when using this framework since "[i]t is easy to insert 'occupation' for 'profession' in the writing and little is lost. As Abbott observes (p. 317), 'The system approach offers a way of thinking about divisions of labor in general'" (Tolbert, 1990).

In this sense, I expand the term "professional" to include many occupations that involve a level of individual self-supervision and autonomy. This generosity broadens most accepted criteria for using the term "professional." Abbott (1988: 8) defines professions as "exclusive occupational groups applying somewhat abstract knowledge to particular cases." However, he also suggested that "the degree of abstraction necessary for survival varies with time and place," so there is no precise measure to determine which groups qualify as "professional." Some scholars restrict professions to groups of practitioners that seek a monopoly (Brint, 1994; Larson, 1977), undergo a process of professionalization through university training, state licensing, codes of ethics, etc. (Wilensky, 1964), or whose firms have distinctive characteristics such as knowledge intensity, low capital intensity, and a "professionalized" workforce (von Nordenflycht, 2010). My expanded use of "professional" encompasses Van Maanen and Barley's (1984: 287) view of professions, which they believe "are best viewed as occupational communities and that they differ from other lines of work (and each other) only by virtue of the relative autonomy each is able to sustain within the political economy of a given society."

I stop short of including all occupations by excluding interchangeable workers whose successful role performance is unrelated to prior knowledge and expertise. My use of the term professional, then, parallels Barley and Kunda's (2004: 14) description of *contractors*, but only if you think about the *project* rather than the *firm* as the "employer" (as illustrated in figure 5.1). Keeping this in mind, review table 5.1, which is the IRS' distinction between an employee and an

independent contractor.³ A quick review of the questions indicates that the degree of autonomy is a crucial differentiator. When we begin to examine the work of building contractors or subcontractors, many stem from craft industries that rely specifically on autonomous decision-making, based on the idiosyncratic technical problems that arise in the normal course of work on a unique and complex project that has not gone through the prototyping process. In other words, craft work (as typically conceptualized by society) can certainly compete in the system of professions, and this is why I have expanded my use of the term *professional*. This concept will return in my discussion about *coordination*, which often organizes by role-based divisions of labor.

³ The IRS uses the collection of answers to guide a determination, i.e., no one question automatically qualifies someone as either an independent contractor or employee.

TABLE 5.1
U.S. Internal Revenue Service's Determination of Worker Status
(adapted from Barley & Kunda, 2004: 15; US Internal Revenue Service, 2009)

<i>Question</i>	<i>Independent Contractor</i>	<i>Employee</i>
How did the worker obtain the job?	Bid	Application
Must the worker follow the company's instructions about when, where, and how to work?	No	Yes
Does the company provide the worker with training?	No	Yes
Are the worker's services integral to the business?	No	Yes
Can the worker subcontract the work to someone else?	Yes	No
Is the worker employed for an extended, continuous period?	No	Yes
Must the worker work full-time for the company?	No	Yes
Is the worker paid by the hour, week, or month?	No	Yes
Does the company provide benefits to the worker?	No	Yes
Does the company have the right to fire the worker?	No	Yes
Can the worker realize a profit or loss as a result of his or her services?	Yes	No
Does the worker regularly advertise or make his or her services available to the general public?	Yes	No
Whom does the customer pay?	Worker	Firm

Professionals

More so than any other social category, the professions function as institutional agents — as definers, interpreters, and appliers of institutional elements. Professionals are not the only, but are — I believe — the most influential, contemporary crafters of institutions. In assuming this role, they have displaced earlier claimants to wisdom and moral authority — prophets, sages, intellectuals — and currently exercise supremacy in today's secularized and rationalized world. (Scott, 2008: 223)

In this section of my discussion, I turn back to traditional definitions of professionals. Though I reject these definitions when using the system of professions framework to understand the *structure* of inter-organizational project work, I embrace the more restricted definitions to explore the essential brokerage *role* that traditionally-defined professionals serve. This historical brokerage role can inform studies of both fragmented fields and mechanisms of institutional change.

Professional definition. Early definitions of professionals tautologically characterized professionals as groups of actors that went through a sequence of “professionalization” steps (Carr-Saunders & Wilson, 1964/1933; Wilensky, 1964). This functional definition was rejected on two accounts. The first rejection came from Parsons because the narrative ignored “who was doing what to whom and how,” missing both the contents of professional activity as well as the “larger situation in which that activity occurs” (Abbott, 1988: 1-2, 6). The second rejection came from work by both Larson (1977) and Brint (1994) who take a monopolist perspective, describing professionals as a group of actors in pursuit of money and power, essentially “social closure” to an economic sector. However, this account does not adequately explain many purportedly “altruistic” actions of professionals (Sharma, 1997), though it does address the conflict evident in Abbott’s ecologically-based system of professions.

All scholars seem to agree, however, on the knowledge intensity involved in “true” professional work (Greenwood, Suddaby, & McDougald, 2006; Malhotra & Morris, 2009; von Nordenflycht, 2010). This knowledge is not only knowing-what, but more importantly knowing-how (Sharma, 1997: 769). “Know-what” knowledge is easily codifiable, able to be relegated to reference volumes. “Know-how” involves skill-based experiential knowledge. For example, I may conceptually understand how driving with a clutch and manual transmission works, but if I’ve never done it before I don’t actually know “how” to do it—my first attempts will likely involve stalls, drifting backwards on hills, and grinding gears from time to time. The more input I give to the system, the more I understand the nuances and feel for “properly” interacting with it. This process constitutes experience and “know-how”.

Because of the intensity of professional knowledge, it typically takes years to acquire—not because a long training period helps legitimize a professional group (as the functionalists argue)

—but because the nuances of practice require both a broad and deep knowledge base that is aided by both formal training and experience. Therefore, the second account that rejects functionalist arguments distinguishes professions as “exclusive occupational groups applying somewhat abstract knowledge to particular cases” (1988: 8). This is the definition I use in this section. In other words, professional knowledge is not easily codified for universal application. Instead, it is used by a practitioner to cobble together plausible causes of and solutions for symptoms presented to the professional by the client’s “particular case.”

Professional as guide. Clients hire professionals when they have a symptom that cannot be efficiently or enduringly addressed by their own workforce. Another way to think of this situation is that clients exist within a main organizational (or institutional) field, but want to temporarily enter an “outside” field in which they do not have expertise—e.g., having a baby, patenting an invention, filing taxes, or planning a new headquarters building. Professional expertise is essentially an intimate and intense knowledge of a particular field, with the professional hired to “hold the hand” of a client who relies on the professional as a guide to an unfamiliar terrain. As a broker, the professional advises on what behavior is appropriate for the client amid status hierarchies, traps, opportunities, miscues, and incomplete translations with field members—in other words, tacit and experiential knowledge the professional took years to understand, whether through formal training or experiential trial-and-error. In this respect, a professional “owns” knowledge, but it is not for sale and cannot be “purchased” in an atomized client exchange (Powell, 1990: 324). Instead, a professional uses her knowledge to help the client navigate a complex and unknown field.

Professional as expert. Besides the role of guide, professionals also diagnose problems and prescribe specific treatments, whether it is a knee surgery, a lawsuit, a new building, or a corporate restructuring. Because the client is new to the field of practice, he must grant an inordinate level of trust to the professional’s expert opinion over both the causes of and solutions for his declared symptoms. Clients essentially hand over their resources to “solve” the problem for the professional’s management, and with these resources professionals are able to steer the course of their own field, depending on the size and status of the resources to be used. With this relationship, professionals control the arrangement of resources far beyond their own fees and

services, thereby supporting Scott's claim above that professionals may have the most influence over societal institutions.

Professional as agent. One final role to understand is the agentic nature of the professional–client relationship, which will inform my analysis of inter-organizational team interactions that contain traditionally-defined professionals. Sharma (1997: 769, 770, 772) clearly outlines both the increased power of “professionals” over managers, as well as the control mechanisms on that power. Agency theory argues that clients can control an agent's power through the mechanisms of monitoring and metering. However, there are three reasons why neither monitoring nor metering are available in a professional–client relationship. First, the knowledge asymmetry between client and professional prevent clients from determining what standards of practice apply, evaluation mechanisms for the contracted work, or even how much service is actually needed. Second, the professional's behavior is opaque to the client, with a great deal of ambiguity “as to the true contribution of the agent's efforts on the observed outcome.” Finally, the client and professional *coproduce* the service in question, to “*create jointly* the product that incorporates values, ethics, and very specific instrumental as well as cultural needs.” This coproduction further muddies the discrete contribution of the professional to the service outcome. As Rueschemeyer argues (1983: 41), “recipients of expert services are not themselves adequately knowledgeable to solve the problem or to assess the service received” and are therefore unable to protect themselves against “incompetence, carelessness and exploitation” (cited in Sharma, 1997: 764-765).

Given this power asymmetry, why do professionals not rout a client for their own gain? Sharma (1997: 777) argues that there are four main restraints or control mechanisms. The first mechanism of *self-control* draws on literature arguing that “professional work is a calling to which those people respond who have not only an orientation to make a living but also a desire to serve unselfishly others in need.” Other scholars have described this as a social expectation of “professional integrity” (Suddaby, Greenwood, & Wilderom, 2008: 989). The second mechanism of *community control* suggests that reputation effects of unscrupulous practices can only be determined by the profession itself. Even early writings by Carr-Saunders and Wilson (1964/1933: 403) noted that “peer control of professionals often is manifested in ‘the silent

pressure of opinion and tradition ... which is constantly around him throughout his professional career” (cited in Sharma, 1997: 780). The third mechanism is *bureaucratic control*, taking into account the employing professional service firm, where typical hierarchical authority (with monitoring and metering) can happen among individuals with the same professional credentials. The final mechanism is *client control*, where the client employs one professional to monitor or meter the professional service provider. Examples include firms with internally employed “general counsels,” health maintenance organizations using a “primary care physician” to recommend specialist procedures, or large organizations internally employing architects as facility managers. Alternatively, organizations within one field (such as universities in an education field) can employ non-professional individuals (such as facility managers) who daily interact with the “foreign field” (of building design and construction) over such a long period of time (many years) that the employees can serve the role of guide, while contracted professionals serve the role of expert.

The control mechanisms listed above inform our study of inter-organizational teams by serving as substitutes for traditional hierarchical lines of authority. Further, this discussion of professionals will inform observations of micro-level interactions among inter-organizational team members. I next turn to a discussion of professional service firms—which have become a popular empirical site in organizational literature—before turning to concepts of institutional logics that will further elaborate the diverse meaning systems within inter-organizational teams.

Professional Service Firms

Why study professional service firms (PSFs)? Scholars argue that PSFs exhibit a unique form of organizing, distinctive in ways that “will be increasingly relevant to non-PSFs” because they can provide a model for managing an “increasingly knowledge-based economy” (Greenwood, Li, Prakash, & Deephouse, 2005; Greenwood et al., 2006; Suddaby et al., 2008; von Nordenflycht, 2010: 155). However, I argue that in many cases scholars confuse the need to understand professional work with questions of how to manage professionals themselves. For example, because PSF “performance depends heavily on the reputation and status of their workforce” (Suddaby et al., 2008: 989), I argue that the actual work that professionals are involved in provides more a consequential understanding of knowledge intensive industries than

studies of PSF organization. In many respects, PSFs could be considered as no more complicated than staffing or employment agencies in this regard. Though Abbott's system of professions model "nearly silenc[ed] academic discourse on professions for over a decade" (Greenwood et al., 2006: 13), scholars taking up studies of professions today may be misdirecting their current focus to "the attenuation of competition together with its relocation into complex workplaces" (Abbott, 1988: 317-318; Nam, Gruca, & Tracy, 2010). Many scholars have addressed the pressures on PSFs to corporatize, or at least adopt a market-based logic (Glynn & Lounsbury, 2005; Leicht & Lyman, 2006; Scott, Ruef, Mendel, & Caronna, 2000; Thornton, 2002, 2004; Thornton et al., 2005). Others compare ownership structures of PSFs, using financial performance of the firm as the variable to be explained (Greenwood & Empson, 2003; Greenwood, Deephouse, & Li, 2007; Greenwood, Hinings, & Brown, 1990; Greenwood et al., 2005; von Nordenflycht, 2007). A summary of the uniqueness of professional service firms in contrast to traditional corporations can be found in table 5.2.

All of the studies listed above are worthwhile, but occlude the need to study professional project organization as an important level of analysis which connects field, firm, and individual influence over institutional configurations and change. Reinvigorating the studies of professions should include gaps left by Abbott, including questions about how professional boundaries are negotiated in-situ, as well as how "conflict shape[s] participants" (Abbott, 1988: 325). Some recent work has examined individual professional (and occupational) action, and how this action is involved in institutional and organizational change (Bechky, 2006a; Chreim, Williams, & Hinings, 2007; Goodrick & Reay, 2010; Nelsen & Barley, 1997; Reay, Golden-Biddle, & Germann, 2006). These scholars "achieve theoretical depth by paying attention to work practices and exploring individuals' occupational memberships and their attendant meanings and actions" (Bechky, 2011: 4). My study aims to continue this line of work, treating PSFs primarily as employment agencies for all but the firm owners, who have a multiple set of relationships with the firm itself. In particular, PSF owners tend to be "partners" who also perform the work, and their enduring identity is closely linked to both firm reputation and performance.

TABLE 5.2
Professional and Corporate Organizational Forms

<i>Professional</i>	<i>Corporate</i>
Shifting	Stationary
Temporary	Permanent
Project-Based	Continuous
Network	Hierarchy
Multi-Disciplinary or Inter-Organizational	Single “Parent”
Fragmented	Unified
Heterogeneous	Single Meaning System

INSTITUTIONAL LOGICS

“If logics offer templates for action and organizing while rendering existing and potential relationships meaningful, then settings where multiple logics overlap will be particularly fertile ground for institutional entrepreneurship. ...In settings where numerous logics reflect conflicting or incompatible demands, ambiguous identities and multiple networks offer room to maneuver.” (Owen-Smith & Powell, 2008: 605)

By definition, *emergent issues* are purportedly “new” on some level, whether in society, a field, an organization, or to an individual. Further, *emergent issues* indicate topics that are receiving increased attention in some form. The framework of institutional logics helps to understand the reception of emergent issues within multiple levels of analysis and across the multiple occupational communities that are characteristic of fragmented fields.

Thornton and Ocasio (1999) define institutional logics as:

the socially constructed, historical pattern of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality. (Jackall 1988, p. 112; Friedland and Alford 1991, p. 243). Institutional logics are both material and symbolic—they provide the formal and informal rules of action, interaction, and interpretation that guide and constrain decision makers in accomplishing the organization's tasks and in obtaining social status, credits, penalties, and rewards in the

process (Ocasio, 1997). These rules constitute a set of assumptions and values, usually implicit, about how to interpret organizational reality, what constitutes appropriate behavior, and how to succeed (Jackall 1988; March and Olsen 1989).

Essentially, institutional logics are “rules of the game,” which address structural, normative, and symbolic dimensions of social life. Importantly, logics are “more than strategies or logics of action as they are sources of legitimacy and provide a sense of order and ontological security (Giddens, 1984; Seo & Creed, 2002)” (Thornton & Ocasio, 2008: 108). Therefore, I argue that as issues emerge, actors “test” the interpretation and meaning of the issue against their dominant institutional logic in order to understand and “properly” categorize the issue. *Emergent* issues are interesting because their meanings have not yet been determined within a logic, so they are framed, reframed, theorized, and contested (Clark, Gioia, Ketchen, & Thomas, 2010; Gioia, Price, Hamilton, & Thomas, 2010; Rao, Monin, & Durand, 2003), wending through action mechanisms of identity, status, categorization, and organization (Thornton & Ocasio, 2008).

How institutional logics shape action

Thornton and Ocasio (2008) define four distinct mechanisms through which institutional logics can shape individual and organizational action. The first mechanism is through *identity*, where “the identification with the collective is equivalent to the identification with the institutional logic prevailing in the collective” (2008: 111). The “collective” is any sort of social group, such as gender, race, ethnicity, social movements (Benford & Snow, 2000; Rao et al., 2003), organizations (Albert, Whetten, & Cummings, 1985; Dutton & Dukerich, 1991), or even professions and occupations (Abbott, 1988; Fine, 1996; Gioia et al., 2010; Glynn, 2000; Hotho, 2008). A collective identity develops among members of a social group through cognitive, normative, and emotional connection “because of their perceived common status with other members of the social group” (Thornton & Ocasio, 2008: 111).

The second way that logics shape action is through *contests for status and power*. Because institutional logics create the “rules of the game,” they determine the criteria against which individuals and organizations determine whether they are winning or losing (Lounsbury, 2002). For example, institutional logics determine whether wearing Birkenstock sandals confers increased status in environmental circles, or wearing thick round black glasses confers increased status in architectural circles. Whereas items of this nature can be meaningless in outside social

groups (environmentalists may not care what kind of glasses you wear), some items that are prized in one group can actually *reduce* one's status in another group (some architects would disdain the Birkenstock sandals). In this example, the Birkenstock sandals are "checked" against the institutional logic of the architecture social group which may value beauty (collectively defined) over "real" and "natural" characteristics. In this way, institutional logics determine the value hierarchy of a social group, which uses their dominant logic as a measuring stick to determine which actors "deserve" increased status and power.

The third way that logics shape action is through *classification and categorization*. Friedland and Alford (1991: 250) state that "any given behavior can carry with it alternative meanings. Sexual intercourse, for example, can be an expression of affection, of passion, of power, of a divine commandment to reproduce, or of property." The institutional logic that an individual or organization uses determines which meaning is assigned to various objects or actions. This categorization mechanism is extended to partition social actors (Mohr & Duquenne, 1997), organizational forms (Haveman & Rao, 1997), products (Lounsbury & Rao, 2004), technologies (Garud et al., 2010), strategies, and practices.

The final way that logics shape action is through the allocation of *attention*. Institutional logics specify for decision makers "which problems get attended to, which solutions get considered, and which solutions get linked to which situations (March and Olsen, 1976)." Logics determine these actions by "generating a set of values that order the legitimacy, importance, and relevance of issues and solutions; and (2) by providing decision makers with an understanding of their interests and identities" (Ocasio, 1997; Thornton & Ocasio, 2008: 114). Note that logics generate a *set* of values with a specific *order*, such that some issues do not merit attention because the attention has already been expended on issues of higher value. Therefore, it is often not the case that the logic assigns an issue a value of 0 when it is not attended to. Instead, the attention must be doled out according to the existing institutional logic value hierarchy.

Institutional logics, professions, and fragmented fields

The four mechanisms listed above suggest that the framework of institutional logics can inform studies of fragmented fields, recognizing that project team members are drawn from different organizations, experiences, and occupational communities. Linking institutional logics to the

profession(al) literature, I suggest that the professional jurisdiction defines a group of social actors which produce its own institutional logic. Further, the jurisdictional members engage with the logic through the above mechanisms of identity, status and power contestation, categorization, and allocation of attention. However, in examining the institutional logic literature carefully, individuals also belong to a “social group” of their employing organization, the project, their family, a religion, a running club, a no-kill animal shelter, etc. Each individual must untangle potentially conflicting institutional logics when crossing the thresholds between each associated activity. Organizational actors face the same task, as Scott and colleagues (Scott et al., 2000) illustrate conflicting institutional logics within the healthcare industry. The authors found that “consensus about institutional logics has been reduced,” creating “disagreements and disputations over the priorities and goals of the sector and lack of agreement on the appropriate means to be employed in reaching them” (2000: 360, 359, cited in Light, 2001). However, the authors left the story during a period of “fragmentation, disruption, and confusion” and do not “explain how and why the institutionally entrenched era of professional dominance fell apart” (Light, 2001: 1489). One reviewer of the book suggests that the “intellectual fragmentation” of the volume accurately represents the multifaceted character of the health field itself (Rocheftort, 2002: 31). With this lens, it is worthwhile to study another field whose enduring character is also multifaceted and fragmented.

Thornton, Jones, and Kury (2005) also address the notion of multiple or plural logics contending for dominance within organizational populations. Their comprehensive work identifies four models for dealing with plural logics—hybrid, punctuated equilibrium, cyclic, and evolutionary. Hybrid logics “marry” the rules, values, assumptions, and material practices of two more universal logics which both influence a social group. Punctuated equilibrium indicates a temporary stasis for one dominant logic until its shortcomings create societal questioning of the rules by which the social group operates. The group then adopts a new logic either organically or under duress, and the new logic then enjoys dominance until another event creates a similar upheaval. Cyclic logics refer to “a partitioning” of a market, “sparked by the structural overlap” of professionals and other specialists who “vie for control” of a field (2005: 145). In the language of Abbott (1988: 69-79), contention for dominance may result in five possible

settlements: full and final jurisdiction (i.e., complete takeover of one logic/group by another), subordination of one jurisdiction under the other, final division of labor into two interdependent parts with task overlap (sometimes progressing to a new solo jurisdiction in the overlapping territory), advisory roles over certain aspects of the work, and division of territory based on the nature of the client. Abbott relegated each of these “settlements” to particular professional fields, rather than identifying examples of each type of settlement within the same field. I address this gap by examining instances of each type of settlement within the building design and construction field, as well as examining which (and how many) logics actors use to understand and interpret emerging issues.

Specifying research questions

This review of institutional logics leads the discussion back to this study’s purpose and specifying questions. The institutional logics and system of professions frameworks will guide my examination and understanding of the following questions:

1. How do participants understand their own role in relation to other project team members?
2. How do participants evaluate their own work, and the work of other team members?
3. How do participants understand the goals and practices of an emergent set of tasks in relation to roles and responsibilities of all project team members?
4. What structures participants’ understandings and value systems?

In particular, I will examine not only an individual’s hierarchy of institutional logics, but also their hierarchy of values within a particular institutional logic. Further, I will examine an individual’s impression or belief about which logics their team member colleagues use to structure their different sets of priorities, values, assumptions, and material practices.

Where logics come from

In examining the participants’ sets of institutional logics, it is important to recognize the sources of logics, because the source can indicate which social group is used for the participants’ identity. Categorization of participants depends largely on affiliations with projects and professions, but that never tells the whole story of how one actor distinguishes among the multiple logics in everyday life and work.

Because institutional logics typically coalesce around a social group, whatever that group does for social reproduction could be considered institutionalization. In other words, in the spirit of Thornton and Ocasio's (2008) stress on both the material and symbolic aspects of logics, actors assign meaning to material practices. Typically, only the judgment of legitimate and even dominant actors determine which practices receive which meaning. That said, the interinstitutional nature of society and the multiple institutional logics that each actor contends with means that "[t]he ambiguous and contested nature of symbols circumscribes the applicability of abstract models of individual or organizational behavior. There is no one-to-one relationship between an institution and the meanings carried by the practices associated with it" (Friedland & Alford, 1991: 255). As stated in the opening quote to this section, "ambiguous identities and multiple networks offer room to maneuver" where "multiple logics overlap" (Owen-Smith & Powell, 2008: 605).

How logics change

Thornton and Ocasio (2008) outline three mechanisms of institutional logic change. The first mechanism involves *institutional entrepreneurs*—"actors who have an interest in particular institutional arrangements and who leverage resources to create new institutions or to transform existing ones" (DiMaggio, 1988; Maguire et al., 2004: 657; Rao et al., 2000). Most literature on institutional entrepreneurs stress the "bridging" role that these organizations or individuals serve. In fact, though "dominant actors may be able to champion institutional change, they appear unlikely to come up with novel ideas or to pursue change because they are deeply embedded in—and advantaged by—existing institutional arrangements" (Hardy & Maguire, 2008: 199). The concept of institutional entrepreneurship will keep me alert to uniquely located individuals or organizations within the field under study.

The second mechanism is *structural overlap*, where previously distinct fields are "forced into association (Thornton, 2004)." The third mechanism is *event sequencing*—"the temporal and sequential unfolding of unique events that dislocate, rearticulate, and transform the interpretation and meaning of cultural symbols and social and economic structures" (Thornton & Ocasio, 2008: 116). Often, shifts in resources have unintended consequences, and thereby prompt these mechanisms of institutional logic change (Haunschild & Chandler, 2008: 635).

In summary, the institutional logics literature provides a substantial and robust framework for examining how emergent issues influence and disseminate through fragmented fields. Critical to my analysis is the connection between material practices and the meaning system that participants ascribe to those practices. Now that I have reviewed the literature on what separates and distinguishes actors within a fragmented field, I next turn to a discussion on the mechanisms that help such diverse team members coordinate their work.

COORDINATION

There are three main streams of literature with similar and interconnected concepts that I review to inform the nature of work coordination. The stream closest to my study—but still underdeveloped—includes studies of temporary inter-organizational projects (Jones & Lichtenstein, 2008) and temporary organizations (Bechky, 2006a). The second stream draws on understandings of coordination among intra-organizational teams (Okhuysen & Bechky, 2009). The key difference in these first two streams is the presence of a hierarchical authority in the second stream which can provide structure to the work and coordination techniques through various mechanisms. The third stream on project management runs parallel to the organizational literature, with few “crossover” citations, and tends to be European-based in both empirical sites and authorship. Though this third stream has tended toward operations research and project “success,” recent work specifically develops theories for inter-organizational project coordination (Söderlund, 2004), and develops a quite useful theory of *interinstitutional* projects (Dille & Söderlund, 2011).

Finally, there are two streams of literature on inter-organizational alliances that I do not review. One stream follows inter-organizational alliances from a strategic perspective, focusing on (financial) firm performance as the dependent variable (Aggarwal, Siggelkow, & Singh, 2011; Gulati, Nohria, & Zaheer, 2000). In studying a fragmented field with temporary inter-organizational projects, firm performance depends on myriad variables beyond the project coordination and project team governance issues I examine, thereby disconnecting this literature from my study. A second stream on inter-organizational alliances rests within the network literature (Greve, Baum, Mitsuhashi, & Rowley, 2010; Powell, White, Koput, & Owen-Smith, 2005). My study differs from this form of alliance because fragmented fields exhibit hybrid

market/hierarchy/network structures, where firms may be forced into “arranged marriages” by a single client. Therefore, the firms do not frequently “ally” themselves with each other as illustrated in both the strategy and network literature. Rather, firms try to optimize, modify, or control the working relationship that is given to them, and that effort certainly involves coordination with other actors.

In other words, members of fragmented field project teams are likely not “allied,” nor contracted with each other, nor participants on the project for the same period or length of time. Within such a field, the originating “client” of an inter-organizational project may hold multiple primary agreements with actors who may not have agreements among themselves, despite the critical coordination of their work. An illustrative example may help. A recent collarbone injury resulted in the patient receiving separate bills from the hospital, the radiology department, and the doctor performing the consultation. Letters arrived from both the insurance company and a law firm, who were checking to be sure that the accident was not a workplace injury covered under the patient’s employer coverage. In this case, no one entity was “in charge” of the other entities. In fact, it is clear that all of these actors coordinated limited dyadic relationships, but relied on the inexperienced and unknowledgeable “client” (who is a temporary visitor to the field of medicine) to manage the team governance and interaction among multiple actors. This illustration also makes clear that the criteria to determine “success” of the “project” (purportedly fixing a broken bone) depends on the interests of the individual team member.

Temporary inter-organizational projects

As noted above, the stream of organizational literature closest to my examination of fragmented fields is the work on temporary inter-organizational projects. Recently, Oxford published a handbook specifically on inter-organizational relations, gathering a diverse pool of authors to collect the emerging work on this topic (Cropper et al., 2008). Other than the chapter by Jones and Lichtenstein (2008) on temporary inter-organizational projects, the volume generally addresses inter-organizational relations in the context of the power to decide on one’s long-term work partners—alliances and joint ventures. In contrast, temporary inter-organizational projects are often headed by an inexperienced client collecting diverse field participants. Here, the analogy of an “arranged marriage” trumps terms like “alliance” or “joint venture” to describe

projects that “involve multiple organizational actors with disparate goals, overlapping areas of responsibility, and differing levels of expertise” (2008: 232).

Field context. Jones & Lichtenstein suggest that certain fields experience both *demand uncertainty* and *transactional uncertainty*, creating the need for “more flexible and adaptive organizational structures, which inter-organizational projects provide” (2008: 236). *Demand uncertainty* results from rapid shifts in customer taste, when competitors leapfrog one another with technological advances or new products, or where seasonality punctuates demand. In addition to these causes highlighted by the authors, I argue that demand uncertainty also results from two additional criteria: first, serving clients who *infrequently* “need” the services of the field, thereby obviating opportunities for long-term coordination agreements or alliances; second, project initiation that relies on such myriad variables that demand is literally unpredictable. For example, a single client’s demand for a new building could result from a merger, an expansion into a new market, a restructuring of internal divisions, a philanthropic donation to a university or non-profit organization, a new CEO’s desire for a “signature” design, etc. All of these examples may prompt—but do not dictate—a client’s entry into the field of building design and construction, thereby contributing to increased demand uncertainty.

Transactional uncertainty relates to fields involving specialized and complex knowledge, such that a constellation of specialists (including professionals) must each contribute a piece of their expertise to the project outcome.

Field coordination. Jones and Lichtenstein suggest that fields experiencing both demand and transactional uncertainty manage this uncertainty through temporal and social embeddedness in order to coordinate work. Temporal embeddedness uses time as an organizational tool through sequencing, deadline events, and synchronization. Social embeddedness uses relationships among field actors and firms to increase shared understanding and coordination. With social embeddedness, it is not necessary to have a specific prior relationship with an exchange partner to have common understandings of roles and responsibilities. Instead, the connectedness of the field—where exchange partners can be linked by multiple third parties—increases the likelihood of institutionalizing understandings of protocols and routines that structure coordination (Granovetter, 1992; Jones & Lichtenstein, 2008; Uzzi, 1997). The techniques of temporal and

social embeddedness to coordinate work are examples of tacit knowledge that a field newcomer (e.g., an inexperienced client) is not able to perceive or quickly assimilate. Further, because the newcomer is not socially embedded, field participants do not “swiftly” extend trust for successful role performance. Jones and Lichtenstein (2008: 239-240) take exception to the argument that the “trust” extended to embedded exchange partners within these types of fields is “swift” since participants are operating according to the industry “macroculture” that contains collaborative rules which have evolved over long periods of time, reflecting “Zucker’s (1986) notion of institutionalized trust.”

These two mechanisms of coordination—temporal and social embeddedness—give researchers an understanding of the field-level controls that govern individual interactions on temporary inter-organizational projects. However, with such field-level constraints, it is unclear how significant institutional change emerges within this industry since actors bring substantial expectations of role enactment to project interactions. I will address this question more directly in the section on institutional change. But first, I turn to the knowledge about coordination within organizations and the project management literature.

Coordination within organizations

A review by Okhuysen and Bechky (2009) provides a more fine-grained understanding of coordination within work teams. Though the review focuses specifically on coordination *within* single organizations, most of the findings can be applied to inter-organizational project teams as well.

The authors illustrate early work on coordination that involves both temporal and structural controls (Fayol, 1949; Taylor, 1911), but stress that the studies rely on an assumption that “organizational arrangements can be designed for optimum performance” (Okhuysen & Bechky, 2009: 469). Newer forms of work and organization involve a greater amount of equivocality in project outcomes, accompanied with a greater reliance on less tangible/less measurable knowledge-based work—neither characteristic able to produce “optimal” outcomes. Therefore, new research on coordination more accurately matches the nature of “organizational work under conditions of task interdependence and uncertainty” (Faraj & Xiao, 2006: 1156) found within fragmented fields.

Okhuysen and Bechky adopt Faraj and Xiao’s (2006: 1157) definition of coordination as “temporally unfolding and contextualized process of input regulation and interaction articulation to realize a collective performance” (2009: 469). This mouthful acknowledges that in addition to producing an *outcome*, coordination is at heart an *interaction process* involving emergent action within the context of the work itself.

The authors then outline five mechanisms for coordination that produce three “integrative conditions for coordinated activity: accountability, predictability, and common understanding” (Okhuysen & Bechky, 2009: 463). Table 5.3 illustrates the fine-grained actions which contribute to coordination within organizations. The authors clarify that the specific actions can both support and substitute for one another to achieve the three “integrating conditions” that may all be necessary to enable coordination. Again, this framework is valuable because it enables analysis of emergent action rather than limiting analysis to static structural qualities or dyadic relationships.

TABLE 5.3
Integrating Conditions for Coordination and their Relationship to Coordination Mechanisms
(reproduced from Okhuysen & Bechky, 2009: 484)

Table 10.2 Integrating Conditions for Coordination and their Relationship to Coordination Mechanisms

	Accountability	Predictability	Common understanding
Plans and rules	Defining responsibilities for tasks	Defining responsibilities for tasks Resource allocation	Developing agreement
Objects and representations	Scaffolding Acknowledging and aligning work	Scaffolding	Direct information sharing Creating a common perspective
Roles	Monitoring and updating		Substitution Creating a common perspective
Routines	Hand-off work	Task completion/stability	Bringing groups together Developing agreement
Proximity	Visibility: monitoring and updating Familiarity: developing trust	Familiarity: anticipating and responding	Familiarity: store of knowledge

The authors conclude with examples of how coordination is an “ongoing accomplishment” that rebuffs various threats such as turnover, mistakes, and status differences among team members. I will be alert to these and other threats to the conditions for coordination. In fact, “turnover” is a definitional characteristic of projects in fragmented fields. Therefore, I will examine how the fields achieve coordination in the face of constant turnover.

Finally, Okhuysen and Bechky (2009) give recommendations for future research on coordination, highlighting characteristics of my current study. First, it is unclear where accountability mechanisms emerge in “boundaryless” organizations without centralized planning or hierarchical structures. I may find that the system of professions involving territorial jurisdiction serves these purposes. Second, the authors highlight the increasing blurring between provider and customer, where the customer “co-produces” a service or product. This creates a disruption in service when the customers are unfamiliar with their “proper” roles. I have already highlighted that this is the case within fragmented fields.

Project management

The project management literature is relatively new compared to management science. The International Project Management Association and the Project Management Institute were founded in 1965 and 1969, respectively. Their associated academic journals—the *International Journal of Project Management* (started in 1983) and the *Journal of Project Management* (started as *Project Management Quarterly* from 1969-1997)—include primarily European authors, with significant representations from Sweden and the UK. This literature is somewhat connected to the literature on organization studies in that the EURAM (European Academy of Management) conference began a “project” track in 2002, and continues today (Lundin, 2011). However, though the authors cite some of the dominant organizational literature (from *AMJ*, *AMR*, *ASQ*, *Organization Science*, etc.), the inverse does not typically happen, with the notable exception of the *Scandinavian Journal of Management*. Project management literature has also been somewhat relegated to the operations management field, typically focusing on supply chain effects, project risks, and criteria for project “success” (Pinto, 2002; Söderlund, 2004), as if managing a process is detached from managing people.

The literature on project management also tends to focus on the project manager—in individual that is “in charge” of a diverse group of processes and people. The literature infrequently addresses what happens when project managers are multiple and either equal or disconnected. In other words, multiple firms may be involved in a project, and each may have a “project manager.” The coordination of those managers is what this dissertation examines—the

inter-organizational project, where the organizations may not hold contracts with each other, but may require coordination nonetheless.

Most recently, Dille and Söderlund (2011: 483) developed the theoretical concept of “interinstitutional” projects that quite accurately describes my conception of fragmented fields. The authors suggest that organizational scholars studying “inter-organizational” projects may in fact be inaccurately describing the salient features of their empirical site. Though the term “inter-organizational” characterizes multi-actor arrangements, it inadequately characterizes the “situated nature in complex, diverging, and fragmented institutional environments that involve actors from multiple organizational fields.” The new terminology addresses the fact that “several of the cooperation and coordination difficulties reported [in inter-organizational projects] are not necessarily due to their inter-organizational character but rather their institutional differences.” Finally, the authors suggest that “interinstitutional projects typically cut across sectors, making industry and sector characteristics significant as parts of a project’s interinstitutional nature.”

This conception of interinstitutional projects further clarifies the type of setting that I plan to examine, and underscores my use of both the system of professions and institutional logics frameworks. Both of these tools provide a way to examine project teams where individuals draw from different institutionalized meaning systems, despite their ongoing and close working relationships. Recent research recognizes not only the traditional *isomorphic* institutional pressures (Meyer & Rowan, 1977), but also *isopraxis* (the homogenization of practices), *isonymism* (the homogenization of naming and terminology) (Erlingsdóttir & Lindberg, 2005), as well as *isochronism*—the homogenization of timing norms (Dille & Söderlund, 2011; Lauer, 1981; Lawrence & Lorsch, 1967; Lewis & Weigert, 1981; Lundin & Söderholm, 1995; Moore, 1963). I will be alert to all of these forms of institutional pressures from conflicting sources that may arise in the projects under study.

Because Dille & Söderlund’s conception of interinstitutional projects is quite recent, here I outline earlier findings from the project management literature that help us understand temporary organizations and inter-organizational projects. The most robust theorization can be found in both the *International Journal of Project Management*, where “inter-organizational projects” and “temporary organizations” vie for terminology favoritism, and the *Scandinavian Journal of*

Management (and scattered others in the management literature) where “temporary organizations” is the predominant term. Though these two terms certainly emphasize different aspects of the empirical site under study, their literature is considerably intertwined.

Bakker (2010) provides the most comprehensive review of literature on temporary organizations, outlining four salient themes that both distinguish temporary organizations and provide a structure for research investigation. Table 5.4 (2010: 472) outlines the main themes of *time*, *team*, *task*, and *context*, and provides key research questions for each theme.

TABLE 5.4
Temporary organizations research themes
(adapted from Bakker, 2010: 472)

<i>Theme</i>	<i>Key Questions</i>
Time	<ol style="list-style-type: none"> 1. What is the effect of time limits on processes, functioning, behaviour and performance? 2. How do temporary organizational forms develop over time? 3. How should time itself be envisioned in a temporary organizational setting?
Team	<ol style="list-style-type: none"> 1. How do groups of people in temporary organizational systems resolve issues of vulnerability, uncertainty and risk? 2. How is face-to-face interaction shaped in a temporary team environment? 3. <i>How are temporary teams managed?</i>
Task	<ol style="list-style-type: none"> 1. What kind of tasks do temporary organizational forms perform? 2. What are the effects of temporary organizational forms having a limited task? 3. How do temporary organizational forms execute tasks most effectively?
Context <i>Firm</i>	<ol style="list-style-type: none"> 1. <i>How is knowledge that is created in a temporary organizational form sustained in an enduring firm?</i> 2. <i>How can firms manage innovations through temporary organizational ventures?</i>
<i>Society</i>	<ol style="list-style-type: none"> 1. <i>What is the impact of embeddedness in the wider exterior context on interior processes of temporary organizational forms?</i> 2. What form do careers take that are made up of subsequent temporary team memberships?

My study specifically looks at the relationship among the firm context, societal context, and team management. Through these questions, I am able to investigate emergent issues within the fragmented field of building design and construction.

Bakker's work also draws heavily on a foundational article that developed "A theory of the temporary organization" (Lundin & Söderholm, 1995). In the earlier work, the authors not only provided four similar thematic concepts that provide an "action arena" for investigation (only substituting "transition" for "context"), but also developed four "sequencing concepts" that distinguish temporary organizations by their internal processes. These concepts include *action-based entrepreneurialism*, *fragmentation for commitment-building*, *planned isolation*, and *institutionalized termination*. In brief, this process theory implies that a temporary organization requires both a beginning and an end, with two stages of exploration then exploitation in the middle.

In summary, three main streams of literature inform the nature of work coordination within fragmented field teams. Work on temporary inter-organizational projects describes how fragmented fields deal with both demand uncertainty and transactional uncertainty through social and temporal embeddedness. Scholarship within the coordination literature provides mechanisms to achieve accountability, predictability, and common understanding among team members. Finally, project management and "temporary organization" literature provides salient characteristics of interinstitutional projects, as well as a process theory for the progression of a project. Next I turn to my final literature review section on institutional change.

INSTITUTIONAL CHANGE

Scott (2008/1995: 48) defines institutions as "social structures that have attained a high degree of resilience [and are] composed of cultural-cognitive, normative, and regulative elements that, together with associated activities and resources, provide stability and meaning to social life." My earlier discussion about institutional logics illustrates how these social structures are "inhabited" by actors, expressed in patterns of both thought and action (Bechky, 2011; Hallett & Ventresca, 2006). Institutional change investigates how these patterns of thought and action change, thereby changing social structures.

The reason I investigate “emergent issues”—rather than institutional change per se—is to determine whether new thought or action has actually contributed to a new pattern—in essence, whether the rise of an emergent issue results in institutional change. It is entirely possible that actors respond to “emergent issues” in an ad-hoc format and the issue subsequently wanes, resulting in claims that the issue was really a fad based on novelty rather than merit. As many scholars in institutional theory have illustrated, there are many reasons that an emergent issue results in institutional change, some that have little to do with purported merit (often narrowly defined as efficiency). For example, ideas may flow widely not because “they are powerful, but rather... ideas becom[e] powerful as they circulate.” Alternatively, ideas may become “legitimate, popular and even taken for granted as being effective and indispensable as a result of having been adopted by certain actors in the field (Tolbert & Zucker, 1983; Westphal, Gulati, & Shortell, 1997)” (Sahlin & Wedlin, 2008: 221). As outlined in my methodology chapter, LEED green building certification is emergent and growing, but remains a minority practice when considering the entire volume of building design and construction today (in 2011). As a representation of green building practices, LEED building certification is therefore an emergent issue. Further, its creators aim for institutional change.

Van de Ven and Hargrave (2004: 262) review the institutional change literature and outline four perspectives, illustrated in table 5.5. This summary indicates that scholars “have not converged on a single question or theory of change... Each perspective addresses different questions and relies on a unique generative mechanism or motor to explain change.” Though each perspective sensitizes my study when examining emergent issues, the fourth perspective of “collective action” comes closest to my investigation, as it focuses on “networks of distributed and partisan actors in an interorganizational field who are embedded in a collective process of creating or revising institutions.” Further, the perspective of collective action “examines the construction of new institutions through the political behaviors of many actors who play diverse and partisan roles in the organizational field or network that emerges around a social movement or technical innovation” (Hargrave & Van De Ven, 2006: 867).

TABLE 5.5
Distinguishing Dimensions of Four Perspectives on Institutional Change
 Source: (Van de Ven & Hargrave, 2004: 263)

Distinguishing Dimensions of Four Perspectives on Institutional Change				
Dimension	Institutional Design	Institutional Adaptation	Institutional Diffusion	Collective Action
Question	What actions and roles do individual actors undertake to create or change an institutional arrangement?	<ul style="list-style-type: none"> ● How do individual organizations adapt to their institutional environment? ● Why do organizations adopt similar institutions? 	<ul style="list-style-type: none"> ● How do institutions reproduce, diffuse, or decline in a population or organizational field? ● Why are so many organizations alike? 	How do institutions emerge to facilitate or constrain social movements or technological innovations?
Focal institutional actors	Individual entrepreneurial actor(s) with bounded agency: affordance and partisan mutual adjustment	Individual organizational actors adapting (proactively or reactively) to institutional environments	Population or industry of organizations exposed to same institutional environment	Networks of distributed and partisan actors in an interorganizational field who are embedded in a collective process of creating or revising institutions
Generative mechanism	Purposeful social construction and strategies by actor to solve a problem or correct an injustice	Institutional environmental beliefs, pressures, or regulations to which organizational actor must adapt to be legitimate	Competition for scarce resources forces actor to imitate and conform to legitimate institutional practices	Recognition of an institutional problem, barrier, or injustice among groups of social or technical entrepreneurs
Process: event sequence	A dialectical process of creating working rules that resolve conflicts or address unprecedented cases	Coercive, normative, and mimetic processes of internal organizational adaptation and change	Evolutionary processes of variation, selection, and retention of institutional forms	Collective political events dealing with processes of framing and mobilizing structures and opportunities for institutional reform
Outcome	New "rules of the game" that enable and constrain actors by changing their rights, duties, or roles	Organizational legitimacy by adopting isomorphic institutional arrangements	Institutionalization or deinstitutionalization of institutional arrangements in a population of actors	Institutional precedent, a new or changed working rule, an institutional innovation

Source: Van de Ven and Hargrave (2004).

The authors form the perspective of collective action by integrating literature from both social movement scholars as well as scholars studying technological innovation. This integration is unique and quite important to my study, which examines possible technological changes within a fragmented field which are spurred by environmentalism.

In characterizing the salient features for investigation, Van de Ven and Hargrave provide a typology of the four perspectives, as illustrated in table 5.6.

TABLE 5.6
Perspectives on Institutional Change
 Source: (Van de Ven & Hargrave, 2004: 293)

FIGURE 1
Perspectives on Institutional Change

		Mode of change	
		Reproduction	Construction
Focus	Zoom out on multiple actors in inter-organizational field	<p style="text-align: center;">Institutional diffusion</p> <ul style="list-style-type: none"> ● Reproduction, diffusion, or decline of an institutional arrangement in a population or organizational field ● Evolutionary processes of variation, selection, and retention (isomorphism) ● Organizational institutional ecology literature 	<p style="text-align: center;">Collective action</p> <ul style="list-style-type: none"> ● Political action among distributed, partisan, and embedded actors to solve a problem or issue by changing institutional arrangements ● Framing processes, mobilizing structures, and political opportunities ● Social movements and industry emergence literature
	Zoom in on single actor	<p style="text-align: center;">Institutional adaption</p> <ul style="list-style-type: none"> ● Organizational efforts to achieve legitimacy by adapting to institutional environmental pressures and regulations ● Coercive, normative, and mimetic processes ● New organizational institutional literature 	<p style="text-align: center;">Institutional design</p> <ul style="list-style-type: none"> ● Purposeful social construction and strategies by an actor to create/change an institution to solve a problem or correct an injustice ● Bounded agency: affordance and partisan mutual adjustment ● Old institutional literature

Source: Van de Ven and Hargrave (2004).

In their development of the collective action perspective, the authors emphasize the importance of “conflict, power, and politics in explaining institutional innovation” (Hargrave & Van De Ven, 2006: 877). The authors argue for a “dialectical theory of change” which examines “a never-ending series of tensions between oppositions.” Conflict, power, and politics are central to the dialectical theory: “Conflict is the core generating mechanism of change, power is a necessary condition for the expression of conflict, and political strategies and tactics are the means by which parties engage in conflict” (2006: 878). These assertions relate to my study because temporary project teams inevitably contain differing levels of power and status. Further, the multiple institutional logics within fragmented fields (or interinstitutional fields, as Dille and Söderholm suggest) inherently develops conflict within a team—regardless of whether the conflict is destructive or productive.

Citing Oliver (1991):

According to Oliver, key contingencies shaping an organization's response to institutional pressures include the amount of social legitimacy and economic gain at stake, whether or not the focal organization is dependent on the constituent applying pressure, whether pressure is exerted through coercive or voluntary means, and the degree of environmental uncertainty. (Hargrave & Van De Ven, 2006: 879)

These factors are all critically important when examining the reception of an emergent issue within a fragmented field, where the same action confers different levels of social legitimacy and economic gain to different actors with different dependencies. Therefore, in examining the link between emergent issues and institutional change, I will examine instances of conflict, displays of power, and political maneuvers among the actors involved.

SUMMARY

In this chapter I outlined four significant streams of literature which inform my examination of how emergent issues both influence and disseminate through fragmented fields: literature on the professions, institutional logics, coordination, and institutional change. Literature on the professions provides a structure to understand the working "ecology" of interdisciplinary teams, and how each actor can claim jurisdiction over tasks within a project. A separate stream of professional literature informs the ability of "true" professionals to instigate institutional change through their role as brokers. The institutional logics literature shows how each actor within a team may hold different meaning structures, despite working closely on temporary projects. This difference translates into both categorization and conflict of norms, values, assumptions, and material practices. The literature on coordination outlines how such diverse team members can accomplish coordination on a project, by implementing mechanisms that achieve accountability, predictability, and common understanding. These mechanisms constrain the divergent forces identified in the system of professions and institutional logics literatures. Within the coordination literature is work from the field of project management, recently outlining the complexity of "interinstitutional" projects, pointing to the innate institutional multiplicity found in temporary inter-organizational projects. Institutional multiplicity is one of the determining factors of institutional change. However, a more fine-grained analysis of situated conflict, power, and politics may better illustrate the mechanisms which spur institutional multiplicity to generate institutional change.

Within this literature, there are two main gaps that my study investigates. First, while previous literature investigated inter-organizational projects and institutional change separately, my study integrates these conditions, which may be a more accurate representation of the current conditions of network-structured organizations. Considering the rise of research investigating professionals and professional service forms, project-based organizing is still undertheorized. Little is known about how individuals make sense of their place among bordering and overlapping fields, or conceptualize emergent issues with respect to professional and occupational boundaries. Though Abbott's system of professions provides an adequate snapshot view of inter-organizational work, he argues that jurisdictional boundaries are modified when some social change happens, "Technology, politics, and other social forces divide tasks and regroup them. They inundate one profession with recruits while uprooting the institutional foundations of another." (1988: 35). To study these social forces, Abbott defines a gap in knowledge that few have pursued since his initial treatise: "We must stop studying single professions... and start studying work. We need histories of jurisdictions—who served them, where they came from, how the market was created, how conflict shaped participants" (1988: 325). My study takes on this charge for fine-grained investigation of change within occupational jurisdictions.

Second, research related to institutional change focuses primarily on how the the change-oriented organizers strategize to move an issue forward, which overlooks instances of social change that are integrated within the daily work experience of how individuals prioritize tasks and which dependencies influence their priorities. As Campbell suggests,

[w]hat is notably absent here is much discussion of what happens when a practice arrives at an organization or movement's doorstep ready and waiting for adoption. Here the story often ends and it is assumed that the practice is simply adopted uncritically and in toto. ...diffusion appears to be a mindless mechanical transfer of information from one place to another... What is required... is a specification of the mechanisms whereby models of organization and action that diffuse through a field are translated into practice on a case-by-case basis... modified and implemented by adopters in different ways so that they will blend into and fit the local social and institutional context. (2005: 54-55)

REFERENCES

- Abbott, A. D. 1988. *The system of professions: An essay on the division of expert labor*. Chicago: University of Chicago Press.
- Aggarwal, V. A., Siggelkow, N., & Singh, H. 2011. Governing collaborative activity: Interdependence and the impact of coordination and exploration. *Strategic Management Journal*, 32(7): 705-730.
- Albert, S., Whetten, D. A., & Cummings, L. L. 1985. Organizational identity. In B. M. Staw (ed.), *Research in organizational behavior*, vol 7: 263-295. Greenwich, CT: JAI Press.
- Argenti, P. A. 2004. Collaborating with activists: How Starbucks works with NGOs. *California Management Review*, 47(1): 91-116.
- Armstrong, E. A. 2005. From struggle to settlement: The crystallization of a field of lesbian/gay organizations in San Francisco, 1969-1973. In G. F. Davis, D. McAdam, W. R. Scott, & M. N. Zald (Eds.), *Social movements and organization theory*: 161-187. New York: Cambridge University Press.
- Bakker, R. M. 2010. Taking stock of temporary organizational forms: A systematic review and research agenda. *International Journal of Management Reviews*, 12(4): 466-486.
- Barley, S. R. 2008. Coalface institutionalism. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism*: 491-518. London: Sage.
- Barley, S. R. & Kunda, G. 2004. *Gurus, hired guns, and warm bodies: Itinerant experts in a knowledge economy*. Princeton, N.J.: Princeton University Press.
- Bechky, B. A. 2006a. Gaffers, gofers, and grips: Role-Based coordination in temporary organizations. *Organization Science*, 17(1): 3-21.
- Bechky, B. A. 2006b. Talking about machines, thick description, and knowledge work. *Organization Studies*, 27(12): 1757.
- Bechky, B. A. 2011. Making organizational theory work: Institutions, occupations, and negotiated orders. *Organization Science*, Articles in Advance: 1-11.
- Benford, R. D. & Snow, D. A. 2000. Framing processes and social movements: An overview and assessment. *Annual review of sociology*, vol 26: 611-639. Palo Alto, CA: Annual Reviews.
- Brass, D. J., Galaskiewicz, J., Greve, H. R., & Tsai, W. 2004. Taking stock of networks and organizations: A multilevel perspective. *Academy of Management Journal*, 47(6): 795-817.
- Brint, S. G. 1994. *In an age of experts: The changing role of professionals in politics and public life*. Princeton, NJ: Princeton University Press.
- Campbell, J. L. 2005. Where do we stand? Common mechanisms in organizations and social movements research. In G. F. Davis, D. McAdam, W. R. Scott, & M. N. Zald (Eds.), *Social movements and organization theory*: 41-68. New York: Cambridge University Press.

- Carr-Saunders, A. M. & Wilson, P. A. 1964/1933. *The professions*. (2nd ed.). London: Frank Cass.
- Chaison, G. N. 2006. *Unions in America*. Thousand Oaks, CA: Sage.
- Chreim, S., Williams, B. E., & Hinings, C. R. 2007. Interlevel influences on the reconstruction of professional role identity. *Academy of Management Journal*, 50(6): 1515-1539.
- Clark, S. M., Gioia, D. A., Ketchen, J., & Thomas, J. B. 2010. Transitional identity as a facilitator of organizational identity change during a merger. *Administrative Science Quarterly*, 55(3): 397-438.
- Cropper, S., Ebers, M., Huxham, C., and Ring, P. S. (Eds.). 2008. *The Oxford handbook of inter-organizational relations*. New York: Oxford University Press.
- Czarniawska, B. 2004a. Management as the designing of an action net. In R. J. Boland & F. Collopy (Eds.), *Managing as designing*: 102-105. Stanford, CA: Stanford Business Books.
- Czarniawska, B. 2004b. On time, space, and action nets. *Organization*, 11(6): 773-791.
- Davis, G. F. & Marquis, C. 2005. Prospects for organization theory in the early twenty-first century: Institutional fields and mechanisms. *Organization Science*, 16(4): 332-343.
- Davis, G. F. & McAdam, D. 2000. Corporations, classes, and social movements after managerialism. *Research in organizational behavior*, vol 22: 193-236. Elsevier.
- Davis, G. F., Morrill, C., Rao, H., & Soule, S. A. 2008. Introduction: Social movements in organizations and markets. *Administrative Science Quarterly*, 53(3): 389-394.
- Davis-Blake, A. & Broschak, J. P. 2009. Outsourcing and the changing nature of work. *Annual review of sociology*, vol 35: 321-340. Annual Reviews.
- Dille, T. & Söderlund, J. 2011. Managing inter-institutional projects: The significance of isochronism, timing norms and temporal misfits. *International Journal of Project Management*, 29(4): 480 - 490.
- DiMaggio, P. 1988. Interest and agency in institutional theory. In L. G. Zucker (ed.), *Institutional patterns and organizations: Culture and environment*: 3-21. Cambridge, MA: Ballinger Publishing Company.
- DiMaggio, P. 1989. Review of the book *The System of Professions: An Essay on the Division of Expert Labor*, by A. Abbott. *American Journal of Sociology*, 95(2): 534-535.
- 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.
- Dutton, J. E. & Dukerich, J. M. 1991. Keeping an eye on the mirror: Image and identity in organizational adaptation. *Academy of Management Journal*, 34(3): 517-554.

- Eccles, R. G. 1981a. Bureaucratic versus craft administration: The relationship of market structure to the construction firm. *Administrative Science Quarterly*, 26(3): 449-469.
- Eccles, R. G. 1981b. The quasifirm in the construction industry. *Journal of Economic Behavior and Organization*, 2: 335-357.
- Emirbayer, M. & Johnson, V. 2008. Bourdieu and organizational analysis. *Theory and Society*, 37(1): 1-44.
- Erlingsdóttir, G. & Lindberg, K. 2005. Isomorphism, isopraxis and isonymism: Complementary or competing processes? In B. Czarniawska & G. Sevón (Eds.), *Global ideas: How ideas, objects and practices travel in the global economy*: 47-70. Malmö: Liber & Copenhagen Business School Press.
- Faraj, S. & Xiao, Y. 2006. Coordination in fast-response organizations. *Management Science*, 52(8): 1155-1169.
- Fayol, H. 1949. *General and industrial management*. London: Pitman Publishing Company.
- Fine, G. A. 1996. Justifying work: Occupational rhetorics as resources in restaurant kitchens. *Administrative Science Quarterly*, 41(1): 90-115.
- 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. W. Powell & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 311-336. Chicago: University of Chicago Press.
- Fourcade, M. 2007. Theories of markets and theories of society. *American Behavioral Scientist*, 50(8): 1015-1034.
- Freudenberg, W. R. & Gramling, R. 2010. *Blowout in the gulf: The BP oil spill disaster and the future of energy in America*. Cambridge, MA: MIT Press.
- Friedland, R. & Alford, R. R. 1991. Bringing society back in: Symbols, practices, and institutional contradictions. In W. W. Powell & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 232-260. Chicago: University of Chicago Press.
- Garud, R., Gehman, J., & Karnøe, P. 2010. Categorization by association: Nuclear technology and emission-free electricity. *Research in the sociology of work: Institutions and entrepreneurship*, vol 21: 51-93. Bingley, UK: Emerald.
- 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 structuration*. Berkeley: University of California Press.

- Gioia, D. A., Price, K. N., Hamilton, A. L., & Thomas, J. B. 2010. Forging an identity: An insider-outsider study of processes involved in the formation of organizational identity. *Administrative Science Quarterly*, 55(1): 1-46.
- Glynn, M. A. 2000. When cymbals become symbols: Conflict over organizational identity within a symphony orchestra. *Organization Science*, 11(3): 285-298.
- Glynn, M. A. & Lounsbury, M. 2005. From the critics' corner: Logic blending, discursive change and authenticity in a cultural production system. *Journal of Management Studies*, 42(5)
- Goodman, R. A. & Goodman, L. P. 1976. Some Management issues in temporary systems: A study of professional development and manpower—the theater case. *Administrative Science Quarterly*, 21(3): 494-501.
- Goodrick, E. & Reay, T. 2010. Florence Nightengale endures: Legitimizing a new professional role identity. *Journal of Management Studies*, 47(1): 55-84.
- Granovetter, M. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3): 481-510.
- Granovetter, M. 1992. Problems of explanation in economic sociology. In N. Nohria & R. G. Eccles (Eds.), *Networks and organizations: Structure, form, and action*: 25-56. Boston: Harvard Business School Press.
- Greenwood, R. & Empson, L. 2003. The professional partnership: Relic or exemplary form of governance? *Organization Studies*, 24(6): 909-933.
- Greenwood, R., Deephouse, D. L., & Li, S. X. 2007. Ownership and performance of professional service firms. *Organization Studies*, 28(2): 219-238.
- Greenwood, R., Hinings, C. R., & Brown, J. 1990. "P2-Form" strategic Management: Corporate practices in professional partnerships. *Academy of Management Journal*, 33(4): pp. 725-pp. 755.
- Greenwood, R., Li, S. X., Prakash, R., & Deephouse, D. L. 2005. Reputation, diversification, and organizational explanations of performance in professional service firms. *Organization Science*, 16(6): 661-673.
- Greenwood, R., Oliver, C., Sahlin, K., & Suddaby, R. 2008. Introduction. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism*: 1-46. London: Sage.
- 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.
- Greenwood, R., Suddaby, R., & McDougald, M. 2006. Introduction. In R. Greenwood & R. Suddaby (Eds.), *Research in the sociology of organizations: Professional service firms*, vol 24: 1-16. San Diego: Elsevier.

- Greve, H. R., Baum, J. A. C., Mitsuhashi, H., & Rowley, T. J. 2010. Built to last but falling apart: Cohesion, friction, and withdrawal from interfirm alliances. *Academy of Management Journal*, 53(2): 302-322.
- Gulati, R., Nohria, N., & Zaheer, A. 2000. Strategic networks. *Strategic Management Journal*, 21(3): 203-215.
- Hallett, T. & Ventresca, M. J. 2006. Inhabited institutions: Social interactions and organizational forms in Gouldner's patterns of industrial bureaucracy. *Theory and Society*, 35(2): 213-236.
- Hambrick, D. C. & Chen, M. J. 2008. New academic fields as admittance-seeking social movements: The case of strategic Management. *Academy of Management Review*, 33(1): 32-54.
- Hardy, C. & Maguire, S. 2008. Institutional entrepreneurship. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism*: 198-217. London: Sage.
- Hargrave, T. J. & Van De Ven, A. H. 2006. A collective action model of institutional innovation. *Academy of Management Review*, 31(4): 864-888.
- Haunschild, P. & Chandler, D. 2008. Institutional-Level learning: Learning as a source of institutional change. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism*: 624-649. London: Sage.
- 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.
- Hiatt, S. R., Sine, W. D., & Tolbert, P. S. 2009. From Pabst to Pepsi: The deinstitutionalization of social practices and the creation of entrepreneurial opportunities. *Administrative Science Quarterly*, 54(4): 635-667.
- Hoffman, A. J. 1999. Institutional evolution and change: Environmentalism and the U.S. Chemical industry. *Academy of Management Journal*, 42(4): 351-371.
- Hoffman, A. J. 2001/1997. *From heresy to dogma: An institutional history of corporate environmentalism*. Stanford, CA: Stanford Business Books.
- Hoffman, A. J. 2001. Linking organizational and field-level analyses: The diffusion of corporate environmental practice. *Organization Environment*, 14(2): 133-156.
- Hoffman, A. J. & Ocasio, W. 2001. Not all events are attended equally: Toward a middle-range theory of industry attention to external events. *Organization Science*, 12(4): 414-434.
- Hoffmann, S. & Müller, S. 2009. Consumer boycotts due to factory relocation. *Journal of Business Research*, 62(2): 239-247.

- Hotho, S. 2008. Professional identity - product of structure, product of choice; linking changing professional identity and changing professions. *Journal of Organizational Change Management.*, 21(6): 721-742.
- Ingram, P., Yue, L. Q., & Rao, H. 2010. Trouble in store: Probes, protests, and store openings by Wal-Mart, 1998-2007. *American Journal of Sociology*, 116(1): 53-92.
- Jackall, R. 2009/1988. *Moral mazes: The world of corporate managers*. (20th anniversary, revised, annotated ed.). New York: Oxford University Press.
- Jensen, M. C. & Meckling, W. H. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4): 305-360.
- John, A. & Klein, J. 2003. The boycott puzzle: Consumer motivations for purchase sacrifice. *Management Science*, 49(9): 1196-1209.
- Jones, C. & Lichtenstein, B. B. 2008. Temporary inter-organizational projects. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of inter-organizational relations*: 231-255. New York: Oxford University Press.
- Jones, C. & Livne-Tarandach, R. 2008. Designing a frame: Rhetorical strategies of architects. *Journal of Organizational Behavior*, 29(8): 1075-1099.
- Jones, C., Hesterly, W. S., & Borgatti, S. P. 1997. A general theory of network governance: Exchange conditions and social mechanisms. *Academy of Management Review*, 22(4): 911-945.
- Kendall, B. 2010. Justice Department Sues BP Over Gulf Oil Spill. *The Wall Street Journal Online*. <http://online.wsj.com/article/SB10001424052748704828104576021762008860814.html>. Retrieved December 15, 2010.
- King, B. G. 2008. A political mediation model of corporate response to social movement activism. *Administrative Science Quarterly*, 53(3): 395-421.
- Larson, M. S. 1977. *The rise of professionalism: A sociological analysis*. Berkeley: University of California Press.
- Lauer, R. H. 1981. *Temporal man: The meaning and uses of social time*. New York: Praeger.
- Lawrence, P. R. & Lorsch, J. W. 1967. *Organization and environment: Managing differentiation and integration*. Boston: Division of Research, Graduate School of Business Administration, Harvard University.
- Lawrence, T. B. 2008. Power, institutions and organizations. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism*: 170-197. London: Sage.

- Lawrence, T. B. & Suddaby, R. 2006. Institutions and institutional work. In R. Clegg, C. Hardy, T. B. Lawrence, & W. R. Nord (Eds.), *Handbook of organization studies*, (2nd ed.): 215-254. Thousand Oaks, CA: Sage.
- Lawrence, T. B., Suddaby, R., & Leca, B. 2009. *Institutional work: Actors and agency in institutional studies of organizations*. New York: Cambridge University Press.
- Lawrence, T. B., Suddaby, R., & Leca, B. 2011. Institutional work: Refocusing institutional studies of organization. *Journal of Management Inquiry*, 20(1): 52-58.
- Leicht, K. T. & Lyman, E. C. W. 2006. Markets, institutions, and the crisis of professional practice. In R. Greenwood & R. Suddaby (Eds.), *Research in the sociology of organizations: Professional service firms*, vol 24: 17-44. San Diego: Elsevier.
- Lewis, J. D. & Weigert, A. J. 1981. The structures and meanings of social time. *Social Forces*, 60(2): 432-462.
- Light, D. W. 2001. Review of the book *Institutional Change and Healthcare Organizations: From Professional Dominance to Managed Care*, by W. R. Scott, M. Reuf, P. J. Mendel, & C. A. Caronna. *American Journal of Sociology*, 106(5): 1488-1489.
- Lounsbury, M. 2002. Institutional transformation and status mobility: The professionalization of the field of finance. *Academy of Management Journal*, 45(1): 255-266.
- Lounsbury, M. & Rao, H. 2004. Sources of durability and change in market classifications: A study of the reconstitution of product categories in the American mutual fund industry, 1944-1985. *Social Forces*, 82(3): 969-999.
- Lundin, R. A. 2011. Researchers of projects and temporary organizations – one happy family? *International Journal of Project Management*, 29(4): 357 - 358.
- Lundin, R. A. & Söderholm, A. 1995. A theory of the temporary organization. *Scandinavian Journal of Management*, 11(4): 437 - 455.
- Lundin, R. A. & Steinthórsson, R. S. 2003. Studying organizations as temporary. *Scandinavian Journal of Management*, 19(2): 233 - 250.
- Maguire, S., Hardy, C., & Lawrence, T. B. 2004. Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. *Academy of Management Journal*, 47(5): 657-679.
- Malhotra, N. & Morris, T. 2009. Heterogeneity in professional service firms. *Journal of Management Studies*, 46(6): 895-922.
- Manning, S. 2008. Embedding projects in multiple contexts – a structuration perspective. *International Journal of Project Management*, 26(1): 30-37.
- March, J. G. & Olsen, J. P. 1976. *Ambiguity and choice in organizations*. Bergen: Universitetsforlaget.

- March, J. G. & Olsen, J. P. 1989. *Rediscovering institutions: The organizational basis of politics*. New York: Simon and Schuster.
- Marcus, G. E. 1995. Ethnography in/of the world system: The emergence of multi-sited ethnography. *Annual review of anthropology*, vol 24: 95-117. Palo Alto, CA: Annual Reviews.
- Maurer, C. C., Bansal, P., & Crossan, M. M. 2011. Creating economic value through social values: Introducing a culturally informed resource-based view. *Organization Science*, 22(2): 432-448.
- Meyer, J. W. & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2): 340-363.
- Mohr, J. W. & Duquenne, V. 1997. The duality of culture and practice: Poverty relief in new york city, 1888--1917. *Theory and Society*, 26: 305-356.
- Moore, W. E. 1963. *Man, time, and society*. New York: Wiley.
- Nam, I., Gruca, T. S., & Tracy, R. 2010. The effects of competition on referral alliances of professional service firms. *Organization Science*, 21(1): 216-231.
- Nelsen, B. J. & Barley, S. R. 1997. For love or money? Commodification and the construction of an occupational mandate. *Administrative Science Quarterly*, 42(4): 619-653.
- Ocasio, W. 1997. Towards an attention-based view of the firm. *Strategic Management Journal*, 18: 187-206.
- Okhuysen, G. A. & Bechky, B. A. 2009. Coordination in organizations: An integrative perspective. In J. P. Walsh & A. P. Brief (Eds.), *Academy of Management annals*, vol 3: 463-502. London: Routledge.
- Oliver, C. 1991. Strategic responses to institutional processes. *Academy of Management Review*, 16(1): 145-179.
- O'Mahony, S. & Bechky, B. A. 2008. Boundary organizations: Enabling collaboration among unexpected allies. *Administrative Science Quarterly*, 53(3): 422-459.
- Owen-Smith, J. & Powell, W. W. 2008. Networks and institutions. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism*: 594-622. London: Sage.
- Pinto, J. K. 2002. Project management 2002. *Research-Technology Management*, 45(2): 22-37.
- Powell, W. W. 1990. Neither market nor hierarchy: Network forms of organization. *Research in organizational behavior*, vol 12: 295-336. Greenwich, CT: JAI Press.
- Powell, W. W. 1991. Expanding the scope of institutional analysis. In W. W. Powell & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 183-203. Chicago: University of Chicago Press.

- Powell, W. W., White, D. R., Koput, K. W., & Owen-Smith, J. 2005. Network dynamics and field evolution: The growth of interorganizational collaboration in the life sciences. *American Journal of Sociology*, 110(4): 1132-1205.
- Rao, H., Monin, P., & Durand, R. 2003. Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy. *American Journal of Sociology*, 108(4): 795-843.
- Rao, H., Morrill, C., & Zald, M. N. 2000. Power plays: How social movements and collective action create new organizational forms. *Research in organizational behavior*, vol 22: 237-281. Elsevier.
- Reay, T., Golden-Biddle, K., & Germann, K. 2006. Legitimizing a new role: Small wins and microprocesses of change. *Academy of Management Journal*, 49(5): 977-998.
- Rocheftort, D. A. 2002. Review of the book *Institutional change and healthcare organizations: From professional dominance to managed care*, by W. R. Scott, M. Ruef, P. J. Mendel, & C. A. Caronna. *Contemporary Sociology*, 31(2): 228-229.
- Rueschemeyer, D. 1983. Professional autonomy and the social control of expertise. In R. Dingwall & P. S. C. Lewis (Eds.), *The sociology of the professions: Lawyers, doctors, and others*: 38-58. New York: St. Martin's Press.
- Sahlin, K. & Wedlin, L. 2008. Circulating ideas: Imitation, translation and editing. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism*: 218-242. London: Sage.
- Scott, W. R. 1995. *Institutions and organizations*. Thousand Oaks: Sage.
- Scott, W. R. 2008/1995. *Institutions and organizations: Ideas and interests*. (3rd ed.). Los Angeles: Sage.
- Scott, W. R. 2008. Lords of the dance: Professionals as institutional agents. *Organization Studies*, 29(2): 219.
- Scott, W. R. & Davis, G. F. 2007. *Organizations and organizing: Rational, natural, and open systems perspectives*. Upper Saddle River, NJ: Pearson Education.
- 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.
- Seo, M. G. & Creed, W. E. D. 2002. Institutional contradictions, praxis, and institutional change: A dialectical perspective. *Academy of Management Review*, 27(2): 222-247.
- Sharma, A. 1997. Professional as agent: Knowledge asymmetry in agency exchange. *Academy of Management Review*, 22(3): 758-798.

- Söderlund, J. 2004. Building theories of project management: Past research, questions for the future. *International Journal of Project Management*, 22(3): 183 - 191.
- Stinchcombe, A. L. 1959. Bureaucratic and craft administration of production: A comparative study. *Administrative Science Quarterly*, 4(2): 168-187.
- Suddaby, R. & Greenwood, R. 2005. Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, 50(1): 35-67.
- Suddaby, R., Greenwood, R., & Wilderom, C. 2008. Introduction to the journal of organizational behavior's special issue on professional service firms: Where organization theory and organizational behavior might meet. *Journal of Organizational Behavior*, 29(8): 989-994.
- Taylor, F. W. 1911. *The principles of scientific management*. New York: Harper & Brothers.
- Thornton, P. H. 2002. The rise of the corporation in a craft industry: Conflict and conformity in institutional logics. *Academy of Management Journal*, 45(1): 81-101.
- Thornton, P. H. 2004. *Markets from culture: Institutional logics and organizational decisions in higher education publishing*. Stanford, CA: Stanford University 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. *American Journal of Sociology*, 105(3): 801-843.
- Thornton, P. H. & Ocasio, W. 2008. Institutional logics. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism*: 99-129. London: Sage.
- Thornton, P. H., Jones, C., & Kury, K. 2005. Institutional logics and institutional change in organizations: Transformation in accounting, architecture transformation in cultural industries. In C. Jones & P. Thornton (Eds.), *Research in the sociology of organizations: Transformation in cultural industries*, vol 23: 125-170. San Diego: Elsevier.
- Tolbert, P. S. 1990. Review of the book *The System of Professions: An Essay on the Division of Expert Labor*, by A. Abbott. *Administrative Science Quarterly*, 35(2): 410-413.
- 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): 22-39.
- US Internal Revenue Service 2009. *Determination of Worker Status for Purposes of Federal Employment Taxes and Income Tax Withholding*. <http://www.irs.gov/pub/irs-pdf/fss8.pdf>. Retrieved November 17, 2010.
- Uzzi, B. 1996. The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review*, 61(4): 674-698.
- Uzzi, B. 1997. Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42(1): 35-67.

- Van de Ven, A. H. & Hargrave, T. J. 2004. Social, technical, and institutional change: A literature review and synthesis. In M. S. Poole & A. H. Van de Ven (Eds.), *Handbook of organizational change and innovation*: 259-303. New York: Oxford University Press.
- van Donk, D. P. & Molloy, E. 2008. From organising as projects to projects as organisations. *International Journal of Project Management*, 26(2): 129-137.
- Van Maanen, J. & Barley, S. R. 1984. Occupational communities: Culture and control in organizations. *Research in organizational behavior*: 287-365. Greenwich, CT: JAI Press.
- von Nordenflycht, A. 2007. Is public ownership bad for professional service firms? Ad agency ownership, performance, and creativity. *Academy of Management Journal*, 50(2): 429-445.
- von Nordenflycht, A. 2010. What is a professional service firm? Toward a theory and taxonomy of knowledge-intensive firms. *Academy of Management Review*, 35(1): 155-174.
- Weber, K., Heinze, K. L., & DeSoucey, M. 2008. Forage for thought: Mobilizing codes in the movement for grass-fed meat and dairy products. *Administrative Science Quarterly*, 53(3): 529-567.
- Weick, K. E. 1979. *The social psychology of organizing*. New York: McGraw-Hill, Inc..
- Westphal, J. D., Gulati, R., & Shortell, S. M. 1997. Customization or conformity? An institutional and network perspective on the content and consequences of TQM adoption. *Administrative Science Quarterly*, 42(2): 366-394.
- Wilensky, H. L. 1964. The professionalization of everyone? *American Journal of Sociology*, 70(2): 137-158.
- Wooten, M. & Hoffman, A. J. 2008. Organizational fields: Past, present and future. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism*: 130-147. London: Sage.
- Zilber, T. B. 2006. The work of the symbolic in institutional processes: Translations of rational myths in Israeli high tech. *Academy of Management Journal*, 49(2): 281-303.
- Zucker, L. G. 1986. Production of trust: Institutional sources of economic structure, 1840–1920. *Research in organizational behavior*, vol 8: 53-111. Greenwich, CT: JAI Press.

Chapter 6

Conclusion

In this qualitative dissertation, I examined the sources of norms, values, and expectations in an effort to better understand both the barriers still constraining greener building as well as how emergent issues (such as environmental concerns) influence and disseminate through an existing, fragmented industry (such as building design and construction). As more industries move towards networked forms of organizing, the issue of fragmentation becomes more critical, and consequently understanding institutional complexity and how cornerstone institutions dominate different topics at different times allows actors to better understand the opportunities and constraints that institutions provide.

In chapter 2, I outlined the non-material resources of expertise, interest, voice, and time that professionals use to acquire, defend, or cede jurisdictional territory over professional tasks. I identified situations where none of the professionals involved held adequate resources to adopt the new tasks posed by the emergent field of green building. Rather than capitalizing on the new territory and viewing it as an opportunity for professional expansion as existing literature would predict, professionals found themselves undersupplied and unprepared to fill the gap in expertise. With greater reserves of the identified resources, professionals can take advantage that emergent issues present in project work.

In chapter 3, I clarified the difference between institutional orders and institutional logics, arguing that institutional orders remain individually rigid, though they are hierarchically ordered by actors according to professional logics, material and regulatory constraints, or individual *habitus*. When “business as usual” confronts emergent issues or concerns, new material practices symbolically float among multiple meanings before settling (sometimes only temporarily) into a field-negotiated institutionalization, frequently referred to as an institutional logic.

In chapter 4, I examined the content and source of expectations, drawing on both stakeholder theory and the orders of worth framework. I not only identified the stakeholders who brought emergent concerns and expectations to the managers, but I also demonstrated the path through power, legitimacy, and urgency the those expectations took to arrive at a location of central concern to the project at hand. I further demonstrated strategies that managers can use to mitigate the risk that some stakeholders pose to keep a project on track. Finally, in chapter 5, I explored in depth the nature of emergent issues in fragmented fells, showing how the project level of analysis holds promise for investigations of institutional complexity.

Limitations and Future Research

The limitations of my study are typical to an inductive qualitative project, where the specificity of the cases may reduce their generalizability. As part of my research design, I only investigated university projects for two reasons: first, I wanted to control for the client and building type since I would be interviewing a number of diverse industry professionals, and second, universities have a long-term relationship to their buildings such that they have a stronger incentive to address the environmental impacts of design and construction. Given that research design, however, my results may not be applicable across the building design and construction industry, especially where long term ownership is not the norm. In those cases, there may be institutional orders that are not evident, even in the visioning period of the project. Further, my investigations included dominant architectural firms and dominant universities due to the assumed isopraxism of the rest of the field. This may not be the case, and there may be quite different hierarchies of meaning and methods of negotiation when the work has a less public presence. Therefore, future research in this industry can look more closely across typical practices, or even within other dominant organizations to see if my conclusions still hold.

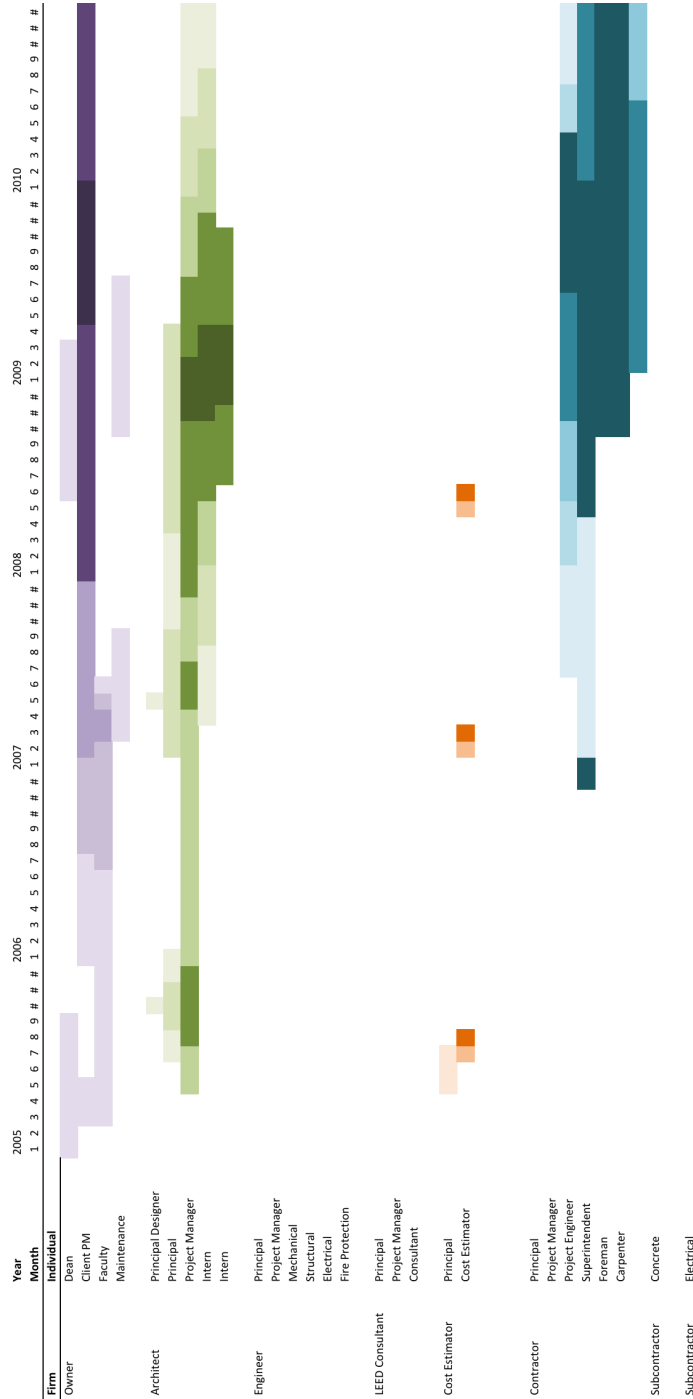
During my study, I saw a number of opportunities for valuable future research:

Time and attention. In chapter 5, I noted that the time that an individual or firm spends on a project provides relative values for the “frequent and fateful” interaction of field members. More specifically, the time that actors spend on a project can be described in the following ways:

- total hours spent on project (as well as per day/per week/per month)
- frequency of engagement

- centrality of engagement (who contacts whom)
- engagement in different phases of the project
- number of concurrent projects for each individual

FIGURE 6.1
Intensity, Length, and Frequency of Engagement



By examining timesheets and billing for all staff across the project—even across multiple firms, researchers can explore the relationship between the institutional orders valued within the project, and the time devoted to the project by “representatives” of each order. A sketch of this type of analysis is shown in figure 6.1.

Comparison of multiple projects in this way can also examine the result of project staff turnover, which is inevitable in multi-year projects. In just three projects I investigated, one university project manager was arrested mid-project for soliciting bribes from a contractor on a different project, a second simply retired, and a third bounced between three projects in different phases of design and construction. This third example is most interesting because large universities, consultants, and contractors frequently have multiple projects in different phases of design, construction, or delay. Staffing each of the projects to have a continuity of staff knowledge becomes difficult when delays are unpredictable (with some projects going on hold for months and then unexpectedly “coming to life” just as unpredictably) and projects for different clients don’t neatly sequence. Studying the ebb and flow of project work can not just help in preparing for such uncertainty, but it can also inform the institutions guiding such projects, depending on the actors and their relationships.

Materiality and aesthetics. Another under explored research area is the relationship of material objects to the institutional orders. In chapter 4, I mentioned the language of aesthetic descriptions (“contextual fit,” “forward looking”), and suggested that each of these terms represent values in different institutional orders. Future research can analyze the language of aesthetics for not just buildings, but also for industrial products. Examining the institutional orders used for governance versus the institutional orders used for material artifact expression may provide clues to expectations that will come to bear on a project.

Communication Control, the Rise of Building Information Modeling, Integrated Design. In chapter 3, I provided an example of the contract structure among the major parties to a building design and construction project. Concurrent with the rise of green building is the development of two innovations. The first, Building Information Modeling (BIM) is a software structured method of communication, where a three dimensional digital model of a building is

shared among all parties to the project. Dividing the responsibilities for accuracy within the model has become a point of contention and negotiation. The second innovation is a contract model called “integrated design” where the owner, contractor, and architect form a joint liability company where the risk—and purportedly the reward—is spread among all parties.

Many of my interviews covered perspectives on these two innovations, as they attempt to solve recurrent challenges and take advantage of efficiencies within the process. However, no technology is neutral and these changes involve significant engagement of the legal and insurance industries, given the litigious nature of construction projects due to their significant financial requirements.

In summary, the building design and construction industry is a rich, fertile site for organizational scholarship due to its complexity and evolving governance mechanisms over both the work and the relationships among participants. Its lessons can be carried into a number of emergent and creative industries that do not operate according to clear hierarchies or anonymous market conventions. Though I may always continue to examine this field for important lessons in complexity, I also see opportunities for applying similar analyses to other fields, with the emergent 3-D printing industry and other design-oriented fields most piquing my interest.

APPENDIX A

Demographic Information

<i>Description of Informants (N=49)</i>	<i>Count*</i>	<i>Proportion</i>
Male	32	0.65
Female	17	0.35
<hr/>		
Experience in Role†		
under 10 years	8	0.16
10 – 25 years	24	0.49
over 25 years	17	0.35
<hr/>		
Professional Role		
Architect	21	0.43
Consultant	12	0.24
Contractor	5	0.10
Owner	9	0.18
User/Stakeholder	4	0.08
<hr/>		
Project Involvement		
U: Business School	8	0.16
U: Hospital	4	0.08
U: Law School	6	0.12
A: Business School	14	0.29
A: Art School	8	0.16
Architecture firm member (not in projects above)	7	0.14
Industry Professional (not in projects or in arch. firm)	7	0.14

*Some informants met more than one “professional role” or “project involvement” category.

†Estimated for 20% of informants.

APPENDIX B

Interview Questions

Team Processes

in Building Design and Construction

Part One:

- Describe your professional background: what experience you had before this position & how you arrived in this position.
- What do you consider a job “well done”? How are you rewarded in your position? How would you like to be rewarded?

Part Two:

- Tell me about your involvement in the (X) project.
- Reconstruct one or two events from this project that required significant team interaction, and tell me about the specific people you worked with on them.

Part Three:

- Tell me about what made this building project unique in your experience.
- What do you believe would have made the project better?
- What would have made the team interaction better?
- Speculate on the reward structures of the other team members. How do you think they define a “job well done”?

Part Four:

- How was the LEED Certification achieved?
- Which practitioners or firms in your field of practice (architecture firms, contracting firms, developers, etc.) do you admire? Why?
- What associations do you belong to, and what news sources do you read?

APPENDIX C

Signature Building Notes, University Project Manager

Summary notes of meeting from university project manager to architects:

- Not "signature" – don't like the 'look' of it
 - How can we get back on track by V24?
- (Mr. Architect) in area V8 or V9 – what can be accomplished by then?
V24 next time in town alternate design ideas?
1. (Mr. Architect) talk to University President
Find out what is signature?
Remind of decision making process
Function & program – keep great room?
Look – facade, skin?
Contextual fit is key.
 2. Who is decision making group? AK, TL, MV?
need commitment were not part of original group.
- Delays – Redesign Costs – what spent to date? Cost to redo?
Inflation 5–7%
Construction start in winter = rain delays
- Clarity of presentation could be an issue –

APPENDIX D

Signature Building Notes, Finance Officer

Meeting notes from finance officer (previously tasked with new building project management):

1. *Can we define signature?*
Examples of other buildings or material treatments.
(Mr. Architect): What makes it signature to him...
 2. *Orientation -*
Process we went through to get to this layout
 3. *Great room -*
West University asked for it to be included in program.
 - *Do we want to eliminate it, make it larger or smaller?*
 - *What don't you like about it?*
 - *Exterior elevations?*
 - Gable (peaked) clay tile roof?*
 - Use of Glass?*
 - What features do we want? -great light*
 - *flexible*
 - *a.v. capabilities*
 4. *Green roof -*
What do you like or not like?
Sustainable elements
Benefits of....
Cost savings...
Can add to signature 'look'
 5. *Sustainability issues -*
This can make the building signature
Use of building can be signature
 6. *Decision making team - can we make sure that those that attend meetings and make decisions stay committed and attend all meetings*
- Signature: (A) A (Mr. Architect) building*
(B) an iconic building for West University
What are those characteristics?
How do we express this architecturally?