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The Disciplinary Practices and Processes of Critique in a Third-Year Architecture Design Studio

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Philosophy

in Education

by

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ABSTRACT

The Disciplinary Practices and Processes of Critique in a Third-Year Architecture Design Studio

by

Ethny A. Stewart

The present study sought to make visible how and in what ways critique, as a disciplinary practice and process, was discursively constructed among actors in and through the opportunities for learning afforded in a third-year, 24/7 access architectural design studio. To gain an emic perspective (Agar, 1994), as an outsider entering a new disciplinary study, required a multilayered approach to trace over time how and in what ways processes and practices were proposed, established and (re)formulated. Discourse-in-use (Bloome & Clark, 2006) was the driving construct of this research project, as a way to trace how critique practices and processes were inscribed in this course of study. Data were constructed using written fieldnotes completed in the course, email correspondences with the instructor, video records of the course, course records, and ethnographic interview-conversations. Analyses made visible that opportunities for learning the practices and processes of critique. Opportunities that varied from formal to informal, engagement with different actors (Spradley, 1980), and participation in different learning environments were all critical to preparing students for the academic, social, and cultural demands in the architecture profession. The findings lay a foundation for further analyses about other phenomenon/a central to work in the design studio.

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There has been an increasing focus on science, technology, engineering, and mathematics (STEM) education at the K-12 and postsecondary levels in the United States due, in part, to growing concern about the current and future lack of Americans who are qualified to work in these fields (e.g., National Science Foundation [NSF], 2006, 2008). Interest also extends beyond STEM to intersect with other disciplines, such as the arts, in the formation of STEAM (science, technology, engineering, arts, and mathematics) education to further promote innovation and critical thinking (Robelen, 2011). Parallel with the discussions of STEM and STEAM, other discussions have centered on the need of developing 21st century learners. Twenty-first century learners are those who develop a level of knowledge in the areas such as reading, writing, and mathematics; innovative learning; technology and information; and life and career skills (Robelen, 2011). Important considerations to support such learners include cross-disciplinary experiences and expertise, learning environments, future employment of students, and the new language of learning (e.g., digital and multimedia).

In rethinking current learning environment models to promote STEAM and 21st century learning, Brown (2006) proposed that successful learning environments are used as part of architecture design studios. He argued that architecture design studios promote critique in the public space, therefore allowing students opportunities to engage in and learn from each other about decision-making processes and to explore how those decisions inform outcomes. Regarding the role of critique in architectural design studio, Brown specifically stated:

> Particularly via the practice of the public critique of projects, students gain a moderately nuanced understanding of the design choices, the constraints, the unintended consequences of choices made early on, and the compromises that may underlie the final product. They start to appreciate and learn from the struggles and successes of their peers, and learn the social and intellectual practices that enable them as an ensemble to become a reflective practicum. Indeed, the students are beginning to be enculturated into the practice of being architects. (p. 20)

Thus, Brown established critique as significant to students moving beyond "learning about" being an architect to "learning to be" an architect.

As previously discussed, the architectural critique is identified as a point of enculturation into the architecture discipline and profession (Brown, 2006; Melles, 2008). Salama (2007) emphasized that the naming of critique practices (e.g., pin-ups, reviews, desk crits, etc.) are not universal across the architecture community. Critiques, also take more formal to less formal formats. Still, all architectural critiques focus on providing a form of feedback, whether given by professors/instructors, peers, or clients. The resulting differences in how architecture critique is defined within the discipline and professionally, the potential ways critique can be implemented within a course of study, and the ways in which instructors draw on architectural design studio theories to implement critique in the design studio provides a potentially rich opportunity to examine critique in different contexts. The following set of interrelated, overarching research questions framed this study:

1. What were the historical roots of the major actors interacting in the course?
2. What counted as a critique practices and processes in this architecture design studio from the instructor's perspective?

Purpose of the Study

Critique as the central practice and process in architecture still remains fairly under-researched (Anthony, 1987; Salama & El-Attar, 2010). There has been little discussion about what exactly occurs during a critique: This includes how a critique is accomplished via resources (models, presentations, etc.) and through the discourse (verbal and non-verbal) that is interactionally accomplished. As Melles (2008) proposed, the discourse or talk that occurs in architecture is a type of disciplinary talk that reveals particular, unique, structured, and/or valuable processes and practices found in architectural design studios.

The purpose of this study was to examine how and in what ways critique was socially constructed in and through discourse in a third-year, 24/7 access architecture design studio. Specifically, of interest was what counted as critique in this architectural design studio course within the discipline of architecture at a state university, Coastal University (pseudonym given for the university site). According to the Architecture and Environmental Design College at Coastal University, in 2014, at least one in 20 architects in the United States was a graduate of this program. Founded as an architectural engineering program, students received significant coursework in engineering, mathematics, and physics as a part of their training. In addition, the program was consistently ranked in the top 5 best undergraduate programs in the United States. Thus, the selection of this architecture program as a site of study was done, in part, because of its record as a top producing and ranked program for the preparation of architects (Design Futures Council, 2016).

A second factor that informed Coastal University as a site for research was the opportunities afforded by the lead professor. Specifically, the use of two studio formats,

analog and digital studios, within the Department of Architecture was unique to this site and department in which this study was embedded.

A third reason for engaging with this architecture program was because of my personal connections to the university as an alumnus. While my disciplinary background was in an agriculture field of study, as an alumnus of Coastal University, I was intimately familiar with the institutional values and approaches to learning with an emphasis on hands-on preparation to enter a profession. However, I was unfamiliar with the disciplinary requirements, processes, and practices of this particular architecture design studio and department. My prior relationship with an emeritus Coastal University staff member assisted in facilitating a connection with Professor F. Through my connection with Professor F, I was able to negotiate entry into his architectural design studio course. This early entry phase led to my initial pilot study, which informed my dissertation research.

Overview: Conceptual Review of Literature

Exploration of complex sites such as an architectural design studio requires researchers to draw on a combination of methodological and theoretical traditions. This section discusses three constructs informing the conceptual framework for studying critique as it was accomplished in this particular third-year architectural design studio. These constructs are as follows: design studios as sites for disciplinary work and places of cultures-in-the-making; discourse as situated within a context; and critique as a disciplinary practice and process.

Design Studios as Sites for Disciplinary Work

The architectural design studio is an integral part of the architecture education experience. However, the design studio is often misunderstood in terms of its purpose and execution. Compared to normal campus classrooms, studios are usually the largest physical space available for students (Anthony, 1987). By definition, the design studio is referenced as a working space and site where design exercises and projects are accomplished (Dinham, 1987). Many in architectural education (Goldschmidt, 1983; Goldschmidt, Hockman, & Dafni, 2010; Melles, 2008) reference the design studio as the center of architecture design education, comprising a fair amount of a student's coursework in architecture (Dinham, 1987) and course credits awarded (Anthony, 1987).

Beyond a physical location, the architectural design studio is the site for exploration of creativity, a socialization process to the profession and discipline, real life experiences through interactions with clients, and conceptualizing and designing for how others use the space (Salama, 1995). Ledwitz (1985) proposed the studio's purpose as that of guiding students through three important areas of design education that are learned concurrently: visualization and representation, language of the discipline/profession, and to "think architecturally" (p. 2). Through direct immersion in experiences (problem solving, analyses, modeling, and feedback), learners (students) are given the opportunity to experience architecture as an architect with social and content interactions across actors, artifacts, and sites (Dutton, 1987).

Architectural design studio is different from other, more traditional classroom spaces as knowledge and application are not separated (Salama, 1995). The interactions between instructor and student provide instances for the construction of mutual knowledge (Yanar,

2007), thus design studios are built on an intimate (one-on-one) time with students and/or groups of students with a low instructor-to-student ratio. These interactions are further solidified through the scheduling of design studios to meet for extended periods of time over multiple days (Attoe & Mugerauer, 1991; Bose, 2007).

The purposeful review of literature on architectural design studios, from my previous work, suggests definitions of architectural design studios are not synonymous, but vary by university sites and are dependent on their philosophies of teaching and learning. Broadfoot and Bennett (2003) discussed the design studio as having two commonly used definitions: (1) physical space and (2) process (practice) of designing. The physical space references where designing occurs and the related conceptual process identified and implemented. The process and practice of designing is focused on teaching-centered processes of learning through active engagement. Problems with potential answers are the focus of the studio; however, less defined are the best design methods to answer these problems. As a result, design studios often contain curriculum and practices that are not prescriptive in nature, but fluid (e.g., varying by location, course, and instructor).

Given there is no "one" curriculum or definition of an architectural design studio, one must investigate how the processes and practices are enacted within this context by analyzing multiple layers of course records from interviews, to course artifacts, to video records. For instance, interview-conversations conducted between the instructor of a third-year design studio and the researcher provided insights into how the instructor defined key processes and practices in a design studio within the discipline of architecture and within his own design studio in contrast to other studio forms (Skukauskaite, 2006). Thus, each record

provided a perspective that, taken together, can provide a comprehensive view of a design studio at Coastal University.

Discourse-In-Use as Situated Within a Context

Within the architectural field, discourse-in-use is also discussed as imperative to the design process in an architectural design studio. Attoe and Mugerauer's (1991) investigation of excellent studio teaching revealed the importance of talk and commentary throughout the design process, from discussions, to lectures, to critiques. Through discourse-in-use, instructors communicate practices of the discipline and the work conducted in the design studio. Types of institutional talk, as argued by Melles (2008), are forms of particular *speech genres* or social contexts. Taken from this perspective, institutional talk is different from everyday talk and brings with it particular knowing, being, and doing of that discipline or classroom (studio). Critique, as discussed previously, is a context specific process and practice within architectural education and therefore provides an anchor to trace across time and space, activities, and events to show patterns of opportunities for teaching and learning that are made available.

Agar (2006) argued that language cannot be separated from culture; they are interrelated and as one changes so does the other. Culture is reflective of more than just the language used, and references the interrelationship as *languaculture*. Accordingly, a *languaculture* draws on "using a language involve[ing] all manner of background knowledge and local information in addition to grammar and vocabulary" (p. 1). As a developing system, culture is reflected in people's language, through their actions and events. Relatedly, speaking to discussions of human activity and language are what Bakhtin (1986) referred to as *speech genres,* stable forms of utterances. Accordingly, these

utterances provide meaning unique to "one's own circle…family-everyday, sociopolitical, philosophical, and so on…" (p. 65), thus they have related political, cultural, and historical links. As these utterances link to form a discourse and members speak, write, and hear these discourses with an implicated other, they signal to each other what are socially significant texts, actions, events, and meanings. Utterances also have relationships to each other, or are intertexually linked (Bloome & Egan-Robertson, 1993), thus signaling past and future practices, processes, and content. Therefore, instructors and students engage in a variety of discourses that must be traced over time and space, as what is spoken carries histories and social practices of that particular studio, department, institution, or profession.

Discourse-in-use is the driving construct of this research project as a way of tracing teaching and classroom (studio) interactions. Rex and Green (2007) proposed discourse as "language-in-use" (p. 571) or the "language above the level of a single utterance or sentence" (p. 571). Discursive choices of actors (e.g., instructor, students, client) participating in classroom (studio) interactions make transparent the opportunities for learning afforded, for whom, under what conditions, and with what consequences and outcomes (Green, Dixon, & Zaharlick, 2003). Further, discursive choices in classroom interactions also reveal the locally situated meanings that are jointly constructed through everyday practices and processes, constructed moment-by-moment through verbal and non-verbal cues (Gumperz, 1982, 1986). These meanings and discursive choices are also a system of reference, where roles and relationships are being proposed, developed, and (re)negotiated with each other, outsiders (e.g., researcher), and classroom artifacts. Accordingly, tracing these developing forms of classroom interactions as forms of classroom life signal ways of knowing, being, and doing. From this perspective, discourse is

a resource that provides insights into particular interactions and relationships between actors and events that can be traced over time.

Critique as Disciplinary Practices and Processes

As discussed previously, the purpose of critique is to assist learners through the design process by engaging with professors/instructors, peers, and others to receive feedback. Design juries have historically been "the" process used in the discipline of architecture for learning and evaluating student design process in the architecture design studio. The system of jury practices and processes as an evaluation of student work still remains fairly un-researched (Anthony, 1987; Salama & El-Attar, 2010). The resulting practices and processes have been both applauded and criticized. The critiquing process through juries, as a part of the "double loop learning" (Anthony, 1987, p. 3) process, propels design thinking forward by addressing conceptual frames guiding the designs such as the assumptions and values, the thought process, and the resulting execution of the project. However, failure to focus research on the jury system and the impact on teaching and learning has placed architectural education significantly behind other disciplines, which seek to continuously revise the evaluation process (Salama & El-Attar, 2010). The void, according to Salama and El-Attar, not only encompasses architectural design juries, but also extends to architecture education and design studio teaching in general.

Purposeful review of literature on critique in the architecture educational setting identified that no one article investigates the same set of questions or draws on similar theories and methodologies (e.g., Attoe, 1976; Anthony, 1987; Lifchez, 1976; Melles, 2008; Salama, 1995; Salama & El-Attar, 2010; Wernik, 1985). The contrasts in research questions and foci extend to the account of phenomena that the authors use in formulating their record

set and the subsequent analyses (see Chapter II for an in-depth discussion literature review). Differences also extend to how critique process was defined. Authors reviewed defined critique as related to a particular theory and methodology implemented for evaluation or assessment of student learning. For example, Salama and El-Attar (2010) discussed the practice of critique as equivalent with what others in the profession identify as juries and reviews. Attoe (1976) defined *criticism* as a verb that is used to accomplish several tasks: sifting through content, distinguishing own biases, identifying the "good" and the "bad" of the process, interpreting, and describing. Conversely, Lifchez (1976) defined *criticism* as relating to the evaluation and accomplishment of work and the institutional acceptance and professional value attached to that work. Accordingly, students who have an opportunity to actively engage in criticism in a professional and academic environment will learn to become critics.

The subsequent practices and processes of critique also vary significantly across sites. A design studio professor/instructor may implement numerous forms of critique; each form uses a specific set-up to assist in interaction between actor(s) and the design. These differences are most noticeable in the ways in which students actively participate in critique, varying across university sites and within the same department or college (Anthony, 1987; Salama & El-Attar, 2010). One convergence across the literature, including the work of Lifchez (1976) and Melles (2008), is the importance of critique in informing students' academic and professional practices and processes. Through critique, students are enculturated into the discipline and profession of architecture (Dinham, 1987; Goldschmidt, 1983; Lifchez, 1976; Melles, 2008).

In particular, Attoe (1976) posited that critique is found everywhere and must be defined in relation to where it occurs, the types present, and the significance of the criticism to professional practice. There continues to be a void in the literature addressing key areas outlined by Attoe. Discussions fail to adequately investigate the interactions of the actors individually and their engagement together in constructing joint activities. Furthermore, the purposeful analysis of a select group of articles on critique exposes how discourse-in-use is not emphasized as a way to discuss what is made available or proposed during critiques and how that in turn impacts the response and actions of the actors.

Methods and Methodology

To research how and in what ways critique, as a disciplinary practice and process, is discursively constructed among actors (e.g., instructor, students, client, etc.) in and through the opportunities for learning afforded in this third-year design studio, the present study was guided by an ethnographic perspective (Green & Bloome, 1997). Consistent with an ethnographic perspective, there was interdependent theory-methods (Birdwhistell, 1977; Emerson, Fretz, & Shaw, 1995). That is, selection and application of particular theories were shaped by and in turn shaped the methods, as one cannot be artificially separated from the other. Bounded by a set of theories and inquiry processes and practices of a cultural group, an ethnographic perspective (Green & Bloome, 2004) focuses on everyday life through the cultural practices of groups. As an outsider to the disciplinary ways of knowing, being, and doing in architecture, I chose to take an ethnographic perspective to gain an emic, or insider, perspective (Agar, 1994). Entering a new *languaculture* required a multi-layered approach to trace over time how and in what ways processes and practices were established and (re)formulated through events, activities, and discourse-in-use.

Central to the theory-methodology approach is interactional ethnography as an epistemology. Interactional ethnography allows one to trace, over time, the patterns, processes, and practices of a cultural group, moving from the whole to individual parts of "life inscribed in the words and actions of members of a social group" (Green, Dixon, & Zaharlick, 2003, p. 215). This methodological approach involves two interrelated angles of analysis—one at the collective level focusing on the discourse(s), social actions, achievement, and outcomes, and the other focusing on individuals within the collective, how they take up (or not) what is constructed at the collective level and how the use of resources is transferred across subsequent events (Green, Skukauskaite, Dixon, & Cordova, 2001).

Green, Skukauskaite, and Baker (2012) argued that ethnography is guided by a logic-in-use that is non-linear, recursive, and abductive. A researcher's logic-in-use is informed through "principled decisions about records to collect and pathways to follow" (p. 310) with the goal of understanding how everyday life is constructed. The diagram below, Figure 1.1, provides a visual (re)presentation of the logic-in-use of this third-year architecture design studio, guided by *principle one: ethnography as a non-linear system* (Green, Skukauskaite, & Baker, 2012). *Rich points*, or unexpected encounters (norms and expectations) that are non-normal to the researcher, requires the researcher to modify her or his point of view, to trace pathways (past and future) through a series of iterative and recursive processes, and to bring together cultural processes and practices to create explanations or accounts of the phenomenon under study. *Rich points* are used to anchor contrastive analyses of the discourse and the (inter)actions across events and activities. As evidenced in the diagram, different levels of scale by moving among diverse record sources was necessary to gain an

emic understanding of what it meant to be an actor (student, instructor, client) in this particular architectural design studio and the profession of architecture.

Purposefully representing these record sources in different colors shows the relationship between the record sources and the arrows show directionality of the movement between sources that is non-linear. For example, those represented in green are interrelated records tied to the literature that were used in investigating components that were from professional and institutional perspectives. Initiating the literature search was an email correspondence with the instructor. The instructor directed the researcher to several resources on architecture traditions of the department and the related institutional models for engaging in disciplinary knowledge, resulting in a shift between these immediate sources in green and the other sources as a way to gain an emic understanding.

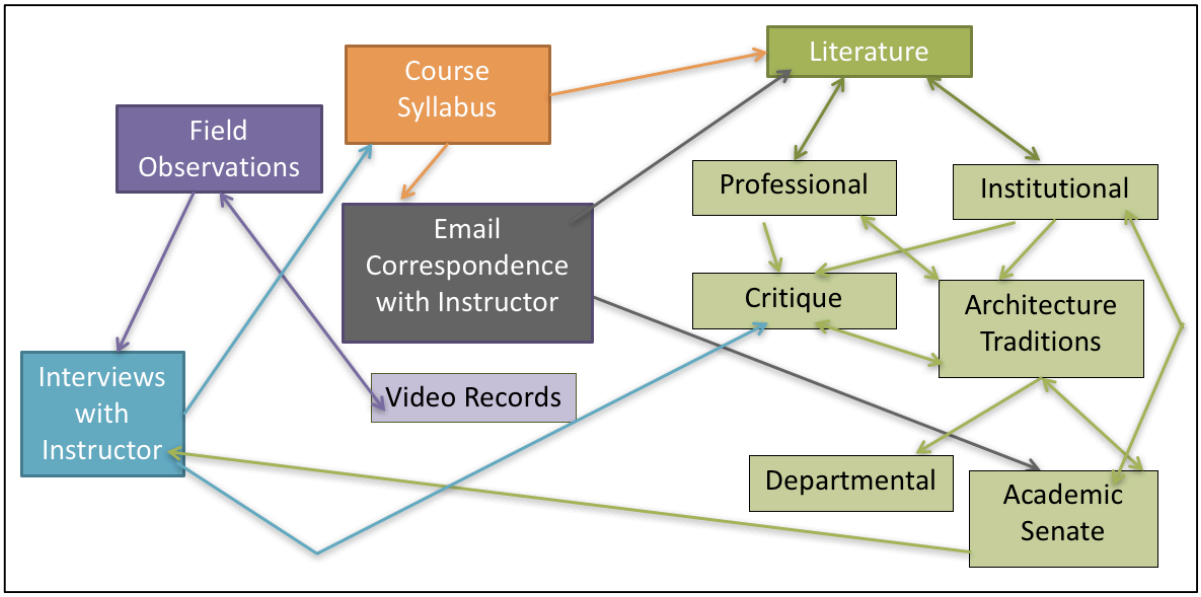

Figure 1.1. Visual (re)presentation of the logic-in-use to research a third-year architecture design studio.

Four major methods were used to obtain records that I drew on in constructing data: (1) observations in the form of fieldnotes, (2) videotaping of classroom meetings, (3) ethnographic interview-conversations with the instructor, and (4) archiving of course artifacts. Table 1.1 outlines the different types of records collected over the ethnographic study of this architecture design studio. Column one details the type of records collected, while column two identifies the amount of records collected. The next sections provide a description for each method and its relationship to how and in what ways the records were collected.

Table 1.1

Types of Records Collected

Type of Records	**Record Amount**
Ethnographic Fieldnotes	• Spring 2011: 14 sessions • Fall 2011: 26 sessions • Email Correspondence with Professor F: 100+ correspondences
Video	• Fall 2011: 22 sessions (~64 hours) • Spring 2011: 7 sessions (~11 hours)
Ethnographic Interviews (Audio recorded)	• Instructor: 3 interviews • Students:18 individual interviews (Fall 2011)

Course Materials and Documents	• Spring 2011: Syllabus
	• Fall 2011
	  ○ Syllabus (LMS)
	  ○ Assignments and Weekly Readings (LMS)
	  ○ Discussion Boards Individual Surveys (LMS)
	• Coastal University Departmental and University Websites

Site and Participants in the Study

I entered the university setting, Coastal University, with familiarity about the university mission and goals; however, I was unfamiliar with the disciplinary requirements, and the practices and processes of critique for this particular architecture design studio and department. To negotiate my understanding of these experiences required me to draw on my prior relationship with Professor F. As a guide, Professor F provided the knowledge necessary for understanding the disciplinary content that was foreign to me as well as to others entering this architectural design studio for the first time.

My initial conversation with Professor F was negotiated via a Coastal University emeritus staff member. During an in-person meeting with Professor F, we discussed the project as a joint construction, where Professor F would have a say in the design and the approaches used in researching how everyday life in his course was co-constructed. Professor F suggested his third-year design studio course as the best course to fully engage in and learn about the practices and processes relating to critique. To assist with my entry, Professor F also suggested which course days to visit and engage in events and activities relating to critique.

Data Collected

As an overtime ethnography, the study focused on records collected during Fall quarter of the 2011-12 academic year; records were also collected during Spring quarter 2011 of the 2010-11 academic year. Each quarter provided a range of different actors (Spradley, 1980) that engaged in the design studio and classroom sites (e.g., analog and digital studios, and online learning management site). These actors included the course, the analog and digital design studio, the online learning system, the instructor, and students.

The course was one of four design studio courses within the architecture major at Coastal University at the time of the study. Specifically, the design studio course was a requirement during the first four years of the five-year architecture major. Design courses for years two through four were each five units and built on the previous years' concepts and processes relating to concepts of architectural theory, design processes, and building systems.

The studios, analog and digital design studio, also served as major sites for architectural work for the design studio under study. An analog design studio is a *folk term*, one that encompasses where physical artifacts, drawings, and models are constructed. The analog design studio comprised the largest portion of the students' site for designing, and engaging in critique and group interactions. Emphasis on group work throughout the course also influenced the set-up of the course in group format throughout the studio. The digital design studio was a unique studio option that only the instructor had in the Architecture Department. The majority of the formal presentations were reserved for the digital design studio; however, this site also served as a place for lectures on basic elements of design and a collaborative working space. The online management system, Blackboard, was another site for collaboration and interactions between the instructor and the students and also housed resources (e.g., syllabus, course assignments, reading materials, course announcements).

The instructor, Professor F, had greater than 15 years of experience working at the university level and in the field as an architect at architecture firms. Professor F was the instructor of record for the third-year design studio in which this study was embedded. Professor F also worked with numerous students on their independent projects, co-taught an

interdisciplinary fourth-year design studio including majors in architecture, architectural engineering, and construction management, and was the director of digital design studio.

Lastly, the students entered the design studio course with a diverse set of experiences including prior design studio professors and coursework and digital tool experiences-digital modeling software. Professor F engaged with 18 students, 10 were female and eight were male. Transfer students comprised five of the 18 students in this design studio. Students entered this course as continuing students who began at Coastal University as a freshman or as a transfer student.

Analyses

Drawing on an interactional ethnographic analysis (Green, Dixon, & Zaharlick, 2003) of a third-year architectural design studio, critique practices and processes were used as an anchor to examine the disciplinary requirements and demands of this particular architecture design studio. Of interest was how actors (e.g., students, instructor, clients) discursively constructed these practices and processes, which were disciplinary defined and socially constructed ways of knowing, being, and doing. Therefore, this study contributes to the field by anchoring the analyses in and through discourse to trace crit.

This does not provide a comprehensive review of the quarter; however, it offers an in-depth analysis of the historical contexts (departmental and institutional) and intellectual history of the instructor; the instructor's conceptualization and philosophy of critique; an analysis of the first day of the course; and an analysis of a complete critique cycle. Through these analyses, I laid a foundation for coming to know an unfamiliar discipline and profession. Thus, as an outsider to the discipline of study, I sought an insider understanding crit in architecture as a discipline and within this specific architectural design studio.

Table 1.2 provides a representation of data collected and analyses undertaken as telling cases of how critique was implemented in this architecture design studio. Column one entails the guiding questions used construct telling cases in this study, while column two entails the kinds of records used. Column three addresses how many of each record were used, while column four addresses the kind of data analysis undertaken to make visible the representative data.

Table 1.2

Representation of Data Collection and Analyses

Guiding Questions	Records Used	Records Amount	Data Analysis
1. What were the historical roots of the major actors interacting in the course?			
1.1 What were the historical roots and shifts of the institution?	Coastal University's institutional timeline	Examination of: Coastal University's	Discourse Analysis Contrastive Analysis
1.2 What were the historical roots and shifts of the architecture program at Coastal University?	Coastal University institutional and Architecture Department timelines	Examination of Coastal University's and Architecture Department's website	Discourse Analysis
1.3 What was the intellectual history of Professor F? What were the histories of the students and visitors participating in this architecture design studio course?	Ethnographic interview-conversations	Two ethnographic interview-conversations with Professor F	Discourse Analysis
	Fieldnotes	Written fieldnotes (email) exchanges with instructor ~100+ correspondences	Discourse Analysis
	Coastal University institutional and Architecture Department websites	Coastal University's and Departmental website for key historical and reference materials	Descriptive Analysis

Guiding Questions	Records Used	Records Amount	Data Analysis
2. What counted as a crit in this architecture design course from Professor F's perspective?			
2.1 What was Professor F's teaching philosophy relating to critique?	Ethnographic interview-conversations	Two ethnographic-interview-conversations with Professor F	Discourse Analysis Domain Analysis
2.2 How and in what ways did the professor inscribe critique through textual resources?	Ethnographic interview-conversations	Two ethnographic-interview-conversations with Professor F	Discourse Analysis
	Course Materials	• Fall 2011 Course Syllabus • Learning Management System records	Discourse Analysis Contrastive Analysis
2.3 How did the Professor F make present the processes and practices of critique?	Ethnographic interview-conversations	Two ethnographic-interview-conversations with Professor F	Discourse Analysis
	Video	22 sessions (~64 hours)	Video Analysis
	Fieldnotes	26 sessions	Discourse Analysis

As indicated in Table 1.2, several analyses were undertaken about what counted as critique practices and processes in this particular design studio. Each guiding question as a telling case is comprised of several sub-questions. The initial telling case, research question 1, was comprised of sub-questions, 1.1 and 1.2, which examined Coastal University's institutional and departmental websites' historical shifts over time through discursive and contrastive analyses. Sub-question 1.3 drew on ethnographic interview-conversations, fieldnotes, and Coastal University's institutional and departmental websites' to discursively analyze the content. Professor F's intellectual history and background of the students and participants in this third-year design studio were also analyzed as part of this sub-question. The second telling case, research question 2, was also comprised of sub-question 2.1,

explores Professor F's teaching philosophy related to critique practices and processes through discourse and domain analyses of two ethnographic interview-conversations. Sub-question 2.2 draws on ethnographic interview-conversations with Professor F and course materials to conduct discourse analyses. Lastly, sub-question 2.3 seeks to uncover how critique practices and processes are made present by Professor F. Drawing on ethnographic interview-conversations with Professor F, video records, and fieldnotes, discourse and video analyses were undertaken to create grounded accounts of what was proposed by Professor F.

Dissertation Structure

The structure of the dissertation is as follows. Chapter II explores literature related to design studios as sites for disciplinary work and places of cultures-in-the-making (e.g., Dutton, 1987; Salama, 1995; Varnelis, 2007); discourse as situated within a context (e.g., Agar, 2006; Bakhtin 1986; Green, Dixon, & Zaharlick, 2003); and critique as disciplinary practices and processes (e.g., Anthony, 1987; Melles, 2008; Salama & El-Attar, 2010).

Chapter III is separated into two sections that provide an overview of the method and methodologies used during data collection and analysis in the present study. Part one provides contextual information about the research site and the participants, actors, and artifacts involved at the research site. Part two focuses on the research design, including record collection and analyzing and producing data.

Chapter IV provides a historical overview of the founding of Coastal University through present day to make visible the inter-relationship of the architecture design studio with the department and program within the university and the histories of the instructor and students. I collected and analyzed histories publicly available on the Coastal University's and Architecture Department's websites to do so.

Chapter V presents a series of analyses related to the concept of critique by tracing the opportunities provided through different actors (people, spaces, and artifacts), across events, and resources. Analyses are focused on the course and video records to make visible how the instructor, Professor F, constructed the course for learning the disciplinary practices and processes of critique as an architect. Lastly, Chapter VI presents a discussion of the findings of this study and the related implications for future research.

Chapter II: Literature Review

Introduction

This chapter presents a conceptual review of literature and framework for how the instructor proposed to students in his course of study the disciplinary processes and practices of critique in architecture. Analysis of the complex site, the architectural design studio, required me to draw on a combination of methodological and theoretical traditions in order to explore the disciplinary ways of learning relating to critique in an architecture design studio. This review, therefore, explores literature related to design studios as sites for disciplinary work and places of cultures-in-the-making; critique as a disciplinary process and practice; and discourse as situated within a context in order to situate the present research site and course of study within an ongoing historical and disciplinary program of research.

Part 1: Review of Literature on Design Studios and Critique

This next section provides a review of literature on both design studios as sites for disciplinary work, as places of cultures-in-the-making, and critique as a disciplinary process and practice. These three interdependent areas provide a historical foundation for understanding how design studios are conceptualized and implemented in a disciplinary field with specific ways of knowing and doing including the process and practice of critique.

Design Studios as Sites for Disciplinary Work

The purpose of this section is to investigate how design studios have been studied as sites for disciplinary work in an architectural design studio. To begin, I briefly present literature focusing on the ways in which researchers have defined and framed the purposes

of architectural design studios. This review is followed by the review of literature focusing on critique in architectural education. I provide an overview of how architectural design studios have been conceptualized with emphasis on the following questions:

1. How and in what ways was an architecture design studio defined?
2. How and in what ways did the nature of a "design studio" serve as a site for acculturation into architecture?

History of the architecture design studio. The design studio in architecture is not a new concept, but one that has been used as a part of the professional and disciplinary practice of architects for centuries. Broadfoot and Bennett (2003) and Salama (1995) both traced the evolution of architectural design studios and architectural education from early formats like Ecole des Beaux Arts (1819-1914), to Bauhaus, to the current trends in architecture education and design studio. Beaux-Arts is the original and most formal design studio model with roots in France. A new model emerged after WWI, Bauhaus, from Germany emphasizing product development. The models each attempted to answer the question regarding what is necessary to become knowledgeable in the profession and discipline of architecture. Taken from Beaux-Arts, the incorporation of practices such as: learn-by-doing through the use of design problems; juries; and the use of instruments (drawing of classic architecture, and large-scale buildings). The Bauhaus movement (1919-1932) then became the focus of a new academy with emphasis placed on craftsmanship; use of workshop teaching (expertise, theoretical, and creativity influenced); and fundamentals of form, color theory, craft raining, and the use of realistic problems (Broadfoot & Bennett, 2003; Salama 1995). As proposed by Salama (1995), the current questions about design studios focus on: (1) the ways in which studios are taught to meet the professional practice

and the course content, and (2) whether studios should be taught as foundational courses, in which the practices and the language of the discipline are separated or whether the two should remain tied together.

Definition of architecture design studio. The present section presents ways in which over the past four decades an architecture design studio has been defined in the literature. Most recently, Varnelis (2007) identified an architect's design studio as comparable to a scientist's laboratory, as both are sites where work is conducted and where students, professors/instructors, and visitors interact with each other in many forms of disciplinary and non-disciplinary work. Yanar (2007) argued that a design studio experience affords students an opportunity to explore knowledge gained from their disciplinary experiences in and out of architecture. Their two perspectives bring forward arguments that the design experience is a significant portion of the architecture students' experience (Attoe & Mugerauer, 1991). Based on these arguments, the design studio is viewed as the site for the intersection of learning and practice of skills, where designing is an active engagement with shifting modes of thinking and is expressed through the practice of doing (Ledewitz, 1985). Further, social and content interactions across actors, artifacts, and sites are encouraged (Dutton, 1987).

Salama (2007) added to the disciplinary definition by arguing that the design process is non-linear and often requires students to shift their thinking from analytic, to synthetic, to evaluative. From this perspective the processes and practices are often iterative and recursive, focusing on areas of problem solving, structuring/building, and defining. Embedded within each these areas are questioning, deconstruction of information, problem modification/reframing, designing, and evaluation (Bose, 2007).

While design studios are a well-established disciplinary practice and process in the fields of art and architecture, more recently, "studio" has been adopted by disciplines such as the sciences (chemistry) and engineering. The presence of design studios are the source of contention in specific disciplinary circles in higher education (Schön, 1988). Schön (1988) discussed the fracture between the value of scientific knowledge in the institution and the roles studios play in the arts and architecture. The next sections further explore the purpose(s), history/ies, and the general nuances (format, components, etc.) of architectural design studios.

As discussed above, there are numerous forms of practices and processes in an architectural design studio, thus definitions of architectural design studios are not synonymous, but vary by discipline, university sites, and their related philosophies of teaching and learning. For this given set of literature, an architectural design studio is broadly defined as relating to a physical space and/or a teaching and learning model. Schön (1988) defined both designing and a design studio. Designing, according to Schön, is the "making [of] representations of things to be built" (p. 2), while the design studio is a place of practice, where students learn through the "real world of practice[,] but is relatively free of its pressures, distractions, and risks" (p. 5).

Similar to Broadfoot and Bennett's (2003) and Salama's (1995) historical accounts of architectural design education evolution discussed above, Armstrong (1999) also provided a parallel discussion of the evolving architectural design studio, with specific emphasis placed on landscape architecture. Design studios are identified as the core of applied disciplines with emphasis on problem based activities and forms of peer review. The significance of design studios goes beyond a "think tank" format (Armstrong, 1999, p. 7),

and provides access to academic discourse: experiences similar to those encountered in a professional setting as an architect (exhibits, critiques, etc.); and engaging in the cycle of investigation of proposed problems, critiquing of the ideas, and the resolution of the ideas.

Broadfoot and Bennett (2003) discussed the design studio as having two commonly used definitions: (1) physical space and (2) process (practice) of designing. The physical space references where designing occurs and the related conceptual process identified and implemented, while the process (practice) of designing that is focused on teaching is centered on the process of "learn-by-doing." Problems with potential answers are the focus of the studio; however, less defined are the best design methods to answer these problems. As a result, design studios often contain curriculum and practices that are not prescriptive in nature, but fluid (e.g., varying by location, course, and instructor). The impact of the digital age, in part, is one contributing factor to the fluidity of curriculum in the design studio and the related movement away from the traditional design studio definition. New forms of design studios are now found in the online space and have the title of "virtual design studio." This new physical space where designing occurs is defined as a network across space and time, where interactions are mediated via computer support allowing for interactive work.

Design studios in architectural education. Salama (1995) argued that design studios allow for the exploration of creativity, the socialization process to the profession and discipline, real life experiences through interactions with clients, and conceptualizing and designing for how others use the space. By not artificially separating knowledge and application, the architectural design studio Salama (1995) maintained is different from other more traditional classroom spaces. The interactions between instructor and student provide instances for the construction of mutual knowledge (Yanar, 2007), thus design studios are

built on an intimate (one-on-one) time with students and/or groups of students with a low instructor to student ratio. These interactions are further solidified through the scheduling of design studios to meet for extended periods over multiple days (Attoe & Mugerauer, 1991; Bose, 2007). As a foundational practice, and as a core of architecture, the design studio promotes the learning about the disciplinary, professional and societal values, socializes individuals into the architecture profession, and cultivates skills necessary for success. Thus, an architecture design studio is metaphorically a "kiln where the future architects are molded" (Salama, 1995, p. 1).

Purpose of the architecture design studio. Although, the design studio has a historic place within the university setting and is often associated with earlier educational models only now readily embraced by a handful of disciplines. The purpose and the nature of design studio practices and processes often vary by discipline. Schön (1988) stated that the architectural design studio is different from other disciplines and professional schools because of the experiences and professional knowledge provided, thus making it an excellent model for other disciplines on how to inform practices of mentorship (student-instructor relationships) and how to engage in learn-by-doing practices and processes related to the disciplinary subject matter. More recently, Green and Bonollo (2003) discussed the historical adoption of the architectural education approach to design studio teaching and the studio as a central piece in industrial design curriculum. Today's industrial design studios draw heavily on learn-by-doing which focuses on project-based and problem-based education. Design studios provide opportunities necessary for students to learn processes and practices of visualization and representation, which ultimately assist them in learning to become a designer. The separation of these disciplines using design studios from the other

disciplines is partially attributed to the disjoining of scientific knowledge, where science knowledge is seen as significant to everyday processes and practices, and sits in contrast to a studio which is viewed as providing less significant contributions.

The design studio makes available a unique set of educational experiences used in familiarizing students to similar processes and practices that an architect encounters in a professional setting (Dutton, 1987). Ledewitz (1985) outlined the purposes of the architecture design studio to teach and make present the principles of architectural design relating to the practicing of skills, acquisition of new language, and learning to "think architecturally" (p. 2). Most notably, design studios are sites for socialization into architecture. Architectural design studios are "active sites where students are engaged intellectually and socially" (Dutton, 1987, p. 17). Students are required to navigate different experiences and shift their thinking to engage in a range of activities that incorporate drawing, conversations, and model making.

The teaching and learning that takes place within an architectural design studio is often rigorous (intellectual work, research, and analytical evaluation), interactive in nature, and affording engagement in different forms of thinking/intellectual activities (Armstrong, 1999; Dutton, 1987). Generally, these activities are problem based in nature according to Anthony (1999) or a balance of the virtual and real world practices (Schön, 1988). Specifically, the practice of reflectivity, as discussed by Schön, sits at the center of the design studio, assisting students in becoming proficient in learning to be an architect and engaging in appropriate processes and practices.

Design studio formats. Formats of architecture design studios are numerous. Table 2.1 summarizes those formats referenced in the articles reviewed as a part of this section

ordered with the most recent publication date listed first. The first column identifies the name given to the type of studio/design studio. Column two provides related definitions for the type of design studio identified. Lastly, column three provides the reference.

Table 2.1

Summary of Different Architectural Studio and Design Studio Formats by Reference

Type of Studio/Design Studio	**Definition of Studio/Design Studio**	**Reference**
Virtual Design Studio	Is a contemporary design studio format that occurs completely or partially via online or virtual environment. Set-up allows for interaction of many participants across differing sites.	Broadfoot and Bennett (2003)
Refereed Studio	Most commonly used in landscape architecture. This process emphasizes peer review.	Armstrong (1999)
Master Class	Is a form of a professional studio that can be embedded within a larger studio project.	Armstrong (1999)
Conjectural-Theoretical	Focuses on using problem based seminars across different "intellectual areas" (p. 18).	Armstrong (1999)
Creative Associations Studio	Explores the interaction of community and university with emphasis on Bourdieu's idea of capital and the ways in which knowledge and change occurs through communities. Universities and local knowledge work in concert with each other and the design studio is used as the site for debate and discussion of social issues.	Armstrong (1999)
Design Through Debate	Is a theory focused approach using critical analyses of philosophical and site issues. Explores issues through reflection-in-action to provide different perspectives (stories, concepts, processes).	Armstrong (1999)

Type of Studio/Design Studio	Definition of Studio/Design Studio	Reference
Destabilizing Studio	"Avant-garde" studio (p. 20) that is based on post-structural advances and focuses on innovation and development of ideas for design competitions.	Armstrong (1999)
The Professional Interface Studio	A senior design studio, it is the best location for exploration of creative ideas and innovations.	Armstrong (1999)
The Poetic Studio	Utilizes Schön's implementation of inquiry. It focuses on nature and stewardship of land, with emphasis on empathy and performance.	Armstrong (1999)
Four strands of architectural education formats: Academic, Craft, Technology, and Sociological	Academic strand informed by compositional theory and formal design with emphasis on design principles and precedents; craft encourages proficiency in trades by working with a master craftsman; technology exploration using scientific principles in answering a question; and sociological influences principles for building and planning.	Salama (1995)

As indicated in Table 2.1, Salama (1995) traced the current design studio practices and formats as influencing agents to meet the needs of society and users. Four strands of education developed in architecture, each with differing views on ways to educate architects. According to Salama (1995), these strands are academic, craft, technology, and sociological. The academic strand is influenced by a compositional theory and formal design with emphasis on design principles and precedents, while the craft strand encourages proficiency in trades by working with a master craftsman. The technological strand allows for exploration using scientific principles in answering a question, while the sociological strand influences the principles guiding building and planning for the building use.

Armstrong (1999) suggested that leading design schools utilize design studios emphasizing rigorous format that incorporates research, critical evaluation, and intellectual

discussion. Specifically, within landscape architecture, the refereed studio is the most common type of studio with emphasis on peer review. However, a master class is another format that has also been utilized because of its emphasis on public exhibitions as a way of providing access to new information and as a form of studio that is embedded within a larger project. Other emerging forms of studios discussed at length by Armstrong include conjectural-theoretical, creative associations, design through debate, destabilizing, professional interface, and poetic studios. A brief description of the studio/design studio type and definition of the studio type is discussed in the Table 2.1. In contrast, Broadfoot and Bennett (2003) discussed the turn to more of a contemporary design studio format that is guided by the proliferation of online and internet access termed a "virtual design studio," where participants are allowed to connect across space and time in varying collaborative ways. As expected, this new studio format requires restructuring as a result of the intricate nature of the process and practices often undertaken in an architectural design studio.

Actors participating in the architectural design studio are also significant to the architectural education format structuring. Schön (1988) spoke directly about the role of the studio master as more of a coach, who engages with students in demonstrations, providing advice and feedback in the form of critiques. The more effective studio masters are those who go beyond talking and describing about designing, to engage students in demonstrations of practices. To do so requires the studio master to be improvisational, reacting in and across the moments of interactions, and reflexive to students' needs in the moment, including clarification of confusions or questions. Students are also required to possess some of the same improvisational and reflexive abilities, including taking in and responding to their own performance, critiques, and design in the moment.

As discussed in this section, "studios" and "design studios" are often defined across articles in relation to a (1) physical space and/or (2) instructional format. An architectural design studio places design as central to the studio processes and practices. Design studios across the architecture discipline generally represent a space for work, but also a philosophical stance on teaching and learning. The convergences across articles were the significance of the role of interactions, whether identified between students, clients, and/or instructors. One can argue that the tracing of interactions, ways in which interactions are accomplished across actors, events, and spaces, is best done through discourse practices. Crits are often a fairly significant part of the discourse practices in use while in the architectural design studio. As such, I next turn to discussion of the process of critique.

Critique as a Disciplinary Process and Practice

Design juries have historically been "the" process used in the discipline of architecture for learning and evaluating student design in the architecture design studio. The subsequent practice of critique process also varies significantly across sites. The jury system, by which critique is discussed and implemented, was first developed as a part of the arts education and training and was adopted by architecture in 1795. Under the Beaux-Arts program in France, early forms of the system focused on evaluation of student projects and did not allow for active student participation (students allowed to present their project) in the process until the 19th century. The jury system was implemented in North America architectural education during the 19th century with guidance of one or two faculty trained in Beaux-Arts as the overseers of the process. The Beaux-Arts process is still a guiding force in the jury systems used in the U.S. and European countries, where students present work in front of a group and are evaluated. However, students today are active participants in the

jury process and are evaluated on quality of presentation (verbal) and drawings (Anthony, 1987; Salama & El-Attar, 2010).

Based on my review of relevant research, the system of jury practices and processes as an evaluation of student work still remains fairly under researched (Anthony, 1987; Salama & El-Attar, 2010). Anthony's (1987) historic piece on architecture design juries and critique experiences emphasizes the "educational value of the jury system" (p. 3) and the importance of engaging students in the discussion about design juries. The resulting practices and processes have been both applauded and criticized. The system has been praised for assisting with the designing process. The critiquing process through juries, as a part of the "double loop learning" (p. 3) process, propels design thinking forward by addressing conceptual frames guiding the designs (assumptions and values), and the thought process and resulting execution of the project (Anthony, 1987). However, failure to focus research on the jury system and the impact on teaching and learning has placed architectural education significantly behind other disciplines, which seek to continuously revise the evaluation process. The void, according to Salama and El-Attar (2010), not only encompasses architectural design juries, but also extends to architecture education and design studio teaching in general.

A focused review of literature on critique (e.g., Anthony, 1987; Attoe, 1976; Lifchez, 1976; Melles, 2008; Salama, 1995; Salama & El-Attar, 2010; Wernik, 1985) in the architecture educational setting identified that no one article investigates the same set of questions or draws on similar theories and methodologies. The contrasts in research questions and foci extend to the account of phenomenona that the authors use in formulating their record set and the subsequent analyses.

As indicated in Table 2.2 below, a summary table of the reviewed articles, there are differing names and definitions of critique formats. The table was created by identifying the major terms referenced across articles, and by locating alternate terms that are intimately related to the generic terms. A description was constructed from the readings on critique and their related references were also noted.

The table was constructed to read left to right, with Column 1, Major Term, identifying the root term used in discussing architectural design studios, while Column 2, Alternate Term, provides names for other common critique processes that are also synonymous with the Major Term heading. For example, critique is a common term to describe an iterative, recursive, and non-linear process in architectural design studios; however, Alternate Terms are also used to signify this same process that may include: Crit, Desk Crit, "Open" Desk Crit, etc. A description of how authors are defining these alternate terms is found in Column 3, Description of Alternate Term, and Column 4, Alternate Term Reference, identifies the author who contributed the definition for the alternate term.

Table 2.2

Summary of Major Terms, Related Terms, and Associated References Relating to the Critique Process

Major Term	Alternate Term	Description of Alternate Term	Alternate Term Reference
Critique/ Feedback	Crit	Held during the middle or at the end of a project.	Melles (2008)
	Desk Crit	Design learning format used for over a century. It is a private interaction between the instructor and the student that occurs several times a week (2-3) for 15-30 minutes.	Goldschmidt, Hockman, & Dafni (2010)
		Individual form of critique occurring between the instructor and student at the student's desk informally during studio time.	Anthony (1987); Melles (2008)
	"Open" Desk Crit	Group discussion is beyond the normal one-to-one interaction found using a Desk Crit.	Goldschmidt, Hockman, & Dafni (2010)
	Pin-Up	Pin-up requires students to display (wall or board) work in a public setting and engage with faculty and peers to receive feedback.	Melles (2008)
		A review with peers and instructors requiring students to discuss the problem under study, what is being addressed through the design, and plausible resolutions to the problem.	Hassanpour, Utaberta, Tahir, Abdullah, Spalie & Che-Ani (2010)
	Whole Group Critique	Students locate themselves within the studio, which will assist in their participation of others' and their own design processes.	Salama (2007)

Major Term	Alternate Term	Description of Alternate Term	Alternate Term Reference
Jury	Jury/ies	Historically tied to Beaux-Arts, it is a method of presenting student work. Generally, it involves a group of faculty from the program of study.	Salama & El-Attar (2010)
		Format that is open broadly that is held during the middle or at the end of a project.	Melles (2008)
	Final Juries	Discussed by some faculty as not providing much value because it is too late in the process, while others state that it provides diversity of feedback and discussions.	Anthony (1987)
	Interim Juries	Juries held towards the middle of the coursework. Some faculty state that it is a beneficial practice and allows students to adjust their projects after feedback.	Anthony (1987)
Reviews	Reviews	Publicly accessible format that is open broadly and that is held during the middle or at the end of a project.	Melles (2008)
	Open House	Publicly accessible format that is open broadly and incorporates a combination of many different forms of engagement, including pin-ups and crits or juries, where physical or visual material is presented.	Melles (2008)

In reviewing the articles, it became apparent that authors often failed to adequately define the terms they used to describe the major and alternate terms; therefore, much of what is defined contains only a partial description of what could be deduced from the writings. Moving forward, my research will attempt to further refine these initial definitions in relation to this third-year design studio.

Defining an architecture critique. Due to the void in my own understanding of critique and critique processes within the architecture field, I purposefully reviewed

literature regarding critique in the architecture educational setting. Guided by the research question, *What was an architecture critique in an architecture design studio*?, references focused on the field of architecture, with an emphasis on literature from the *Journal of Architectural Education*. Because Professor F's choice of references reflected his philosophical beliefs about teaching and learning in regards to critique, a number of references were chosen from his records, to assist in understanding what he drew on to inform his critique practices and processes.

Therefore, in Table 2.3 was constructed to capture those articles reviewed that speak directly to critique, criticism, and feedback. The table was organized in chronological order by date. Guiding the organization of the table were Strike's (1989) guiding principles on programs in education. These principles assisted me in analyzing the content of the references, thus allowing me to engage in a contrastive analysis across what each author made available. Tabling the articles using Strike's guiding assumptions assisted me in contrasting what each article drew on and how the authors constructed their data based on specific research questions, methodologies, and theories.

Table 2.3

Analysis of Literature on Critique as Guided by Strike's Principles

Article Author (Year)	Purpose/ Questions	Account of Phenomenon	Evaluating Accounts	Theoretical or Empirical Terms and Definitions	Perceptual	Problems for Future – Limitations
Attoe (1976)	What are the factors that impact and contribute to design studio teaching?	Literary and art criticism manuscript to inform definitions for criticism and criticism types Case study experiment of adopting criticism methods in teaching team and in design studio	No rubric was given for how measuring accounts related to critique. Just a summary for the case study areas of study For case study introduced criticism unit requiring students to complete several analyses of critique	Definitions provided for: criticism, prescriptive criticism, interpretive criticism descriptive	Criticism occurs at the moment that designer proposes an idea or and judgment is passed on the idea by: "self," client, contractor, user of the building Two assumptions identified: -Critic and designer are equally hypothesizers in design process - Criticism is not one thing but varied	Impact of environmental criticism on the future, thus critics should focus on future and not on judgments of the past. Criticism is purposefully sifting and making distinctions
Lifchez (1976)	What must be considered in groups working together during a design process? Drawing on author's own experience in a studio setting	Site – 10-week Undergraduate studio Participants- 70 students, 6 instructors, 6 teaching assistance	Social processes of how groups worked together in design process must consider: -Students took responsibility for work direction -Instructors worked with groups on direction of work	-Developed own vision – must decide what will guide how and what students need to know -Conflicts- as a learning resource to assist in understanding of values and assumptions. These major	Collective criticism as important process to take one beyond the individual and focusing on the work supporting groups	----------

Article Author (Year)	Purpose/ Questions	Account of Phenomenon	Evaluating Accounts	Theoretical or Empirical Terms and Definitions	Perceptual	Problems for Future – Limitations
Goldschmidt (1983)	Focused discussion on double-layered model for architectural designing. Discussed the stages from defining to interpreting and the modern variations in architectural design and education	Draws on previous research related to double-layered learning model to discuss the evolution of the designing process moving stage by stage. Moves to more modern architectural models with emphasis on architecture design and education	Proposed theories and methods that have been traditionally used in architecture education for teaching design For double layered model guided with someone with expertise	Definitions provided for architectural design, design studio, double-layer, feedback, desk crits, open desk crits, and group interactions	No one mode of teaching will meet every learner's need Architecture school's theories and philosophies will influence the type(s) of interactions and type of design produced	Issues surrounding juries have been and continue to impacts today
Ledewitz (1985)	Design learning in studio guided by series of models that guide teaching architecture practices. Underlying purpose of models is to assist students in learning the practices of design. Teaching the design process as a cyclical process involving concepts and tests	Reviews two of the more common practices in studio teaching as ways of modeling design: analysis-synthesis model and concept-test model	Models under review: Analysis-Synthesis model and Concept-Test model	-Design skills are best taught through direct experience over explanation -Ensure understanding and communication remains open between students and instructors, it is best to explicitly outline the objectives, assumption, and standards	-Design as a cycle of process of concepts and tests -Definitions for following: incremental information, decomposing information, solution type, and form experiments	----------

Article Author (Year)	Purpose/ Questions	Account of Phenomenon	Evaluating Accounts	Theoretical or Empirical Terms and Definitions	Perceptual	Problems for Future – Limitations
Anthony (1987)	Void present in the educational value of design juries in architectural education contexts. Seeks to understand the education value of design juries from the perspective of students, alumni, and faculty	Records from 1 academic year (Phase 1) with follow-up (Phase 2) in 1985: -Phase 1 (Case Study) and -Phase 2 (Follow-up with Other Schools)	"Qualitative" data analyzed through content analysis (using statistical tests for qualitative data) – draws on written quotes survey responses and written responses across several of participants	Definitions provided for: final juries, interim juries criticism – at a jury is most often provided in an oral/verbal format and is less likely to be provided as a written response. Generally, forgotten by the participant because of presenting experience (nervousness, stress, etc.)	-Architecture jury system is a common process and practice within the field of architecture education that can be used to enculturate students into architecture and the practices of negotiation with clients -Jury systems used during design process may assist or detract with the designing process. -Feedback in the form of "criticism" during juries is often in an oral/ verbal (less often written format) and generally given in the moment	Architectural jury system is valuable, but requires improvement Limitations –sample size, refinement of questionnaires, and expansion of survey

Article Author (Year)	Purpose/ Questions	Account of Phenomenon	Evaluating Accounts	Theoretical or Empirical Terms and Definitions	Perceptual	Problems for Future – Limitations
Dinham (1987)	Built upon previous research and findings of criticism as central to teaching. Used findings as basis to explore criticism as part of desk crits to see if any additional themes beyond previous research could be identified	-4 U.S. schools of architecture (3 in east and 1 in southwest) included private and state programs that were analyzed over16 months -Program types: Range from 4-6 years -Interviews used for clarification purposes	Observations notes refined to 8 categories based on: -Detailed student-teacher exchanges and reviews used notes on the presentation/critique exchanges -General themes across the day's events	Definitions provided for: crit, desk crit, design studio, review/jury, group meetings, final review ("jury"), criticism	-Studio teaching is comprised of planning (designing and implementing curriculum) and interactions between students and teachers -Architecture traditions (e.g., Bauhaus, Beaux-Arts) as philosophies have impact on design teaching and learning	Exchanges during studio teaching and reviews/juries both make a complete educational experience

Article Author (Year)	Purpose/ Questions	Account of Phenomenon	Evaluating Accounts	Theoretical or Empirical Terms and Definitions	Perceptual	Problems for Future – Limitations
Frederickson (1990)	Discussed the types of communication and common difficulties that are experienced during design juries between student-to-student, juror to student, and student to juror	Drew on many methods/methodologies including: Ethnographic analysis of videotaped juries; Pre and post interviews of jurors and students; and surveying faculty from design schools	Reviews relevant articles to assisted in the discussion of the major areas of discussion in relation to student-to-juror, juror-to-student, juror, juror-to-juror	Studio environment provided several purposes: -Exploration of different design philosophies and procedural approaches -Explored language(s) of architecture and architecture design -Opportunity to engage in professional experiences Juries serve several purposes: -Provide new approaches to design -Allow for the presentation of designs and receive feedback -Provide real life experiences (e.g. due dates, work relationships, presentation skills)	Juries are highly charged emotional environments for all actors involved. Jury experiences provide approaches to addressing design problems and feedback	----------

Article Author (Year)	Purpose/ Questions	Account of Phenomenon	Evaluating Accounts	Theoretical or Empirical Terms and Definitions	Perceptual	Problems for Future – Limitations
Melles (2008)	-Architecture critique as a key moment in students becoming encultured into disciplinary norms -Study focused on how affective, factual, and identity, are present in architecture critique between presenters (students) and other actors (faculty, students, etc.)	-Archived records: 4 architecture critique presentations (crits and pin-ups) pre-transcribed [123 minutes total] -Site – University of Michigan's Michigan Corpus of Academic Spoken English Participants- 7 main speakers in pairs or alone presented (25 total participants) divided into pairs	Analysis of 1 selected sequence from 3 presentations with emphasis on interactions between presenters, peers, and faculty: -Academic status and relationship to interactions (faculty-student, student-student, etc.) -Non-verbal affective markers (e.g., laughter, pauses, overlaps) -Verbal markers (e.g., indexicals, "um," "alright," etc.)	Architecture critique is equivalent to crit is a jury and vice versa 4 genres of "oral" critique: - Individual desk crit -Pin-up -"Open house"	-Interactive turns between participants are particularly important in seeing how identity/ies, position(s), and emotion are negotiated. -Discourse analysis provides a resource for examining the spoken interactionism, which can be transactional and interactional in nature. -Participants' positions (faculty versus students) impact the type(s) of expertise brought to the interaction can be shown linguistically and through the social and academic relationships	How best to support group experience and interaction to ensure socialization of student

Article Author (Year)	Purpose/ Questions	Account of Phenomenon	Evaluating Accounts	Theoretical or Empirical Terms and Definitions	Perceptual	Problems for Future – Limitations
Goldschmidt, Hochman, & Dafni (2010)	Go beyond 1-to-1 crit and investigated instructor performance in a studio to provide guidance on design pedagogy and practice	Site – 2nd year studio in architecture taking place 5 weeks into the fall semester Participants – focused on 3 students and the student's instructors	Analyze crits using protocol analysis of recorded and transcribed crits. Crits separated into verbal units, coded using 8 schemes and analyzed via Linkography.	Verbal units are length of speaking turns, which are identified as a few words to many words	Architecture critiques are interactional, that is, between instructors and students. Instructors and students must construct a dialogue to seek what students do not know, raise issues and maintain ideas by outlining the ties between previous topics and students' own design concepts. Instructors must take in account students' needs and their own teaching	Calls for no one particular interpretation but providing a complete theory and philosophy of design Limitations - Same instructor is not used across participants, therefore the verbalization is not equivalent across students

Article Author (Year)	Purpose/ Questions	Account of Phenomenon	Evaluating Accounts	Theoretical or Empirical Terms and Definitions	Perceptual	Problems for Future – Limitations
Hassanpour, Utaberta, Tahir, Abdullah, Spalie & Che-Ani (2010)	Investigates critique methods that were implemented at a design studio at a University in Malaysia	Site: University Kebangsaan Malaysia Participants: 23 undergraduate students Assessment tools identified 9 categories of critique used	Case study of convenience sample from University Kebangsaan. Focus on satisfaction and dissatisfaction through survey methods 5 types of design studio applications implemented by instructor that were organized based on critic style and/or student's opportunity/ies for being creative or productive	Design studio education – provides opportunities for revision of practice Definitions provided for: desk crit, informal critique, pin-up 9 categories of critique: 1. Individual 2. Formative 3. Summative- 4 Peer Critique 4. Group 5. Public 6. Written 7. Seminars 8. Panel Discussion 9. [Did not specify]	Purpose of juries are to: -Raise questions and issues for students to continue design -Teach students to become critical (question, experiment, and explore ideas) Every critique option has pros and cons: -Majority are instructor centered -Limitation of participation and collaboration between participants Structure and consistency important for student to give and receive criticism	Limitations- -Assessment that is authentic will draw on relevant knowledge and skills for problem solving -Add areas of ethnicity, gender, and other related factors to crits

Article Author (Year)	Purpose/ Questions	Account of Phenomenon	Evaluating Accounts	Theoretical or Empirical Terms and Definitions	Perceptual	Problems for Future – Limitations
Salama & El-Attar (2010)	Composed a comprehensive literature review to explore the jury practices and value educationally of the jury system Discussed jury system and practices through contrast between western and Arab world	26 articles chosen to investigate jury system and design review Case study focus using 2 studies from Arab world: Misr International and KFUPM-Dhahran, KSA	-Articles identified and chosen by authors to only include those published in English (however 5 participants chosen were non-English natives) - Case Studies: Questionnaire developed focusing on key issues that was given to 45-60 students at each of the 4 universities	Juries – panels of instructors, architects, etc. that are providing some sort of feedback Architecture jury-traditional education ritual that was initiated as part of Beaux-Arts in France Communication is key in discussing how juries are accomplished and there must be rules between jurors and students	Design juries have historically provided imperative educational value to students learning effective ways to acquire knowledge and problem solve ideally through: -Use of "constructive criticism" of student work (outlining the positives and negatives) (p. 180) -Engaging in disciplinary and professional conversations between students and instructors -Design issues that are critical to students' projects being evaluated are given instruction -Adequately measuring student's ability to utilize and apply knowledge to solve a design related problem/challenge Case Study Outcomes: -Similarities between 4 universities in results with preferences for: external juror involvement and opportunities to defend projects; balance between instructor's and students style, and adhering to programmatic requirements -Verbal and presentation skills most important; criticism and assessment important as part of jury learning	Article identifies 3 areas of future study: -The setting-having grades provided on behalf of jurors -Jurors – having problems with subjectivity and ethical issues -Students – obtaining fair assessments through: criteria for evaluation, adequate time for presentation and defend work

Table 2.3 was constructed to read left to right with Column 1, labeled Author(s), referencing the author(s) of the piece under review, while Column 2, entitled Purpose/Questions, identifies the research questions or areas of focus that the authors identified in the article. Column 3, Account of Phenomenon, summarizes the records or research that the authors drew on in constructing their article. Column 4, Evaluating Accounts, examines the authors' methodology/ies in analyzing the data constructed and Column 5, Theoretical or Empirical Terms Definitions, identifies any pertinent definitions related to the theories and methodologies used by the authors with emphasis on definitions relating to critique, criticism, and juries. Column 6, Perceptual Categories, provides summary statements of how the authors inscribed experiences, interactions, and relationships. Lastly, Column 7, Problems for Future, discuss any identified questions or problems for future research. The following section summarizes the key content area findings across articles reviewed that directly spoke to critique. After which, the concluding sections speak directly to definitions, purposes, and types of critique.

Purpose of research/questions of interest. As discussed in the previous section, a table was constructed using Strike's (1989) principles as a guide to organize the references directly speaking to critique, criticism, or feedback. Column 1 of the Table 2.3 speaks to a general statement of research purpose and research questions of interest across. As evidenced across the articles, no one article investigates the same set of questions; however, there is similarity in that all articles speak to some aspect of critique and the design jury. These similarities are not by accident, but were purposefully chosen because of the researcher's interest in critique, critique process, and the teaching and learning of critique. The differences in research questions also extend to the choice of theories and

methodologies. The contrasts in research questions and foci extend to the account of the phenomenona that the authors used in formulating their record set. No one author or set of authors used the same theories or methodologies in the construction of their data, from records or the subsequent analyses.

Phenomenon of accounts. Across the reviewed articles, authors employed a diverse set of record collection and data construction methodologies with a few convergences. The use of "case study" approaches was one convergence across four (e.g., Anthony, 1987; Attoe,1976; Hassanpour et al., 2010; and Salama & El-Attar, 2010) of the eleven articles tabled. However, it was unclear exactly how authors defined "case study" in relation to their research. Overlaps in these four articles also extended to the population of study, which generally focused on undergraduate architecture design studios and drew on both instructor and student data sources. Other articles used a combination of theories and methodologies in constructing their data sources (e.g., interviews, observations, fieldnotes, questionnaires and surveys, and student work), but also failed to provide detailed descriptions of how they solicited, collected, and analyzed their records.

Theoretical and empirical terms. As discussed in the following section, authors often failed to fully define terms related to critique and the related processes and practices. Of those terms defined, there were inconsistencies in definitions across articles, thus making the process of determining what critique is and how it is accomplished a challenging process. A more thorough review of articles on critique may provide some insight into the terms used. However, it is likely that several terms are contextually linked to the site and the instructor's conceptual belief about teaching and learning. A conversation with an

architecture design studio instructor, such as the one attached to the site of my own research, may inform what terms and related practices are important to know.

Categories and problems for discussion. Similar to the other areas discussed, very little consistency was found across articles in the perceptual categories. There appears to be some consensus that there is not enough research on design studio jury processes and practices. Communication and interactions also seem to be the underlying frames guiding juries. Mapping onto several of these categories are areas to consider for future research. Several authors discussed improving the sample size and refinement of theories and methodologies guiding their research.

Differences among articles also extend to how critique process is defined (see Table 2.3 for a detailed summary of the articles). Several in the field of architectural education define critique as related to a particular theory and methodology implemented for evaluation or assessment of student learning. For example, Salama and El-Attar (2010) discussed the practice of critique as equivalent with what others in the profession identify as juries and reviews. Others I reviewed (e.g., Lifchez, 1976; Wernik, 1985) opted for the use of criticism as an equivalent term to critique as relating to a theory and methodology. Additionally, Attoe (1976) defined criticism as a verb that is used to accomplish several tasks: sifting through content, distinguishing own biases, identifying the "good" and the "bad" of the process, interpreting, and describing. Conversely, Lifchez (1976) defined criticism as relating to the evaluation and accomplishment of work and the institutional acceptance and professional value attached to that work. What became visible across these different studies, however, is a common view that students who have an opportunity to actively engage in criticism in a professional and academic environment will learn to become critics.

One potential problem related to discussion on critique and design juries is the failure to maintain a common set of nomenclature and definitions. The majority of the articles reviewed do not use similar naming or related definitions. As discussed previously, the purpose of critiques and juries is focused on students receiving feedback from professors/instructors, peers, and others. The design studio professor/instructor may implement numerous forms of critique; each form uses a specific set-up to assist in interaction between actor(s) and the design.

As indicated in Table 2.2, values and beliefs about the interactional space(s) determine the type(s) of critique employed in the studio. Lifchez (1976) identified two such interactions as the most common in an architecture studio setting: student-student and instructor-student. The analysis presented in Chapter V illuminates the interactions in this third-year architectural design studio at Coastal University, may also take place with clients, outside faculty, and/or other participants. In using the group as the basis for critique type events, Lifchez (1976) suggested that the vision for the group experience must be discussed and implemented and instructors must assist students through conflict(s) as these assist students with understanding values and assumptions. Further, familiarity of participants in the group impact how the group will work together. Those participants who are previously acquainted with each other will work better than those with no previous ties. An outcome of the group work experience is the enduring criticism via the instructor and peers; this is the major benefit. In summarizing the role of criticism, Lifchez (1976) reinforced that criticism, in general, is important, but is most effective in a student-critic interaction.

Goldschmidt (1983) also described critique as "feedback" given to students as a part of an ongoing design process. He described two forms often used in providing feedback:

desk crit and group review. The most popular format to accomplish critique is the one-to-one desk critique (desk crit), which has been utilized in the design-learning format for over a century (Goldschmidt, 1983; Goldschmidt, Hockman, & Dafni, 2010). A desk crit can be a private interaction between the instructor and the student and may be informal in nature (Melles, 2008), or may also take the form of an "open desk crit" in which discussion evolves into group discussion beyond the one-to-one. These group interactions act as a reflective practice allowing for personal interpretations to be reflected and discussed (Goldschmidt, 1983). Used two to three times a week, it is a focused event that takes place between students and the instructor. As noted by Goldschmidt, Hockman, and Dafni (2010), encounters such as group interactions can last 15 to 30 minutes in length and center around students describing projects and project evolution, while the instructor solicits information about the design of the project and provides suggestions for clarifications.

Beyond the desk crit, Melles (2008) specifically outlined three other oral critique genres: pin-ups; juries, crits and reviews; and "open house" (p. 161). The pin-up requires students to display (wall or board) work in a public setting and engage with faculty and peers to receive feedback. Conversely, Hanssapour et al. (2010) described pin-ups primarily as a review with peers and instructors requiring students to discuss the problem under study, what is being addressed through the design, and plausible resolutions to the problem. Juries, crits, and reviews are forms of critique held during the middle or at the end of a project. Lastly, an "open house" genre is another publicly accessible format that is open broadly and incorporates a combination of many different forms of engagement, including pin-ups and crits or juries, where physical or visual material is presented. Reviews, according to Salama (2007), can take place throughout the project or design process. Whole group critique, as

noted by Salama (2007), encourages students to locate themselves within the studio, which will assist in their participation of others' and their own design processes.

Design studio professor/instructor may implement numerous forms of critique; each form uses a specific set-up to assist in interaction between actor(s) and the design. These differences are most noticeable in the ways in which students actively participate in the critique or jury process, varying across university sites and within the same department or college (Anthony, 1987; Salama & El-Attar, 2010). As the "cornerstone" (Goldschmidt, Hockman, & Dafni, 2010, p. 285) of design education, the design studio serves as the site where critique is accomplished. Critique allows students to develop design skills and knowledge under the guidance of the instructor. However, critiques are an often forgotten piece of the architecture design process discussion within architectural education (Anthony, 1987). Anthony's (1987) literature search shows non-existent research on design juries beyond summary examples of case study experiences that often fail to include experiences of students as a part of design juries.

One convergence across several literature sources (e.g., Lifchez, 1976; Melles, 2008) is the importance of critique in students coming to know the academic and professional practices and processes. Through critique, students are enculturated into the discipline and profession of architecture (Dinham, 1987; Goldschmidt, 1983; Lifchez, 1976; Melles, 2008). Attoe (1976) posited that critique is found everywhere and must be defined in relation to where it occurs, the types present, and the significance of the criticism to professional practice. There continues to be a void in the literature addressing key areas outlined in Table 2.3 by Attoe (1976).

In addition, discussions fail to adequately investigate the interactions of the actors individually and their engagement together in constructing joint activities. Furthermore, the purposeful analysis of a select group of articles on critique and juries exposes how discourse-in-use is not emphasized as a way to discuss what is made available or proposed during critiques and how that, in turn, impacts the response and actions of the actors. Given the paucity in literature bridging these concepts, the purpose of this research project is to examine how critique is discursively constructed between actors in a third-year design studio. The next section, therefore, reviews literature relating to the concept of discourse and how it is situated.

Part 2: Literature Review on Situated Nature of Discourse

The next sections will provide a concise conceptual review of literature to provide a framework for situating the dialogic and situated nature of discourse in this architecture design studio course.

Discourse-in-Use as Situated Within a Context

Discourse-in-use is the driving construct of this research project as a way of tracing teaching and classroom (studio) interactions. Rex and Green (2007) proposed that discourse is "language-in-use" (p. 571) or the "language above the level of a single utterance or sentence" (p. 571). In and through the discursive choices of actors (instructor, students, client, etc.) participating in classroom (studio) interactions, the opportunities for learning afforded, for whom, under what conditions, with what consequences and outcomes become transparent (Green, Dixon, & Zaharlick, 2003). Further, discursive choice in classroom (studio) interactions also reveals the locally situated meanings that are jointly constructed

through everyday practices and processes, constructed moment-by-moment through verbal and non-verbal cues (Gumperz, 1982, 1986). These meanings and discursive choices are also a system of reference, where roles and relationships are being proposed, developed, and (re)negotiated with each other, outsiders (e.g., researcher), and classroom (studio) artifacts. Accordingly, tracing these developing forms of classroom (studio) interactions as forms of classroom life signal ways of knowing, being, and doing. From this perspective, discourse is a resource that provides insights into particular interactions and relationships between actors and events that can be traced over time.

Speaker–listener and self-other relationships. The present research builds on M. M. Bakhtin's work on *Speech Genres and Other Late Essays* (1986) as the theory guiding the present analyses. Bakhtin's work focuses on the many forms of language, as identified as written and verbal *utterances*, which occur wherever human activity takes place. Therefore, these *utterances* have histories that identify what came before and what comes after. While *utterances* take many forms (complex or simplistic), literary (e.g., stylistic, grammatical) and verbal (e.g., words, phrases, and sentences), they build from the individual to create whole *utterances* (p. 60). Bakhtin identified that as language develops over time, *utterances* become more stable and form their own *speech genres*. Accordingly, *speech genres* are found everywhere that human activity and language are found. Each *speech genre*, therefore, imbues its own specific set of utterances that are unique to "one's own circle…family-everyday, sociopolitical, philosophical, and so on…" (p. 65).

Additionally, utterances are spoken-into-being through the ongoing negotiated shift between the *speaker* and *listener*, that is speaker to listener and vice-versa, listener to speaker (Bakhtin, 1986). Bakhtin wrote:

> Any understanding of live speech, a live utterance, is inherently responsive, although the degree of this activity varies extremely. Any understanding is imbued with response and necessarily elicits it in one form or another: the listener becomes the speaker. (p. 68)

Thus, a listener is listening with a purpose to respond as a speaker and the speaker is responding with the purpose to listen. Self and other become important in conceptualizing *speech genres*, as what is spoken or conveyed is done so "out of consideration for what we wish to express…that is, of a particular speech genre, guides us in the process of our speaking" (p. 81).

Building on Bakhtin's (1986) theory behind *speech genres*, the implicated speaker-listener (speaker as listener and listener as speaker relationships) and the social construction between individuals, the research conducted as a part of this dissertation sought to make visible how critique is its own form of a *speech genre* containing related utterances unto itself, but also how critique is related to other levels of scale, such as the design studio, the institution and department within which the design studio is located, and the profession of architecture. This suggests that the process of designing, see Figure 2.1 below, in architecture is not just for oneself, but is often done in thinking of the other, which may include the institutional/department and the profession. In designing and receiving critique, a student (architect-in-training) foregrounds certain interactions (e.g., personal, professional, institutional/department) conditional on who they talk to, when, for what purposes, and under what conditions.

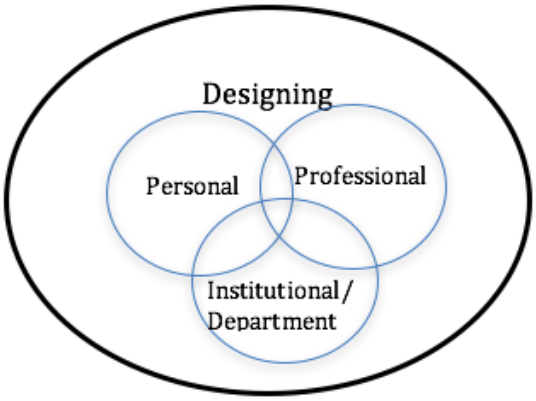

Figure 2.1. Designing as personal, professional, and institutional/departmental relationships.

Discourse in-use. Complementing and building on the work of Bakhtin (1986), Bloome and Clark (2006) discussed that language and practices, discourse-in-use, are taken-up and applied as situated within the particular community of practice (institutional, professional, discipline, etc.) they participate within, and language, in the form of words or utterances, have histories within time space. In addition, words or utterances have relationships to each other, or are intertexually linked (Bloome & Egan Robertson, 1993), which are mediated through the interactions of people. Instructors and students engage in a variety of discourses that must be traced over time and space to make meaning, as what is spoken carries histories and social practices of that studio, department, institution, and/or profession. Interactional ethnography, as an epistemology, allows one to trace over time the patterns, processes, and practices of a cultural group, moving from the whole to individual parts of "life inscribed in the words and actions of members of a social group" (Green, Dixon, & Zaharlick, 2003, p. 215).

Discourse-in-use is also discussed within the architectural field as being imperative to the design process in an architectural design studio. Attoe and Mugerauer's (1991) investigation of excellent studio teaching revealed the importance of talk and commentary

throughout the design process discussions, lectures, and critiques. Through discourse-in-use, instructors communicate practices of the discipline and the work conducted in the design studio (Attoe & Mugerauer, 1991). Institutional talk, as argued by Melles (2008), is a form of a particular *speech genre* or social context. Taken from this perspective, institutional talk is different from everyday talk and brings with it particular knowing, being, and doing of that discipline or classroom (studio). Critique, as discussed previously, is a context-specific process and practice within architectural education, and therefore, provides an anchor to trace across time and space, activities, and events to show patterns of opportunities for teaching and learning that are made available.

Languaculture. Building on the idea that institutional talk brings together not only talk, but culturally defined practices and processes requires one not only to investigate the language in isolation, but as an interrelated phenomenon. Agar (2006) spoke to this phenomenon through the concept of languaculture. From Agar's perspective, a researcher/outsider entering a new environment (i.e., a new major, department, profession) is trying to understand not just the culture, but also the language, thus what he termed *languaculture*, as one cannot be artificially separated from another. Agar described this relationship: "Using a language involves all manner of background knowledge and local information in addition to grammar and vocabulary" (p. 1). Agar (2006) identified this process as a researcher/outsider's languaculture, LC1, and the languaculture in which he or she enters (the person/group/etc. being studied) as LC2. *Rich points* make visible differences between languacultures, allowing the researcher to trace contrastively a phenomenon/a of study.

Classrooms and discourse. Classrooms, therefore, are one site where languacultures are present and can be traced. Green, Kantor, and Rogers (1991) defined classrooms as "social systems," (p. 337) where daily life occurs and where language or discourse is found in sites, events, and roles and relationships. Within the room where the class (or course) takes place are specific expectations, roles and relationships, rights, and obligations. Over time through interactions, participants begin to form ways of interacting that become patterned, normalized, and expected. Thus, culture is constructed as an overtime process in and through these practices, interactions, and language(s).

Discourse, therefore, becomes a central practice and process that cuts across co-existing systems (classrooms or courses) to represent what participants bring to the course, what is constructed by participants in moment-by-moment interactions, and the related outcomes (what is learned). Discourse, whether spoken, written, visual, or through representation, is therefore situationally constructed (Hicks, 1995; Kelly, 2014). Lin (1993) identified *language in and of the classroom* as two separate, but imperative research foci relating to classroom and language. *Language in the classroom* focuses on the range of what students bring in the way of resources, experiences, and language. In contrast, language of the classroom supports the notion of the social construction of discourse in and through a series of actions, events, cycles, etc. in a classroom or a course.

Building on these theoretical perspectives regarding the nature of classroom processes and practices, classroom discourse or talk can be viewed as multidimensional, occurring simultaneously across multiple levels of time(s) and space(s). Through participation in "locally situated, everyday social interactions" (Hicks, 1995, p. 10) as provided by instructors or teachers, students are given an opportunity to learn, define, and

participate in academic or disciplinary processes and practices as a person practicing in that discipline (Brilliant-Mills, 1993). Kelly (2014) identified how, as students engage in these disciplinary processes and practices, they gain greater proficiency in their discursive abilities.

Conclusion

As discussed throughout this literature review, there is no "one" curriculum or definition of an architectural design studio. As such, I elected to investigate how the processes and practices were enacted within one design studio by analyzing multiple layers of course records from course artifacts, to video records, to literature. For instance, ethnographic interview-conversations (Skukauskaite, 2006) conducted between the instructor of a third-year design studio and myself, as presented in Chapter V, provide insights into how the instructor defined key processes and practices in a design studio within the discipline of architecture and within his own design studio in contrast to other "studios." Thus, each record collected and analyzed in this study, when taken together, provided a comprehensive view of critique as defined, enacted, and socially constructed in this design studio. Drawing heavily on the ethnographic perspective and interdependence of theory-methods (Birdwhistell, 1977), Chapter III builds on theories informing the methods to explore how and in what ways critique, as a disciplinary practice and process, was discursively constructed among actors (instructor, students, client, etc.) in and through the opportunities for learning afforded in this third-year design studio.

Chapter III: Methods and Methodologies

This chapter provides an overview of the methodology used as a part of data collection and analysis in the present study. The organization of the data collection and analysis procedures are presented in two parts. Part 1 discusses the research site and participant selection: I provide contextual information about the research site and the participants, actors, and artifacts involved at the research site. Part 2 provides an overview of the research design, including record collection and analyzing and producing data.

Part 1: Context of Site and Participants

This study was set in a third-year architectural design studio at Coastal University in California. Design studio courses were required in all five years of the five-year architecture major. As an overtime ethnography, the study focused on records collected during fall quarter of the 2011-12 academic year, records were also collected during spring quarter 2012. Throughout each quarter, a range of different actors engaged in the design studio, including students, the instructor, and clients. These actors interacted in multiple classroom sites (e.g., analog and digital studios, departmental support shop, and online learning management site Blackboard). In the discussion that follows, detail how I defined an actor discuss major actors involved in this course (e.g., one sustaining instructor, Professor F, eighteen students in the fall 2011 course; clients; and university classroom sites).

Framing the Course

In this section, I frame the approach that I constructed to identify the multiple layers of actors engaging in this course of study. Drawing on Spradley's (1980) argument that actors are part of every social situation along with activities and a place, rather than define

each actor separately from the place and activities, I explored the actors within and across different levels of activity. Although actors from Spradley's prospective are people, I built upon this initial definition to include inanimate objects and artifacts as actors given that they were selected and/or created by the instructor as more than objects to use; they were purposeful resources and objects designed to support particular forms of interaction. Viewed in this way, the *course resources and objects were potential actors as well as the course design elements themselves*. Viewing the course as a construction by multiple actors required me to step back from my expectations about what a course is, and to examine who designed the course, in what ways, and for what purpose(s). Thus, the developing course became an actor as a developing texted constructed through the interactions among various actors, artifacts, and objects that were engaged with and/or developed overtime.

Having framed the course as constituted by a range of actors, I now turn to a discussion and (re)presentation of the participants, i.e., the range of actors, who, together, co-constructed and shaped the local processes and practices of the architecture design studio in and across different times and spaces. However, before identifying the actors who participated in this third-year architecture design studio, I present arguments about how each was identified conceptually. To identify the different actors, I first explored the social situations that constituted the architecture design studio by drawing on Spradley's (1980) dimensions that constitute an anthropologically-bound ethnographic perspective: space, object, act, activity, event, time, actor, goal, and feeling. The intersections of these dimensions were used to guide my analysis of who the actors were, in what spaces, participating in what activities, for what purposes, and in what ways and with what outcomes. This logic enabled me to explore actors and engage in different levels of

observations needed to uncover the actors, who were contributing to, and participating in this third-year architecture design studio course.

As stated previously, this process require that I step back from the moments of observation in the class in order to construct, what Spradley called a "grand tour" of the full range of design studio activities and how and where they were presented to students in class as well as on websites and in the course materials. The grand tour provided the broadest picture of an event using features such as: *space, actor, activity, object, and act* to guide my process of being a participant-observer. This process led to the selection of focused periods of time and types of observations, what Spradley referred to as a series of "*mini*" or *particular tours,* to construct richer, more refined descriptions of what was being jointly constructed by different configurations of actors across times and activities. Mini tours, therefore, focus in on smaller bits of experiences drawing on information already gathered that is more detailed. Building on Spradley's framework that a social situation involves numerous dimensions, the following sections uncover a series of layers of analysis necessary to situate the third-year architecture design studio course in the Coastal University program and then to identify how and in what ways, the instructor created relationships of space, time, actor(s), and activities in this architectural design studio with the students and other actors.

Situating the course in the architecture education program. The grand tour of this course began with an exploration of the third-year architecture design studio course within the overall program in architecture education at Coastal University. Analysis of the university and department website showed that this course was one of four design studio courses within the architecture major at Coastal University. Design studio courses were

requirements during the first four years of the five-year architecture major. Table 3.1 provides a graphic (re)presentation of these courses, their focus and unit requirements as identified through analysis of web-based documentation. Column 1 represents the year in the quarter, column 2 discusses the quarter of the course, column 3 is the course number, column 4 is the course description, and, lastly, column 5 are the related units assigned for the course.

Table 3.1

Studio Courses Within the Architecture Department at Coastal University for 2011-13 Curriculum

Year in Program	Quarter	Course Title	Description	Units Assigned
1	Fall	Arch 131 (Design and Visual Communication)	An introduction to the issues, concepts, processes and skills pertaining to two- and three-dimensional design and the freehand, constructed and digital representation and visual communication of ideas, objects and environments. Purchase of a laptop computer, software and peripherals is highly recommended to participate in this course. 4 laboratories. Concurrent: EDES 101.	4
1	Fall, Winter, Spring	Arch 101 (Theory)	Exploration of the major paradigms which have guided the development of architectural education and the profession. Survey of the roles of the architects and an introduction to curricula and programs designed to prepare students for careers in architecture.	1 [CR/NC]

Year in Program	Quarter	Course Title	Description	Units Assigned
1	Winter	Arch 132 (Design and Visual Communication)	Continuation of ARCH 131 plus the issues, concepts, processes and skills pertaining to color theory and the design and visual communication of architectural space. Purchase of a laptop computer, software and peripherals is highly recommended to participate in this course. 4 laboratories. Prerequisite: ARCH 131.	4
1	Spring	Arch 133 (Design and Visual Communication)	Continuation of ARCH 131 and ARCH 132 plus the issues, concepts, processes and skills pertaining to the analysis and design of architectural form, space and organizations. Purchase of a laptop computer, software and peripherals is highly recommended to participate in this course. 4 laboratories. Prerequisite: ARCH 132.	4
2	Fall	Arch 251 (Architecture Design)	Continuation of ARCH 123 or ARCH 133 in terms of materiality and the theories, concepts, processes and skills pertaining to the analysis and design of architectural form, space and organizations to communicate intended concepts and meanings. 5 laboratories. Prerequisite: ARCH 123 or ARCH 133; corequisite: ARCH 241.	5
2	Fall	Arch 241 (Architecture Practice)	The language, principles and materials of construction with an emphasis on the origin, history, and application of traditional and emergent materials. 2 lectures, 2 activities. Prerequisite: ARCH 123 or ARCH 133. Corequisite: ARCH 251	4

Year in Program	Quarter	Course Title	Description	Units Assigned
2	Winter	Arch 252 (Architecture Design)	Continuation of ARCH 251 plus the theories, concepts, processes and skills pertaining to light, construction and function as determinants that shape the built environment and support the communication of intended concepts and meanings. 5 laboratories. Prerequisite: ARCH 251, ARCH 241; corequisite: ARCH 242.	5
2	Winter	Arch 242 (Architecture Practice)	A continuation of ARCH 241 with an emphasis on the fundamental aspects of construction systems and the basics of construction documentation. 2 lectures, 2 activities. Prerequisite: ARCH 241. Corequisite: ARCH 252.	4
2	Spring	Arch 253 (Architecture Design)	Continuation of ARCH 251 and ARCH 252 plus the theories, concepts, processes and skills pertaining to context, structure and climate as determinants that shape the built environment and support the communication of intended concepts and meanings. 5 laboratories. Prerequisite: ARCH 252 and ARCH 242; corequisite: ARCH 207.	5
2	Spring	Arch 207 (Environmental Control Systems)	Theory and application of climate, energy use and comfort as determinants of architectural form in small-scale buildings. Emphasis on architectural methods of ventilating, cooling, heating, and lighting for envelope-load dominated buildings. 2 lectures, 2 activities. Prerequisite: ARCH 242; concurrent: ARCH 253.	4

Year in Program	Quarter	Course Title	Description	Units Assigned
3	Fall	Arch 351 (Architecture Design)	Continuation of ARCH 253. Development and exploration of architectural theories, building systems, and design processes involved in creating architecture on a sensitive site; implications of the site as building form generator. 5 laboratories. Prerequisite: ARCE 212, ARCH 253, ARCH 207 and PHYS 122 or PHYS 132, or consent of department head. Corequisite: ARCH 341.	5
3	Fall	Arch 341 (Architecture Practice)	Concepts, methods and processes pertain to the detailing and construction of masonry, steel, concrete and combination structures. 2 lectures, 2 activities s. Prerequisite: ARCH 242 and ARCH 253. Corequisite: ARCH 351.	4
3	Winter	Arch 352 (Architecture Design)	Continuation of ARCH 351. Development and exploration of architectural theories, building systems, and design processes involved in creating sustainable architecture with an emphasis on ecological environmental 5 laboratories. Prerequisite: ARCH 351, ARCH 341. Corequisite: ARCH 307.	5
3	Winter	Arch 307 (ECS)	Theory and application of climate, energy use and comfort as determinants of architectural form in large -scale buildings. Emphasis on architectural and mechanical methods of ventilating, cooling, heating, lighting, acoustics, and water and waste systems for internal-load dominated buildings. 2 lectures, 2 activities. Prerequisite: ARCH 207. Concurrent: ARCH 352.	4

Year in Program	Quarter	Course Title	Description	Units Assigned
3	Spring	Arch 353 (Architecture Design)	Continuation of ARCH 352. Development and exploration of architectural theories, building systems, and design processes involved in creating appropriate architecture with emphasis on socio-cultural and/life safety. 5 laboratories. Prerequisite: ARCH 352, ARCH 307. Corequisite: ARCH 342.	5
3	Spring	Arch 342 (Architecture Design)	Continuation of ARCH 341 plus the concepts, methods, and processes pertaining to the preparation of outline specifications, production of design development drawings, life safety, systems integration and estimating. 2 lectures, 2 activities. Prerequisite: ARCH 341. Corequisite: ARCH 353.	4
4	Fall	Arch 451 (Architecture Design)	Problems of increasing architectural complexity involving the comprehensive integration of architectural theory, design processes, and building systems with emphasis placed on multifunction singular buildings. 5 laboratories. Prerequisite: ARCE 316, ARCH 353, ARCH 342.	5
4	Fall	Arch 443 (Professional Practice) [optional for Fourth Year]	A critical analysis of the roles and responsibilities of the architect in providing comprehensive services to the client from project acquisition and inception to project delivery and closeout and the process and requirements for internship development and attaining registration. 2 lectures, 2 activities. Prerequisite: ARCH 342, ARCH 353.	4

Year in Program	Quarter	Course Title	Description	Units Assigned
4	Winter	Arch 452 (Architecture Design)	Problems of increasing architectural complexity involving the comprehensive integration of architectural theory, design processes, and building systems with emphasis placed on multi-building, multifunctional projects. 5 laboratories. Prerequisite: ARCE 316, ARCH 353, ARCH 342.	5
4	Spring	Arch 453 (Architecture Design)	Problems of increasing architectural complexity involving the comprehensive integration of architectural theory, design processes, and building systems with emphasis placed on multifunctional projects in an urban context. Total credit limited to 10 units and may substitute for ARCH 451 or ARCH 452. 5 laboratories. Prerequisite: ARCE 316, ARCH 353, ARCH 342.	5
5	Fall	Arch 443 (Architecture Practice) [optional for Fourth Year]	A critical analysis of the roles and responsibilities of the architect in providing comprehensive services to the client from project acquisition and inception to project delivery and closeout and the process and requirements for internship development and attaining registration. 2 lectures, 2 activities. Prerequisite: ARCH 342, ARCH 353.	4
5	Fall, Winter, Spring	Arch 481 (Senior Architecture Design Project)	Comprehensive building design and research project in an architectural concentration area. Demonstration of professional competency in integration of architectural theory, principles and practice with creative, organizational and technical abilities in architectural programming, design and design research. Total credit limited to 15 units. 5 laboratories. Prerequisite: ARCH 451, ARCH 452 and ARCH 453.	5

Note. Information contained in chart is from Coastal University's website for 2011-13 catalog.

As indicated above, the first-year design studios were four units each. As discussed in column 4, for first year of the program, the focus of the design studios were largely to provide an introduction to: "the issues, concepts, processes and skills pertaining to two- and three-dimensional design and the freehand, constructed and digital representation and visual communication of ideas, objects and environments".

Design courses for years two through four were five-units, with each built on the previous years' concepts and processes relating to "architectural theory, design processes, and building systems" as part of the curriculum to become an architect. Specifically, fall quarter of the year three focuses on: "continuation of ARCH 253. Development and exploration of architectural theories, building systems, and design processes involved in creating architecture on a sensitive site; implications of the site as building form generator. Five laboratories". In addition, prerequisites for this third-year, fall quarter design studio required students' completion of the previous quarter's design studio (ARCH 253) and Environmental Control Systems (ECS) course (ESC 207) or equivalent, two physics course (PHYS 122 and 132) or equivalent, and an architecture engineering course focused on the second quarter of structures (ARCHE 212).

During the second and third-years, design studio courses were paired with a practice course and were corequisite courses to each other. All practice courses were four-units courses and were taken twice during the academic year. Similar to the design courses, practice courses were to build onto each other focusing broadly on language, principles, and materials of construction. Specifically, fall quarter of year three focused on: "Continuation of ARCH 242 plus the concepts, methods and processes and building systems that pertaining to the detailing and construction of large-scale masonry, steel, concrete and combination

structures. 2 lectures, 2 activities discussions". During the third-quarter, students enrolled in a four-unit environmental controls systems (ESC) course replaced the practice studio, for years two and three. During year two, the ESC course took place spring quarter, and during year three, the course took place during winter quarter.

As corequisite courses for fall quarter for year three of this program, together the design and practice course provided a more in-depth approach to make visible the theories relating to architecture, building systems, and processes and practices of architecture that were required in preparing students to become an architect. The two main locations for work were the analog design studio and the digital design studio. For this particular course, students were given 24/7 access each of the studios; however, the "official", or university defined design studio period took place three times a week, Monday, Wednesday, and Friday, from approximately 1:10-6pm.

Analog design studio. For this particular design studio course at Coastal University, the analog design studio was where students spent the majority of their time devoted to designing, and engaging in critique and group interactions. Groups are noted as specific colors in the figure below.

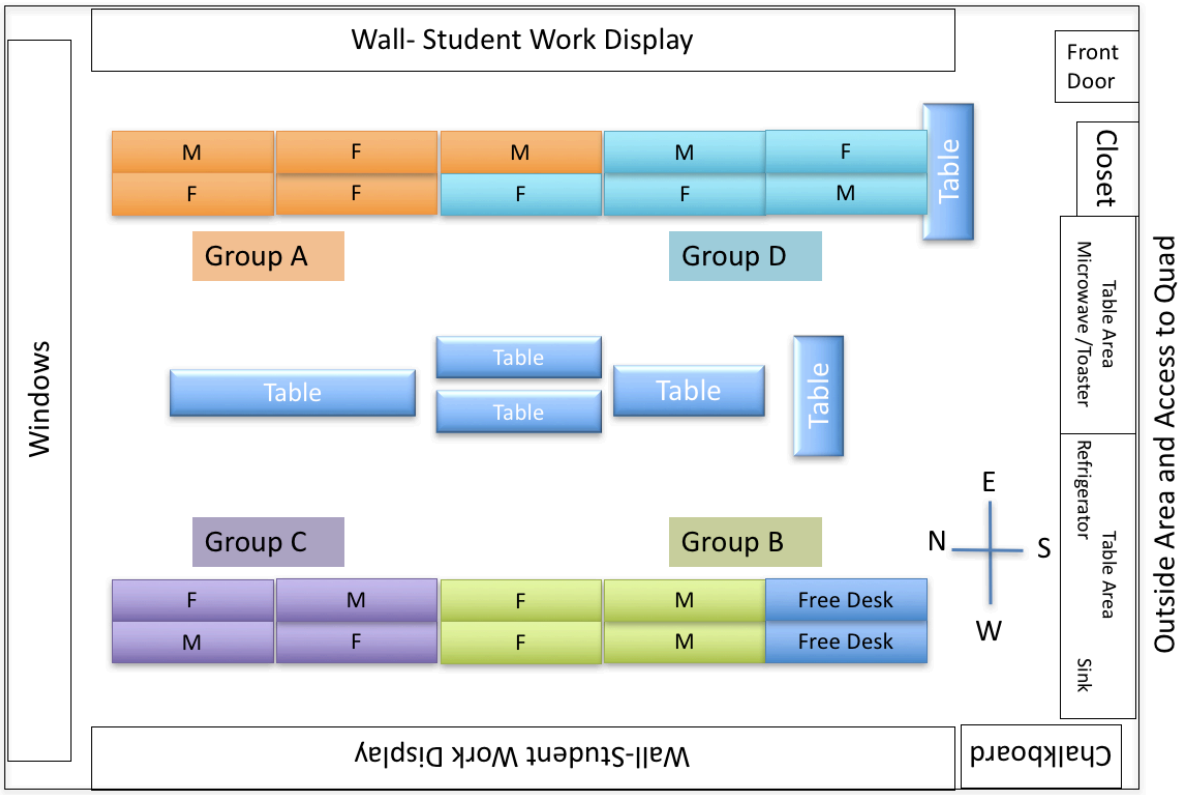

Figure 3.1. Aerial schematic of the analog design studio. Colors represent each group and their related orientation in the studio.

As indicated in Figure 3.1, the setup of the studio was purposeful: Group work served as the foundation of the work, and as such, the individual student worktables were placed back-to-back so students sat face-to-face in their individual groups. Two working groups were located on each side of the studio during the record collections during fall 2011. As discussed in greater detail in Chapter V, groups were created the first day of the studio through a series of questions presented by the professor related to students' use of, experience with, and knowledge related to architecture design software. Thus, student groups were formulated to provide a cross-section of students with digital experience(s).

To return to the physical dimensions of analog digital studio the room set-up, Figure 3. 1, what was visible was through my over-time participant-observations across the quarter

showed that the set of middle tables, in the center of the studio, were designed to support many functions. It served as a place where students stored different iterations of models as well as a place where students tended to congregate during large studio discussions guided by the instructor. Given that this was a 24/7-access studio, the studio also included a small sink, a dorm style refrigerator, a microwave, and a toaster oven, all of which anchored the south side of the room (See Figure 3.1). On the north side of the room was a large window that extended almost the full length of the wall and overlooked a courtyard. The room shared one adjacent wall with another design studio on the west side of the room, while the east side of the studio faced a walkway that cut between the architecture building and another adjacent building.

As indicated in Figure 3.1, the west and east sides of the design studio, the instructor designated wall space for student work to be posted throughout the quarter. Professor F during his June 13, 2011 interview-conversation, defined the structuring as reflective of his philosophy about teaching and learning was reflected in his use of the walls and desks to visually display the designs created by students. Also expressed by Professor F during the same interview-conversation was the importance of a balanced studio between different forms of work. Specifically, students were required to make visible their work, through the use of different formats, such as displaying work on walls, crafting models, and/or through presentations of their work. In creating these opportunities, Professor F enabled students to contrast their design process with that of their peers, thus making transparent where students were in their designing process and the range of ways that the process could be realized. One expected feature that was missing was that of an instructor desk. The instructor did not have

a formal desk or area within the studio. He spent the majority of the time moving in the studio among groups, and individuals, and providing feedback to students.

Digital design studio. The instructor of this third-year analog studio also directed a collaborative digital design studio. Having both an analog and digital design studio was unique to this particular site and course of study. Professor F was the only instructor across the Architecture Department program to have both studios. Figure 3.2 is an aerial schematic representing this digital design studio.

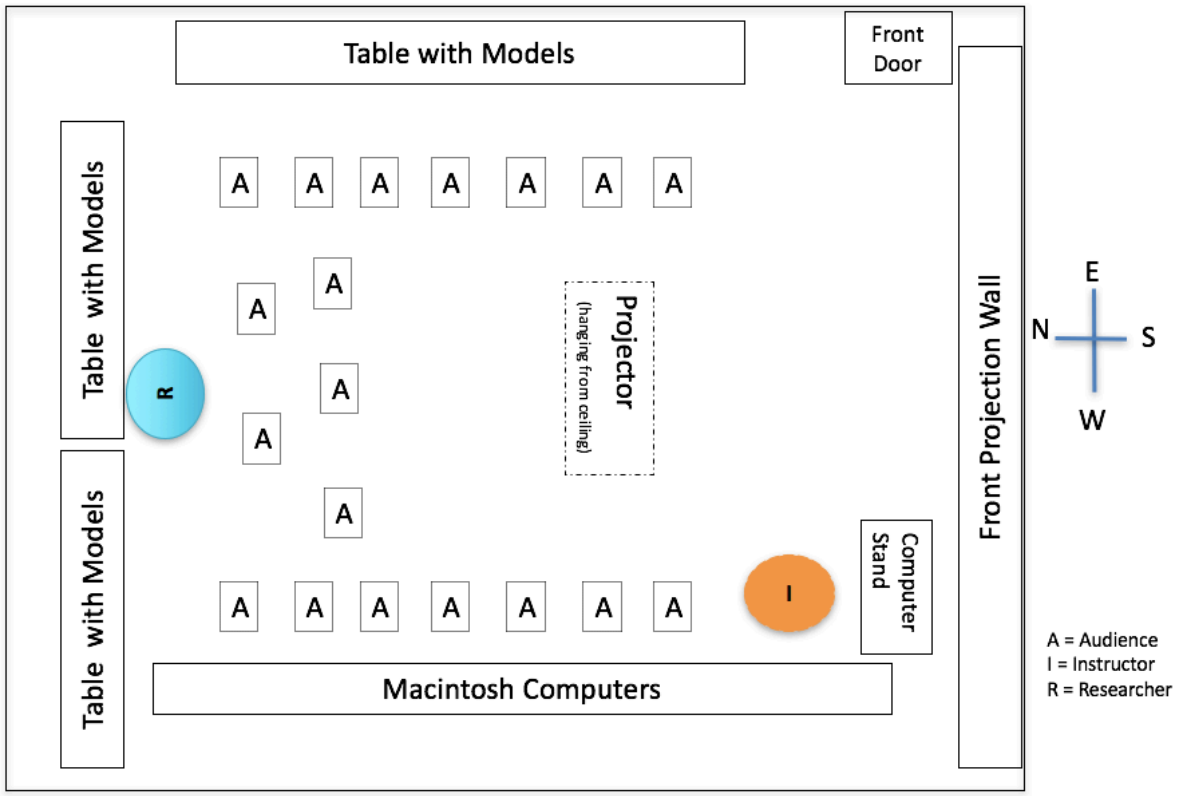

Figure 3.2. Aerial schematic of the digital design studio.

While presentations took place across spaces, the majority of formal presentations (e.g., the instructor's PowerPoint, meeting with clients, and student work presentations) occurred in the digital design studio space above. As indicated in Figure 3.2, positioned in

the center of the room, an overhead projector was used to project information onto the painted wall at the front of the room. During student presentation (a) students stood at the front wall facing the audience, and (b) the instructor sat in the first seat closest to his computer located on the computer stand.

In this course, the digital studio served many purposes, including another space for working on collaborative projects and working in a collaborative space. The digital studio was also a site for numerous lectures on basic elements of design (e.g., integrating design, critique) and to work with client(s). The digital studio consisted of 6 iMac computers. A few chairs provided limited seating for audiences comprised mainly of design studio students, and on other occasions, visitors, clients, and faculty. Also present on exterior walls, tables, and shelves located around the room were models and posters from past projects.

Online learning management system (LMS). During the data collection period, another site for interactions and collaborations between Professor F and the students was the online learning management system Blackboard. The online LMS housed the syllabus, course assignments, required and optional reading materials, course announcements, and instructions for events and meetings, as well as discussion boards. As such, students used the LMS regularly throughout the quarter.

Resources for architecture students. Architecture students were provided a number of potential resources in the Architecture Department. However, students were also expected to also provide a number of their own resources in the analog design studio. Students were required to provide their own computers, and digital and electronic equipment while in the analog studio. Professor F outlined these requirements in the agreement that students were required to sign to use the digital studio. In addition, students were asked to provide detailed

information about the type of hardware they used as a part of the course: Computer, scanner, and printer models and the type of external hard drive. This information was used to determine what students brought to the studio, which impacted what they could potentially accomplish in the course, and in what ways. Professors F also noted the purpose of the digital studio was as a supplement to their own resources. Day-to-day projects supplies were to be provided by the design student. These items included, but were not limited to: construction materials (e.g., balsa wood, corrugated containerboard, paint, etc.); prints (e.g., posters, handouts, etc.); and tools (e.g., drafting boards). Students were required to attend in-state and out-of-state fieldtrips, as a part of their learning experience in this course.

Identifying Participants

The instructor. Professor F was the instructor of record for the design studio examined as a part of this study. He had more than 15 years of experience working at the university level and in the field as an architect at architecture firms. At Coastal University, Professor F was one of the two instructors that provided a consecutive two-quarter design studio option during winter and spring quarters. Beyond third-year design, Professor F also worked with numerous students on their independent projects, co-taught an interdisciplinary fourth-year design studio (architecture, architectural engineering and construction management), and was the director of DDS (Digital Design Studio). As discussed later in this chapter, one of the reasons that Professor F was chosen for this study was because of his breadth of knowledge and previous experience teaching design studio courses. A detailed intellectual history identifying Professor F's experiences is presented in Chapter IV.

The students. The students who entered this course comprised a diverse set of students in terms of gender, educational preparation, and their vicinity to Coastal University. Specifically, Professor F engaged with 18 students: 10 were female and 8 were male. Transfer students comprised five of the 18 students in this design studio. As discussed previously in this chapter, students entered this course as continuing students who began at Coastal University as a freshman or as a transfer student, and who were admitted by meeting the admission requirements.

Gaining Entry

The present study was initiated by a conversation between one of my co-advisors and myself regarding public display of critique in current popular settings, such as recent television competitions for singing and dancing (e.g., *American Idol*, *The Voice*, *So You Think You Can Dance*). Our initial discussion led to questions of how these forms of presentation and interaction can be traced to disciplinary forms of critique, such as those found in architecture. Below, I describe how I negotiated numerous entries at Coastal University and the architecture program leading to my current research on how public critique was socially constructed.

My disciplinary background is in an agriculture field of study, thus I was familiar with the institutional values and approaches to learning at Coastal University; however, I was unfamiliar with the disciplinary requirements, and processes and practices for this particular architecture design studio and department. Re-entering the institutional context as an insider to the institutional culture, but an outsider to the department and disciplinary culture, provided a unique perspective. To negotiate these different experiences required me to step back from ethnocentrism (Heath, 1982; Green, Skukauskaite & Baker, 2012) and to

take a reflexive stance to understand what was being made available from the instructor's and students' perspectives in this particular architecture design studio, department, and institutional site. To assist me in the negotiation, I was able to draw on my prior relationship with Professor F, who then provided me with the knowledge necessary for understanding the disciplinary content that was foreign to me as well as to others entering this architectural design studio for the first time.

My initial conversation with Professor F was negotiated via a Coastal University emeritus staff member. Through this contact, I was able to schedule an in-person meeting with Professor F to discuss my ideas and interests in the topic of public critique. The in-person meeting took place on April 7, 2011 in the office of Professor F at Coastal University. The initial idea proposed to Professor F was that I was interested in public critique and what goes on in an architecture studio. As a part of the project discussion, I emphasized that this project would be a joint construction in the study of his course, where he also had a vested say in the research process. By framing the project in this manner, I hoped to show that the proposed project could be a co-constructed study with the purpose of making the processes and practices of the discipline transparent. Furthermore, Professor F would have a say in the design and the approaches used in researching how everyday life in his course was co-constructed. The initial conversation with Professor F identified two proposed course options that I was invited to potentially observe: (1) an architecture design studio course taught Spring 2011 (a continuation course from Winter 2011), or (2) a fourth-year interdisciplinary studio between architecture and architectural engineering. In speaking further with Professor F, the design studio course was agreed upon as the best course to fully engage in and learn about the processes and practices relating to critique. As a part of this

early entry, Professor F suggested which course days would be the best to visit and engage in the events and activities relating to critique.

The Spring 2011 entry was an opportunity for me to begin to understand this new disciplinary setting and knowledge. Further, the initial entry into Professor F's course was a resource that assisted me in developing the design of the study, including anticipating the cycles of activities, the key opportunities available throughout the quarter relating to critique, and how to position the camera in different settings to capture as much as possible the activities, events, actors, and artifacts. Thus, the Spring 2011 course prepared me for my subsequent entry Fall 2011 and for continued conversations in-person and via email with Professor F.

Professor F served as a point of triangulation and reference, as I navigated through the analysis process. Most notably, Professor F assisted me in understanding what could not be understood as a non-native to his course, as well as the discipline of architecture. For instance, Professor F assisted me in uncovering the following: (1) how and why he was structuring the course practices and processes in particular ways; (2) common theories and traditions of architecture practices and processes guiding his design and instructional processes; and, (3) course, departmental, and university requirements.

Part 2: Design of the Study

The research design of this study was based on an interactional ethnographic approach to investigating the everyday discursive co-construction of practices and processes (Green, Dixon, & Zaharlick, 2003) in this particular third-year architecture design studio. Given this perspective, and as an outsider to the discipline of study, the questions guiding the data collection and analysis sought to make visible the many layers of contextual and

cultural knowledge that an outsider would be required to understand how the instructor engaged in a recursive and iterative process of designing the course for students to learn the disciplinary processes and practices, particularly critique, involved in becoming an architect at Coastal University.

Because of my limited knowledge of the disciplinary and cultural processes of this design studio, I entered the classroom with an expectation of creating a grounded account (Green, Skukauskaite & Baker, 2012) through the collection and analysis of records of what it means to be an actor in this architecture design studio and what opportunities were being made available in and through daily activities, resources and artifacts, and actor(s). The exploration of the different layers from institutional and department founding to instructor and student background and histories was imperative, as the analyses in Chapters IV and V will show, to understanding the situated nature of this particular course. Thus, the initial guiding questions for the early data collection process were fairly general in nature:

- How was life structured in this design studio course?
- How did actor(s) use time and space within this design studio course?
- What kinds of activities did actor(s) engage in over time in the course?
    - What kinds of specific activities related to critique were accomplished over time in the course?

To guide my early data collection, I entered the course as a participant-observer to investigate the overtime co-construction accomplished through events and activities (Spradley, 1980). As with any ethnographic study, the initial set of guiding questions evolved and new questions emerged. For instance, during the process of data collection and analysis, I found it necessary to understand the historical background of Coastal University,

the Architecture Department, Professor F, and the students, as these individual pieces impacted what was being made available. Chapter IV more thoroughly explores the historical roots of these different dimensions.

To formulate a grounded account of what it meant to be a member in this particular design studio course, I engaged as an ethnographer over an extended period of time. Pre-fieldwork began Winter quarter 2011, while Spring quarter 2011 fieldwork broadly introduced the concepts, practices, and processes through selective viewings of the design studio course. In contrast, Fall Quarter 2011 provided the most comprehensive view of the course from the initial session to finals week. To provide further context, in the next section, I discuss the ethnographic records collected overtime.

Ethnographic Records Collection

Figure 3.3 below provides an overtime view of ethnographic records collection. The first level analysis at the prior histories of the course, and how the course was embedded within an institution and a department that was created to serve a particular purpose within the curriculum cycle. While the history of this particular course could not be traced via public access, as an official course offering, it was approved by the Coastal University's Academic Senate.

Narrowing to the particular design studio records collection, Figure 3.3, represents the overall context of when and where ethnographic fieldnotes, video records, course artifacts, and interviews were situated in time and through activities. Moving from left to right, the first set of cells identify the life histories of the course as embedded in previous histories to the records collection during Spring 2011 and Fall 2011. Pre-field work during March-April 2011 constituted the initial exploring of a research topic. The interest in an

architecture design studio was born out of a discussion between the advisor and researcher to step away from ethnocentrism and explore a less familiar discipline, thus making visible the languacultures, patterns, and norms. As discussed previously, this exploration was grounded in recent interest in public displays of discourse and critique found in popular culture, to identify ways in which public discourse is accomplished in and through a discipline.

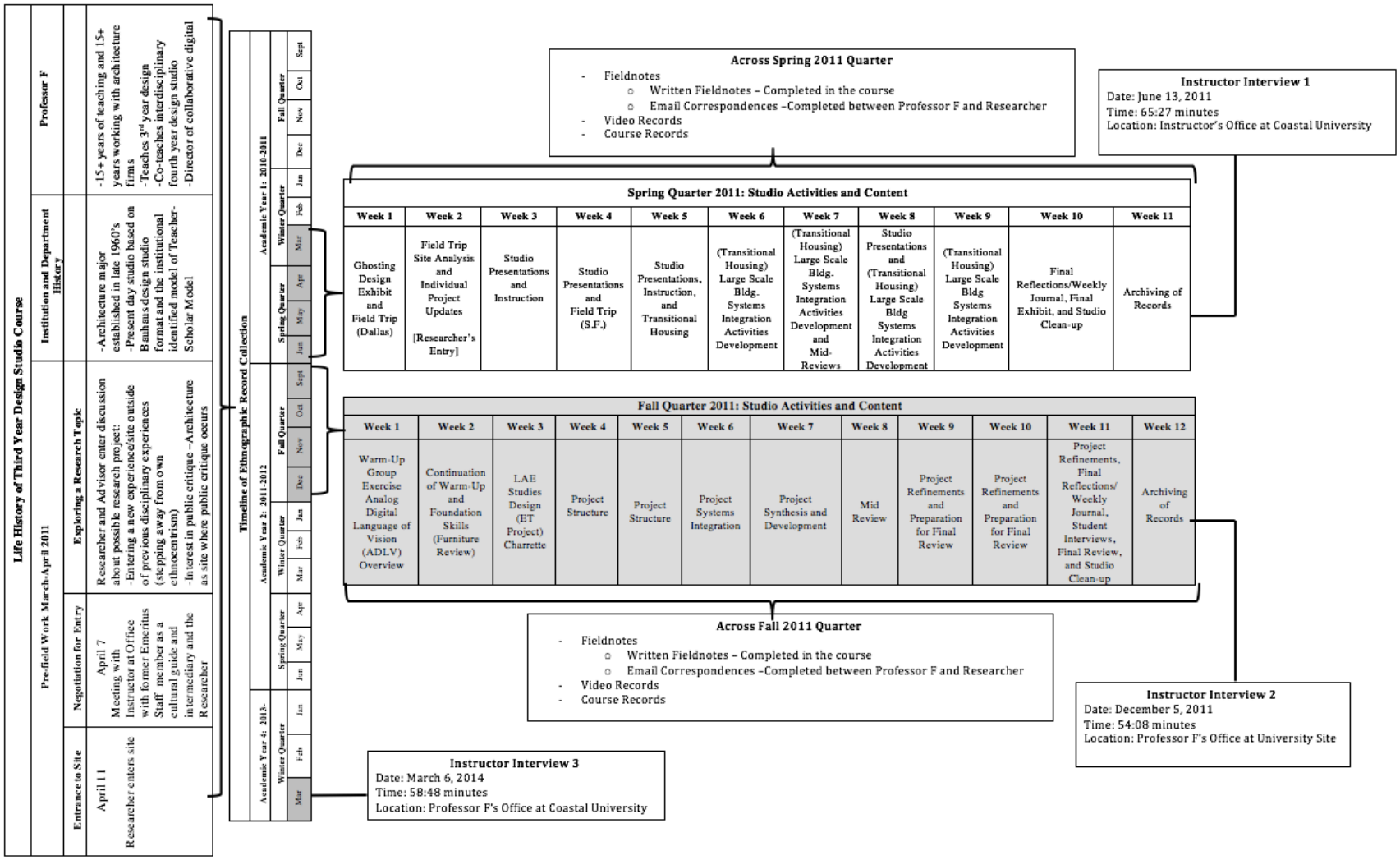

Figure 3.3. Timeline of ethnographic records collection.

The initial conversation with Professor F took place on April 7th with the purpose of meeting to negotiate entry into the design studio. Through negotiation, the instructor agreed to participate in the research of his design studio, which began April 11th, the second week of the course. The course, itself, was embedded, as indicated in Figure 3.3, within institutional and department history, including specific way(s) of teaching and learning. Institutionally, the focus was on a Teacher-Scholar model of engaging students in disciplinary ways of knowing and doing. The Architecture Department and major were established in the 1950's. At the time of this study, the architecture program used an institutional model of the Teacher-Scholar approach, while also embracing the Bauhaus design school education. As noted earlier, and described in more detail in Chapter IV, Professor F also came to the studio with more than 15 years of teaching experience and 15 years of professional experience working in architectural firms.

As indicated in Figure 3.3, Collection of Records, the next level of analysis identified the timeline of the ethnographic records collection. Records collection took place during two separate academic years. The first set of records were collected during academic year 1: 2010-2011, with the month of March and one day in April identified as pre-field work. The official course records collection began during Spring Quarter 2011: April, May, and June. The spring quarter was a continuation of an ongoing two-quarter (winter and spring) sequenced course; as a result, I entered with prior course histories and understanding of the languacultures already established. The next set of cells identified academic year 2: 2011-2012, which is denoted by the shaded areas for Fall Quarter 2011: September through December. Academic year 2 provided the researcher with another opportunity to see how

languacultures of this design studio were established from day 1 of the course to the final day (archiving of student course records) during finals week.

Moving to the right, the horizontal tables denote the studio activities and content across Spring Quarter 2011 and Fall Quarter 2011, highlighting where written fieldnotes, video records, course materials, and interviews were collected each quarter. As seen in Figure 3.3, written fieldnotes were inscribed across both quarters. Also displayed in this figure are other forms of fieldnotes, in the form of email exchanges that took place from pre-field work through present day. As noted previously, these forms of fieldnotes also served as an important perspective in triangulating among records.

The interviews were related to prior histories (time and space) in an ongoing ethnography. Interviews were informed by participant-observation (including written fieldnotes), while in the field, and the researcher's need for clarification, as an outsider coming into an unfamiliar discipline and studio design course. An initial interview was conducted at the conclusion of Spring quarter after the first quarter of participant-observations. The interview during the fall quarter was informed both by Spring 2011 and Fall 2011 records collection and provided a more complete view of disciplinary knowledge, requirements, and activities of this particular design studio. The purpose of the interview was to gain an emic understanding of events and experiences of the quarter related to: (1) the interdisciplinary nature of the course; (2) the collaborative setup of the course; (3) the syllabus and grading; and, (4) the planning and purpose(s) of the fieldtrip.

The third interview took place Winter 2014, as noted in academic year 3, and was outside of the immediate records collected during Spring and Fall 2011. The third interview was an important supplemental conversation with Professor F after the initial sets of

analyses was completed. The purpose was to make transparent what could not be understood as an outsider to the discipline and this course.

Methods of Records Collection

Four major methods were used to obtain records that I drew on in constructing data: (1) observations in the form of fieldnotes, (2) videotaping of classroom meetings, (3) ethnographic interview-conversations with the instructor, and (4) archiving of course artifacts. Table 3.2 outlines the different types of records collected over the ethnographic study of this architecture design studio. Column one details the type of records collected, while column two identifies the amount of records collected. The next sections provide a description for each method and its relationship to how and in what ways the records were collected.

Table 3.2

Types of Records Collected

Type of Records	Record Amount
Ethnographic Fieldnotes	• Spring 2011: 14 sessions • Fall 2011: 26 sessions • Email Correspondence with Professor F: 100+ correspondences
Video	• Fall 2011: 22 sessions (~64 hours) • Spring 2011: 7 sessions (~11 hours)
Ethnographic Interviews (Audio recorded)	• Instructor: 3 interviews • Students:18 individual interviews (Fall 2011)

Course Materials and Documents	• Spring 2011: Syllabus
	• Fall 2011
	  ○ Syllabus (LMS)
	  ○ Assignments and Weekly Readings (LMS)
	  ○ Discussion Boards Individual Surveys (LMS)
	• Coastal University Departmental and University Websites

Ethnographic fieldnotes. Emerson, Fretz, and Shaw (1995) argued that ethnographic fieldnotes are experiences and observations (e.g., activities, people, interactions) informed and shaped by the perspective and interpretation of the researcher with the purpose of inscribing pieces of "social life and social discourse" (p. 8) that can be traced across classroom events and chains of interconnected activities, i.e., as *cycles of activity* (Green & Meyer, 1991). In addition to video records, which served as a form of fieldnote or record, I also recorded written ethnographic fieldnotes with the purpose of identifying key concepts that could potentially lead to further consideration, including fieldnotes of clarification via conversations in-person and via email with Professor F. I often used the left side of the notebook to notate these key areas for further exploration. Figure 3.4 is an example written fieldnote recorded during Week 2 (9/26/2011).

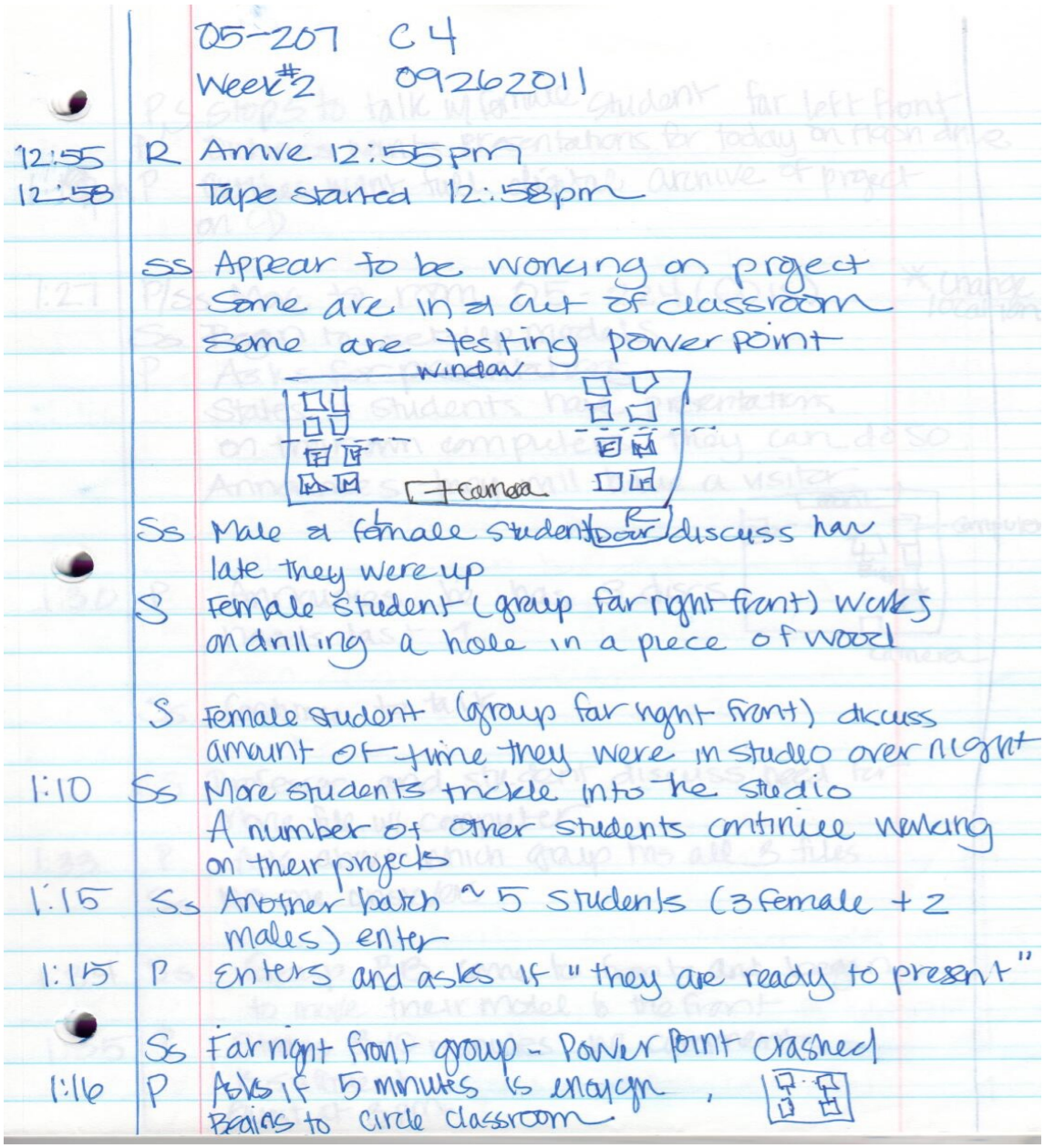

Figure 3.4. Example of fieldnote recorded during Week #2 (9/26/2011). "P" references Professor F and "Ss" references students.

Fieldnotes also provided a method for marking key events and activities for future retrieval. I did so by marking the course dates, projects, and types of records collected which served as an archive that could easily be accessed.

In order to understand the perspective of a student or visitor/client, I often sat to the side or the back of the room, which afforded me with the perspective similar to that of the participants in the course. As discussed earlier in this chapter, in the analog design studio, I was positioned on the south side of the room. In the digital studio, I sat in the back of the room facing the front wall. During reviews outside, I often positioned myself in the same manner as the audience, facing the presenter as they discussed their project. Thus, fieldnotes were imperative to mapping the course setting, such as the physical set-up, and where actors were located in relation to each other.

Another set of fieldnotes was also collected via email conversations with Professor F that I initiated before Spring 2011, and that extends to present day. To date, well over 100 email messages have been exchanged between myself and Professor F, providing detailed information ranging from meeting instructions during the architecture design studio course, to course development and scheduling, to clarifications of processes and practices. Without these supplementary dialogues with Professor F, the multiple layers of information necessary to uncover and interpret how the disciplinary knowledge and ways of knowing would be impossible to trace and understand.

Video records of classroom interactions. Video was chosen as one of the primary sources of records to make visible everyday life as it was constructed in this particular third-year design studio at Coastal University. Video as a "type of fieldnote" (Baker, Green, & Skukauskaite, 2008, p. 9), enabled my (re)entry into the archived record set as needed in order to trace particular chains of activity over time. As noted in Table 3.2, above, of the 26 total course sessions, 22 course sessions were recorded. This process led forward and backward mapping of processes and practices as discursively constructed through space(s),

actor(s), and artifact(s). The positioning of the camera, the type of records collected, and length of record collection were all guided by my conceptual framework, which in turn was guided by my theoretical and methodological perspectives.

The focus on the interactions, practices and processes of critique of this architecture design studio required the camera to be placed in a manner to obtain the widest possible perspective. The nature of this architecture course with the constant changing locals (e.g., digital, analog, and outside) and the numerous participants in the large classroom required a single stationary camera that provided the widest lens at the site of the ongoing event. In the analog studio, there was no traditional "front" of the classroom; therefore, I chose to position the camera along the side of the room, where I could obtain the widest shot of the classroom without obstructing the flow of classroom interactions. In the digital design studio, much of the work was centered on a wall that all students faced, therefore, the camera was placed at the back of the room facing the wall to capture the ongoing interactions as they were (re)constructed. Similar to the analog studio, events did not occur in a traditional classroom manner, therefore, the camera was positioned to be unobtrusive, but with some proximity to hear what was being discussed. Appendix A contain representative still frames of the camera positions across different learning locations related to this third-year design studio.

To accurately trace over time patterns, processes, and development, I decided to record as many as the official course meetings from the initial course until finals week. Therefore, I recorded sessions across the twelve-week quarter during Fall quarter 2011. In total, I recorded greater than sixty hours (26 sessions) across all weeks, with the exception of Week 8, in which no class sections occurred. More fieldnotes were recorded than video

records due to fact that some of the activities taking place in the course periodically did not allow for video recording. These different forms of records were collected with the purpose trying to encompass a wide range of interactions among actors, activities, and artifacts.

Ethnographic interview-conversations. I used ethnographic interview-conversations with the purpose of providing another perspective in triangulating between what was observed as a participant observer in the course, and what could be (re)viewed from video records collected. An ethnographic interview is used to gain direct meaning of participants' everyday lives (Anderson-Levitt, 2006, p. 165) and cultural knowledge (Spradley, 1979). It, therefore, represents a "particular kind of speech event." The type of talk is also distinguished by particular "cues" and constrained by "cultural rules" (e.g., who can talk, when, where, the proxemics between individuals, etc.) (p. 55). The concept of the interview-conversation is guided by Gubrium and Holstein's (2003) discussion of present day interviews taking a postmodern turn, where the roles of interviewer and interviewee are less defined. Therefore, guided by both postmodern and ethnographic interviewing frameworks, conducting interview-conversations enabled me to obtain the "lived experience" (Gubrium & Holstein, 2003, p. 4), and cultural knowledge of Professor F (Spradley, 1979).

To further my understandings of the meanings constructed in the course, I conducted three scheduled ethnographic interview-conversations with Professor F in his campus office as a part of my records collection. The interviews were not structured, but a series of conversations (Spradley, 1979) with the intention of getting at the meanings constructed over time in the design studio course. Thus, the majority of questions were informed by my

novice understanding of being an architecture student, in general, and in particular, to the course under study.

As identified previously, the process of moving among writing participant observer fieldnotes, collecting video records, and posing subsequent interview questions was iterative, recursive, and abductive (Agar, 2006). Questions were largely focused on the processes and practices of design studio, such as critique, and the intellectual history of the instructor. The first audio-recorded formal interview-conversation (65:26 minutes) was conducted in Spring 2011 after eight weeks of field observations, while a second audio-recorded formal interview-conversation (54:07 minutes) was conducted Fall 2011 after 12 weeks (a complete quarter) of field observations. The third audio-recorded formal interview-conversation (58:48 minutes) was conducted Winter 2014. The third interview was conducted outside Spring and Fall 2011 record collection, it was required as a supplemental conversation to inform the next stages of analysis. Interview three was not used as part of this research project. All audio recordings were reviewed by an initial pass to mark significant discourse content. Interviews one and two were transcribed in their entirety (Green & Wallat, 1979; Green & Wallat, 1981; Mishler, 1991). The constructed transcripts were then used to trace the processes and practices of the design studio and to determine its languaculture (Agar, 2006).

Course records. Course records were collected from the learning management system (e.g., course syllabus, reference materials, directions, and email messages to the course). Students were instructed by Professor F that these resources would be available online.

Logic-of-Inquiry

The principle process that was the focus of this study as indicated previously (see Chapter I) was the practice and process of critique, as a form of disciplinary and professional knowledge discursively constructed by members of this third-year architectural design studio. The study's methodology was based on an ethnographic perspective (Agar, 2006; Green & Bloome, 2004), with a focus on classroom (studio) discourse-in-use (e.g., Bakhtin, 1986; Rex & Green, 2007), embedded in an architectural design studio (e.g., Attoe & Mugerauer, 1991; Dinham, 1987; Goldschmidt, 1983; Goldschmidt, Hockman, & Dafni, 2010; Melles, 2008). Consistent with an ethnographic perspective, there was interdependence of theory and methods (Birdwhistell, 1977; Emerson, Fretz, & Shaw, 1995). That is, selection and implementation of theories was shaped by, and in turn shaped, the methods, as one cannot be artificially separated from the other.

Bounded by ethnographic and discourse sets of theories and inquiry processes and practices, the ethnographic perspective (Green & Bloome, 2004) guiding this study focused on uncovering everyday life in the design studio through exploring the cultural practices constructed by members of groups of study in particular configurations in this course. To gain an emic or insider perspective (Agar, 1994), as an outsider entering a new *languaculture*, I engaged in a multi-layered approach to trace over time how and in what ways crits were established and (re)formulated through events, activities, and discourse-in-use.

Central to the theory-methodology approach of this study was interactional ethnography (Green, Dixon, & Zaharlick, 2003). As an epistemology, interactional ethnography engages the researcher in tracing over time the patterns, processes, and

practices of a cultural group, moving from the whole to individual parts of "life inscribed in the words and actions of members of a social group" (Green, Dixon, & Zaharlick, 2003, p. 215). This methodological approach involves two interrelated angles of analysis—one at the collective level focusing on the discourse(s), social actions, achievement, and outcomes, and the other focusing on individuals within the collective, how they took up (or not) what was constructed at the collective level and how the use of resources was transferred across subsequent events (Green, Skukauskaite, Dixon, & Cordova, 2001).

Logic-in-Use

Green, Skukauskaite, and Baker (2012) argued that ethnography is guided by a logic-in-use that is non-linear, recursive, and abductive. A researcher's logic-in-use is informed through "principled decisions about records to collect and pathways to follow" (p. 310) with the goal of understanding how everyday life is constructed. The diagram below, Figure 3.5, provides a visual (re)presentation of the ongoing logic-in-use of this third-year architecture design studio, guided by *principle one: ethnography as a non-linear system* (Green, Skukauskaite, & Baker, 2012).

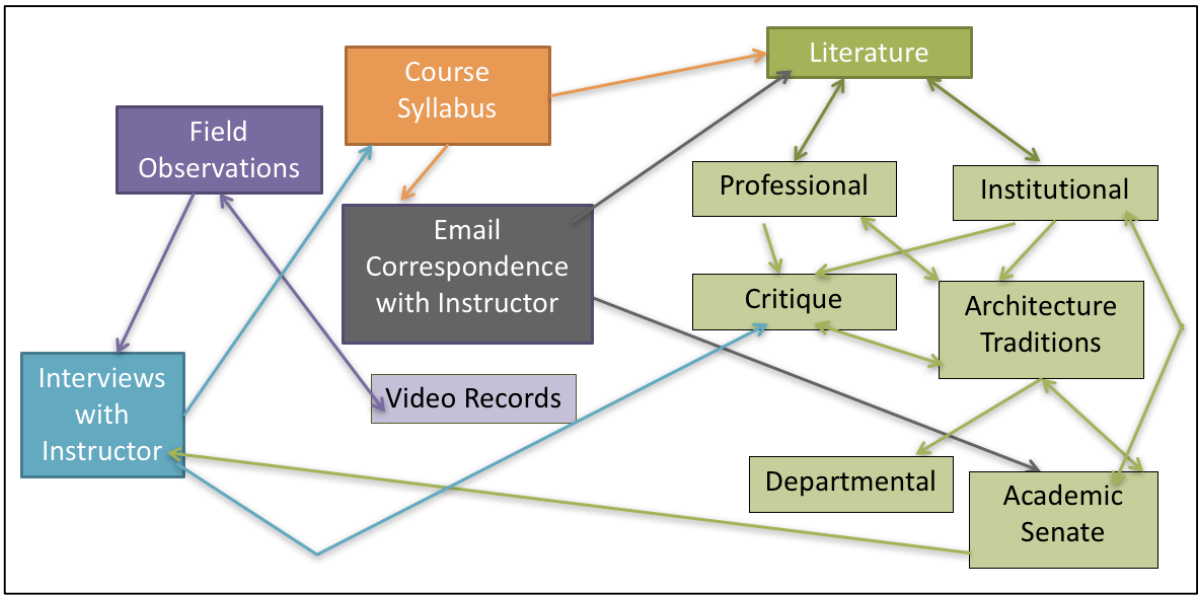

Figure 3.5. Visual (re)presentation of the logic-in-use to research a third-year architecture design studio.

As evidenced in the Figure 3.5, (Figure 3.5 was also introduced in Chapter I), to gain an emic understanding of what it meant to be an actor (student, instructor, and client) in this particular architectural design studio and the profession of architecture, I was required to move through different levels of scale and across diverse record sources. Purposefully representing these record sources in different colors shows the relationship between the record sources and the arrows show directionality of the movement between sources that is non-linear. For example, those represented in green are interrelated records tied to literature that were used in investigating components from professional and institutional perspectives. Initiating the literature search was email correspondence with Professor F, he directed me to several resources on architecture traditions of the department such as Bauhaus design school education and its related institutional model, the Teacher-Scholar model, for engaging in disciplinary knowledge.

Data Analysis and Records

The data analysis procedures and selection of particular records from the entire corpus of archived records, was informed by the logic-of-inquiry that guided the research design and the collection of the archived records previously discussed. The analysis, therefore, included both data construction and data analysis, building on arguments about what constitutes data in an ethnographic study by Mitchell (1984). Mitchell defined data as the "documented and memorable results of conducting research" (p. 235). Thus, records were documents collected, while data was what I produced as the end product of particular research analyses that I undertook.

From this perspective, the records collected as a part of this research project were from numerous sources including: fieldnotes, video records, ethnographic interview-conversations, and course materials. The related data construction methodology was shaped by the logic-of-inquiry, guided by interactional ethnography as a theory-methodological approach. As previously described, the interactional ethnographic approach focuses on the everyday life and the cultural practices and processes as discursively constructed. The logic-in-use focused on ethnography as non-linear, recursive, and abductive process in which I traced how everyday life was (re)constructed across, actors, spaces, events, and times, for as Spradley (1980) argued, actors cannot be studied separate from their situation of action and knowledge construction (see Chapter II for a definition). These dimensions of social life were selected purposefully to inform and assist with answering the research questions. The overarching research questions were:

1. What were the historical roots of the major actors interacting in the course?

2. What counted as public critique in this architecture design studio from the instructor's perspective?

A summary of the analytic processes and related methodologies addressing the overarching research questions, as well as several sub-questions identified, are outlined in Tables 3.3 and 3.4. Each table was formatted in a similar manner, where column one of each table outlines the guiding questions used in answering the overarching question. Column two discusses the records used in answering the guiding questions. Column three summarizes the representing data based on records presented in column two. The (re)presenting data column makes visible the range of ways that the data were constructed, for example, through timelines, event maps, and tables. Column four discusses the data analyses, conducted drawing on representing data. Lastly, column five provides a select listing of theoretical and methodological literature guiding the analytic process in Chapters IV and V.

Table 3.3 discusses the analysis methods and analytic processes in Chapter IV. Specifically, Chapter IV is guided by an overarching question investigating the historical roots of the institution. As discussed above, there was a set of sub-questions related to the overarching question. The purpose of these sub-questions was to address more specific areas relating to the historical roots of the actors, including institutional and departmental shifts and student populations admitted, the intellectual history of Professor F as the instructor of record for this architecture design studio, and the student histories in this course of study. Thus, each sub-question is represented by a set of records, column two, used to create the "(re)presenting data," column three. Data were then analyzed, column four, drawing on the theoretical and methodological literature as cited in column five.

Table 3.3

Analysis Methodology and Analytic Process of Chapter IV

Guiding Questions	Records Used	Representing Data	Data Analysis	Theoretical/Methodological Literature
1. What were the historical roots of the major actors interacting in the course?				
1.1 What were the historical roots and shifts of the institution?	Coastal University's website for: ● The examination and review of key historical information, ● The examination of the university requirements for the two main student populations (continuing and transfer) entering this particular design studio.	Timeline of institutional history Contrastive table	Discourse Analysis Contrastive Analysis	**Discursive Analysis Units:** Agar (2006); Bloome & Clark (2006); Bloome & Egan Robertson (1993) **Cycles of Activity**: Green & Meyer (1991) **Event Map:** Castanheira, Crawford, Kelly & Chen (1999) **Fieldnotes**: Emerson, Fretz, & Shaw (1995)
1.2 What were the historical roots and shifts of the architecture program at Coastal University?	● Examination of: Coastal University's and Department's website to trace key historical shifts across time and mapping of departmental situatedness within and across the college and university site. ● Examination and review of key historical and reference events. ● Reference events and documents provided and key departmental figures (i.e., departmental photographer, instructor of the course under study) identified.	Timeline of departmental history	Discourse Analysis	**Discursive Analysis Units:** Agar (2006); Bloome & Clark (2006); Bloome & Egan Robertson (1993) **Event Maps:** Castanheira et al. (2001); Kelly & Chen (1999) **Fieldnotes**: Emerson, Fretz, & Shaw (1995)

Guiding Questions	Records Used	Representing Data	Data Analysis	Theoretical/Methodological Literature
1.3 What was the intellectual history of Professor F? What were the histories of the students participating in this architecture design studio course?	• Two of three ethnographic interview-conversations with Professor F • Written fieldnotes (email) exchanges with Professor F • Coastal University's and Departmental website for key historical and reference materials	Transcripts Intellectual history timeline Contrastive table	Discourse Analysis Descriptive Analysis	**Constructing transcripts:** Green & Wallat, (1979, 1980); Mishler (1991) **Event Maps:** Castanheira et al. (2001); Kelly & Chen (1999) **Fieldnotes**: Emerson, Fretz, & Shaw (1995)

Table 3.4 describes the methodology and analytic process in Chapter V. Specifically, Chapter V is guided by an overarching question investigating what was public critique in this architecture design studio. As discussed previously, the related sub-questions listed in column one were identified to support further depth in exploration of the various facets of what counted as public critique (Heap, 1991) and how it was accomplished in relation to Professor F's teaching philosophy, inscription of critique through textual resources, and the ways in which Professor F made present the processes and practices of critique. A similar process of identifying records, creating data, and analyzing data using theoretical and methodological literature as described above was enacted for Chapter V.

Table 3.4

Analysis Methodology and Analytic Process of Chapter V

Guiding Questions	Records Used	Representing Data	Data Analysis	Theoretical/Methodological Literature
2. What counted as public critique in this architecture design course from Professor F's perspective?				
2.1 What was Professor F's teaching philosophy relating to critique?	• Two ethnographic-interview-conversations with Professor F	Transcripts Taxonomy of Semantic Relationships	Discourse Analysis Domain Analysis	**Discursive Analysis Units:** Agar (2006); Bloome & Clark (2006); Bloome & Egan Robertson (1993) **Constructing transcripts:** Green & Wallat (1979, 1980); Mishler (1991) **Event Maps:** Castanheira et al. (2001); Kelly & Chen (1999) **Domain Analysis**: Spradley (1979)
2.2 How and in what ways did the professor inscribe critique through textual resources?	• Two ethnographic-interview-conversations with Professor F • Fall 2011 Course Syllabus • Learning Management System records	Transcripts Summary analysis table containing content information from Syllabus and LMS	Discourse Analysis Contrastive Analysis	**Discursive Analysis Units:** Agar (2006); Bloome & Clark (2006); Bloome & Egan Robertson (1993) **Constructing Transcripts:** Green & Wallat (1979, 1980); Mishler (1991) **Event Maps:** Castanheira et al. (2001); Kelly & Chen (1999) **Fieldnotes**: Emerson, Fretz, & Shaw (1995) **Cycles of Activity**: Green & Meyer (1991)

Guiding Questions	Records Used	Representing Data	Data Analysis	Theoretical/Methodological Literature
2.3 How did the professor make present the processes and practices of critique?	• Two ethnographic-interview-conversations with Professor F • Day 1 of the course • Week 2 of the course • Ethnographic fieldnotes • Learning Management System Records	Transcripts Event Maps- Day 1 and Week 2 of Fall 2011 Course Analytic fieldnotes (written) Syllabus	Discourse Analysis Video Analysis	**Discursive Analysis Units:** Agar (2006); Bloome & Clark (2006); Bloome & Egan Robertson (1993) **Constructing Transcripts:** Green & Wallat (1979, 1980); Mishler (1991) **Event Maps:** Castanheira et al. (2001); Kelly & Chen (1999) **Fieldnotes**: Emerson, Fretz, & Shaw (1995) **Cycles of Activity**: Green & Meyer (1991) **Video Analysis**: Baker, Green, & Skukauskaite (2008)

Types of Analyses

This section discusses the types of analyses conducted including: video analysis, discourse analysis, event maps, domain analysis, and transcripts.

Video Analysis

As discussed earlier in this chapter, video served as a resource, or an anchor, similar to a written fieldnote, allowing me to (re)enter and (re)analyze records at many levels of analytic scale, from micro to macro, in order to explore everyday life as it was constructed over time (Baker, Green, & Skukauskaite, 2008). Baker, Green and Skukauskaite (2008) argued that the researcher enters a partnership with the video to record the construction of everyday life that is informed by the researcher's theoretical and philosophical underpinnings. This logic-in-use shapes the choices and actions the researcher takes when capturing events through video.

Baker et al. (2008) further argued that video records represent a "type of fieldnote" (p. 9) or anchor for constructing a local data set for analysis of particular questions. This process involves exploring recorded events collected, archived, (re)viewed, and analyzed to construct a data set of records capturing particular dimensions, interactions, processes and practices of a social group. As discussed by Baker, Green, and Skukauskaite, the ethnographer's theoretical and philosophical stance guides the partnership between the ethnographer and video. In particular, a partnership between an ethnographer and a video provides a rich opportunity for the exploration of a social group's discursive construction of their everyday life.

Thus, in this study video record was used as an anchor for:

- Exploring the varying analytic scales and perspectives from macro to micro;
- Investigating the over-time development as traced through patterns, themes, and actions;
- Providing warranted accounts of everyday life as traced (triangulated) through different forms of records, methods, and theories.

As further argued by Baker et al. (2008), the video record therefore represents the lens (theoretical and philosophical) that the ethnographer chose to position the camera and captures the event(s) that were made visible in particular segments of life.

Baker et al. (2008) contrasted video fieldnotes with written fieldnotes. They argued written fieldnotes have several *limits to certainty* (Baker & Green, 2007; Bateson as cited in Birdwhistell, 1977), including the ability of others to view the record(s) of everyday life. Video records, however, allow the researcher access to a permanent visual record of a piece of life (Hymes, 1977) held in particular time and space. Thus, video provides an anchor to (re)view and analyses particular bits of everyday life that were collectively accomplished socially across different levels of analytic scale (micro and macro).

To explore how critique was implemented and used within this particular studio, I drew on Green and Meyer's (1991) concept of "cycles of activity" (p. 150). By tracing references to activity that was intertextually tied (i.e., topic, processes) "within and across days," I was able to identify how the instructor and students signaled to each other (and thus to me as the ethnographer) the "over time nature of classroom events" (p. 151) and how these ties supported identification of a "complete series of actions about a topic or for a specific purpose" (p. 151). Thus, I adopted the idea of "cycle of activity," in tracing how

critique, as an iterative and recursive process, was introduced and implemented within and across days and across cycles of activities throughout the Fall 2011 records.

Discourse Analysis

Discourse-in-use, as discussed by Bloome and Clark (2006), complements Bakhtin (1986) by suggesting that language and practices are taken-up and situated within a particular community of practice (institutional, professional, discipline, etc.) in which they participate and language use, in the form of words or utterances. This community and members have histories within the particular times and spaces. In addition, words or utterances have relationships to each other, or are intertextually linked (Bloome & Egan Robertson, 1993), and are mediated through the interactions of people. This perspective further proposes that instructors and students engage in a variety of discourses that must be traced over times and spaces to explore meanings being constructed through what is spoken. The discourses, taken up and used, as Fairclough (1990) argued, carry histories and social practices of that studio, department, institution, or profession. Interactional ethnography, as an epistemology, therefore, engages one in tracing over time the patterns, processes, and practices of a developing cultural group. It further supports analyses that move from the whole to individual parts of "life inscribed in the words and actions of members of a social group" (Green, Dixon, & Zaharlick, 2003, p. 215).

From the perspective of Agar (2006), a researcher/outsider entering a new environment (i.e., a new major, department, profession) is trying to understand not just the culture, but also the language, thus what he termed *languaculture*, as one cannot be artificially separated from another. I discussed this previously in Chapter II. As already

stated, *rich points* make visible differences between languacultures, that is, the researcher begins to wonder what is happening. This process leads the researcher to create an anchor and then to move backward and/or forward or sideways in time to trace the roots of a phenomenon/a leading to the frame clash (Tannen & Gumperz, 1979).

Event Maps

Event maps are a way of (re)presenting the flow of activity and actions amongst actors. By tracing the coordinated activities and actions of particular actors or groups of actors, the researcher chooses tracer unit. In tracing broadly, the coordinated activities as events and narrowly the discourse, the researcher conducts both grand and mini tours (Spradley, 1980). Mitchell (1984) argued such as the individual in a group or the group within the larger collective to have across time and events (Castanheira, Crawford, Dixon, & Green, 2001). Through a process of contrastive analysis and the identification of intertextual relationships, the researcher then follows the inter-related, and at times, interdependent activities as changes occur over time.

The level of scale the researcher chooses in the contrastive and intertextual analyses depends on the research question(s) of interest. For instance, the researcher may seek to map how critique events change over the period of a week or across multiple weeks in the quarter. Alternatively, the researcher may also investigate how a particular student or client engages in critique as compared to others in his or her group or in the larger classroom. Focusing broadly across the quarter may provide insight on the structuring of the course, while focusing on particular student or client may provide detailed discourse of that individual and how the individual interacts with actors within the larger collective. The

process of constructing event maps to trace the connections and inter-relationships among events is a constructed document by the researcher, and is informed by both the logic of inquiry guiding the analytic processes and the researcher's search for emic or insider, knowledge or understandings.

Table 3.5 presents a partial event map that I constructed of the Day 1 of the architecture design studio to illustrate this process as it related to how time was spent academically by tracing cycles of activity (Green & Meyer, 1991) through the first three events. Column one provides a base, a timestamp of events. Column two provides the corresponding written fieldnotes taken from observations. Column three indicates the sub-events, which are embedded in the event of the first day. Column four is the event number to identify the change in events across Day 1. Lastly, column five is used in conjunction with column 4 to describe these specific events.

Table 3.5

Event Map of Day 1 for First Three Activities as Constructed from Fieldnotes and Video Records

Day 1 (9/19/2011) Written Fieldnotes - Summary Format				
Time	**Fieldnotes**	**Sub Event Description**	**Event #**	**Events Description**
12:50pm	Researcher arriving and setting up	Researcher set-up	1	Location of "official" studio-analog
	A few students are moving into studio with supplies	Students becoming acquainted with studio	2	Onset of “official” studio time
1:11	Instructor entering studio and suggesting that students move to the middle of the classroom where a set of middle tables are located	Initiating course - instructor directing location beginning	3	
	Students moving to the middle and sitting - a total of 18 students			
1:18	Instructor returning and turning on lights			
	Instructor beginning with introducing researcher	Introduction of research and researcher		
1:21	Instructor distributing consent forms			

As indicated in Table 3.5, the event map (re)presents the first three cycles of activity in the course on Day 1. As noted through the event map, the onset of Day 1 began with my setup of the camera to chronicle the opening sequence of the instructor initiating the course. As referenced in Table 3.5 above, the changing of events were numbered to show the activities, the coordinated movement from one event to another, and the related location(s)

of the events as they unfolded. For instance, after the first event, the second and third events together comprised the "official" onset of the course. These events included: the instructor initiating the course, introduction of the research project to the students, and providing the related research consent forms. In (re)presenting this developing process of community construction, the complete event map can be viewed as providing a roadmap of how Professor F structured Day 1, what he made available to the students, and how these events foreshadowed what was to come throughout the day and across the quarter. Once this map was constructed, I used this map as a text to interpret what was happening, when, where, to and with whom, in what ways, with what outcomes or implications. This event map therefore provided empirical evidence for the claims that from this interpretive process.

Domain Analysis

Spradley (1980) identified culture as the "organization of things, the meaning given by people to objects, places, and activities" (p. 86). As the ethnographer, I drew on this argument to develop understandings of what the cultural meanings were and how they were built. According to Spradley, a domain analysis is an entry-level analysis, that enables the ethnographer to explore what is embedded in collected records and to make sense of the cultural phenomenon/a under study. The major components of domain analyses are the cover terms, included terms, and semantic relationships. Spradley (1980) defined the cover term as a cultural domain, which was a set of cultural meanings given to a category in the lifeworld of a person or a group. These larger categories often are comprised of smaller categories. Given these categories are comprised of cultural meanings and names, they must be named using a folk term.

Building on this argument I engaged in an analysis, review of key records (e.g., ethnographic interview-conversations, video records) for kinds of items (X) that were inscribed. The semantic relationships supported ways that I explored the relationships between cover terms and included terms. Spradley identified 12 common cultural semantic relationships that I considered. “Strict inclusion” (“X is a kind of Y”) and “means-end” (e.g., “X is a way to do Y”) (p. 92) are the most commonly used semantic relationships and were the starting point for early domain analysis. In and through the tracing of semantic relationships, I was able to link the larger categories to smaller categories.

Table 3.6 represents a domain analysis of the concept of critique using two ethnographic interview-conversations with Professor F using strict inclusion and means-end semantic relationships. The first column summarizes the included terms, column 2 represents the semantic relationship, which is used to show the relationship between column 1 and column 3, while column 3 lists the cultural domains. A complete description of the analysis is discussed in Chapter V.

Table 3.6

Semantic Relationships Built Using Key Ethnographic-Interview-conversations

Included Terms	Semantic Relationship	Domains
Outdoor reviews "Tag team" reviews Formal reviews Desk crits	X are kinds of	Critique
Verbal Written Visual	X are kinds of representations evaluated during	
Feedback Criticism Self-critique Reflective statements	X are names given for	
Risk taking Completing task (what was identified by the student) Production of concept/model Level of representation Compelling story	X are kinds of measurement components in	Critiquing
Quality Graphics Models Craft Care Story Visual	X are ways to measure the level(s) of	Representation

Transcripts

Discourse used by actors in records such as video records of classroom events and audio recordings of ethnographic interview-conversations were transcribed and (re)presented as transcripts. Ochs (1979) stated that transcripts are a reflection of the researcher's "theoretical goals and definitions" (p. 44). Thus, the process of transcribing, how verbal discourse was (re)presented as written discourse, was informed by the theory-

method relationships guiding the present study, which argues that the construction of conversation occurs in the moment-by-moment and overtime interactions among actors. Green (1977; Green & Wallat, 1979, 1981) defined *message units* as the most minimal units of communication (bursts of talk). Building on Gumperz's (1982) argument about contextualization cues, Green and colleagues defined prosodic cues, such as changing intonation, pitch, pausing, etc., as providing significant information about boundaries of message units, and the meanings being proposed and interactionally accomplished (see also Bloome et al., 2005) by actors in a social situation. As bounded units, message units are combined with other message units to create action units, which in turn lead to interactional units. Interactional units are then bounded to create sequence units and bounded sequence units lead to phase units, which mark an event. In the context of this dissertation, transcripts were constructed to show construction of disciplinary content through various record sources and levels of interactions.

Transcripts were also constructed with particular formatting style, including the orientation of (positioning of) the discourse of different actors. The transcribed segments placed speakers in different columns in a side-by-side format, with separate columns for different actor(s) (e.g., Professor F and the Researcher or Student 1 and Professor F). This format was informed by Green and Wallat (1979, 1981) and Mishler's (1991) work-in which side-by-side (re)presentation reinforces that no one participant sits in dominance or control of the interview, while also demonstrating the dynamic between actors (e.g., the length of response(s) provided by the participants, the type of response provided by the participants, etc.). In addition, transcripts contain a separate column for line numbers and time stamps that correspond to message level transcription or key events.

Table 3.7 is an example of a transcript excerpt taken from the ethnographic interview-conversation with Professor F. The purpose of the ethnographic interview-conversation is to gain insight, or an emic perspective, on the processes and practices of the nature of work accomplished in this course to get students to begin to think and act as an architect. The transcript excerpt was a part of an ongoing cycle of activity, where Professor F discussed his teaching philosophy in this third-year architecture design studio. Column 1 is the timestamp, while column 2 is the line number corresponding to the message unit level transcript in columns 3 and 4. Colum 3 specifically relates to Professor F's transcribed discourse, while column 4 relates to my transcribed discourse, as the researcher.

Table 3.7

Excerpt Example from Ethnographic Interview-Conversation with Professor F

Time	Line Number	Professor F	Researcher
0:04:23	0191	So	
	0192	So the structure of the	
	0193	The class very much relates to the teaching philosophy in	
	0194	In terms of	
	0195	I	
	0196	I umm	
	0197	I	
	0198	I	
	0199	I also tried to balance	
	0200	Which relates to the idea the practical versus the aspirational	

Time	Line Number	Professor F	Researcher
	0201	Very much balance group	
	0202	Group work to	
	0203	To individual work	
	0204	There's a fair amount of group work in the class-	
0:04:43	0205		(overlapping)
	0206		Mmhm-

Transcripts were also constructed for analysis of textual artifacts. Specifically, I drew on a similar analysis process as outlined in the dissertation of Stewart (2015) to analyze an email correspondence between myself and Professor F. Stewart used the approach of Drawing on Directed Reading – Thinking Activity (DRTA) Teaching Strategy (Dixon & Nessel, 1992). As discussed by Stewart, DRTA allows a researcher to both analyze the text and construct related meanings about the text including making predictions about the language by drawing on prior experiences with the text and/or knowledge about the author who constructed the text. Through prior interactions with the author, one is familiar with the language the author uses and related meanings expressed.

Concluding Summary

This chapter discussed the context of study, including the interacting actors and artifacts, and the processes of gaining entry to a site where I was a disciplinary outsider, but an institutional insider. In subsequent sections, I also discussed the records that were available and the theory-method used in analyzing records to formulate data. Tables 3.5 and

3.6 displayed the overarching research question, sub-questions, and analyses in presented in Chapter IV and V. The next chapters (IV, V) delve further into the analyses and the related records as way to gain an emic understanding of the disciplinary practice and processes of critique. In Chapter IV, I present findings related to the overarching research question: *What were the historical roots of the major actors interacting in the course?* In Chapter V, I examined the overarching research question: *What counted as public critique in this architecture design course from Professor F's perspective?*

Chapter IV: Setting the Context of the Research Site

In this chapter, I present a series of mini tours (Spradley, 1980) to examine the historical overview of the founding of the institution (Coastal University) and the department of architecture to the present day in order to make visible the inter-relationships of the architecture design studio with the department and program within the university. Included in this analysis is an exploration of the histories of the instructor and students. To explore relationships among these histories, I collected and analyzed histories publicly available on the Coastal University's and Architecture Department's websites and interview-conversations with Professor F. Information collected included descriptions of the institution's history, information on the founding of the department, and the history of key actors involved in the design of the 24/7 architecture design studio course (i.e., departmental photographer, instructor of the course under study).

The need to examine these angles of analyses was not initially part of the original design of the study. However, continuous references made by the instructor/designer of the third-year architecture design studio course to institutional, departmental, and professional histories throughout my participant observations, and my interview-conversations with Professor F led to the need to explore these interrelated histories in order to contextualize the course under study. These references were part of dialogues with the instructor and students, and were visible as I interacted with course materials that provided an anchor for locating and tracing how each inscribed the history and their relationships. For example, during these dialogues and participant observations in the class, what became visible was the need to examine the origins and development of this particular design studio given that it was not an individual, isolated class, but rather, it was a course in a series of inter-related

courses that were designed to meet instructor, departmental, institutional, and professional requirements.

Therefore, this chapter represents a telling case related to contextual histories surrounding Coastal University and the architecture design studio under study. Tracing the chains, mini tours, through historical resources of different layers and actors (people, spaces, and artifacts), including institutional, departmental, and instructor, together, provide a holistic perspective on the ways in which this course came to be. As the analysis that follows demonstrates, the history of these requirements introduced students to and guided them in developing particular disciplinary ways of knowing and doing that were embedded in ongoing histories of the instructor, department, and institution. To frame these analyses, I drew on Mitchell's (1984) concept of a *telling case*. Mitchell defined a telling case as a:

> [A telling case] serve[s] to make previously obscure theoretical relationships suddenly apparent. It follows from this that the particularity of circumstances surrounding any case or situation (or set of situations) must always be located within some wider setting or context. (p. 239)

Therefore, to understand the particular architecture design studio and how its components and content were related to other courses as well as to the discipline of architecture as a professional field, I explored the inter-relationships of the varying actors and the layers of institutional contexts in which this third-year design studio was embedded. Analyses were therefore grounded in what was made available from historical data constructed by Coastal University and placed on their institutional and departmental websites as well as by interview-conversations and participant observations. Given my focus on disciplinary

discourse and discourse as constructed in this course (see Chapter II), discourse analysis was the main form of analysis undertaken. Thus, questions guiding this chapter were:

- What were the historical roots of and inter-relationships among the third-year design studio, the Architecture Department, and the University as a public institution of higher education?
- What was the history of the instructor of the third-year design studio course?
- What were the histories of the students participating in this course?
- Who were the actors that interacted with the instructor as a part of this course?

Institutional History

In this section, I present a series of analyses of different layers, mini tours, of historical development of Coastal University as it was configured at the time of this study. This section, therefore, focuses on the historical shifts that this institutional site underwent, from its original founding to its present state as a leading state university in California. Unlike other state universities in California, this particular university is one of two with a designated polytechnic format. The "polytechnic" designation emphasizes process of theory to practice.

Institutional Timeline

The analysis undertaken of the historical developments of Coastal University began with my identification of key time periods and developments inscribed in the texts from the websites and course materials. These developments are (re)presented in Figure 4.1. This timeline (re)presents the evolution of Coastal University from founding to present day that was (re)constructed from the analysis of the history inscribed on the university website.

As indicated in Figure 4.1 below, there was a gradual series of developments that laid the foundation (e.g., format of the programs and departments, what courses are offered, requirements for admission, etc.) for the current disciplinary department and program under study.

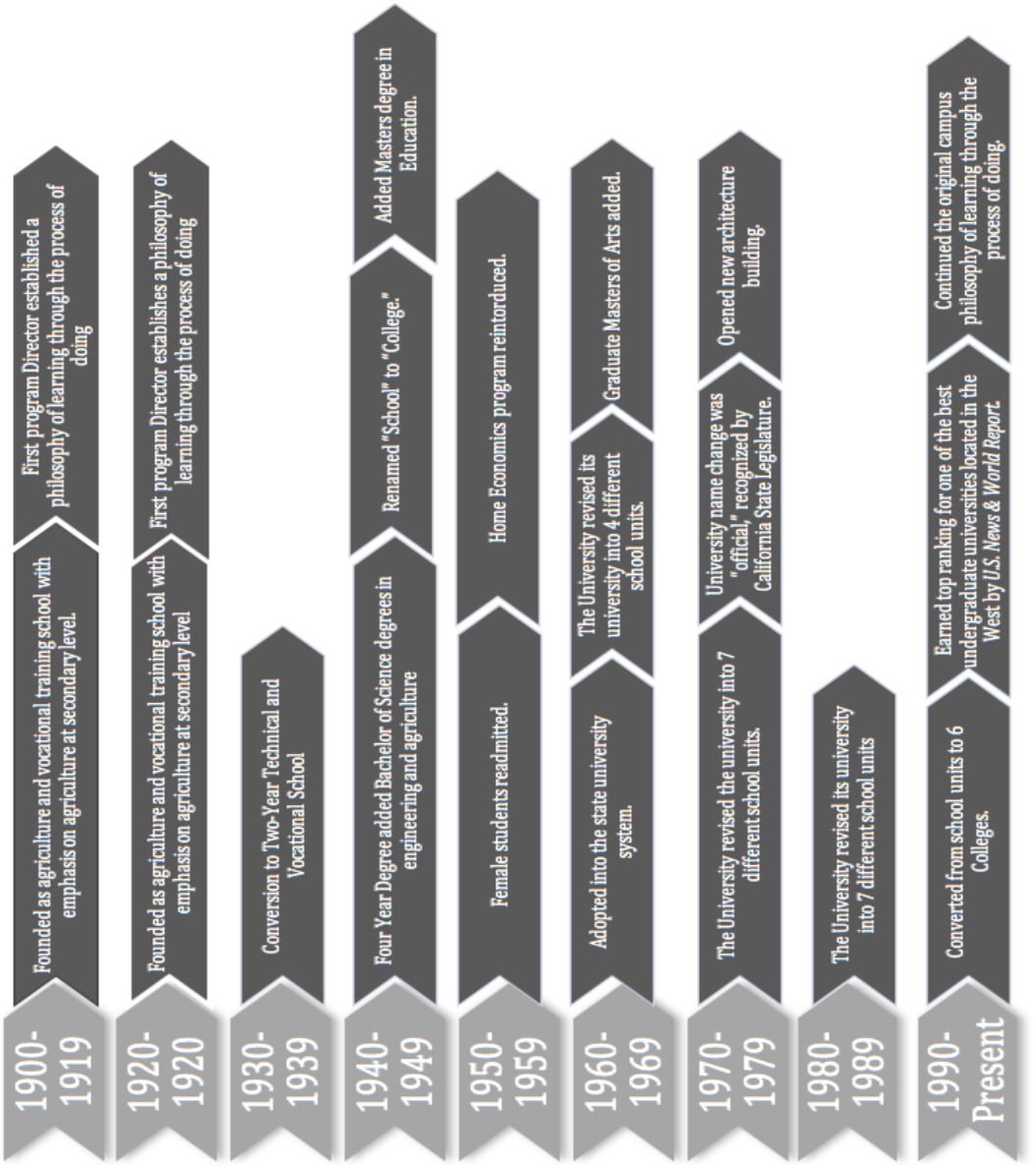

Figure 4.1. Summary of key institutional shifts across decades of Coastal University.

Figure 4.1 was designed to be read from left to right, with each darker gray rectangles highlighting the major developments for a particular decade in the history of Coastal University, beginning from inception (far left) to the most recent state that served to contextualize the period of this study (far right). Analysis of the inscribed history made visible that, today, the original vision and philosophy of engaging in the *doing* of the disciplinary and professional demands remains the same, as first conceptualized by Coastal University's founders (a group of local citizens).

This section focuses on the historical shifts by examining more closely each decade. As noted, Coastal University was founded in 1901 as a co-ed agriculture and vocational training high school. Approximately 20 years later, a junior college emphasizing college preparatory work was added to the original vocational high school, thus creating a six-year institution. The emphasis of this new junior college was mechanics, engineering, and aeronautics. Ten years later, 1930-1939, the legislature of California excluded women from attending Coastal University. Also during this period, the university still retained the "school" in its name; it was converted to a two-year technical and vocational institution. However, by the mid-1940s, the institution was quickly designated a "college" following a change to a four-year program with options for Bachelor of Science degrees in the fields of engineering and agriculture. In addition, Masters degrees in education were added.

The 1950s brought about the re-admittance of female students to Coastal University and the addition of new programs: home economics, dietetics and nutrition, family studies, child development, and textiles research. During the 1960s, there was also a transition from the California School Board of Education to an independent Board of Trustees. In concert with this transition, the curriculum at the university was reorganized into four units. By the

1970s, the curriculum was divided from four to seven units. Further, the California Legislature officially added "university" to the name of the school. The 1980s brought about a third reorganization of the units, and by the 1990s, the units were renamed as "Colleges". In the early 2000s, the University gained accolades as one of the best undergraduate universities in the West according to *U.S. News & World Report* (2016).

Admission Requirements at Coastal University

At the time of this study, Coastal University further distinguished itself from other California universities with its admission requirements. Students, whether freshmen or transfer, seeking to apply to Coastal University needed to declare their major as a part of their admittance requirements. Students were therefore advised to review their admission choices carefully, as their opportunity to change their major did not occur until they had been selected for admission and had completed their first quarter of courses.

The present course under study enrolled students who were continuing students or students who entered Coastal University as freshmen. In the third-year design studio, transfer students also comprised a part of the student population. The difference in student population led me to ask a new question - how students were prepared to enter this course of study, as their preparation is imperative to their future success.

In investigating how students were admitted to Coastal University, I found differences for entering freshmen in contrast to transfer students. The table below, Table 4.1, was constructed to explore the differences in requirements as outlined by the university site for the two groups. Drawing on Coastal University's institutional website, I constructed a table with three columns each representing a particular group of students. Column 1

describes the requirement areas for admissions, while column 2 relates to freshmen, and column 3 relates to transfer students.

Table 4.1

Designated Requirements for Admission to Coastal University for Freshman and Transfer Students

Requirement Areas	Freshmen Requirements	Transfer Requirements
Major	• Intended program of study (major)	• Intended program of study (major)
Preparatory Coursework	• College-preparatory courses in secondary school (must earn a grade of C or better in coursework taken during 9th to 11th grades with in progress/planned courses for 12th grade) • GPA earned in college-preparatory courses (GPA calculated by university site for 9th -11th grade coursework as indicated on the application)	• Must meet the junior transfer level (60 or more transferable semester units or 90 quarter units) before the start quarter • Academic performance - completion of state university and Coastal University's program required coursework with a grade of 'C' or better • General Education or IGETC courses (Intersegmental General Education Transfer Curriculum) • Portfolio review (Architecture specific requirement) - reviewed by the faculty as part of the final selection process
Exams	• Standardized test scores (based on ACT or SAT I)	[None]
Extracurricular Activities	• Extracurricular activities and work experience (as indicated from the four questions on the California application)	• Extracurricular and work experience as specified on the application for admission

Contrasting the two groups of students based on their major requirements highlights the differences in admission in preparatory work and their entrance exams. Transfer students were expected to have a vast amount of their collegiate coursework completed a quarter before entrance. Specifically, transfer students were required to meet junior status (60 or

more transferable semester units or 90 quarter units); the state and Coastal University's coursework requirements with a "C" grade; Intersegmental General Education Transfer Curriculum (IGETC) requirements; and for those entering architecture, a portfolio review requirement. In contrast, freshmen were required to have a "C" grade or better in all of their collegiate preparatory work for grades nine through eleven, leading to a Grade Point Average (GPA) calculated using grades nine through eleven. In terms of entrance exams, transfer students were not required to take entrance exams for their admissions; however, freshmen were required to take and provide exam scores for standardized tests (ACT-American College Testing and SAT I-Scholastic Assessment Test).

In addition to the basic set of requirements for transfer students at Coastal University, architecture transfer students had an additional set of requirements for their admission. They needed to: 1) submit a portfolio for review by faculty; and, 2) meet a set of general education courses and courses specific to the architecture discipline. Table 4.2 below was constructed using content provided on Coastal University's website to outline the required coursework entering architecture as a transfer student. The required courses included: general courses and those courses specific to architecture such as, Engineering Statics and Mechanics of Materials I; Architectural Practice, Second Year, Quarter 1; and Architectural Design, Second Year, Quarter 2. Those students considered admissible must have completed general and major coursework as shown in bold print in the table below. As noted by Coastal University (2014), students' level of admissibility improved with the completion of suggested coursework. Taking the coursework requirements, general and suggested, as a whole, an architecture transfer student entered Coastal University with a fairly rigorous curriculum background in general coursework and in architecture specific

coursework. As noted in the table below, there was a large number of engineering, mathematics, and physics coursework to be completed by entering transfer students. As discussed in the departmental history section, the architecture major was built out of the original architecture engineering major.

Table 4.2

Transfer Students Required Coursework for the Architecture Major

Required Coursework Listing for Transfer Students
1. English Composition (Required)
2. Critical Thinking (Required)
3. Speech (Required)
4. Math (Required) 4a. Calculus I *or* Two courses that articulate with: a. Calculus I or b. Calculus for Architecture and Construction Management 4b. Calculus II
5. Physics (Required) 5a. College Physics *or* General Physics and 5b. College Physics II *or* General Physics II
6. Major Related 1* (Required) Courses equivalent with: 6a. Design and Visual Communication 1.1 6b. Design and Visual Communication 1.2 6c. Design and Visual Communication 1.3

Required Coursework Listing for Transfer Students
*7. Arch Major Related 2**
7a. Structures I And Structures II
or
7b. Engineering Statics And Mechanics of Materials I
8. Arch Major Related 3*
8a. Architectural Practice , Second Year, Quarter 1
8b. Architectural Design, Second Year, Quarter 2
8c. Architectural Practice, Second Year, Quarter 2
8d. Architectural Design, Second Year, Quarter 3
8e. Architectural Design Second Year, Quarter 3
8f. Environmental Control Systems 1

Note. Items in italics note courses that are not considered when determining a student's admissibility.

From this initial analysis of the institutional history and requirements for admission, one can see how Coastal University was established and evolved over time. Specifically, the movement from a vocational high school, to a community college, to a college, and finally to a university shows the responsiveness of Coastal University to the needs of the surrounding community population. Most notable in the historical overview was the establishment of the first degrees at Coastal University in agriculture and engineering, both of which later contributed to its continual top ranking as one of the best western regional universities. The next analysis will focus on the architecture departmental history, specifically, how the department and the architecture major were built upon this initial institutional focus of engineering.

Department History

Figure 4.2 below provides a graphic representation of the Architecture Department embedded in Architecture and Environmental Design, which was one of six colleges of Coastal University. Architecture was one of the degree programs available across five departments.

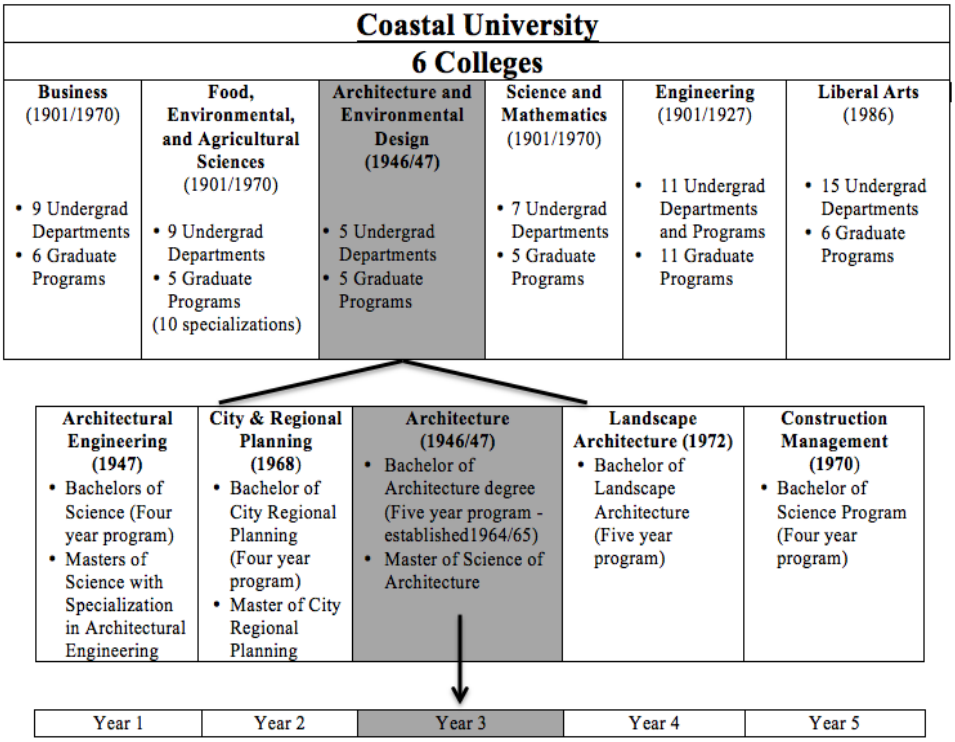

Figure 4.2. Representation of architecture department embedded within the larger institution site.

As displayed in Figure 4.2, the other four departments were: Architectural Engineering, Construction Management, Landscape Architecture, and City and Regional Planning. At the time of this study, the five departments served an estimated 1,700 to 1,900 students. Founded in 1946, the architecture program was established as an architectural engineering program. The "traditional" degree programs at Coastal University were, on average, four years from matriculation to final degree. In contrast, the architecture degree program was a five-year program that was accredited by the National Architectural Accreditation Board (NAAB). The five-year program was seen as a very comprehensive and efficient educational experience. Upon completion of the program, students were

immediately eligible for the Architectural Registration Exams. After completion of a three-year internship students then become eligible for the California Supplemental Exam.

As discussed previously, the focus of the present study was on the third-year architecture design studio course of a five-year program; the area shaded in the figure below denotes the focus on the third-year. As the center of the five-year program, the third-year was a pivotal year in this degree program. At the conclusion of this year, students' academic progress in concert with their desire to continue the program, determine if they move forward with completing the degree program or seek an alternate major to finish their undergraduate degree. Thus, examining this year is imperative as it is pivotal course and point in a student's academic career in attaining an architecture degree at Coastal University.

The teaching and scholarship in the form of a Teacher-Scholar Model was important piece of Coastal University's vision. Coastal University emphasizes teaching excellence through professional development and upholding the campus' educational model with emphasis on learning and doing. Specifically, within the college where this architectural design studio was embedded, emphasis on teaching excellence focused on three main areas: teaching performance, professional development, and scholarship. Faculty participating in this college were required to participate within their own discipline professionally and disciplines outside of their immediate college. Emphasis on these forms of interactions encourage cross disciplinary experiences. Another significant component of the educational focus of this architecture program was the focus on and use of Bauhaus philosophy and principles as the focus of architecture design education. While not discussed publicly on Coastal University's website, Professor F, through a series of email and in-person

conversations, provided this insight about the program's focus. Specifically, Professor F made visible the fact that Coastal University utilized and provided students access to a great "amount of software (Digital Modeling Software, CAD, Parametric Modeling Tools) and hardware (3D Printers, CNC machine, etc.) tools" (Professor F, personal communication, May 19, 2013 and February 22, 2016).

The university website and interview-conversation with the architecture department's photographer afforded contextual information on how the institutional history influenced the building of the department and the related disciplinary opportunities in architecture. Further, the history of the department, founded with an engineering base, extended understandings of the disciplinary ways of knowing and working carried through to the time of this study. Without exploring these pieces, I would have missed significant information on the context of the larger architecture community situated in this particular institution and department. However, additional insights were necessary to illuminate how the course was constructed and the choices made in course content to assist in students' development of disciplinary knowledge. Given that the instructor, Professor F, was the constructor of the course content and structure, in the next section I trace the prior history and experiences to explore how this history informed his choices in designing this particular studio within their developing program. To gain insight into these decisions and his building of the course, the next section focuses on Professor F's intellectual history.

Intellectual Roots of the Instructor

Because I was a non-native to this disciplinary way of thinking, Professor F served as a cultural guide, providing insights into his decisions in designing the course, the processes and practices of the discipline (and by extension the profession), and the historical

evolution of the department, institution, and course. As the instructor of record, Professor F was the designer of the proposed and enacted curriculum (Posner, 2004). Analyzing different angles or points of view on the phenomenon under study, and collecting and analyzing multiple sources of data, both current and historical, were necessary to interpret and understand not only what was being made available to students, but also what led to the formation of opportunities. The history of Professor F, both professionally and educationally, impacted his teaching philosophy/ies, and thus, the course under study. The guiding question for Professor F's intellectual histories was:

- What was the intellectual history of Professor F?
    - How did Professor F, as the instructor, draw on and make visible these histories (background experiences), and professional histories to construct, conceptualize, and build this architectural design studio course for students to learn about and meet professional requirements?

Tracing Professor F's intellectual history was accomplished through analysis of a series of formal and ongoing ethnographic interview-conversations (Gubrium & Holstein, 2003; Spradley, 1979). These conversations were both face-to-face and inscribed in emails exchanged with Professor F. Additionally, I examined Coastal University's website for additional evidence of this history. Table 4.3, while not a comprehensive timeline, illuminates what background intellectual resources that Professor F drew on to inform his conceptualization and implementation of course content. Utilizing the sources of information described above, I constructed Table 4.3 by conducting a domain analysis (Spradley, 1980) by identifying themes across these sources of information and determining the focus areas. This led me to the following set of dimensions:

- Education
- Employment
- Service and Affiliations
- Honors and Awards

As such, column one lists the dimensions identified, column two provides the dates of events with most recent events listed first, and column three describes the specific events related to column two's dates.

Table 4.3

Professor F's Intellectual History as Traced Through Various Resources

Professor F's Intellectual History		
Education	Early 1990s	M. Arch, University 1 in New York
	Mid 1980s	B. Arch, University 2 in New York
License and Registration	---	Registered Architect New York State
	2008	National Council of Architectural Registration Boards (NCARB)
Employment	Mid 2000-Present	Professor, Architecture Department, Coastal University
	Early 2000-2010	Associate Department Head, Architecture Department, Coastal University
	Early 1990s	Lecturer, Architecture Department, Northern California University
	Late 1980s	Teaching Assistant, University in New York, Dept. Of Architecture, Introduction Program
	Mid 1980s-Early 1990s	Director of Minority Educational affairs, University in New York, College of Architecture, Art and Planning,
Service and Affiliations	---	Association of Computer Aided Design in Architecture (ACADIA) ACSA
	---	American Institute of Architects
	Mid 1990s-Present	Directs the DDS (Digital Design Studio)

Professor F's Intellectual History		
	2011	Distinguished Professor Award from the Association of Collegiate Schools of Architecture (ACSA)
	Early 2000s-2009	NAAB Board of Directors
	2007-2008	NAAB Board of Directors Secretary
	2004-2006	ACSA Board of Directors Secretary
	Early 2000-2004	ACSA Advisor to AIAP National Board of Directors
Honors and Awards	2009-2010	Creative Achievement Award, ACSA
	2007-2010	NCARB (National Council of Architectural Registration Boards) Prize
	2008	Selected for American Institute of Architects Doer's Profile April 25, 2008 in recognition of teaching and the work of DDS (Digital Design Studio)
	2007	College of Architecture & Environmental Design Teaching Award at University 2
	2005	Architecture Department's Faculty Teaching Award
	1996-1997	Young Faculty Teaching Award, ACSA/AIAS Association of Collegiate Schools of North America and the American Institute of Architecture Students
	1996-1997	Grant to establish DDS (Digital Design Studio)

As indicated in Table 4.3, Professor F's had numerous honors and awards for his teaching at the university level. Specifically, his grant awarded for the creation of DDS (Digital Design Studio) in 1996-1997 is particularly important as discussed in Chapter III, given that students as a part of this third-year design course had access to the studio and that it was used regularly as a space for course events (e.g., course presentations and instruction, student presentations, etc.). Also significant were Professor F's service and affiliations with numerous professional organizations in the field of architecture. The professional experiences are meaningful in the knowledge brought to the course. Lastly, Professor F's

educational history, as further explored in his interview-conversations discussed below, also influenced how he taught and structured the course for learning.

The interview-conversations (Gubrium & Holstein, 2003) with Professor F, as outlined in Chapter III, were particularly helpful in gaining insight into his educational experiences and how those experiences guided his current teaching and learning. In Table 4.4, a segment pulled from the second interview-conversation with Professor F is presented. As discussed in Chapter III, the transcript is presented in message units (Green & Wallat, 1979; Wallat & Green, 1981). While some might consider this level of representation difficult to read, the message level was very important in tracing in detail Professor F's word choice as it represented his developing thought process. To trace this development, the table below is comprised of the message unit level transcript from the interview-conversation. As discussed in greater detail in Chapter III, the orientation of the transcript in side-by-side columns is to represent the interactions between Professor F and myself. Column one describes the line numbers of the segment pulled, column two is the transcript of Professor F's dialogue, and column three is the transcript of my dialogue.

Each interview-conversation framed particular questions that arose as a result of participant-observations. The interview-conversations assisted in gaining an emic understanding of the this particular third-year architecture design studio. A second interview-conversation was conducted at the conclusion of Fall 2011 record collection. During this second interview-conversation, Professor F alluded to his own limited experiences interacting with other disciplines (lines 01026-01034). A section prior to this passage discussed the purpose of engaging students in a project (ET Project) involving students from the theatre and liberal arts-engineering programs to improve his students'

ability to speak to non-architects about their processes and practices of architectural design and to learn how people interact with space. Lines 01035-01064 also address his design experiences, which generally consisted of receiving the project on day one of the studio, and then six weeks later, being expected to produce a final project. He contrasted this experience to his current process of "structur[ing] the environment" of the course for something due every day. Thus, this interview-conversation provides insight not only into Professor F's background, but how his own background shaped his courses.

Table 4.4

Interview-Conversation 2: Own Educational Experiences

Line #	Professor F	Researcher	Analysis
01022		*Um so I also know that*	
01023		*Um from sitting*	
01024		*That it's very interdisciplinary like the "ET" project*	Inquiring about components program components
01025		*And so I was wondering how this focus was influenced by your own education*	
01026	Well I think with my education is is more		Suggesting own experience in the studio was limited
01027	A		
01028	Sort of traditional in terms of not having		
01029	Any		
01030	A		
01031	Exposure to other disciplines while I was in the studio and I		
01032	I		
01033	I just felt that's was		

Line #	Professor F	Researcher	Analysis
01034	Pretty limiting		
01035	A		
01036	Also when I went school we		Describing how Professor F's experience was different – project given first day and no check in for six weeks
01037	We when we get a		
01038	When an instructor would give us the design project the first day and		
01039	And I'll see you in six weeks		
01040	And we just spend time you know		
01041	Messing around and then when week 5 came we would		
01042	You know stay up all night for a week and get it done -		
01043		*(overlapping) [laughing]-*	
01044	(overlapping)		
01045	So I'm always aware of the the the the problems of		Suggesting that students today have so many options that impede their ability to focus
01046	Especially now with students having long periods of time		
01047	To kind of work by themselves to get stuff done		
01048	And with all the		
01049	The tools that students have acc-		
01050	Access to		
01051	I wouldn't even say		
01052	With all distractions they have		
01053	It's a		
01054	They're very easily kind of		
01055	A		
01056	They very easily get off track-		
01057		*(overlapping)*	
01058		*Mmhm-*	

Line #	Professor F	Researcher	Analysis
01059	(overlapping)		Professor F identifying the purpose of the course set-up
01060	And		
01061	A		
01062	So I		
01063	I have to structure the environment		
01064	Basically the way that classes are set-up there's something to do every day-		
01065		*(overlapping)*	
01066		*Right-*	
01067	*(overlapping)*		

In turning the focus to Professor F's current teaching and his prior teaching experiences as a part of his intellectual history, Table 4.5 was formed as a timeline of the courses he has taught and the number of years Professor F has taught these courses.

Table 4.5

Timeline of Professor F's Course Teachings at Coastal University

Types of Courses Taught	How Many Years Taught
Third-year studio building design studio	22 years
Fourth-year interdisciplinary building design studio – architecture and architectural engineering (co-taught)	12 years
Fourth-year architecture landscape architecture (co-taught)	Taught twice (1995 & 1996)
Fifth-year independent study	Taught twice (2008 & 1999)

Professor F stated he experienced teaching beyond teaching third-year studio (the focus of this study), including prior experiences in an interdisciplinary fourth-year course, a general fourth-year course with landscape architecture, and independent work with fifth-year

students (a reference made later in the second interview-conversation). His extensive background across numerous years in the program supported the development of the course content, opportunities and support he provided for processes and practices of the design studio, and the kinds of knowledge and understandings he integrated into the course. Thus, through repetitive teachings of the course, Professor F built a repertoire for teaching design studios in general, and specifically, in relation to the third-year. The tracing of the courses Professor F taught over his time at Coastal University assisted in understanding the type of student populations Professor F encountered and helped to prepare for disciplinary processes and practices in and outside the architecture program. Access to this type of informational content was critical to the course he developed and how disciplinary content was constructed as a part of the course.

History of the Course Participants

In this section, I discuss the students and visitors who participated in this design studio course. As discussed in greater detail below, the students and visitors who entered this course comprised were a diverse population.

Student Participants in the Course

The student participants. Students brought a wealth of background experiences to this fall quarter design studio including previous design studio professors and related experiences, and digital tool experiences (digital modeling software). Table 4.6 below describes the demographic make-up of the students participating in Fall 2011 design studio course with Professor F at Coastal University. All students agreed to participate as part of

this research project. Although not captured in the table, at the time of the study, all students were in the architecture major.

Table 4. 6

Fall 2011 Student Demographic Description

Student	Gender	Minor	Class Level	Native/ Transfer Student	Regional Relationship
Student 1	Female	None	Senior	Native	Northern California
Student 2	Male	None	Senior	Native	Local
Student 3	Male	None	Senior	Transfer	Local
Student 4	Female	Architectural Engineering*	Senior	Native	Southern California
Student 5	Male	None	Senior	Native	Local
Student 6	Female	None	Senior	Native	Northern California
Student 7	Female	None	Senior	Native	Southern California
Student 8	Female	None	Senior	Native	Out of State
Student 9	Male	None	Senior	Transfer	Southern California
Student 10	Male	None	Senior	Native	Local
Student 11	Male	Psychology & Sustainable Environments*	Senior	Transfer	Northern California
Student 12	Female	Studio Art	Senior	Transfer	Northern California
Student 13	Male	Photography	Senior	Transfer	Northern California
Student 14	Female	None	Senior	Native	Out of State
Student 15	Female	Studio Art	Senior	Native	Southern California
Student 16	Female	None	Senior	Native	Northern California
Student 17	Female	Sustainable Environments*	Senior	Native	Southern California
Student 18	Male	Construction Management*	Senior	Native	Northern California

In column 1, each line denotes an individual student participating in the course. A total of 18 students participated in the design studio course. Column 2 discusses the gender of the student participants. As noted in the table, 10 students were female and 8 were male. Column 3 identifies seven students declared minors. In addition, three of the seven the students chose to complete their minor within the Architecture and Environmental Design College. Column 4 discusses the class level of the student. All students were considered seniors in their class level. Column 5 identifies students who were continuing students, those who began their studies at Coastal University as freshmen, or if they were transfer students, those students who enrolled at Coastal University during the third-year of the architecture program. Lastly, Column 6 indicates the student's regional relationship in proximity to Coastal University. All students, except for two, were from California, and of those from California, four students were listed as "local," and were from a 10-15 mile radius from the university site, seven were from northern California, and five were from southern California.

Visitors. Several outside visitors were invited during Fall 2011 to observe and participate in the architecture design studio. Professor F made possible the opportunity for these individuals to interact with students and faculty as part of the course requirements. Drawing on fieldnotes and the course syllabus, in the Table 4.7 below, I identify the major visitors who engaged in the course. Column 1 names the visitor who was present during the "official" course meeting times. Column 2 discusses when the visitors engaged in the "official" course. Lastly, column 3 identifies how these visitors participated in the course.

Table 4. 7

Invited Visitors to Architecture Design Course During Fall 2011

Visitors	When Participated In Course	How Participated in Course
Architecture Department Faculty	Mid-Reviews [1 event during "official" course time]	Faculty were "Faculty Judges" working groups of 3-5 judges (judges rotated after approximately 3-4 students). Provided verbal feedback and interacted with students, Professor F, and the constructed artifacts (e.g., presentations, posters, models).
Professor in Interdisciplinary Program Liberal Arts and Engineering Studies	Brought students from LAE Studies major to work with design studio students to develop Expressive Technologies Project for Warner Bros. [3-4 week period from development to presentation]	Provided verbal feedback and interacted with students, Professor F, and the constructed artifacts (e.g., presentations, posters, models).
Librarians: ● Lead Librarian "Client" ● Architecture Librarian	Lead Librarian "Client" served as "client" for the project. Architecture Librarian served as a reviewer providing feedback. [2 week period for design and critique and additional two months of display time in the library]	Lead Librarian acted as the "client" and provided the majority of verbal feedback. Interacted with students, Professor F, and the constructed artifacts (e.g., presentations, posters, models). Architecture Librarian provided verbal feedback and interacted with students, Professor F, and the constructed artifacts (e.g., presentations, posters, models).
Students in Department	Peer participant-observers engaged with architecture design studio students outside during: ● Mid-Review ● Final Review. [2 events – each during "official course time"]	Engaged primarily with design studio peers regarding designs.

Visitors	When Participated In Course	How Participated in Course
Outside the Department ● Students, Faculty, Staff, and Other Passers-By ● Liberal Arts-Engineering Studies Students	Students, staff, faculty and other passers-by participant-observers engaged with architecture design studio students outside during: ● Mid-Review ● Final Review. [2 events – each during "official course time"] Liberal Arts-Engineering Studies students engaged with design studio students to develop Expressive Technologies Project for Warner Bros. [3-4 week period from development to presentation]	Provided verbal critique and interacted as participant-observers with design studio students, other students/peers, Professor F, and constructed artifacts (e.g., presentations, posters, models).

The first three visitors listed, Architecture Department faculty, professor in Liberal Arts-Engineering (LAE) interdisciplinary studies program, and librarians (lead and architecture), were all invited by Professor F into his design studio at specific times and for particular purposes. The Architecture Department faculty consisted of a wide range of younger and well established faculty who were invited in for the mid-reviews, a one-time course event, as a "tag team" (folk term provided by Professor F) of three to five faculty, who reviewed three to four students each. The faculty provided verbal critique to the course students, Professor F, and other visitors in response to student presentations of their project and the artifacts (posters, models, etc.) they brought as a part of the review.

The professor from an interdisciplinary program in LAES was invited into the studio, along with his students, to work with the design studio students in creating a project, Expressive Technologies, integrating different forms of visual and audio experiences. Their

final project was presented to the larger group (architecture, LAES, Professor F, professor in LAES, and researcher). The group with the winning concept, as voted by the whole group, was invited to pitch their idea to Warner Bros. Unlike the mid-review, the Expressive Technologies project was developed over a three to four-week period with verbal critiques from initial concept idea, through development, to the final presentation.

Two Coastal University librarians, the Lead Librarian and Architecture Librarian, were also asked to participate as visitors during fall quarter. The Lead Librarian was invited as the primary "client" by Professor F for students to develop a piece of furniture to be displayed in the library as part of an architecture furniture design project. As the "client," the Lead Librarian was invited into the course to provide details for the design project. The Architecture Librarian was the librarian assigned to the architecture education program by Coastal University. While, the Architecture Librarian was present and actively participated in several of the critique events, he often took a tertiary position behind the Lead Librarian and Professor F. Over a two-week period, students designed and re-designed their furniture pieces with input from the Lead Librarian, the Architecture Librarian, and Professor F. The first set of verbal critiques occurred three days into the project, when the Lead Librarian, the Architecture Librarian, and Professor F met with each group at varying locations (e.g., design studio, college shop, outside in the quad) to discuss their development. Five days later, the entire group, including all student groups, the Lead Librarian, the Architecture Librarian, and Professor F, convened in the quad to provide final reviews, via verbal critique, of the furniture design.

Other visitors were students in the department and students outside of the department. Students in the department were considered peers to the design studio students

and mainly engaged with students during mid-review and final reviews, as both were held outside "official" course time. Similarly, outside students, those outside of the department and/or college, and passers-by also engaged design studio students during times outside mid-reviews and final reviews. As discussed previously, LAES students engaged with design studio students to develop the Expressive Technologies Project. In addition, LAES students verbally critiqued and interacted as participant-observers with design studio students, other students/peers, and Professor F, as well as constructed artifacts (e.g., presentations, posters, and models).

In summary, the visitors engaged with the architecture design studio students mainly through verbal critiques and critique events established by Professor F. Therefore, the interactions of the visitors were guided by Professor F's invitation to participate and the related length of interaction he established.

Conclusion

This chapter explored the course and how it related to the larger context of the institution and department. It demonstrated how course content, processes, and practices were influenced by numerous factors, including the institutional and departmental histories, the instructor's intellectual history, and the student participants entering the course context. Missing from this current chapter is how Professor F inscribed disciplinary content in the course, particularly the process of critique, through a representative example. In the next chapter, I conduct a series of focused analyses on how the instructor inscribed disciplinary ways of knowing and doing around a central architectural practice of critique in a course with entering third-year students from diverse educational backgrounds.

Chapter V: What Counts as Critique from the Instructor's Perspective

This chapter builds upon the contextual analyses found in Chapter IV. Each sub-analysis, mini tour, conducted here builds to the concept of a telling case (Mitchell, 1984) related to the concept of critique. Tracing the opportunities provided through different actors (people, spaces, and artifacts) (Spradley, 1980), across events, and resources was imperative for developing an emic perspective how Professor F constructed the course that engaged students in learning the disciplinary processes and practices of critique as an architect. Thus, the overarching question examined in this chapter was: *What counted as public critique in this architecture design course from Professor F's perspective?*

To answer this question, I conducted 4 grand tour analyses: Professor F's teaching philosophy about critique; critique as inscribed through course texts; critique as inscribed in course events; Day 1 of class: setting precedent for future critique opportunities; analysis of one complete design cycle: September 26-29, 2011. Each analysis is theoretically grounded and seeks to investigate how crits are inscribed from Professor F's perspective through his discourse about the course and critique and through the opportunities he provided for engaging in critique to prepare students for disciplinary requirements.

Professor F's Teaching Philosophy About Critique

As discussed in Chapter III, three ethnographic interview-conversations (Gubrium & Holstein, 2003; Spradley, 1979) were conducted as a part of the records collected to further my understandings of the meanings constructed in the course; I conducted these three ethnographic interview-conversations with Professor F in his campus office as a part of my record collection. While the interviews were not narrowly focused on critique, he made

visible various facets of crits as executed throughout the quarter-long course. The next sections focus on two analyses, both drawing on Professor F's interview-conversation. The first analysis focuses on how critique was conceptualized by Professor F, while a second analysis is a domain analysis examining the definitions and the related meanings regarding the concept of critique.

Critique as Explored Through Interview-Conversations

In this section, I provide an overview of the interview-conversations with the professor related to the concept of critique. The topics of critique are presented in Table 5.1 in the order of their occurrence across interviews one and two. These two interviews were the focus of this analysis as they contained content relating to how the instructor conceptualized critique as a part of his course. Eight major topics related to critique were inscribed by the professor during the two interviews conducted. These major topics are described in detail in the subsequent sections. The list below (re)presents topics in the order in which they appeared within the transcripts from the ethnographic interview-conversations with Professor F:

1. How to Measure or Assess - Components in Critique
2. Metaphor of Writer and Representation
3. Roles as the Instructor
4. Roles as a Student
5. Reflective Statement
6. Types of Critique – Contrast of Professor F's Design Studio to those of Colleagues
7. Critique Format and Purpose
8. Acceptance and Implementation of Critique/Criticism

In addition to these major topics, several subtopics were also identified through an analysis of recurrent references by Professor F to particular subtopics. In Table 5.1, the topics and subtopics are presented in the order that they were discussed in the interview. The Interview # column identifies if the topics and/or subtopic(s) were discussed in interview one or two. Also noted are the particular message unit(s) to which each topic and subtopic related. The last column displays to whom Professor F referred in each major and sub- topic. For instance, during the subtopic of risk-taking, Professor F specifically referenced the students and the relationship to meeting a level of risk-taking.

Table 5.1 also represents the topics based on a microanalysis of the transcripts. For example, as indicated in Column 3, Topics, risk-taking was the first subtopic discussed, and was also referenced two other times during interview one.

Table 5.1

Chains of Critique Topics as Inscribed by the Professor Constructed from Transcripts

Topic #	Interview #	Critique Topic	Message Units	To Whom the Professor Referred
1	1	How to Measure or Assess - Components in critique		
		-Risk-taking	1369-1373	Students
			1394-1395	Students
			1597-1601	Students
		Completion of project	1379-1384	Students
			1388-1395	Students
		Production of project	1511-1514	Students
		-Tools	1515-1521	Students
		-Drawings	1522	Students
		Storytelling (representation)	1542-1551	Students
			1590-1596	Students, Professor F, Audience
			1602-1605	Students and Professor F
		Visual (quality indicators)	1543-1548	Students
			1554-1562	Students and Professor F
			1583-1588	Students and Professor F
			1915-1917	
2	1	Metaphor of a Writer and Representation	1523-1539	Students
3	1	Roles as the Instructor	1708-1710	Professor F
4	1	Roles as a Student	1711-1717	Professor F and Students
5	1	Reflective Statement	1878-1887	Students
	2		1732-1741	Students
6	1	Types of Critique – Contrast of Professor F's Design Studio to Colleagues	1929-1955	Professor F and Colleagues
7	1	Critique Format and Purpose	1987-2003	
		-Format	1987-1994	Students and Professor
		-Comparing and Contrasting	1995-2003	Students
8	2	Acceptance and Implementation of Critique/Criticism	1700-1729	
		-Resources for Students	1700-1710	Professor F and a Colleague
		-Filtering critiques	1711-1716	Students
		-Discussion in the Public Space	1717-1729	Professor F and Students

Examining the message units for each topic and subtopic made visible a non-linear discussion of topics and subtopics; that is, references to topics did not follow a linear format. Professor F moved in and out of topics and subtopics to craft answers to the questions asked by the researcher. Several subtopics were discussed during different parts of interview one, and thus became recurrent topics, which signaled that they were significant (Bloome & Bailey, 1992) in understanding the nature of critique as conceptualized by Professor F. In introducing and re-introducing these topics, Professor F created intertextual ties among these topics (Bloome & Egan-Robertson, 1993), utterances (Bakhtin, 1986), or texts (Fairclough, 1992).

One intertextual tie identified occurred between interview one and two (see Appendix B for the complete excerpt). While these two interviews took place at different points, both discussed students' completion of a reflective statement. Although in interview one Professor F introduced the requirement of a reflective statement, in interview two, he further elaborated on the reflective statement and the related components that were required of students. Professor F discussed the reflective statements, Table 5.2, as a self-critique by evaluating what students learned, or what they hoped to learn, in the design studio and the linking of the final reflective statement to the initial self-evaluation.

Table 5.2

Interview 1 (Re)presenting Transcript Excerpt of Discussing Reflective Statement Lines 1878-1888

Line #	Professor F	*Researcher*
1878	They	
1879	They have to a	
1880	Send me a reflective statement	
1881	A	
1882	About the answering questions that I've given them about their	
1883	Their learning for the quarter	
1884	Things that they learned things	
1885	They wished they learned	
1886	And then they do a self-critique	
1887	Against this evaluation rubric	
1888		*Mmhm*

A second intertextual tie is identified in lines 1365-1368 in Table 5.3 below, (see Appendix B for a more complete excerpt), from interview-conversation one. Professor F referenced an evaluation group that he created.

Table 5.3

Interview 1 (Re)presenting Transcript Excerpt of Discussing Reflective Statement Lines 1364-1368

Line #	Professor F	*Researcher*
1364		*I guess go to critiquing*
1365	Yeah that's a that's a good question	
1366	I can send you some stuff	
1367	There's a whole a	
1368	Evaluation group that I developed	

In doing so, Professor F intertextually linked this conversation to another text that an evaluation group had created. This document provided an outside text that students referenced during the critique process.

Several additional recurrent subtopics were intertextually tied as well. While there was a recurrence of subtopics, the content was not repetitive as these opportunities allowed

Professor F to expand his meanings and understandings. The following were intertextually tied subtopics as identified in the interview-conversations: risk-taking, completion of the project, level of representation-storytelling, and level of representation-visual.

Analysis of the transcribed interview led to the identification of another key discourse resource topic that Professor F drew on to relay meanings through the use of metaphors. The use of metaphors was present in interviews one and two and throughout his classroom discourse. Metaphors are essentially "understanding and experiencing one kind of thing in terms of another" (Lakoff & Johnson, 1980, p. 5), and are an everyday occurrence as a part of language, actions, and ways of thinking. Further, Lakoff and Johnson stated that metaphors are ways of making available meanings and a "concept of an argument" (p. 5) to achieve a particular linguistic purpose.

Analysis of this selected set of transcripts related to critique, Table 5.4, led to the identification of metaphor of a "writer" while discussing the concept of critique as a whole.

Table 5.4

Interview 1 (Re)presenting Transcript Excerpt Concept of Critique

Line #	Professor F	Researcher
1511	So it's a	
1512	It	
1513	It's how far the student would	
1514	Go to produce it	
1515	The oth-	
1516	The other aspect which	
1517	Which will probably a not be quite	
1518	You might have a lot of questions about	
1519	It's how	
1520	It's how	
1521	What kind of tools students are using to tell a story	
1522	How well are they drawing this thing up	
1523	I mean	
1524	If it	
1525	If you know	
1526	If the students were writers	
1527	And they had a really great story and the	

Line #	Professor F	Researcher
1528	I	
1529	I started to read the writing	
1530	And I	
1531	You know	
1532	There's typos and the	
1533	The syntax of the sentence were all backwards	
1534	And you couldn't	
1535	You know	
1536	The story was amazing but	
1537	Just hard reading this thing	
1538	And you couldn't really get the story through the writing	
1539	Like with the architect students if the drawings are really hard to read and	
1540		Mmhm
1541	The models are sloppy	
1542	Then the story is not as compelling	
1543	There has to be a certain level of quality	
1544	To the a	
1545	The graphics	
1546	And the physical models	

In doing so, Professor F conveyed the importance of students to provide a story to their audience. Similar to the process of writing, whereby students must think about syntax and grammar conventions when constructing their piece of writing, in designing and constructing their projects, Professor F framed the need for students to provide a story that contains the same level of details as a written piece. Therefore, according to Professor F, students must think about how they are conveying their stories to the audience, what they are drawing on to develop their stories, and how they are ensuring their audience can follow their stories. Professor F identified the story development as the level "representation." The components in representing, as conveyed by the professor, focused on quality factors (e.g., graphics, models, the craft and care that go into model design) all of which impact how and what can be "seen" visually. Thus, the professor introduced the importance of visuals in telling and following a story. The related story/ies told were

analyzed through the different forms of critique measured by Professor F, his colleagues, peers, and clients.

Domain Analyses of Professor F's Interview-Conversations

Building on the previous analyses investigating major and subtopics and their intertextual ties, this section focuses on identifying part to whole relationships; that is, how Professor F built to definitions and the related meanings held by this particular languaculture constructed by Professor F. The same sets of bounded transcripts discussing critique were used in mapping the relationships of these definitions and meanings to the developing dimensions of critique. Spradley's (1980) domain analysis provided the guide by which I mapped these definitions relating to critique. Semantic relationships provided a way to think about domains. Spradley identified 9 common semantic relationships used in exploring cultural domains that he identified as important for initial. The following are the semantic relationships identified:

- Strict inclusion – "X is a kind of Y"
- Spatial – "X is a place in Y" or "X is a part of Y"
- Cause-effect - "X is a result of Y"
- Rationale – "X is a reason for doing Y"
- Location-for action – "X is a place for doing Y"
- Function – "X is used for Y"
- Means-end – "X is a way to do Y"
- Sequence – "X is a step (stage) in Y"
- Attribution – "X is an attribution (characteristic) of Y"

Given Spradley (1980) identified "strict inclusion" and "means-end" (e.g., "X is a way to do Y") as important semantic relationships for building a cultural domain, the following analyses will focus on these two relationships. Strict-inclusion focuses use of the form "X is a kind of Y" to explore nouns where X are included terms, and Y is a cover term. "a kind of" is the semantic relationship. A means-end, semantic relationship focuses on verbs in building of domains where X are included terms, and Y is a cover term. "is a way to do" is the semantic relationship. Fieldnotes and transcripts from interview-conversations are rich resource for the ethnographer to build cultural meanings though the cultural domains built.

Domains in Table 5.5 were formulated from included terms, by identifying and examining interview-conversation transcript segments for strict inclusion and means-end semantic relationships. The first column lists the included terms, which were identified from the transcripts segments focusing on critique. The semantic relationship column was based on Spradley's (1980) discussion of constructing semantic relationships as ways of uncovering cultural processes, practices, and meanings interactionally accomplished in relation to actor(s), activities, and place(s). Lastly, the domains column represents the cultural domains, which relate to the concept of critique.

As stated above, the same sets of bounded transcripts discussing critique were again used in the mapping of the semantic relationships. Semantic relationships build upon the initial analysis conducted by systematically exploring the individual parts in order to construct cultural categories and the definitions that the cultural group holds regarding a specific concept. The relationships identified were: critique, critiquing, and representation. The resulting strict inclusions and means-end semantic relationships

assisted in identifying a preliminary range of cultural domains related to critique. While initial cultural meanings can be attributed to these cultural domains, the ability to obtain a comprehensive view of how and in what ways critique was talked about and implemented was constrained to particular portions of the transcripts. Thus, future analyses should also include analysis of records to identify other potential cultural domains and meanings that are significant to this architecture design studio.

Table 5.5

Domains and Semantic Relationships Built Using Key Transcripts on Critique

Included Terms	Semantic Relationship	Domain
Outdoor reviews "Tag team reviews Formal reviews Desk crits	X are kinds of	Critique
Verbal Written Visual	X are kinds of representations evaluated during	Critique
Feedback Criticism Self-critique Reflective statements	X are names given for	Critique
Risk taking Completing task (what was identified by the student) Production of concept/model Level of representation Compelling story	X are kinds of measurement components in	Critiquing
Quality Graphics Models Craft Care Story Visual	X are ways to measure the level(s) of	Representation

The domain analysis, as explored through semantic relationships, made visible how Professor F categorized the different forms of critique events, the names for the forms of critique, and ways of assessing critique that were implemented in this architectural design studio. The domain analysis made transparent the areas I lacked clarity about as an outsider to the discipline. Therefore, the categories and related meanings assisted me in coming to know the languaculture that Professor F constructed in this particular architecture design studio.

Conclusion

Ethnographic interviews provided a perspective on critique obtained directly from the instructor. In using the instructor's words and definitions, I was able to construct a set of warrants about how the instructor purposefully inscribed particular definitions of critique and the actions associated with critique by examining speaker-listener relationship (Bakhtin, 1986), what it meant to participate in critique in this design studio, and how these actions related to theories of the profession of architecture. As discussed as a part of this analysis section, microanalysis of the interview transcripts yielded 8 major topics inscribed by the instructor across the two transcripts related to critique. Through the micro analyses of the discourse, I also located a set of intertexually tied events (Bloome & Egan-Robertson, 1993) within and across the two interviews signaled significance of the topic to the instructor. Through this non-linear process, I developed warranted accounts of how meanings and understandings what counted as critique were built on across activity cycles and events within such cycles. While Spradley's (1980) domain analysis provided a preliminary list of cultural domains, these domains provide partial meanings. These

together provide one example of a telling case. To fully understand the concept of critique, further analyses are presented in the sections that follow.

Baker and Green (2007) discussed *limits to certainty* of what can be "seen" and warranted from any one record source. In investigating cycles of critique events and how the instructor discussed critique, the above sections provide the groundwork for future analyses. To explore further, I turn next to how critique was textualized by Professor F through course materials, such as the course syllabus as another telling case. As the analyses that follow show, the syllabus provided significant insight into areas such as course content; teaching philosophies; disciplinary and professional ways of doing and knowing; and the roles, relationships, and expectations of the actors taking part in the course between Professor F and students. Thus, the next section answers the question: How and in what ways did the professor inscribe critique through textual resources?

Critique as Inscribed Through Course Texts

Building upon the ethnographic interview-conversations (Gubrium & Holstein, 2003) and the ways in which critique was conceptualized and defined within these conversations, this section analyzes the course syllabus in order to identify the processes and practices relating to critique that were framed by Professor F for this particular architecture design studio. As mentioned above, following sub-research question further contributed to the overarching question: *How and in what ways did the professor inscribe critique through textual resources?* Because content relating to crits were discussed across other areas including the university website and the learning management system, I chose to incorporate these areas into the analysis as well. The related analyses provide insights into the role(s) of critique as discussed and written-into-being by Professor F. In the

section that follows, therefore, I examine how the professor constructed the course, and explore how he inscribed the processes and practices of critique in relationship to the activities and events of the course, the requirements and expectations of the course, the policies and procedures to be followed, and his teaching philosophies.

Level 1 – Syllabus Structure Broadly Constructed

The first level of analysis examined at a macro level, grand tour, structure of the syllabus and what the professor was making present to students about the nature of work in this particular architecture design studio. While many course syllabi suggest and/or assume linearity in content across weeks of the quarter or semester, the first diagram of the syllabus frames to students that the content was non-linear and was built through embedded relationships and intertextual links throughout the quarter. Figure 5.1 is a reproduction of the figure that Professor F provided students to make visible the developing progression and recursive nature of their work in this course.

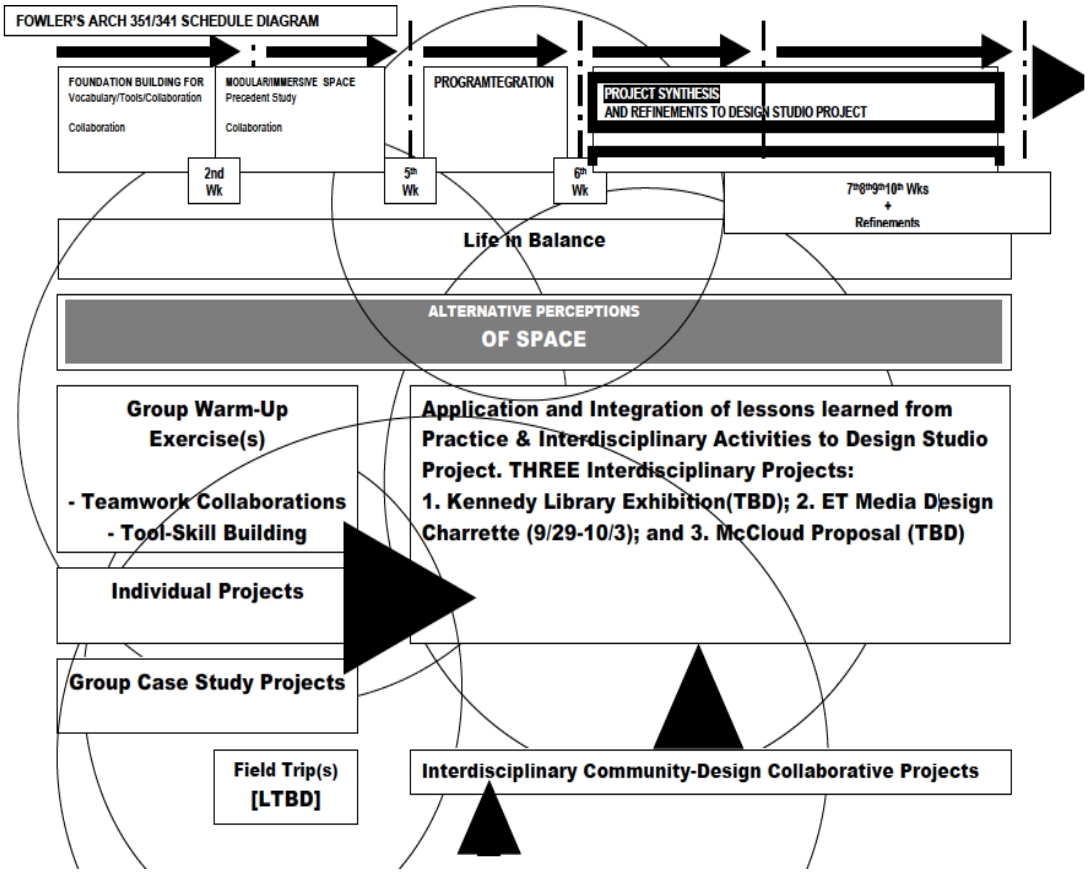

Figure 5.1. Diagram as designed by Professor F making visible the intersection of work across the quarter (Course Syllabus, Fall 2011).

By including this graphic representation of their work, Professor F showed students visually, the major content areas covered across time (moving from foundation of building vocabulary to project synthesis), how events and projects (e.g., fieldtrips, individual and group projects) would be accomplished, and with whom (individual, group, interdisciplinary, etc.) they would be constructed. Though this (re)presentation, Figure 5.1, Professor F made visually accessible to students that their work was multifaceted. It also proposed ways in which the work would be accomplished in a recursive manner over the cycles of activities across the quarter.

To further investigate the events and projects across the weeks of the course and the related course readings, I constructed Table 5.6 to explore the course development by weeks. The first column identified the week of the course; the second column, describes the course events and projects; the third column, identifies how the work was accomplished (i.e., who was involved in the work process); and the fourth column, describes the content from the learning management site (Blackboard) related to the types of readings and their related format by related weeks. This analysis, grand tour in nature, was undertaken to make transparent what Professor F was making available across the weeks of the course related to course events, projects, and course readings. By analyzing the developing structure, I was then able to trace how these pieces built upon and were interrelated across the quarter. For example, by focusing on Week 2 of the course, I was able to trace what Professor F made available during Week 1, and how events in Week 2 were not completed in isolation but were linked to what preceded Week 2 and what was made available after Week 2. Thus, through this process of tracing the intertextual links across weeks, I was able to explore how the course was being developed across the quarter and was not a series of isolated projects, readings, and working environments.

Table 5.6

Week-by-Week Description of Course Events, Projects, and Course Readings

Week	Course Events and Projects	How Work Was Accomplished	Readings on LMS
1	• Analog Digital Language of Vision (ADLV)	Group	*Themes: Diagraming, Collage, Course Notes* • Clark V. Poling, "Kandinsky's Teaching at the Bauhaus, Color Theory and Analytical Drawing", Rizzolli, New York (OL) • Ben Nicolson, "Collage Making" Chapter, from the Book "Appliance House", Rizzoli, New York (OL) • Arch 351/341 Syllabus (OL - see syllabus section) • Donald Kunze, "Confused" • James Corner, "Projection and Disclosure in Drawing" • Angelil, "Technique Science" (select 3 of the questions from Practice Lecture to use)

2	• Analog Digital Language of Vision (ADLV)
	• Furniture Review
		Group
		
		Group
			Themes: Meaning in Art, Collage & Found Image Transformations, Meaning(s) of Abstraction
			• Clifford Geertz, "Art As A Cultural System" (OL)
			• John Hedjuk, The Flatness of Depth (OL)
			• Bagnoli & Bianca, Carlo Scarpa: Architecture in Details (OL)
			• Collage:
			  • Carroll Greene, Romare Bearden: The Prevalence of Ritual (New York, The Museum of Modern Art: 1971) (OL)
			• Abstraction:
			  • E(a). Arnheim, What Abstraction Is (OL)
			  • E(b). Arnheim, What Abstraction Is Not (OL)

3	• Expressive Technologies (ET) Project Begins	Group - Interdisciplinary	*Theme: Making Space* • Ben Nicolson, "Collage Thinking" • Lewis Tsurumaki Lewis, "Contraints" • C. Tschumi, "Architecture And Disjunction"
4	• ET Project Presentations • Project Design and Project Check-In • Reflection of ET Project	Group Individual Individual	*Theme: Structure and Practice* • Technique and the Metaphysics of Science • Frampton Industrialization and the Crisis in Architecture • Rowe Chicago Frame • Allen FBC CH11SteelFrame

Week	Course Events and Projects	How Work Was Accomplished	Readings on LMS
5	• Project Check-In • Project Swap with Partners • Discussion of Readings, Presentation of 'Program', and Model Building • Discussion with Outside Visitors (Architects) and ET Project Presentation with Discussion of Group Projects	Individual Partner Group Group - Interdisciplinary	*Theme: Building Systems* • Hoberman http://www.designboom.com/eng/interview/hoberman.html • Sobek Articles
6	• Project Check-In – Discussion of Individual Designs • Discussion of Readings • Individual Project Check-In	Individual Group Individual	*Themes: Innovation* • Guy Nordenson "Patterns and Structure" 01/28/2011 http://harvard.vo.llnwd.net/o18/gsd/01282011_Nordenson.mp4 • Herzog & de Meuron Lecture by Jacques Herzog 05/05/2011 http://harvard.vo.llnwd.net/o18/gsd/05052011_Herzog.mp4 • Chuck Hoberman "Transformable Strategies for Adaptive Building Performance" 03/04/2009 http://harvard.vo.llnwd.net/018/gsd/03042009_Hoberman.mp4
7	• Group Presentation of Site Information (Laboratory Project)	Group	None Provided

Week	Course Events and Projects	How Work Was Accomplished	Readings on LMS
8	• Discussion (ongoing projects, fieldtrips, etc.) • Mid-Review	Group	None Provided
9	• Project Refinements and Final Reflections, • Weekly Journal, • Student Interviews • Final Review • Studio Clean-up	Individual Individual Pair - with Researcher Pair – with Instructor and Group – outside review	None Provided
10	• Archiving of Records	Individual	None Provided

Note. OL is On Line readings; HO is Hand Out; and, PT is Purchased Text.

Focusing in on column three, *How work was accomplished across the quarter*, what became visible was that there was a diverse set of work experiences provided, ranging from group, to individual, to interdisciplinary group work. In particular, group work occurred across the first eight weeks of the course, thus emphasizing the importance of group work across this architecture design studio. The significance of group work foreshadowed the professional experiences that these students were likely to face when entering architecture firms. The significance of group formation is discussed more thoroughly in the section focusing on Day 1, as Day 1 was the initiation of groups that continued throughout the course. Also of significance was the slow building to individual work and the interdisciplinary experiences that the instructor made available as a part of the course. Specifically, the Expressive Technology (ET) Project provided a multi-layered

experience with emphasis on groups and interdisciplinary experiences through interaction with other disciplines, such as theater and dance and an engineering-liberal studies students.

Examination of the readings assigned each week posted on the learning management system via Blackboard, indicated that they were available via different sources, from online postings, to hard copy via handouts, to purchased text. The majority of the readings were, however, available online through Blackboard. Each week's readings focused on a specific theme, as outlined by the instructor.

As a part of the weekly readings, a group of students was designated as discussion leaders. Discussion leaders were required to post "significant questions that sum up each designated reading" (Blackboard, December 11, 2011) and that were to guide discussions taking place Wednesday during "official" studio times. A passage from the course syllabus from Fall 2011 below identifies how design studio discussions began online and extended into the design studio.

> Design studio discussions start on-line and then continue into the weekly in person classroom discussions and critiques. The on-line postings allow for a balanced discussion in providing all students with a voice in the dialogue, and a lesson that design discussions are not only limited to the confinements of the course time. (Course Syllabus, Fall 2011)

The group discussions of the readings also promoted the public ways of engaging with their peers regarding designing and the design process.

Level 2 – Critique Inscribed in the Syllabus

The next level of analysis explored critique as it was inscribed in the course syllabus. The second interview-conversation with Professor F led to the exploration of the syllabus as a textual resource on crits. As evidenced in Table 5.7 below, in lines 01712-01736, the professor referenced students' difficulties in accepting and building on critique.

Table 5.7

Professor Inscribing Forty-Three Helpful Hints for Engaging in Critique Practices and Processes

Line #	Professor	Researcher	Analysis
01713	(overlapping)		
01714	And a question a day it's based on the syllabus		
01715	A colleague of		Referencing his development of rules of accepting criticism
01716	Mine		
01717	And I		
01718	Many years ago we developed these 44 rules of how to accept criticism-		
01719		*(overlapping)*	
01720		*Unhn-*	
01721	(overlapping)		
01722	Learning from design criticism and then there's another		
01723	So they take one of those and		
01724	They pose a question and		
01725	They make a collage of it		
01726	And it's just one of the things that I noticed over the years		Proposing that students have difficulties in filtering critique
01727	Students are not very good at		
01728	At		
01729	What I call "filtering feedback that they get"		

Line #	Professor	Researcher	Analysis
01730	So there's 44 different versions		
01731	Of how to look at it typically they		Referencing 44 versions of critique as important resource students
01732	They feel more comfortable if I		
01733	Just go to their desk		
01734	And give them a list of things to do-		
01735		(overlapping)	
01736		Right-	

In doing so, the professor specifically made visible forty-three ways that he and his colleague developed to have students participate in and accept critique. Analysis of Professor F's discourse related to the concept of critique in the syllabus led to the identification of a potential *rich point* (Agar, 1994) for further analysis.

To further explore the potential rich point of critique in the syllabus, I explored the ways in which critique was inscribed in the pages leading up to the forty-three ways identified by Professor Fin his and his colleagues' *Learning from Design Critiques* rules. These were guiding principles for students, but did not speak to a specific critique format. Drawing on a similar theoretical and methodological process as Stewart's (2015) analysis investigating what counts as musicology as textualized through an introductory chapter from a scholarly text, the syllabus was analyzed for what the professor made visible regarding critique in this architecture design studio.

To examine the inscriptions of critique in the text, I extracted the introductory pieces of text inscribed by the instructor relating to critique and placed them in table format. Parallel to Stewart (2015), the present analysis was also guided by my own experiences of engaging with the professor through interview-conversations and through participant-observations, which allowed me to analyze the multiple layers and the

intertextually tied relationships. In line with Stewart (2015), I separated text onto different lines, or message units (Green & Wallat, 1979; 1980), to show the text as a discursive construction and to match the grammatical pauses (commas and periods) in the text. In contrast to spoken transcripts, commas were left in the table to show the grammatical pauses that signal a break in content, as if Professor F was reading the syllabus out loud. As shown in Table 5.8, in the next section, line numbers mark these individual lines of syllabus content. Line by line analysis of Professor F's discourse as inscribed in the syllabus provided a grounded account of what Professor F referenced and proposed regarding critique in this particular architecture design studio. This analysis, therefore, makes visible what Professor F told students that they needed to know and do as a part of this course.

Building on the process described in the preceding section, this section discusses the analysis of critique as inscribed in the syllabus.

Table 5.8

Critique as Inscribed in the Course Syllabus

Line #	**Syllabus Content**	**What the Syllabus is Proposing**
	Page 3 of Syllabus - "Criticism Notes"	
0001	Obtaining feedback (or *receiving criticism*	Establishing feedback same as criticism
0002	, as it commonly referred to), on a project(s)	
0003	, is not limited to the one-on-one desk critique.	Suggesting that process of critique is beyond desk crit
0004	To mature as a designer and as a future professional it is important to understand how to use a *multiple range* of feedback typologies for obtaining input on projects.	Identifying there is more than one type of feedback that can be applied to projects

Line #	Syllabus Content	What the Syllabus is Proposing
0005	Becoming self-critical for what needs to be done to proceed along a consistent path of project development	Suggesting critique is central to the development of project
0006	, is a significant part of learning about criticism.	
0007	The *desk crit* is not the only source of how to get feedback for improving your work	Reiterating that desk crit is not the only form of feedback
0008	, but it seems it is the one typology that most students seem to be most familiar (or comfortable) with.	Suggesting students are most familiar with desk crit – foreshadowing other critique typologies will be used
0009	IMPORTANT studio activities to become immersed-in for developing a critical framework for understanding how to use a range of feedback typologies to inspire your design work include (but are not limited to):	Suggesting studio activities as central to the design process and learning how to apply critique
0010	• ASSIGNED Readings;	
0011	• WEEKLY Web Postings;	
0012	• WEEKLY In-Person Class Discussions;	Suggesting types of activities they will engage in throughout the course
0013	• Discussion Leading / Moderating;	
0014	• WEEKLY E-Mail Journals;	
0015	• DAILY Reactions to Aphorisms,	
0016	• Project Critique's of the Whole Reviews,	Identifying another form of critique
0017	• Formal Review's Active Listening/Notetaking	
0018	• Design Discovery via thinking through your hands (e.g., producing at least three alternative drawings , models, etc. for exploring designer's inquiry…),	

Line #	Syllabus Content	What the Syllabus is Proposing
0019	• Collection of 'questions' that focus on the how aspect for tackling design problems (e.g., let the designer's inquiry process take care of the what, why, where type questions).	
0020	Understanding the differences	
0021	, limitations and learning to learn from each of these feedback typologies is a key component for your personal and professional development.	Suggesting that critique typologies will assist with development
0022	Students' who selectively decide to pre select what to follow through on limit their learning substantially	Identifying students' part in their learning process and development and related grading
0023	, and will be grading accordingly.	
	Page 4 of Syllabus - "REQUIREMENTS: Holistic Learning Objectives"	
0024	4. Incorporation of multiple levels of feedback (from informal to formal, group discussions, etc.) into activities and projects	Proposing the many feedback forms as part of learning objectives

As indicated in Table 5.8, line 0001, Professor F's discursive choices identified *receiving criticism* or *feedback* as synonymous practices and processes in this course of study. Specifically, the professor made visible that multiple feedback typologies (critique typologies) beyond the *desk crit* were used in this particular course. The recursive statements about these typologies as outlined in lines 0002-0004, line 0008, line 0009, and line 0024 signaled to students that more than one form of feedback was used across their experience in this course. Lines 0009-0019 also discuss the importance of activities and the relationship to critique typologies and the importance of these typologies in building their course and professional knowledge. Lastly, Professor F proposed to students that their own participation was central for their learning. Lines 0022-0023 proposed ways that

students, who limited themselves in responding to the feedback process, would not only limit their progress in project design but would impact their grades.

Building on the initial rich point identified in the second interview-conversation with Professor F about the nature of critique (re)presented in Table 5.8, I examined what was being proposed to students in the syllabus about critique. As the analysis in this section shows, the syllabus, as the proposed curriculum (Posner, 2004) was representative of Professor F's teaching philosophy. It also reinforced what was significant for students to know and do regarding critique. Areas specifically proposed were: critique events, how students would be assessed regarding their project(s) through critique, and a definition of critique in this design studio section. Allusions to specific critique events or activities throughout the syllabus raised several questions: How and in what ways were crits accomplished as a part of this design studio course? What did Professor F make available in regards to critique activities and events across the quarter? These questions led me to analyze how critique was inscribed in course events across the quarter.

Critique as Inscribed in Course Events

This section builds upon the overarching research question of public critique in this architecture design course by addressing sub-research question 2.3: *How did the professor make present the processes and practices of critique?* To explore how critique was implemented and used within this particular studio, I drew on Green and Meyer's (1991) "cycles of activity" (p. 150), a process that allows researchers to trace "within and across days," thus signaling "over time the nature of classroom events" (p. 151) and a "complete series of actions about a topic or for a specific purpose" (p. 151). Thus, I adopted the idea of "cycle of activity," but refer to it as "cycles of critique," signifying critique as an

iterative and recursive process throughout the quarter, that critique occurred within and across days throughout Fall 2011 records.

The next section discusses the particular kinds of critique identified across event cycles. This analysis therefore represents both a grand tour and mini tours. Table 5.6 summarizes these critique events. To identify and "name" the type(s) of critique present in the design studio, I utilized Salama (2007) as guide of the type(s) of critique commonly found in an architecture studio such as desk crit and whole group critique. I also added to these through my examination of the languaculture of this particular Professor F and design studio. In Table 5.9 below, row one identifies the major types of critique available in this design studio during Fall 2011. These were identified as the following: desk crit, whole group critique, and reviews. The second row in the table includes the subcategories within the major types of critique and were constructed to acknowledge the varying actor(s) participating in the critique and to also acknowledge that in the case of whole group critique, critique could occur as an individual or as a group. Thus, subcategories were identified as the following: desk crit - with client(s) and with the professor; whole group critique - group-by-group and student-by-student format; and reviews - outside faculty or with Professor F.

Table 5.9

Types of Critique Embedded Across Architectural Design Studio Fall 2011

Week	Desk Crit		Whole Group Critique		Reviews	
	With Client(s)	With Professor F	Group-by-Group	Student-by-Student	With Outside Faculty	With Professor F
Week 1			**9/21 - Whole Class Critique – Group-by-Group** Professor F moves group-by-group providing feedback/critique of designs. Location: Analog design studio			
			9/23 -Whole Class Critique – Group-by-Group Professor F moves group-by-group providing feedback/critique of designs Location: Analog design studio			
Week 2	**9/28 -Individual Critique – Group-by-Group-** Discussion/Critique: Lead Librarian, Architecture Librarian, and Professor F visit with each group on project progress. Location: Outside analog design studio, college shop, analog design studio		**9/26 -Whole Class Critique – Group-by-Group** Studio group moves to Digital Studio. Professor F moves group-by-group [Professor F directs students to introduce themselves and provide a compelling story]. Location: Analog and digital design studio			
Week 3		**10/5 - Individual Critique – Student-by-Student** Opening with an in-class activity, Professor F requires students to begin "conceptualizing" using kinetic machine before moving student-by-student discussing and providing feedback about models. Location: Analog design studio		**10/7 - Whole Class Critique – Student-by-Student** Professor F states that they will start in reverse providing feedback/critique of designs. Location: Analog design studio		
Week 4		**10/10 - Individual Critique – Student-by-Student (with periodic commentary to whole group)** Professor F provides feedback/critique of designs student-by-student at individual desks. Location: Analog design studio		**10/10 - Whole Class Critique – Student-by-Student** Professor F asks each student to present project and engages in feedback/critique of design for approximately 6 of the students. Location: Analog design studio		
Week 5		**10/19 - Individual Critique – Student-by-Student (with periodic commentary to whole group)** Professor F directs students to gather objects and meet under their name for a check-in. Professor F announces to group he will walk around to complete one-on-one crit [emphasizes that the process is iterative]. Location: Analog design studio		**10/17 - Whole Class Critique – Peer Critique Assessment and Student-by-Student Discussion** Professor F states that all students will fill out sheet to provide feedback/critique of their peer's work. Professor F then moves student-by-student to discuss the feedback/critique given by peers and then Professor F provides own feedback/critique. Location: Analog design studio		
Week 6		**10/19 - Individual Critique – Student-by-Student (with periodic commentary to whole group)** Professor F directs students to begin their work and moves student-by-student. Location: Analog design studio	**10/21 - Whole Class Critique – Group-by-Group** Each group presents project with Professor F providing feedback/questions regarding project(s). Location: Digital design studio			

	Desk Crit		Whole Group Critique		Reviews	
Week	**With Client(s)**	**With Professor F**	**Group-by-Group**	**Student-by-Student**	**With Outside Faculty**	**With Professor F**
Week 7		**11/2 - Individual Critique – Student-by-Student (with periodic commentary to whole group)** Professor F moves from student-by-student while referencing whole group (often holds up models when addressing students; emphasizes the importance of the whole model, believability of structure, politics and architecture, and designing public/private and semi-private/semi-public). Location: Analog design studio		**11/4 -Whole Class Critique – Student-by-Student** Professor F begins with student reviews (uses models as reference of work) providing feedback on everyone's model and emphasizing completion of work. Location: Digital design studio		
Week 8	NO CLASS					
Week 9		**11/16 -Individual Critique – Student-by-Student** Professor F begins to move between students and announces drawings are representations of adjustments. Location: Analog design studio			**11/14 -Mid-Reviews –Student-by-Student (Groups of 3 to 4) [Whole Group Critique]** Faculty judges arrive and students present individually in groups (3 to 4) to a group (3-5) of judges and audience (faculty, Professor F, peers). Location: Outdoors in Quad	
		11/18 - Individual Critique – Student-by-Student (with periodic commentary to whole group) Professor F begins with a general discussion (with whole group) showing examples of representation using students' projects/designs as examples to provide feedback and direction on how to develop. Professor F then moves student-by-student to provide feedback /direction on projects. During portions of individual desk crits, Professor F addresses whole group about key design components (representation and site argumentation). Location: Analog design studio				
Week 10		**11/21 - Individual Critique – Student-by-Student (with periodic commentary to whole group)** Professor F moves student-by-student providing feedback/direction on projects. During portions of individual desk crits, Professor F addresses whole group about key design components (rendering/digital representations and narrative descriptions). Location: Analog design studio				
Week 11						**11/28 -Final Review - Student-by-Student [Whole Group Critique]** Professor F moves student-by-student for individual discussions during Final Review. Feedback and discussions are held in the open, while visitors (peers, faculty, and outsiders) rotate through the review. Location: Outdoors in Quad
Week 12	**FINALS WEEK**					

Column 1 of the table identifies the weeks of the quarter beginning with Week 1 and ending with Week 12. As indicated in this table, no "official" class was held at Coastal University on Week 8. During Week 8, the design studio participants attended a fieldtrip to several southern California architectural firms, laboratories, and other sites related to their ongoing design projects. Week 12 was finals week and was mainly used by students to conclude their ongoing projects and archive their files. Desk crits, which are summarized in the second and third columns of the table, were found across Week 2 to Week 10 (excluding Week 8). An individual desk crit was often an individual form of critique occurring between the instructor and student at the student's desk (Melles, 2008). While this was generally an individual process, this design studio used a desk crit in two ways: group-by-group format and individual format.

Analysis of the group-by-group format showed that this configuration was only found during Week 2; this was the only instance of desk crit involving client(s) and the professor. In this session the client(s) and the professor moved group-by-group in and outside the analog studio to check-in on group progress for the furniture design project. All other instances, eight in total, were undertaken using the individual desk crit format that involves student-by-student interactions. However, there were at least six instances where this student-by-student form took a whole group format as the professor stopped the conversation with the individual student to address the whole design studio. Thus, the individual format shifted between individual and the whole group to identify key areas involved in the design process. Through this analysis process what became visible was that the students became the overhearing audience (Larson, 1995); that is, they could hear what Professor F discussed with other students.

Whole group critique, as noted by Salama (2007), encourages students to locate themselves within the studio, which he argued would assist in their participation of others' and their own design processes. As evidenced in the cycles of critique across the fall quarter, columns 4 and 5 of the table, this form of critique was used as the foundational form of critique. As the first type of critique used in the studio, it began Week 1 and was used continuously through Week 5, before being used once more during Week 7. Whole group critique was accomplished through group-by-group and student-by-student formats. Group-by-group is defined as instances where a group of students presented and received feedback in the form of critique in the presence of the whole (design studio) group. Student-by-student format was comprised of instances of students presenting and receiving feedback in the form of critique individually by the whole (design studio) group. Group-by-group was used across 3 weeks for a total of 4 instances, with the majority of instances, two, occurring during Week 1. Student-by-student whole group critique transpired over 4 weeks of the course, with the majority of the instances occurring Weeks 3 through 5 and again during Week 7. A combination of group-by-group and student-by-student with peer review was only found during Week 5.

Reviews, according to Salama (2007), can take place throughout the project or design process. In the case of this third-year design studio, reviews were the least used forms of critique formats across the fall quarter, taking place in Weeks 9 and 11. While the least used type of critique, reviews were the most formal of the critique events taking place during the quarter and were given the name "mid-reviews" for Week 9 and "final reviews" for Week 10. Both employed the use of whole group critique student-by-student format. A departure from the previous critique events, the reviews took place publicly by holding the

session in an outside courtyard, just down from the studio. As a public setting, several students, faculty, and others (peers, visitors, etc.) were purposefully invited to participate with the student presenters. Students were asked to bring out all design materials (poster, models, and designs) to their individual presentation areas. The professor directed the organization of posters on the presentation boards. Week 9 reviews contrasted with Week 11 in that judges, who were faculty in the professor's department, provided feedback and critique to students. Professor F orchestrated the group of judges (generally in groups of 3-4) to provide critique to groups of 3 to 4 students at one time. New groups of judges cycled throughout the reviews until all students completed their presentations. Week 11 contrasted with Week 9 as it was considered a "final review" occurring between each individual student and Professor F. However, the public format used in Week 9, including design materials and individual presentation area, remained consistent.

In looking across all weeks, except Weeks 8 and 12, critique was present in one form or another. Weeks 6, 10, and 11 were the only weeks with a single occurrence of critique. While the forms of critique identified in this design studio, such as desk crit, were often associated with student and t professor interaction, the professor chose a less individual form by incorporating whole group interactions, such as his periodic addressing of the whole class to assist in the design process. The co-presence of whole group critique with that of desk crits across the weeks of the course were both co-present for Weeks 2 through 5 and Week 7. It was confirmed via Professor F that the use of more than one form of critique was undertaken to provide students with all forms of the potential interactions that occur professionally and to assist students in building their individual projects while also working to a group project outcome.

In this section, the analyses of fieldnotes (written and video) and two interviews contributed significantly to my tracing of how and in what ways critique was a part of this third-year design studio. Fieldnotes, in particular, made visible critique as an iterative and recursive process and practice across Fall 2011 quarter. In closely examining the cycles of critique across Fall 2011, three major critique formats were identified: desk crits, whole group critique, and reviews. Each of these formats referred to less formal critique events (e.g., desk crits and whole group) as well as to formal critique events (e.g., reviews), were undertaken in different locations of events, had varying participants in events, and focused on diverse content in receiving critique (e.g., group project with a client, final project for laboratory). The differences also extended to within critique formats, where some critique were done individually, others, group-by-group, and others, with a client.

While all critique formats were imperative to the design process, whole group critique was used most frequently, including instances of more "individual" forms of critique (e.g., desk crits or one-on-one interactions between students and Professor F). The fieldnotes were able to provide detailed information about the critique activity cycle; however, questions regarding the purpose behind the critique formats used and the relationship to teaching and learning in a design studio remained unclear. Thus, the next section(s) investigate two telling cases from Day 1 of the course to provide in-depth analysis of how the instructor structured the course, thus allowing for critique events in the future. Day 1 is of particular interest as it was the initial introduction of the course content and critique practices and processes as outlined by Professor F.

Day One 1 of Class: Setting Precedent for Future Critique Opportunities

This section focuses on Day 1 of the architecture design studio that took place on September 19, 2011. As discussed throughout the preceding analyses, the interview-conversations with Professor F were a rich set of records for gaining an understanding and insight into the processes and practices of this course that were not readily visible through direct participant observations. Through our interview-conversations, I identified a set of rich points that served as the grounding of further analyses. As presented in the previous section, Day 1 was identified as a rich point to develop an understanding on how Professor F initiated an interactionally developed text that moved the definition of critique from written text to an interactionally accomplished discourse about critique as a professional process. Thus, the purpose of this analysis was to examine Day 1 of the course to explore how Professor F began the process of structuring his course, the implications of the opportunities he proposed for accomplishing the work of the course, and for establishing ways that critique and/or feedback would be received as a resource for developing professional knowledge of architecture processes.

Interview-conversations as an anchor. The following excerpt from the second interview-conversation with Professor F, Table 5.10, represents the rich point (Agar, 1996; 2006) anchoring the rationale for revisiting Day 1 of the course.

Table 5.10

Professor F's Second Interview-Conversation Regarding Day 1 of the Course

Line #	Instructor	Researcher	Analysis
2036		*So all the studios do a warm-up exercise*	
2037	No		
2038	No-		
2039		*(overlapping)*	
2040		*Oh*	
2041		*Okay-*	
2042	(overlapping)		
2043	It varies I mean		
2044	I		
2045	I don't a		
2046	Real taskmaster		Contrasting his studio with "typical" studio found in the department
2047	I mean I don't let the students		
2048	Typically		
2049	A number of studios you know the first day		
2050	They go and give their name and leave after the first hour		
2051	I have them stay the whole time		
2052	I mean we		
2053	We actually start doing a project-		
2054		*(overlapping)*	
2055		*Oh wow*	
2056		*Okay-*	
2057	(overlapping)		Proposing the significance of the first hours of the course
2058	Cause I		
2059	I say that		
2060	That first hour		
2061	The first two hours		

Line #	Instructor	Researcher	Analysis
2062	Is a very important pace or tone that you set for the class		
2063	If you let the students go then		
2064	There		
2065	There I don't know the the whole motivation level is not quite there		
2066	So I		Suggesting the tone and pace of the course is initiated with first exercise
2067	I also tell them that the first		
2068	Week is basically the		
2069	The pace and the tone for the class and the first exercise		
2070	All the tools		Proposing that resources used on Day 1 are applied to other projects
2071	And all the strategies that they use to do this project will be applied to the projects-		
2072		*(overlapping)*	
2073		*Mmhm-*	
2074	(overlapping)		
2075	After that-		
2076		*(overlapping)*	
2077		*Mmhm*	
2078	And so a		Establishing first day/week to provide expectations of the quarter
2079	It's very important kind of		
2080	Pace that gets set from the first you know		
2081	Day and then first week		
2082	So they		
2083	They kind of understand the expectations of what they'll be doing for the whole quarter-		
2084		*(overlapping)*	
2085		*Okay-*	
2086	(overlapping)		Revisiting the amount of time first week comprises

Line #	Instructor	Researcher	Analysis
2087	And that's		
2088	I mean first week is you know ten percent of the quarter-		
2089		*(overlapping)*	
2090		*Right-*	

In this excerpt, Professor F responded to a question about whether it is common for studios in this architecture program to complete a warm-up exercise. In lines 2046-2053, Professor F stated that other architecture studios commonly release their students after the initial check-in. He then contrasted this common approach with his studio, requiring students to begin a project on that first day. In the subsequent dialogue, lines 2057-2069, Professor F builds on his initial statement discussing how the initial hours of the course were foundational in setting the tone of the course, the expectations, and preparing students for resources and strategies that were to be used throughout the course. Thus, in and through Professor F's discourse, I was introduced to his underlying beliefs about the significance of Day 1 of the course in structuring the course of study throughout the quarter.

Table 5.11 provides another rich point identified through the second interview-conversation with Professor F. The focus of this transcript segment is a discussion of his studio's student population and the need for responsiveness to the different students entering. The initiation of the discussion is by the researcher, lines 0769-0776, asking about the evolution of projects from the initial "warm-up" project during Day 1 to individual projects at the end of the quarter.

Table 5.11

Professor F's Second Interview-Conversation Regarding Initial Course Meetings

Line #	Instructor	Researcher	Analysis
0769		*Yeah*	
0770		*So how did you decide*	
0771		*I guess the evolution of going from like the warm-up*	
0772		*To*	
0773		*You know*	
0774		*The in between projects*	
0775		*To them actually working on their*	
0776		*Individual*	
0777	I've always		Identifying student differences and the building of the community of the architecture design studio
0778	For me it's a		
0779	You know		
0780	Students coming from different backgrounds different studios		
0781	And the transfer students		
0782	I		
0783	I feel very strongly about		
0784	The		
0785	The studio getting to know		
0786	A		
0787	A me building a community an environment		
0788	Like students getting to know each other-		
0789		*(overlapping)*	
0790		*Okay-*	
0791	(overlapping)		
0792	So this idea of the		

Line #	Instructor	Researcher	Analysis
0793	The first week is is really a warm-up		
0794	Exercise a		
0795	It's sort of like		
0796	You know		Making reference to a text as a way to contrast the need to build the early relationships between people and groups in relation to this particular architecture design studio
0797	I don't know if you've read any of Ayn Rand's stuff the Fountainhead, Atlas Shrugged		
0798	But		
0799	She a		
0800	She she the way she used to		
0801	Kind of engage groups of people		
0802	In her discussion		
0803	Groups		
0804	They would		
0805	They would a		
0806	They would		
0807	They would spend		
0808	We don't have a month		
0809	But they would spend a month just sitting around		
0810	Discussing things so they would become very familiar with their vocabulary		
0811	They were using		
0812	So when they started getting		
0813	When they went to the think tank level of discussion people wouldn't have to question each other-		
0814		*(overlapping)*	
0815		*Okay-*	
0816	(overlapping)		
0817	As much		

Line #	Instructor	Researcher	Analysis
0818	Of what they meant		
0819	So my first week		Discussing how first and second weeks are used for building foundation of skills, ways of knowing and doing at this site, and vocabulary
0820	Week and half		
0821	Two weeks		
0822	Are the the idea of getting the studio to understand		
0823	Of of kind of vocabulary base		
0824	Or getting to know their colleagues in terms of their skill set-		
0825		*(overlapping)*	
0826		*Mmhm-*	
0827	(overlapping)		Groups as guiding student work as resources in exercises and the building of foundations used throughout the year
0828	And we		
0829	They		
0830	Get set-up in groups		
0831	And someone who knows a lot about digital media		
0832	And someone that knows a little		
0833	Will work together		
0834	But it's also		
0835	A way of the whole class getting to know each other		
0836	And sort of a bonding exercise		
0837	At the same time		
0838	Of building some kind of		
0839	Of foundation		
0840	In which we can launch the studio off of		
0841	If that makes any sense-		
0842		*(overlapping)*	
0843		*Okay-*	

As indicated in lines 0777-0788, Professor F's placed particular emphasis on the building of community through a common language. Therefore, Professor F signaled the importance of the common language built as a part of the course across all students. In this transcript segment, he reinforced the building of community, which he viewed as especially important given the diverse student populations (different prior education and life experiences). The differences among students were most notable in the number of transfer students entering their first educational experience at Coastal University as a part of this course.

Another element discussed in-depth by Professor F was visible in lines 0819-0822, in which he framed the first weeks of the course as establishing foundational skills, ways of knowing and doing at this site, and the building of a common language. These areas, lines 0827-00841, were discussed further, relating to the formation and use of groups as ways for students to begin to learn about each other and what was required in the course. Analysis of this rich point showed that for Professor F, groups were identified as an important entity in the formulation of this design studio.

This understanding led to the need for further investigation of *how* groups were developed on Day 1 of the course, and by extension, how Day 1 was being structured through the discourse and actions proposed to and taken up by students. Therefore, the next sections build on these rich points to examine how Day 1 was structured and what opportunities the instructor made available for building future ways of knowing and doing the disciplinary work in Coastal University's architecture design studio.

Day 1 course events and creation of studio community. This analysis was grounded in an event map constructed from fieldnotes taken during Day 1 of the course.

Analysis of the chains of activity on Day 1 led to the identification of sixteen events as indicated in Table 5.12. Table 5.12, below, provides a graphic (re)presentation of time during the day, and the event and sub-event descriptions.

Table 5.12

Event Map Day 1 (9/19/2011) – Overview of Chains of Activity

Event Map of Day 1 (9/19/2011)			
Time	**Event #**	**Event(s)**	**Sub-Event(s)**
12:50pm	1	Set-Up for Day 1 – Analog Design Studio	Researcher setting-up in analog design studio
	2		Students becoming acquainted with analog designs studio
1:11pm	3	Onset of "official" studio time	Initiating course - Professor F directing location beginning
~1:22pm	4	Day's event timelines	• Summarizing the day's events • Framing the course requirements
	5	Introductions	• Providing instructions for student introductions • Students introducting themselves
2:12pm	6	Course components	Professor F identifying that Blackboard has not been completed, but syllabus, handout and first assignment are on Dropbox
2:12pm	7	Team formation – Outside in Quad	Professor F discussing the use of teams as a way to assist with learning technology tools. Students are divided into groups based on technology experience.
~2:44pm	8	Studio work by students	• Professor F leaves and students begin to move belongings around analog design studio • Students begin working
2:45pm	9	Administrative work	• Distributing key cards • Students leaving to secure keys

Event Map of Day 1 (9/19/2011)			
Time	**Event #**	**Event(s)**	**Sub-Event(s)**
2:58pm	10	Studio work by students	• Professor F providing instructions for key cards and reading of syllabus • Students getting settled into studio - moving their items around and discussing the assignment
~3:55pm	11	Introduction of official design studios – shift to digital design studio	• Professor F introducing the digital studio as another room that he has had for 13 years • Professor F describing digital studio as a "library of work" with more "stuff" and less computers
~4:05pm	12	Syllabus and course requirements	• Professor F discussing 3-page overview handout, syllabus, and "turbo slide show" • Professor F outlining the course by weeks and areas • Professor F emphasizing a fair amount of group work • Professor F identifying 3 major projects this quarter
4:38pm	13	Introduction to Assignment 1	• Professor F introducing project "kinetic skeletal" -ADLV Workshop • Professor F providing deliverables
~4:50pm	14	Shift in location back to Analog Design Studio	Professor F and students moving back to analog studio
4:54pm	15	Studio work by students on Assignment 1	• Professor F outlining what is due for the next course meeting- suggesting setting tasks and deliverables • Professor F providing details about materials for designs
5:15pm	16	Departures and continued work	• Professor F departing • Researcher departing • Students continue working

Events during Day 1 took place across three different locations: The analog and digital design studios, and in the quad located outside the analog studio space. As further indicated in Table 5.12, the day began for me with my set-up of materials to capture the

day's events indicated as Event 1; this event, therefore was not associated with the developing course but rather was a visible dimension of the research process. As indicated in Event 1, as the camera was being set up to record the events and interactional accomplishments of the day, the students entered the studio (Event 2) and were then followed by the Professor F (Event 3). The entrance of Professor F and students marked the official onset of the course. The majority of the course time was spent in the analog studio (Events 1-7 and 15), where students were introduced to the course, each other, and to one of the learning environments. Part of Event 7 was spent in the quad during the formation of the groups, which became an important work configuration throughout the quarter. As indicated in this table, discussion of the course requirements and content as well as the engagement in the first assignment, were completed in the digital design studio (Events 11-14), mainly through the use of a PowerPoint presentation and discussion.

Establishing the course as an architect's studio. As indicated in the section above, the analysis of the first day led to the identification of the events, language(s), and actions between actors and artifacts to which students (and by extension me as an ethnographer) were introduced. As indicated in this event map, Table 5.12 (see above), the direct structuring through discourse of the class began with the Professor F's initial entrance, Event 3, into the analog studio. In this event, he engaged in actions that moved students to the center of the room, making visible his instructional stance of making content of the course accessible publicly. As shown in the figure below, students on Day 1 gathered in the center of the studio in a fairly circular fashion around a set of work desks in the middle, while Professor F sat towards the end of the set of desks facing the students. This general set-up became an iterative and recursive (Agar, 2006) practice throughout the quarter where

students interacted in a public fashion, each viewing and hearing the other's presentations. Through this practice, Professor F signaled to the students the significance of listening to other's presentations and interacting collaboratively in a face-to-face manner. Thus, this initial practice set forth the practices inherent to this design studio as a member, while also preparing students for the professional experiences they would encounter as an architect.

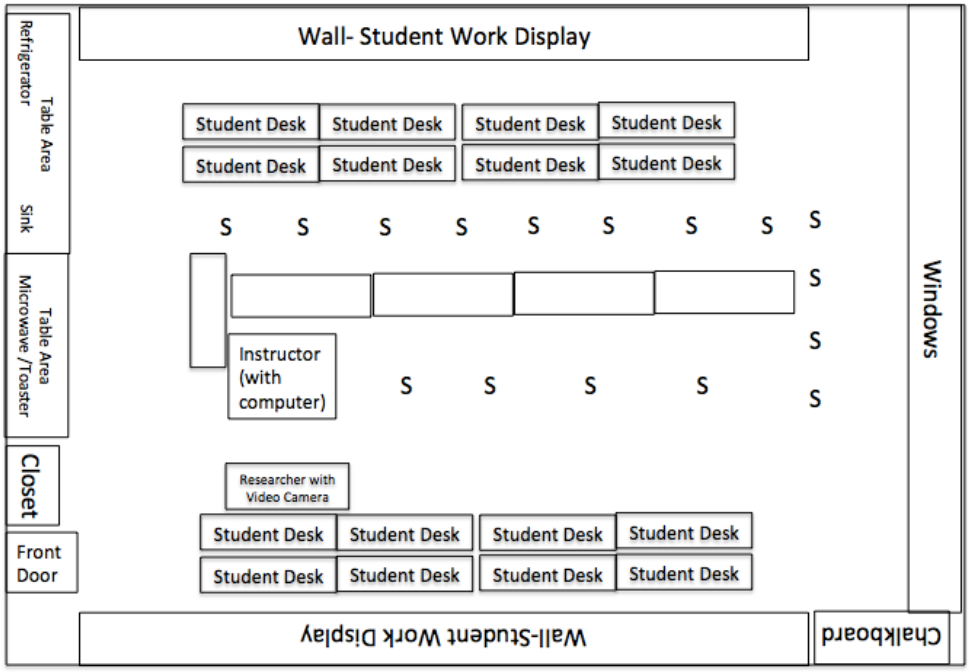

Figure 5.2. Diagram of analog design studio set-up for Day 1 of the course.

Returning to Table 5.12, what becomes visible that the introduction of self was established during Events 4 and 5, where Professor F outlined how students were to provide background information about themselves using verbal prompts (Table 5.13 below). This was signaled by Professor F as he asked students to include their name, note their hobbies, and describe their found object (an object students were required to bring on the first day). This early practice of introducing self, as a member of the course to the larger audience,

initiated an ongoing practice that subsequent analyses showed was present throughout the quarter, thus creating a norm and expectation for participating in this course. Through this process, and its recurrent practice across times and events, students were enculturated into the practices and processes of this design studio.

Table 5.13

Day 1 Transcript from Video Record – Professor F Providing Introduction Instructions

Line #	**Time**	**Professor F**
	[after 00:13:04]	Um
		Okay
		So name
		Ah
		Nickname
		Why here
		Found object
		Just talk a little about it
		And
		If we have any hobbies
		I'm always
		Interested in what else you
		You do besides come to studio

Further analysis of the events on this day and what was proposed supports this analysis of the developing norms and expectations. As indicated in Table 5.12, presented previously, group formation was also a significant process during Day 1 for Event 7. During the process of dividing students into groups, the Professor F proposed to students how the groups were to serve as a resource, especially in light of the digital intensive nature of the course. In dividing students, Professor F signaled to students that he took into account their digital experience and knowledge of particular architectural design software. Viewed in this

way, the formation of 2 groups of four students and 2 groups of five students can be understood as establishing a structure for ongoing student work throughout the quarter. As is discussed in depth later, the groups served as the impetus for students to build their repertoire and move to their own individual work.

Analysis of the event map of Day 1 also made visible course components and requirements. Analysis of the events that followed the initiating actions showed that these items (i.e., content and course requirements) were discussed in-depth during Events 6, 9, 10, and 12. Approximately an hour into Day 1, Professor F briefly described the in-progress learning management system, Blackboard, as a resource for students. Because of the in-progress nature of the site, Professor F provided a hard copy handout of the syllabus and the first assignment for further review during Event 8. Students were told that they would be given 24-hour access during Events 9-10, as key cards to the analog and digital studios were distributed and students were asked to acquire their keys from the architecture office. The provision of access to the studios on a 24/7 basis made visible how this studio experience was one that was beyond a normally designated "official" design studio time. In shifting to the digital studio during Event 11, Professor F also made visible the role of different spaces. In this space, a formal discussion of the course components and requirements was initiated as indicated in Event 12.

The structuring of the course on this day did not end with this discussion. As previously discussed, Day 1 included an assignment, a process that distinguished this design studio from others reported in the literature. How Professor F introduced this assignment was therefore explored as part of Day 1. Event 13 examined the introduction of the first, assignment "Analog Digital Language of Vision (ADLV)" project. Using a PowerPoint

presentation, Professor F, introduced students to the project's theme and conveying the project's deliverables. The practice of introducing the overall theme of the project and the major components or deliverables of the project extended beyond this initial day as subsequent analyses showed, and was an ongoing practice throughout the quarter. Thus, the digital studio was a distinct space where projects were introduced, presented, and then critically analyzed.

Sites for work. Several sites for work during the quarter were introduced during Day 1. Table 5.14 below lists the sites for this third-year design studio across the major headings: on-campus locations, online interactions, and off-campus locations. The majority of the course took place in two on-campus locations: analog and digital design studios. However, on Day 1, the course took place in the analog and digital studios, and in the quad outside the analog studio. These sites were used in numerous ways but mainly as working spaces, spaces for discussion/critique, and course locations. Other on and off-campus locations also referenced and patronized as working spaces during the quarter were: the architecture exhibition space, the architecture college shop, the aerospace engineering hanger, and numerous off-campus locations. In addition to physical spaces, an online learning management system, Blackboard, was also used as way of connecting students around specific assignments, course materials, discussion boards, syllabus, and weekly readings provided by Professor F.

Table 5.14

Sites for Work in the Third-Year Design Studio

On-Campus Locations	Online Interactions	Off-Campus Locations
Analog Design Studio	Learning Management System- Blackboard	Home Depot – Week 2
Digital Design Studio		Roesling Nakamura Terada Architects – San Diego, CA
Quad – outside of Analog Studio		Salk Institute-La Jolla, CA
		The Neurosciences Institute-San Diego, CA
Architecture Exhibition Space		Morphosis Architects, Inc.-Culver City, CA
Architecture College Shop		Burbank Media Center-Burbank [only for students involved in ET Project presentations]
Aerospace Engineering Hanger		

The online learning management system, Table 5.15, also served as a work space in that it housed several resources that were available for students to visit and/or download throughout the quarter. The table below summarizes the listing of document headings, course materials, and week of focus.

Table 5.15

Summary of Online Learning Management System Records of Content, Activities, and Dates

Document Headings	Course Materials	Week of Focus
Major Assignments/Events	• Analog Digital Language of Vision (ADLV) Group Exercise 1	Week 1
	• ADLV Translations (Book Exhibit and Expressive Technologies)	Week 2
	• Individual and Group Work – 10/5/11	Week 3
	• Poster Composition Group Work -10/8/11	Week 3
	• Mid Review	Week 7
	• Fieldtrip - 11/8/11	Week 8
Course Materials	• Diagraming | Collage | Course Notes	Week 1
	• Meaning in Art | Collage and Found Image Transformations | Meaning(s) of Abstraction (5 readings)	Week 2
	• Making Space (3 readings)	Week 3
	• Structure and Practice (4 readings)	Week 4
	• Building Systems (2 readings)	Week 5
	• Innovation (3 readings)	Week 6
Discussion Boards	Postings across Weeks 1-6	Weeks 1-6
Syllabus	• Syllabus • Week 1 Handout • Directions for Weekly Journal Sample	Weeks 1-12

As indicated in this table, the syllabus and the Week 1 handouts, both of which were distributed on Day 1 of the course, were included via the Blackboard site. Also included in

this space were the course materials. The exceptions to this process were the major assignments/events, which were only listed for Weeks 1, 2, 3, 7, and 8. Discussion boards also housed conversations related to weekly readings for Weeks 1-6. These discussion boards served as the impetus for in-class discussions of the weekly readings posted and assigned.

Table 5.16 adds further to the developing analysis of the ways the course was structured and the role of different physical and virtual spaces. Given the focus on critique as a part of this project, this table presents the type of spaces used during the critique events. Whole group critique, individual critique, mid-review, and final reviews are names given to distinguish the set-up of the critique event broadly. Individual critique often takes the form of a desk crit, where by Professor F visits the students at their particular desk; however, as noted in the table below Professor F often comments to the larger group. For this particular course of study, mid-review and final reviews are more formal formats of whole group critique. In addition, the specific participants engaging in critique are noted as student-by-student and group-by-group.

Table 5.16

Sites for Work Related to Critique Events

Location	Types of Events Space Used	When used across quarter	Total Occurrences of Use
Analog Studio	Whole Class Critique – Group-by-Group – 2 events	Week 1; 2	16
	Whole Class Critique – Group-by-Group -1 event	Week 2	
	Individual Critique – Group-by-Group – 2 events	Week 3	
	Individual Critique – Student-by-Student – 1 event Whole Class Critique – Student-by-Student – 1 event	Week 4	
	Individual Critique – Student-by-Student (with periodic commentary to whole group) – 1 event Whole Class Critique – Student-by-Student – 1 event	Week 5	
	Individual Critique – Student-by-Student (with periodic commentary to whole group) – 1 event Whole Class Critique – Peer Critique Assessment and Student-by-Student Discussion – 1 event	Week 6	
	Individual Critique – Student-by-Student (with periodic commentary to whole group) – 1 event	Week 7	
	Individual Critique – Student-by-Student (with periodic commentary to whole group) – 1 event	Week 9	
	Individual Critique – Student-by-Student – 1 event	Week 10	
	Individual Critique – Student-by-Student (with periodic commentary to whole group) – 1 event		
	Individual Critique – Student-by-Student (with periodic commentary to whole group) – 1 event		

Location	Types of Events Space Used	When used across quarter	Total Occurrences of Use
Digital Design Studio	Individual Critique – Group-by-Group – 1 event	Week 2	5
	Whole Class Critique – Group-by-Group – 2 event	Week 5	
	Whole Class Critique – Group-by-Group- 1 event	Week 7	
	Whole Class Critique – Student-by-Student – 1 event		
Quad – outside of Analog Studio	Individual Critique – Group-by-Group – 1 event	Week 2	3
	Mid-Reviews –Student-by-Student (Groups of 3 to 4) [Whole Group Critique] – 1 event	Week 9	
	Final Review - Student-by-Student [Whole Group Critique] – 1 event	Week 11	
Architecture College Shop	Individual Critique – Group-by-Group-1 event	Week 2	1

As indicated in this table, the central site for ongoing critique throughout the quarter was the Analog Studio, it was identified as the most used space with a total of 16 events spanning every week except the week of the fieldtrip and the last week of the course. While the Analog Studio was the most used space throughout the quarter, the types of critique events were less formal in nature. The Digital Design Studio was the second most used space for critique events; however, the events that took place in the digital studio were more formal in nature, including the presentation and use of formal models, posters, digital display, and presentation of materials to peers and clients.

As indicated previously, the quad area located outside the analog and digital studios also served as a space where critique events took place. These events also took a more

formal tone, as two of the events were review sessions, where students brought several iterations of their designs (models, posters, any other relevant work) to their presentation. Unlike the previous critique experiences, which were limited to a select number of participants (client, students, and Professor F), the experiences in the quad were open to outside participants (passersby), other faculty, and students (in and outside the architecture department). The least used space for critique was the architecture college shop, a location where students had access to a wood shop, metal shop, welding room, fabrication lab, and tool room and guidance of a shop manager and tool technician. Only one event was recorded in the shop, it comprised a check-in between a student group, a client (librarian), Professor F, and the departmental librarian regarding an ongoing project.

Time(s) for work. A detailed discussion of the courses of study and prerequisites for course entry across all five academic years are discussed in Chapter III. For the academic year in which these records were collected, the third-year course practice (Arch 341) and design (Arch 351) were taught as separate courses, each given designated days during the academic week. The Arch 341 course was focused on Monday, Wednesday, and Friday; while, the Arch 351 course was scheduled for Tuesday and Thursday. Although these courses were artificially separated across the days of the academic week, each with different titles, they were designated as jointly tied courses taught by the same Professor F and containing the same students.

Table 5.17 below is a (re)presentation of the course meeting framework as provided by the Professor F in a handout on Day 1.

Table 5.17

Description of How Time Was Spent Across Two Courses and Proposed Activities

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
1:00 PM 2:00 PM 3:00-4:00 PM	Arch 341 (1:10-5 PM) Course Activities	----- Arch 351 (2:10-3:30 PM) -Group Case Study Project -Development (Initiated several weeks into quarter)	Arch 341 (1:10-5 PM) -Initial discussion - Weekly Class Discussion	----- Arch 351 (2:10-4:30 PM)	Arch 341 (1:10-5 PM) Course Activities
5:00-6:00 PM	Working Session (5-6 PM) Promoting: -Group work -Individual work	-----	Working Session (5-6 PM) Promoting: -Group work -Individual work	-----	Working Session (5-6 PM) Promoting: -Group work -Individual work

Note. Course activity opportunities included the following: Pin Ups, Discussions, Design Charrettes, Critiques of the Whole. Working Session opportunities included the following: Group Work and Individual Work.

According to this (re)presentation, the activities across Monday, Wednesday, and Friday were very similar, with the addition of a weekly class discussion on Wednesday. All three days focused on pin ups, discussions, design charrettes, and critiques of the whole. The design portion of the course was scheduled for Tuesdays and Thursdays throughout the quarter. As noted, the times for these two strands were not uniform across the two days; however, both days focused on similar areas, including development of a case study project and opportunities to work with the Professor F and fellow students in class to make periodic progress on pin-ups and presentations.

Times for work in this architecture studio were ongoing throughout the quarter as students were given 24/7 access to the analog and digital studios; however, the "official" design studio period took place three times a week, Monday, Wednesday, and Friday, from approximately 1:10-5pm with 5-6pm being reserved as a working session. Table 5.14

provides an overview of how Professor F broadly proposed the course content across each week.

Analysis of One Complete Design Cycle: September 26-29, 2011

This section expands upon the previous analysis focusing multiple days during Week 2 to anchor and trace a complete project cycle. The (re)view of fieldnotes and video recordings of three of the four days devoted to a furniture design project, including a final critique event day presentation with the lead librarian as the "client", was selected for analysis. Drawing on discourse as (re)presented through transcripts afforded the opportunity to trace events and actions as they were socially constructed over the project period. The furniture design project was chosen as it represented the second project students were asked to engage in during this course after the completion of one full cycle project design that began the first day of the course. Thus, this project was an example of how a project was introduced and developed into a critique event, and how students were introduced to the concept of a "client" as a part of this course. The guiding research question was: *How and in what ways did the professor introduce and implement critique within the design studio*?

As discussed throughout this chapter, critique is an iterative and recursive practice in this particular design studio. Figure 5.3 below provides an overall timeline of the furniture design project for Week 2 of the course, leading to the final project critique on Thursday, September 29. Although, Tuesday, September 27 is listed as a part of the project cycle leading to the final critique, I was unable to record and observe that day's events. I was able to discern what took place through Professor F's discourse provided on Monday, September 26. In his discourse, he foreshadowed what was planned. To trace this evolving furniture design project, below, I discuss the three main components of the project cycle.

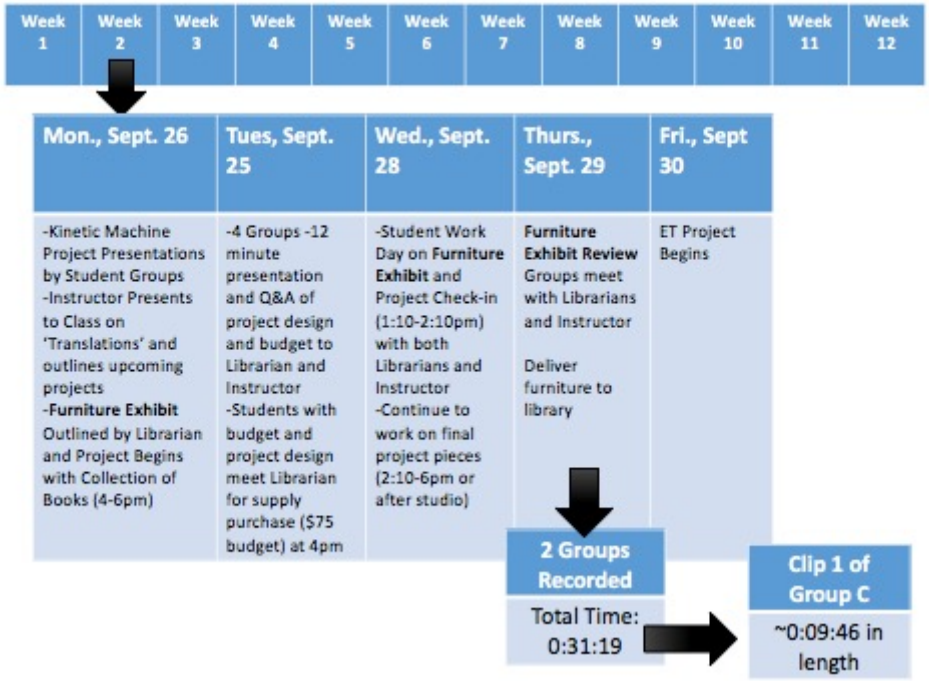

Figure 5.3. *Timeline of Week 2 furniture project design from project introduction to final critique event*.

Component 1: Furniture design introduction and instructions. The furniture design project was built on prior events of Week 1, but also assisted in formulating future events throughout the quarter. Specifically, this project introduced students to a new concept in the form of a client, who was the librarian (she is referenced as Lead Librarian throughout the dialogue) for Special Collections at Coastal University. The furniture project design was initiated on Monday, September 26, 2011, the second week of the quarter. The table below, Table 5.18, was constructed to trace the cycles of activities across events as they unfolded during the initial day of the furniture design project, beginning approximately thirty minutes into the class (line 2140), and ending an hour and a half later (line 3399). Each column, therefore, represents specific content about the first day of the furniture design project. Column 1 represents the time, column 2 are the lines corresponding to the discourse related

to the event, column 3 is the event number, column 4 discusses the actions during the event, column 5 are the sub-events, column 6 are the major events, and lastly, column 7 are summary notes relating to the event.

Professor F began his discussion, Event 1, by building the connection between the previous week's discussion and the upcoming project through his PowerPoint presentation entitled "Transition or Translations." He attempted to encompass discussion of ways to conceptualize the individual parts, or anatomy, of the building and the means by which students could work efficiently through the design process. In doing so, Professor F created an intertextual relationship between the previous content and the future design projects occurring immediately and over the course of the quarter (Bloome & Egan Robertson, 1993). During Events 2 and 3, Professor F foreshadowed what would be accomplished in the week broadly and then more specifically related to the furniture design. In doing so, Professor F prepared students for the resources that they would need to draw on from their previous week's design experience, while also developing new skills to work with the Lead Librarian as the "client."

Event 5 introduced the prior relationship between Professor F and the Lead Librarian. He introduced the Lead Librarian, Event 6, as a "client" who would assess their designs. The Lead Librarian began her official presentation to the students during Event 7. To initiate her discussion, she began with an introduction of her position as a librarian in Special Collections and Archives. In addition to a discussion of her position, lines 3760-3835, she discussed the shift of the library, beginning in 2005, to encompass greater digital collections. In providing this contextual information, the Lead Librarian positioned the problem and the focus of the furniture design project related to an excess of books.

Beginning with line 4131, the discussion then turned to details regarding the furniture project. These details ranged from group formation, to requirements for final projects, to coordinating the purchasing of materials. The session concluded, line 5369, with the Lead Librarian providing directions for students to reconvene at the library loading dock at 4:00 pm.

Table 5.18

Event Map of First Day of Furniture Design Project

Time	Line #	Event #	Action	Event Description	Sub-Event Description	Notes
~0:30:43-0:34:04	2140-2193	1	Foreshadowing how he will connect prior project (ANVL) with project presented	Professor F connecting prior projects/info to new content/projects	Professor F connecting to prior project	
~0:35:40	2206-2251		Introducing concept of "Transition or Translations" in relation to moving project along			
	2252-2264		PowerPoint presentation referenced as "turbo show"		Presentation new content	
	2265-2300		Introducing case study concept and what architecture is "beyond the concept"			
	2301-2345		Introducing an exhibit participation relating to book furniture design and connection of the design project to their Week 1 ANVL project Discussing where books are coming from in the library for the project Identifying that schedule for completion of project is limited and the role of translating the prior project into something else		Introducing new projects	
	2346-2356		Discussing participation in with interdisciplinary collaboration to move students along with understanding translation as it relates to space and media			

Time	Line #	Event #	Action	Event Description	Sub-Event Description	Notes
	2357-2396		Transitioning to showing students what they will be accomplishing. Referencing material found on Blackboard in one folder containing-furniture design information, ET Interdisciplinary Project, and translation of kinetic machine project		Connecting to prior project and moving to next steps	
	2397-2429		Discussing of Part 1 entitled "Anatomy of Architecture" and building cladding and process of deconstructing the pieces			
	2430-2441	2	Discussing schedule -Furniture design project due Thursday at 2:10pm.		Foreshadowing what is to come in the next week	
	2442-2481		Discussing schedule -ET Interdisciplinary Project due Monday Providing details of ET Project - working with faculty in Liberal Arts and Theatre. Beginning project kick-off there as is a barbeque Thursday and forming teams.			
	2484-2501		Schedule - Completion of Part I of the building anatomy. Indicates that they started some work; however, major work begins Thursday.			
	2502-2519		Discussing design projects as one area that has not been covered			
	2520-2540		Reminding students of "suspend[ing] disbelief" as they work their way through these project needing not to become focused on what will occur in the next three weeks.		Ways of processing design	
	2543-2545	3	Discussing Lead Librarian and outlining that she will provide a lecture	Professor F discussing Furniture Project	Foreshadowing what is to come in the next week	
	2546-2559		Showing slides of past furniture design projects and discussing project components			

Time	Line #	Event #	Action	Event Description	Sub-Event Description	Notes
	2560-2634		Providing furniture design details about: ● Money for the project ● Lead Librarian's arrival time at 3:00 pm ● Book Pick-Up at 4:00 pm Providing details about Tuesday's events: ● 2:10pm presentation (each group given 12 minutes to present) ● Must have a budget proposal ready -includes detailed information about student, concept model, conceptual title ● Must meet $75 limit ● Lead Librarian, Professor F, and Architecture Librarian present for proposal meeting			
	2635-2636		Prof F asking students how they are feeling regarding the schedule		Professor F Check-In	
	2637-2658		Prof F talking to Students outside of course as they walk by the Digital Design Studio		[Off-topic] discussing with students outside of the studio course	
	2659-2661		Professor F reiterating that instructions and details can be located online		Book Furniture Project – discussing components	
	2662-2673		Professor F revisiting that the furniture must be safe for use			
0:48:01	2674-2684		Professor F reiterating that complete furniture is due on Thursday at which point they will deliver to the library			
	2685		Professor F outlining the other requirements for the presentation includes 2 posters: furniture and process poster			Poster requirements

Time	Line #	Event #	Action	Event Description	Sub-Event Description	Notes
	2681-2703		Discussing final requirements: • ·2 process posters • ·Final archive CD			
	2704-2720	4	Reiterating that much of the work in architectural education is focused on "trying" and that experiences extend to interacting with non-architects emphasizing importance of being able to talk to different people	Professor F's discussing building	Emphasizing importance of new experiences	
	2721-2776		Discussing the anatomy of a building – making allusions to the skeletal system in contrast to a building Discussing various case studies in representing the anatomy of the building leading to final process poster		Describing components of building and building	
	2777-2784		Discussing upcoming work next Tuesday			
	2785-2829		Returning to PowerPoint presentation of "Translations" – beginning discussion with developmental skins using his own dog as an example			
	2830-2922		Discussing connections between • Furniture design and architecture • Space and furniture detail • Other examples of architects and their design	Professor F connecting design and furniture	Connecting between systems	

Time	Line #	Event #	Action	Event Description	Sub-Event Description	Notes
0:55:52	2923-2925	5	Professor F introducing Lead Librarian (LL) as an archivist in the library		Providing background of the project	
	2926-3051		Professor F returning to prior discussion about focusing on the connections by discussing and showing furniture pieces		Providing furniture project examples	
	3052-3073		Professor F discussing prior relationship with Lead Librarian on another furniture project 3 years prior	Project F background with Lead Librarian	Providing background of the project	
	3074-3079		Professor F outlining requirements of current furniture design project Nov 7 - Dec 6			
(Part 2 ~0:58:00) (Part 3 0-0:05:13)	3080-3365		Professor F showing some examples from prior furniture project examples. Lead Librarian also discussing some of the projects. Professor F and Lead Librarian together discussing the projects and their design		Providing furniture Project Examples	Chronicling that the project is same process completed previously
0:05:14	3365-3399		Professor F bringing up Lead Librarian's PowerPoint Presentation		Providing background of the project	
	3400-3430	6	Professor F introducing the concept of Lead Librarian as a client. Lead Librarian will make decisions about final projects		Introducing LL as “client”	
	3431-3434		Professor F discussing that Tuesday students are to come with a full proposal		Setting up presentation set-up	Foreshadowing what will occur on Tuesday
	3435-3445		Professor F and Lead Librarian working on setting-up the presentation			

Time	Line #	Event #	Action	Event Description	Sub-Event Description	Notes
	3446-3465		Professor F providing directions to students to build upon their kinetic machines and trying to focus their decisions			
	3446		Professor F stating that LL is ready to begin (presentation begins)			
	3467-3509	7	LL introducing herself and stating the time as 4:00pm. Asking how many students have been to the library and special collections	LL Presenting	LL Presenting	
	3510-		LL providing background on the purpose of special collections and university archivists, including resources from architecture, graphic arts, and ethnic studies, etc.		LL providing insight into her background and work at the library	
			Discussing that the last 4 years the LL has been in charge of the exhibitions in the library, including different events such as the furniture exhibit			
	3595-3757		LL showing sample books to the class of what is available to view in the special collections location		LL leading discussion on resources at library and books	
	3760-3835		LL discussing the revised library format and move new commons area in 2005 emphasizing that with more services (online journals, programming, interactive spaces), the library needed to unload books			

Time	Line #	Event #	Action	Event Description	Sub-Event Description	Notes
	4509-4734		LL providing instructions for: ● Group formation ● Inclusion of sketches, drawing, etc. ● 250 word statement "Cut sheet", poster, and process poster			3 posters: 1. Overall poster 2. Cut sheet - how the furniture work 3. Process poster
	4735-4748		Professor F asking students to map out what they require from Home Depot, including description, sku, and sales tax at Home Depot. Reminding students they have $75		Providing project requirements for-shopping	
	4751-4783		Professor F confirming meeting time tomorrow for shopping experience with Lead Librarian at 6:30 pm			
	4784-4819		LL reminding students that they will meet at Home Depot and Project Leader will accompany the LL			
	4832-4999		LL discussing Wednesday's schedule and reiterating functionality of the furniture, and that furniture can move through front door Reminders that final review will take place Thursday		Discussing project presentation-on Wednesday	
	5000-5144		LL discussing the competition design and coordinating pick-up of the furniture after the end of the course		Discussing project delivery	
	5145-5346		Dividing students into 4 groups and discussing documents found via Google Docs		Formatting groups	Group A, B, C, D
0:57:53	5347-5396		LL directing students to meet her at the library's loading dock for the books		Initiating project	

Group formation. Lines 4784-4819 of the event map above identifies the nomination of group leaders. Groups formed on the first day of the course were the same four groups used during the furniture design project (see Chapter III for a description of group formation). Table 5.19 below summarizes the groups participating in the furniture design project, the number of group participants, and the title of the projects designed as part of the library display and final furniture design showcase.

Table 5.19

Description of Furniture Design Projects by Groups, Participants, and Project Title

Group	Number of Group Participants	Title of Project
A	5 total (2 males and 3 females)	*Haptic Response*
B	4 total (2 males and 2 females)	*Stratified Collection*
C	4 total (2 males and 2 females)	*READefined (re-defined)*
D	5 total (2 males and 3 females)	*COMPENDIUM (of joy)*

Requirements established for final project design. A set of final project requirements were provided by the Lead Librarian via a Google Doc and by Professor F via email. As noted in the chart below, Table 5.20, the first set of requirements (1 through 4) on the left of the chart were outlined by the Lead Librarian. The second set of requirements were outlined by Professor F via an email sent to the students on 9/26/2011. As noted in previous sections, the purpose of this project was to design a furniture piece from books discarded from the library that met the requirements as outlined below and in the event map of the project introduction (see again Table 5.15).

Table 5.20

Instructions and Final Requirements for Furniture Design Project as Outlined by Lead Librarian and Professor F

Lead Librarian Instructions and Requirements:	**Professor F Instructions and Requirements:**
Google Doc provided to students on 9/26/2011: 1. Rename group if appropriate. (deadline: Tues. 9/27/11 10am) 2. Create a group statement: (250 words or less) (deadline: Thurs. 9/29/11 2pm) a. This will be used as a caption within exhibit 1. Provide each group member's name, major, and year (deadline: Thurs. 9/29/11 2pm) 2. Project posters: (Deadline: Friday 9/30/11 5pm) Pdf print quality to or drop off on cd to library, room 409 a. 11x17 overall project cut sheet b. 11x17 Process sheet	Email sent to students on 9/26/2011: 1. In addition to archiving ALL of the process on a CD and making a PPT sequence presentation (don't forget about the budget TOO for approval on Tuesday). Also DON'T FORGET TO MAP PUT where stuff is in Home Depot and unit prices so Lead Librarian's time is not wasted on Tuesday evening. 2. MAKE TWO 11x17s for the exhibition: a. A cut sheet that can be attached to the book furniture piece. Should include all team members and head shots, Final images of furniture which can include digital models, key process images along with conceptual narrative which tells and shows the story of the inspiration of the piece b. This is a combination of more process and summary of furniture piece. If you find that this poster is similar to #1, then maybe it is just one 11x17. 3. I decided that it would help regarding the studio design process to still make the square posters BUT make them 20x20 (instead of 40x40). a. So make ONE poster that is an overall poster for Book Furniture, b. and a SECOND poster that is set up as a matrix of process. We will hang these in the studio under kinetic machine posters.

Component 2: Day 3 of furniture design - preliminary review. The third day, Wednesday, September 28, 2011, of the furniture design project was a check-in day after one full day of planning, proposals, and purchasing and/or using found supplies. This was the first opportunity for students to display their physical designs to Professor F, the Lead Librarian, and the Architecture Librarian. The Architecture Librarian was a specialist assigned to the College of Architecture and Environmental Design to assist with research and securing collections. Professor F, the Lead Librarian, and the Architecture Librarian

began their discussion by moving from group to group. The event map, Table 5.16, broadly outlines the day's events, beginning with my entry to the analog digital studio. Approximately thirty minutes into the video record, Professor F, the Lead Librarian, and the Architecture Librarian also entered the analog design studio and proceeded to move group by group (see Events 3-7 in Table 5.21).

The group by group interaction allowed each group to obtain feedback from Professor F, the Lead Librarian, and the Architecture Librarian. This process was fairly informal in nature and ranged in length of time as noted in the time column of the Table 5.16 below from 0:00:00 to 0:59:34 minutes. Group members in varying numbers (not all group members were present during each interaction) provided an update on their furniture pieces, while Professor F, the Lead Librarian, and the Architecture Librarian discussed the design and the physical models. Therefore, this intermediary check-in and critique event provided students an opportunity to interact with the Lead Librarian, as the client, in concert with Professor F and the Architecture Librarian. Thus, this set of events and interactions set-up the future forms of discourse and interactions that took place the following day and set a precedent for what students expected to encounter as part of their final critique event on Thursday, September 29, 2011.

As represented in the event map below, Table 5.21, several interactions took place on this third day of the project. Examination of the discourse within an event provided an opportunity to view interactions taking place among different actors in the course and the ways in which opportunities for critique (receiving feedback) were made available during the furniture design projects, leading to the final project delivery and the culminating review event on Day 4 of the project.

Table 5.21

Event Map Chronicling Overall Events of Day 3 for the Furniture Design Project Taking Place on 9/28/2011

Time	Line #	Event	Event Description
0:00:00-0:30:31	0001-0062	1	Researcher arriving Students working on projects
0:30:31-0:30:59	0063-0080	2	Professor F arriving and speaking with researcher about student groups and their identifying their location - some groups at the shop, others inside of studio, and outside the studio
0:30:59-0:43:53	0081-0206	3	Professor F and Architecture Librarian meeting with Group A at back of studio
0:44:05-0:44:30	0207-0308	4	Professor F, Lead Librarian, and Architecture Librarian moving to Group B
0:44:30-0:48:22	0088-0207	5	Student M is discussing their design with Professor F, Lead Librarian, and Architecture Librarian
0:54:30-0:59:21	0309-0559	6	Professor F, Lead Librarian, Architecture Librarian, and Researcher moving outside to Group D (2 of 5 group members are present) working on a book wall and bench. Engaging in a discussion with the group about their concept and providing suggestions
0:59:21-0:59:34	0560-0561	7	Professor F, Lead Librarian, Architecture Librarian, and Researcher moving to shop After initial recording of Group C, the concluding video due to sound difficulties

To further trace the discourse and interactions socially constructed among actors, I explored a representative piece of transcribed video from Event 6 between two Group D members (male and female students), Professor F, the Lead Librarian, and the Architecture Librarian. The representative sample of transcribed discourse (lines 0390-470) were

extracted from the complete transcript (lines 0309-0559) from the video recording. From this interaction, I was able to understand how the students engaged in discourse and actions with the Lead Librarian, the Architecture Librarian, and Professor F during this session. The significance of this session was to prepare students for their final furniture review taking place the next day (9/29/2011).

As evidenced in the swing out chart, Table 5.22, the representative sample discourse during the preliminary review was a fairly informal conversation and discussion about the design presented by the two members of Group D. The Lead Librarian, as the client, provided the majority of the feedback during this sample of discourse and across the whole of Event 6. Lines 0390-0398 and 0400-0403 represent the Lead Librarian's support of Group D's designs and their ability to act as "designers." The conversation moved back and forth between the Lead Librarian and the two Group D members about the best alternatives for adjusting their designs to take into account the poles that were visible between books, to the incorporation of a bench or chair in the design, to the adjustment of their design, to properly balance the books so that their design did not appear "lopsided" (line 0448). Professor F also engaged in the conversation; however, his input was significantly less than the Lead Librarian. As noted in lines 0457-0459 and 0469-0470, Professor F's feedback primarily focused on the ability for Group D to move their design to the library, which was one of the most important considerations the Lead Librarian emphasized on the first day project introduction.

In summary, the critique during Day 3 was largely in an informal/formal modified individual critique format that mainly took the form of a desk crit. The informal nature was the fact that there was not a traditional audience (student peers) as each group discussed

their design concepts with Professor F, the Lead Librarian, and the Architecture Librarian. The Professor F, the Lead Librarian, and the Architecture Librarian will be referenced as "the reviewers". However, the conversation was formal in nature, because the Lead Librarian was the official client to which they were providing an update in their status. The modification from a traditional desk crit was visible in the fact that Professor F, the Lead Librarian, and the Architecture Librarian moved group by group to wherever the groups were located. As noted previously, locations included the quad outside the analog design studio and the departmental shop. From their interactions and discourse taking place during this preliminary review, one can see the benefit of critique being completed in smaller more intimate context. In doing so, students had an opportunity to speak with the reviewers about their in-progress designs and the reviewers were able to provide feedback. Largely, the substance of what was discussed between the groups and the reviewers was what was presently working in terms of their design, what still needed work, and their next steps for completion. This was completed largely in an informal conversational format, thus providing a level of approachability.

Table 5.22

Swing Out Chart of Transcript of Video Record for Event 6 Day 3 of Furniture Design Project on 9/28/2011

Line #	Lead Librarian	Female Student - Group D	Male Student - Group D	Professor F	Notes and What Proposing
0390	(overlapping) Like take a step back step away from it and go				LL providing feedback about design and giving positive reinforcement
0391	"Is this pretty				
0392	Do I like this				
0393	Is this speaking to our design"				
0394	Cause you guys are designers				
0395	I mean you're				
0396	You're making something architectural				
0397	But there's all this design that I'm impressed with				
0398	And don't forget you have that talent				
0399		(The details)			

Line #	Lead Librarian	Female Student - Group D	Male Student - Group D	Professor F	Notes and What Proposing
0400	I'm so impressed with what you guys do				LL providing suggestions relating to details
0401	And don't				
0402	Don't forget those tiny little details				
0403	It really makes a difference				
0404			Absolutely		
0405				Great	
0406	You think maybe				LL providing another suggestion to the Group D
0407	Folding the pages on top or whatever				
0408	Give you more work				
0409	But really just think of every opportunity to make this-				
0410		I that we could actually highlight			Female student providing a counterpoint to the LL's commentary
0411		The poles on the inside			

Line #	Lead Librarian	Female Student - Group D	Male Student - Group D	Professor F	Notes and What Proposing
0412	Yeah				
0413		So they stop here			Female student providing additional suggestions for troubleshooting the pole problem
0414		We can put a cap in a top so it can't be removed			
0415		But that way			
0416		It's seamless			
0417		Um from that way			
0418	Just				
0419	The-				
0420		(overlapping) But I think we might cover these			
0421	Yeah				LL providing encouragement for the students' design and acknowledgement of what may/may not work

Line #	Lead Librarian	Female Student - Group D	Male Student - Group D	Professor F	Notes and What Proposing
0422	Yeah				
0423	Little details				
0424	You can wrap				
0425	You know how there's				
0426	Oh maybe that won't work				
0427	But yeah				
0428	Decoupage the paper whatever				
0429	Just think about those little design elements				
0430				So is there a book that's going to be here	Picking up books and showing the book tower on side furthest from camera
0431				So (lead to like that) flapping out	
0432		It's possible-			Standing to right of Professor F (right side of frame)

Line #	Lead Librarian	Female Student - Group D	Male Student - Group D	Professor F	Notes and What Proposing
0433		(overlapping) We're thinking about it			Responding to Professor F's question and providing options for use
0434		Could be yeah			
0435		Maybe you can read it as you're sitting down			
0436	But if you're doing a				LL suggesting alternatives to consider
0437	A bench				
0438	You don't want that				
0439	Right				
0440				Right	
0441			Maybe		
0442			Maybe the seat will be at the end		
0443			Maybe it can come up		

Line #	Lead Librarian	Female Student - Group D	Male Student - Group D	Professor F	Notes and What Proposing
0444		(overlapping) It all seems a little bit distracting			Pointing to the book tower model
0445				(Yeah)	
0446	I don't mind the seals too much				Pointing to portion of book tower
0447	Interesting				
0448		Right now it's also lopsided because it's not-			
0449	(overlapping) Yeah-				
0450		Attached in the right spots			
0451	But just think about it				LL suggesting that the details are significant to the design of the project
0452	Think about those details				
0453	Okay				
0454	Awesome				

Line #	Lead Librarian	Female Student - Group D	Male Student - Group D	Professor F	Notes and What Proposing
0455	I'm so excited				Moving from left side of frame to right side of frame
0456			Anyways		
0457				The other thing to think about is	Professor F inquiring about the movability of the furniture into place
0458				Is weight too	
0459				If it gets (???)	
0460				Who's going to carry this thing	
0461		Well it-			
0462			It can be assembled		
0463		It's assembled in pieces			
0464			Cause they just slide up and down-		Gesturing that the poles holding the book tower together can be removed
0465				(overlapping) Okay	

Line #	Lead Librarian	Female Student - Group D	Male Student - Group D	Professor F	Notes and What Proposing
0466			So they come in rows of eight		Male student confirming the ability to move the furniture piece
0467			And you just actually just		Moving closer to the book tower model and gesturing placing the poles in to hold the book tower
0468			[makes a sound]		
0469				So it's going to be pretty easy for someone like Lead Librarian to	Professor F confirming the movability of the furniture
0470				Take a part	

Component 3: Day 4 furniture design - final critique. The final critique took place on Day 4, Thursday, September 29, 2011, after three days that included the project introduction and two official days of design. As discussed previously, students were given a set of verbal and written instructions on Day 1 of the project, including project requirements (see Table 5.20 discussing project requirements). Figure 5.3, discussed in the preceding section focusing on Component 2, represents this overall timeline from project introduction to final critique. The final critique event took place outside as an outdoors review in the quad. All four groups participated in this review; however, as noted as part of Figure 5.3 only two groups (Group A and C) were recorded. Unfortunately, only two groups were captured as Professor F moved the final presentation location at the last minute, which impeded my ability to capture the other two group's presentation.

Figure 5.4 below is a photo still from the video record taken during the final critique of Group C. Group C was comprised of two females and two males. Like all other groups, the final furniture project was inspired by their Week 1 kinetic machine project, their first project of the course. The photo shows a modular system composed of books. According to Group C, their vision was to create furniture that provided the greatest flexibility for a patron to (re)construct their vision of furniture. Specifically, Group C provided the following as their group statement:

> By using a modular system of notched books, we were able to create a piece that can be easily constructed in a number of ways. This gives the user the freedom to use/see the piece as they please. The two pieces vary in level and can be placed to become one large piece. We don't want to limit the function of the piece and therefore have not ascribed a use; our hope is to prevent

> hindering people's visualization. It can be a lounging stool for someone in need of a place to sit, a place for someone to rest their coffee on as they wait for their next class, or a piece that provokes passers-by to rethink the idea of a book. (Group C Library Exhibit Working Doc, 2011)

Also represented in the figure below, student 3 and student 4 both are holding posters (overall process poster and "overall essence of the project"). These posters were a requirement as outlined by Professor F to accompany their furniture design project. This requirement was a consistent requirement throughout the quarter. Further, the process of students standing in front of an audience with their materials (posters, models, etc.) was a common practice from Week 1 through the end of the quarter. Also noted as part of the written text on the photo is the location of the Lead Librarian on the left side of the camera frame. The Lead Librarian and Professor F were present on camera numerous times during Group C's presentation.

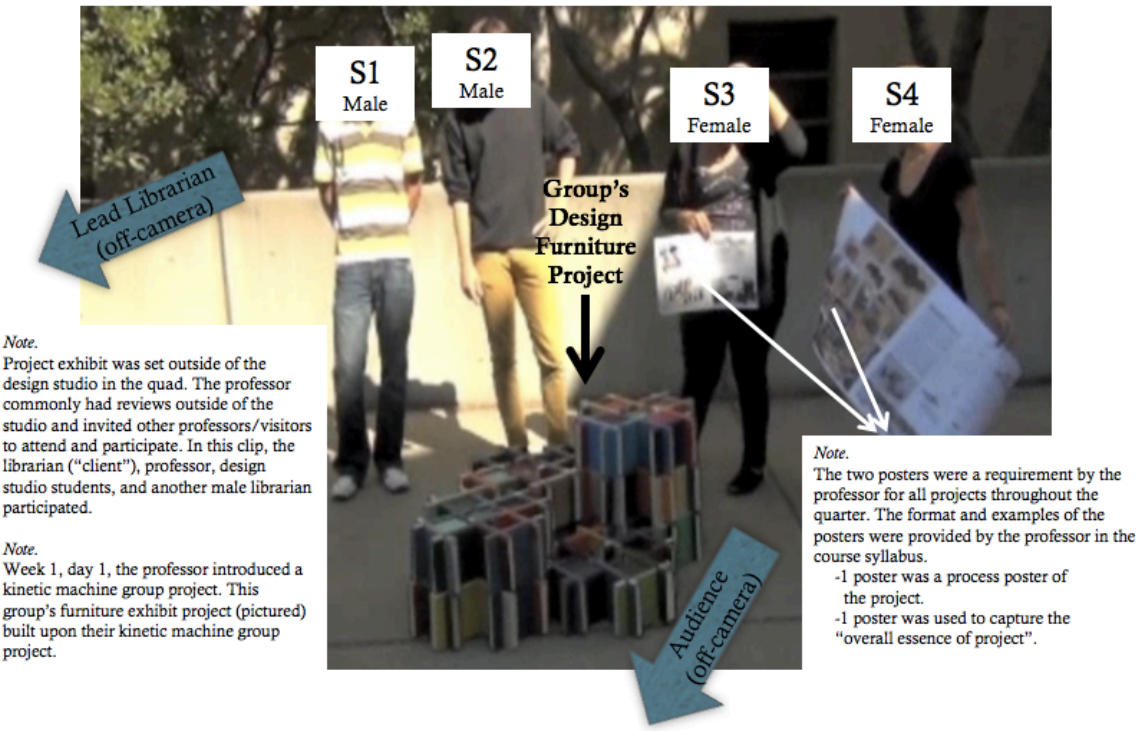

Figure 5.4. Photo still taken of Group C presenting during the final critique on 9/29/2011.

The final critique with Group C had three main foci: introductions and project vision, the critique, and the closing of the critique. As discussed throughout this chapter, Professor F prepared students from Week 1 to the end of the quarter through constant critique events on how to present their projects and receive feedback. The sequence of events during Day 4 of the furniture design project were traced by constructing an event map in the form of a running record of Group C's final critique event (see Table 5.23). In (re)viewing the video transcripts and fieldnotes, I was able to trace how Professor F constructed this culminating event that engaged outside participants, the Lead Librarian as the client, and the Architecture Librarian as another judge and vested participant. Column 1 denotes the time as recorded from the video record; column 2 lists the line numbers relating to the transcript of the video record; column 3 identifies the event number, which notes the broad transition between

events; column 3 provides a sub-event description, which is a detailed description of the events; and lastly, column 4 provides an event description which is a broad description of the events.

Table 5.23

Event Map of Group C's Final Furniture Design Project Critique on 9/29/2011

Time	Transcript Lines	Event #	Sub-Event Description	Event Description
0:00:00	0000-0109	1	Group C participant introductions and introduction of their project ● Introduction of project concept ● Discussion of project design and functionality ● Identifying the materials used in construction of project	Introduction of self and projects
	0110-0119	2	Lead Librarian inquiring about the number of books in each module as 8 or 10	Project design vision
	0134-0169		Students 2 and 3 member discussing their design concept to allow for flexibility to rearrange the orientation of the module	
0:03:19	0170-0173 0186-0188		Librarian engaging in conversation with Group C about modules and how they are structured	
	0189-0190 0193-0215		Student 2 and 3 discussing the structural format of the modules and how they can be reconfigured	
	0222-0224 0228-0230 0239-0246	3	Lead Librarian providing feedback about exposed structural pieces Lead Librarian suggesting that the stain will provide a finished piece of furniture	Feedback and dialogue with Group C members - engaging with Lead Librarian
	0249-0253		Lead Librarian confirming with Group C that part of the modular piece is one piece and ability for storage.	
	0254-0256		Students 2 and 3 confirming that the piece the Lead Librarian is inquiring about is one piece	
	0257-0259		Lead Librarian inquiring if part of the display come a part	
	0260-0270		Students 2 and 3 confirming that the pieces were glued	

Time	Transcript Lines	Event #	Sub-Event Description	Event Description
	0281-0283		Professor F entering the frame and providing feedback: "wow"	Feedback and dialogue with Group C members - engaging with Professor F
0:04:45	0284-0286		Lead Librarian closing the conversation by stating the group did "awesome"	
	0287-0300	4	Students 2 and 3 discuss how they leveled out the modules so that there was similarity and balance	Feedback and dialogue with Group C members - engaging with Lead Librarian regarding (re)forming modules
	0301-0305		Lead Librarian maneuvering the modules to see how the modules can be reformulated	
	0315-0317		Lead Librarian suggesting a new use for their design such as a wine rack	
	0318-0326		Students 2 and 3 responding to the Lead Librarian	
	0327-0335		Lead Librarian congratulating Group C on their progress from their initial conception to what they presented during the review	Lead Librarian providing a second congratulatory statement
	0336-0340	5	Professor F also providing feedback regarding the book packaging	Feedback and dialogue with Group C members - engaging with Professor F regarding the book packaging, alternate designs, and furniture use and expectations
	0341-0362		Students 2 and 3 about their design and use of plywood and possibly inhibiting the look of the design as just books but providing order.	
	0354-0362		Professor F discussing book rack in response to Student 2's description	
	0363-0370		Professor F approaching the display makes note of how people will looking inside of the furniture pieces - how people will utilize the furniture	
	0371-0379		Lead Librarian building on Professor F's commentary suggesting that they could add potted succulents in the vacant spots	Feedback and dialogue with Group C members - engaging with Lead Librarian about providing other uses for the vacant spaces between modules (building off of Professor F's suggestions)

Time	Transcript Lines	Event #	Sub-Event Description	Event Description
	0380-0383		Architecture Librarian asking group if there was logic behind depth of spaces	Feedback and dialogue with Group C members - engaging with Architecture Librarian about original vision and spaces between units
	0384-0411		Student 2 discussing their original conception that originally moved to have varying depths	
	0412-0419		Student 3 suggesting that they designed the furniture so anyone could configure the furniture	
	0420-0429	6	Lead Librarian going through the list of requirements (functionality, sustainability, etc.) and how Group C met the requirements. She does inquire about the glue and related stability.	Meeting project requirements - discussion between Group C, Lead Librarian, and Professor F. Majority of discussion focusing in on strength of units
	0430-0443		Student 2 discussing that they could improve some of the connections so that the sustainability is improved	
	0443-0445		Student 3 stating it is important that they have clamped the connections long enough	
	0446-0460		Lead Librarian and Professor F engaging in conversation about strength (sustainability) and ability to stand on the furniture piece.	
	0461-0470		Student 2 discussing their thoughts about using the spines of the books to provide additional support; however, there is greater need for strength in the connections	
	0470-0474		Lead Librarian and Professor F both confirming Student 2's discussion	
	0474-0486		Student 2 discussing their idea of adding a diaphragm; however, it requires additional wood	
	0497-505		Student 3 discussing alternative structural formats that were considered, but could not work because of stability including addition of nuts and bolts	
	0511-0514			
	0514-0519		Librarian asking other groups about additional nuts and bolts that could be used as a part of Group C's project to create more stability	
	0532-0535			
	0541-0546		Professor F reinforcing to Group C to figure out how to fix their design	Meeting project requirements - Professor F feedback regarding design figure posters to accompany furniture
	0553-0561		Professor F reinforcing that they need to have their "cut sheets" with each furniture piece	
	0565-0571		Professor F stating that the posters should be possibly exhibited with the furniture	

Time	Transcript Lines	Event #	Sub-Event Description	Event Description
	0574-0575	7	Professor F congratulating the group on good job	Closing of the presentation by
	0576-0577		Lead Librarian closing the review	Professor F and
0:09:46	--		The camera shifting to Group A's review	Lead Librarian

As (re)presented in the event map, Events 1 and 2 broadly constituted the introduction and design vision. During Event 1, as required throughout the course, students were asked to provide information about themselves (e.g., their names, their group number, etc.) and then asked to introduce their projects and related furniture designs. As noted in Event 2, the Lead Librarian and several students engaged in conversation related to how their modular furniture were constructed and if they were one unit or separate units. This initial set of discussions led into the body of feedback, or "the critique," during Events 3, 4, and 5. During these events, Group C engaged with and received feedback from the Lead Librarian and Professor F about the structure of their unit (Event 3) and alternative uses for the modular units (Events 4 and 5). Event 6 marked a transition in the conversation. The Lead Librarian confirmed that Group C had met the requirements related to functionality and sustainability. As indicated in lines 0420-0429, the Lead Librarian did inquire about the stability of their project. Professor F joined the Lead Librarian, lines 0446-0460, in expressing concern over the stability of their project to withstand use. Professor F, lines 0553-0561 and 0565-0571, also expressed concern that Group C incorporated their "cut sheets" as a part of their final furniture processes. The "cut sheet" was one of the requirements outlined by Professor F to accompany their final projects. Event 7, lines 0574-0575 and 0576-0577, marked the closing of the critique event, where Professor F and the Lead Librarian provided closing comments to Group C. While both provided supportive closing remarks, the Lead Librarian also provided ongoing support throughout the critique

event, thus showing her approval of their direction.

As indicated in Table 5.23, the final review was a formal format; however, the critique format relating to conversations and interactions were similar to those experienced by the students during their preliminary review taking place the prior day. The formality of this review was found in the actions of students, such as students' formal introduction of themselves and their detailed introduction about their project design concept. After initial discussion, the conversation turned to the commentary provided by the Lead Librarian focusing in on the construction of the furniture, and the sustainability and use of the furniture piece(s). Held in the open, passersby, current students in the architecture department, other faculty, etc. were able to engage in the review. Similar to the preliminary review on Day 3, this final review was also held in the form of a conversation, where student presenters and mainly Professor F and the Lead Librarian engaged in discussion about their evolution. As detailed previously, this final review format, in an outside setting, was also found during mid-review and final review events.

Conclusion: Furniture review project. The furniture review project was one of numerous opportunities Professor F constructed for students to engage in critique over the course of this architectural design studio. As discussed throughout this section, there were numerous critique opportunities ranging from less formal, the preliminary review, to formal critique formats, final review, made available for students to participate in for their furniture review. Additionally, the participants interacted in critique in a one-on-one interaction such as the desk crits for each group during the preliminary review to the final review, where groups presented to a large audience that required participation of outside participants, including the Lead Librarian as a client and the Architecture Librarian. The opportunity to

first engage with Professor F, the Lead Librarian, and the Architecture Librarian during the preliminary review was imperative to students in building their design concepts and physical models. Conversations ranged from discussions regarding their design concept to the physical stability and use of their in-progress designs. Each day of the furniture projected was an additional opportunity to view interactions taking place among different actors (people, locations, models, etc.) in the course and the ways in which opportunities for critique (receiving feedback) were made available. Thus, all forms of conversations in and through critique were completed with the purpose of guiding students to meet the client's needs.

Summary Conclusion

This chapter's telling case made visible how Professor F inscribed the professional practice and process of critique in his third-year architecture design studio. The analyses in this chapter were guided by the overarching question: *What counted as public critique in this architecture design course from the instructor's perspective?* The exploration of Professor F's inscription of critique was first examined through his teaching philosophies as discursively constructed in two ethnographic-conversations. The second analysis focused on the examination of the concept of critique as inscribed through course texts on the online management system and the course syllabus. The third analysis was anchored by two rich points identified as a part of Professor F's second interview-conversation with the researcher. In and through his discourse, Professor F referenced the importance of Day 1 in structuring the course for future events, practices, and processes. Day 1 of the course was therefore examined through event maps constructed from participant

observations and video records. The event maps made visible how time was spent across Day 1 of the course, and how Professor F structured the course through the construction of events, the use of different artifacts, different configurations of people, the movement across site(s), and the construction of different time(s) to provide opportunities to accomplish the disciplinary practice and process of critique. Examination of a complete cycle of critique taking place in Week 2 of the course provided additional insights into how students engaged in critique over the course of this architectural design studio, from project introduction, to implementation, to completion.

Without examining each of these sub-analyses, it would be difficult trace across the full range of times and events in the course the ways in which Professor F provided opportunities for students to move beyond knowing about being an architect to learning to be an architect. Although this analysis focused on the construction of the first day and one complete critique cycle across multiple days, it made visible how Professor F constructed the course for subsequent events. A complete analysis of the course across times and events is not presented; however, the analysis laid a foundation for additional levels of analysis in future research, ones that trace how what was constructed on the first day and through the furniture design project shaped and was shaped by this structuration process and how it afforded subsequent opportunities for learning.

Chapter VI: Discussion and Conclusions

Introduction

The study examined how and what ways critique was socially constructed in and through discourse in a third-year, 24/7 access architecture design studio. The architectural critique processes and practices were identified as a point of enculturation into the architecture discipline and profession (Brown, 2006; Melles, 2008); however, the processes and practices regarding critique in this setting are often invisible. As an outsider to the discipline and profession, the ethnographic perspective guiding my research entering this new site required me to examine numerous resources (e.g., the syllabus, instructor, historical and contextual information, etc.) as a way to look at what counted as critiques practices and processes and what to expect regarding critique events. For instance, students entering their first quarter at Coastal University in the architecture major faced challenges of knowing what to expect and what was required of them, when preparing for and participating in a critiques practices and processes. Thus, this course served as a way of enculturating students in the practices and practices as well as the conceptual meanings of the work necessary to develop understandings of and repertoires for the architecture field, both in the university setting and in the profession.

Interactional ethnography (Green, Dixon, & Zaharlick, 2003) framed my in-depth exploration of how critique was discursively accomplished in this third-year design studio. In choosing this theoretical-methodological logic-of-inquiry, I was able to trace over time the patterns, processes, and practices of a cultural group-in-the-making. Guided by this logic-of-inquiry I was able to move through different layers of scale each of which, brought me closer to an emic (insider) understanding of what it meant to be an actor (student,

instructor, and client) in this particular architectural design studio and the profession of architecture.

My interest in researching the topic critiques practices and processes and entering the Coastal University site was partially influenced by a conversation with one of my co-advisors regarding the public display of critique in current popular settings, and how these forms of presentation and interaction can be traced to disciplinary forms of critique, such as those found in architecture. Although I did not have prior personal experience with the disciplinary processes and practices of critique, I did have experience with campus-wide approaches to learning at Coastal University. The architecture program at Coastal University was chosen because the architecture program is a top producing and ranked program for the preparation of architects. My initial conversation and meeting with Professor F and his unique course opportunities with both analog and digital design studios as major sites for architectural work solidified my interest in working in this third-year design studio. As part of my entry, Professor F also agreed to jointly engage in the research process as a guide through learning the requirements of his course, the discipline, and profession. Professor F, therefore, served as a cultural guide in exploring the following: (1) how, and why he was structuring the course's practices and processes in particular ways; (2) theories and traditions of architecture practices and processes guiding his design and instructional processes; and, (3) how this course was positioned within this university and department to achieve the theory-practice of the university.

My interest and reasons for undertaking the present research study were also influenced by the recent discussions and concerns in preparing 21st century students to enter disciplines of study (Robelen, 2011). Given my own experiences working in student affairs

and services at a Research I university in the preparation and persistence of students in undergraduate and graduate education through programmatic initiatives, I became interested in how students come to learn about and engage in the practices and processes of a discipline. As a staff member, I have encountered numerous instances where students are disconnected from how curriculum is built to support a discipline and how related disciplinary practices and processes are constructed for learning the profession to which they seek entry.

To seek answers to how students are enculturated into a discipline and learn about these processes and practices, I used an initial pilot focusing on the disciplinary practice and process related to critique. As made visible through my analyses and report of findings, the need to initially refocus my attention on how this discipline came into being and the related opportunities made available for work in the profession of architecture, in turn, allowed me to explore how critique was defined, introduced, and implemented throughout this course of study. Thus, the purpose of this dissertation was to examine critique in the context of this department and university disciplinary site and as constructed through the opportunities afforded by an instructor teaching a third-year design studio.

Research Questions Guiding Overtime Ethnographic Study:

The overarching research questions that guided my entry and research process were:

1. What were the historical roots of the major actors interacting in the course?
2. What counted as public critique in this architecture design course from Professor F's perspective?

Discussion

To address each overarching research question, I drew on the concept of telling cases (Mitchell, 1984). A telling case makes visible the context surrounding this architecture design studio site and its components. Exploration also extended to what opportunities were being made available through the inter-relationships of the varying actors, through events, and across time(s). In constructing these analyses, I provided a foundation for future analyses. Therefore, the analyses make transparent complex and multi-layered work in defining an architectural design studio and framing the course of study for students in creating norms and expectations, roles and relationships, and rights and obligations for being a member in this course, the department, discipline, and profession. The next section discusses key findings in relation to the concept of critique as discursively constructed in an architecture design studio. These findings are discussed in relation to the overarching questions as two major telling cases: (1) Summary of historical contexts, and (2) Critiques practices and processes as conceptualized and constructed by Professor F.

Case 1: Summary of Historical Contexts

The first telling case was the institutional, departmental, instructor, and student contexts and historical background in which this third-year design studio course was embedded. Continuous references by the instructor/designer of the architecture design studio course and students in concert with interactions with course materials regarding institutional, departmental, and professional histories required me to examine the origins and development of this particular design studio given that it was not an individual, isolated class, but rather, a course in a series of interrelated courses that were designed to meet instructor, departmental, institutional, and professional requirements.

The analysis drew on publicly available resources to trace the founding of the institution (Coastal University) and the department of architecture to the present day in order to make visible the inter-relationship of the architecture design studio with the department and program within the university. Also included in the analysis was an exploration of the histories of the instructor and students. As outlined in the chapter, the institution transitioned from a co-ed agriculture and vocational training high school to its current institutional structure of six colleges and fifty-six undergraduate departments. In line with institutional growth and evolution over time, the Architecture and Environmental Design Department also experienced change over time from an architectural engineering program to encompass four other departments including Architecture. Further, the intellectual history, both professionally and educationally, of Professor F provided another layer of contextual information to interpret and understand what was being made available to students and what led to the formation of opportunities. Access to this type of informational content was critical to the course he developed and how disciplinary content was constructed as a part of the course. Lastly, the prior academic histories of the students as continuing students, who began at Coastal University as a freshman or as a transfer student, and who were admitted by meeting the admission requirements, was also significant as an influencing agent in the formation of the design studio culture.

The analysis demonstrated how course content, processes, and practices were influenced by numerous factors, including the institutional and departmental histories, the instructor's intellectual history, and the student participants entering the course context. Thus, the analysis made evident the need to look beyond the observable moment, as the design studio course under study came with embedded histories that must also be explored

and examined. To do so, the analysis considered multiple perspectives and layers of course records to uncover and interpret how disciplinary knowledge and ways of knowing are constructed.

Case 2: Critique as Conceptualized and Constructed by Professor F

The second telling case focused on how Professor F defined, introduced, implemented, and constructed opportunities for learning the disciplinary processes and practices of critique across different actors (people, spaces, and artifacts), events, and resources. The purpose of the analysis was to explore various facets of what counted as a crit and how it was accomplished in relation to Professor F's teaching philosophy, inscription of critique through textual resources, and the ways in which Professor F made present the processes and practices of critique.

Critique as explored through interview-conversations. The initial analysis on critique as inscribed through Professor F's teaching philosophy drew on two ethnographic interview-conversations (Gubrium & Holstein, 2003; Spradley, 1979). The instructor's discourse, as purposefully inscribed through as speaker-listener relationship (Bakhtin, 1986), assisted in warranting what it meant to participate in critique in this design studio and the related theories of the profession. Microanalysis of the transcripts yielded eight major topics and intertextually tied events (Bloome & Egan-Robertson, 1993) via the ethnographic interview-conversation. In order of their appearance in the transcript they were,

1. How to Measure or Assess - Components in Critique
2. Metaphor of Writer and Representation
3. Roles as the Instructor
4. Roles as a Student

5. Reflective Statement
6. Types of Critique – Contrast of Professor F's Design Studio to those of Colleagues
7. Critique Format and Purpose
8. Acceptance and Implementation of Critique/Criticism

Each topic inscribed by Professor F assisted in understanding how he conceptualized critique in relation to this architectural design course, the discipline, and profession.

Analysis of course materials. A secondary analysis investigated how Professor F textualized the concept of critique through course materials (e.g., course syllabus). The syllabus was chosen as the focus of this analysis as it provided significant insight into areas such as course content; teaching philosophies; disciplinary and professional ways of doing and knowing; and the roles, relationships, and expectations of the actors taking part in the course. The first level of analysis examined how individual pieces were interrelated and built upon each other across the quarter. Therefore, a record for each week with the events and projects across the course, who was involved in the work process, and the types of readings and their related format by week were recorded. The analysis emphasized the dynamic nature of the course, especially in relation to projects and the engagement of students in group work, which became foundations of their experience in this architecture design studio.

The second level analysis was anchored in Professor F's second ethnographic interview-conversation, which focused my attention on what the Professor F made visible regarding critique in the syllabus of this architecture design studio. The syllabus, as the proposed curriculum (Posner, 2004) and representative of Professor F's teaching philosophy, reinforced what was significant for students to know and do regarding critique.

Areas specifically discussed were proposed critique events, how students would be assessed regarding their project(s) through critique, and a definition of critique in design studio.

Critique as inscribed in course events. Analysis focused on how critique was implemented and used within this studio through Green and Meyer's (1991) concept of "cycles of activity" (p.150) as applied to critique events. Fieldnotes (written and video) and two interview-conversations each were used in tracing how and in what ways critique was as a part of this third-year design studio course. Fieldnotes, in particular, made visible critique as an iterative and recursive process and practice across Fall 2011 quarter. In looking closely to the cycles of critique across Fall 2011, three major critique formats were identified: desk crits, whole group critique, and reviews. Each of these formats referenced less formal critique events (e.g., desk crits and whole group) and formal critique events (e.g., reviews), different locations of events, varying participants in events, and diverse critique formats for receiving feedback (e.g., group project with a client, final project for laboratory design competition).

Day one of class setting precedent for future critique opportunities. A rich point (Agar, 1996; 2006) identified during the second interview-conversation led me back to Day 1 of the course to examine how Professor F structured this course. Fieldnotes from participant observations provided an opportunity to trace 16 events that took place across three different locations. Moving beyond Day 1, the analysis extended to the work accomplished across the quarter and across different sites and times for work. The analyses together impart a broad picture of time(s) for critique, location(s) for critique, and most importantly, how Day 1 of the course set the precedent for what opportunities were made

available for students to learn about and engage in critique in a disciplinary and professional manner.

Analysis of one complete design cycle. Through the last analysis, I investigated how over a four-day period a furniture design project was introduced, developed, and culminated with a final critique event. Project development was traced across three major components: Day 1 of the furniture design project introduction and instructions; Day 3 of the furniture design project preliminary review; and Day 4 of the furniture design project final critique. The analyses conducted as a part of this section illustrated how students engaged in a design project that involved several critique events, introduced students to the concept of a "client" (the Lead Librarian), and also provided opportunities to interact with other outside participants such as the Architecture Librarian. Furthermore, students were also introduced to informal to formal examples of critique events that required interaction with participants (Professor F, Lead Librarian, and Architecture Librarian). Thus, each day built upon the previous day's experiences and provided additional opportunities to view interactions taking place between different actors (people, locations, models, etc.) in the course. While not the only occasion for students to engage in critique events, the furniture design project was one representative example of how Professor F provided both disciplinary and professional critique experiences.

In sum this second telling case is comprised of several pieces; however, taken together it provides a fairly holistic picture of how Professor F inscribed the professional practices and processes of critique in a third-year architecture design studio. As evidenced across multiple records (ethnographic interview-conversations, syllabus, course resources), events, people, site(s), and time(s) chronicled, it became more apparent how Professor F

structured his course for students to move beyond knowing about being an architect to learning to be an architect.

Implications

The primary implication speaks to the void in research (Anthony, 1987; Salama & El-Attar, 2010) addressing what occurs during a critique including: how a critique is accomplished via resources (models, presentations, etc.) and through the discourse (verbal and non-verbal) that is interactionally accomplished. Professor F made present to students the disciplinary and professional requirements through interactions with disciplinary content and experiences. In conceptualizing a course involving critique, the present research project reinforces the need for instructors to incorporate both formal (e.g., review) and informal (e.g., desk crits) experiences; to engage in different learning environments, such as analog and digital studios; interactions with different people, such as peers, clients, professors, and visitors; and via course material.

A secondary implication of this study is for how and in what ways an instructor designs a course (purpose, function, etc.) for learning disciplinary content and preparing students to enter a profession. This implication is timely because of the growing interest in STEM disciplinary fields of study and in the interdisciplinary areas, such as the recent STEAM (science, technology, engineering, arts, and mathematics) movement. Students, such as the ones I encountered on a daily basis as part of this study, admitted to a prospective program of study and often enter the university site without the knowledge of the disciplinary and professional ways of knowing, being, and doing. This void may also extend to the design of courses for disciplinary knowledge and their related preparation for their chosen profession. The research conducted in this architecture design studio, with

Professor F, made visible how the departmental and institutional histories in concert with the intellectual history of the instructor dictated course design and influenced how Professor F structured the learning environment and architectural design studio, to support students in engagement in the practices and processes of critique in an iterative and recursive manner. In creating opportunities for students to engage in work with clients such as the Lead Librarian during the furniture design project, with their peers in other disciplines of study during the Expressive Technologies project, and/or engaging with professional architects such as during their fieldtrip to Southern California, Professor F also prepared students for future professional projects/work. Taken together, this research supports the need to draw on multiple perspectives to gain an emic understanding for disciplinary ways of knowing, being, and doing for researchers entering an unfamiliar discipline and a new site of study.

As stated in the introduction, my background was not in architecture, and I was unaccustomed to the disciplinary and professional demands of this discipline, including the curricular opportunities for learning. My outsider status provided another lens for viewing the work of an architect and what Professor F was making present to students about being an architect through the curriculum he constructed. Another implication of this study is how a researcher negotiates entry into a discipline that is unfamiliar. Entrance into this new site and discipline required a multi-layered approach, including artifacts, resources, ethnographic interview-conversations, and participant observations to gain an emic (insider) understanding of the processes and practices such as critique. The initial negotiation and conversation with the instructor allowed me to seek the instructor's interest and participation in the research side of the process. Without the instructor's guidance as a partner and mentor throughout this process, I would have been unable to conduct the analyses, such as the ones

included in this study, because of the disciplinary/professional knowledge required to understand the work accomplished within this architecture design studio. Thus, the partnership and need for a cultural guide within the discipline and/or profession under study is required for gaining insider understandings about meanings, practices and processes that members engage in as a part of a course of study.

Limitations

While this dissertation provides a multi-layered approach and review of how and in what ways the instructor constructed opportunities (e.g., artifacts, resources, people, events) for the learning disciplinary and professional practice and process of critique, it has limitations as well. Specifically, I initiated foundational research for how norms and expectations, roles and relationships, and rights and obligations for being a member of the discipline and profession were established and evolved over time. As discussed in Chapter I, however, this was not a comprehensive review of the complete quarter. I elected to focus my analyses on: historical contexts and intellectual history; the instructor's conceptualization and philosophy of critique; Day 1 of the course; and, Week 2 of the furniture design project as a complete critique cycle. Given that this is not a complete analysis of the quarter, and that only one complete critique cycle was reviewed, there are several *limits to certainty* (Baker & Green, 2007) that can be warranted. One major limitation is exploration of critique from the student perspective. Future studies will need to build on these initial set of analyses to explore critique across multiple projects. Furthermore, examination of the student perspective and their overtime development of crits, including how students engage in, take-up, and expand upon critiques practices and processes, is needed.

Conclusion

This study makes visible how an instructor provided opportunities for students to learn the processes and practices of critique in a third-year design studio. As discussed, opportunities for learning the practices and processes of critique vary widely from formal to informal; engaging with different people, including peers, clients, and professors; and across different learning environments, such as analog and digital studios and online learning management systems. To make present the demands of a disciplinary and professional practice requires instructors to construct these opportunities for learning and promote engagement of students in the discourse of the practices and processes of critique. In doing so, the students are enculturated into disciplinary and professional ways, which moves students from learning about being an architect to learning to engage in and applying practices and processes of critique as an architect.

Postscript

By Professor Thomas Fowler, IV

This is a timely research project – the study of *the disciplinary practices and processes of the design studio*. From my experiences of over 2 decades teaching at three institutions (22 at this central coast university) and a similar number of years working as a practicing architect, this research comes at an important time — since this learning environment has not been the focus of much prior research. There are also a number of myths that are not true about the design studio, that range from a classroom environment that has no structure and the difficultly in assessing what is learned, since all studios are so different. It also does not help that the design studio is typically considered a separate and very different type of classroom environment (pointed out in the thesis) from others forms of learning on campus — and therefore not well understood outside of the design professions. What this research does a great job of, is unpacking the component pieces of the design studio and making what is typically an invisible pedagogical structure and goals of learning, plus other interdisciplinary activities more visible, and frames research in an easy to understand manner that is accessible to the non disciplinary reader. Framing linkages of the design studio to 21st Century learning (with connections to STEAM: science, technology, engineering, arts, and mathematics) that combines cross-disciplinary and new learning strategies — elevates the context for understanding the importance for this type of learning environment.

This thesis does an excellent job in making more visible – what typically is an invisible disciplinary practice and process of this learning environment in exploring how and in what

ways this critique process is socially constructed in my third year design studio classroom. I agree with the thesis writer's quote, which sums up an essential component of research for understanding this environment:

> …the[se] analyses make transparent complex and multi-layered work in defining an architectural design studio and framing the course of study for students in creating norms and expectations, roles and relationships and rights and obligations for being a member in this course, the department, discipline, and profession.

As a teacher who has always enjoyed inviting the outside public into my classroom, this collaborative exchange of being the *cultural guide* to the thesis writer in assisting in this process of unpacking the many moving components of this didactic learning environment, has been an enjoyable and rewarding process. There are several reasons why this study is successful: First, there was an advantage to the thesis writer, as she framed it, coming into my classroom as an outsider, since a strong theoretical-methodological approach had to be developed that allowed the researcher to provide a unique perspective, along with connecting the dots with found literature (even though limited) for successfully expanding the discussion into other important discussions outside of the discipline of architecture: Agar's *languaculture*, Bakhtin's *speech genres*, and Spradley's *actors are part of every social situation*; Second, framing the course resources and objects as actors (brilliant!), as well as the course design elements themselves, since actors are part of every social situation along with activities and a place and within and across different levels of activities defines the nature of this design studio environment. I cannot think of a better framework for describing this dynamic environment to outsiders. You immediately get it once you describe

this unique learning environment this way, and this is the way I will describe my studio environment from now on to others.

I agree with the thesis writer, that this study can provide a precedent for what opportunities are made available for students to learn about and engage in critique in disciplinary and professional manner. There are also a number of deft observations from the thesis writer (that are listed below) that contribute immensely in assisting in how I understand the benefits and potential gaps of this learning environment.

The Design Studio:

- Each day is built upon the previous day's experiences and provides additional opportunities to view interactions taking place between different actors (people, locations, models, etc.) in the course.

- Provides both disciplinary and professional critique experiences and does not artificially separate knowledge and application (Salama) and interactions between instructor and student provide instances for the construction of mutual knowledge (Yanar).

- Structured for students to move beyond knowing about being an architect to learning to be an architect and develops 21st century learners for cross-disciplinary experiences and expertise, learning environments, future employment of students, and the new language of learning.

- Students are exposed to the disciplinary and professional requirements through interactions with disciplinary content and experiences.

- Can often contain curriculum and practices that are not prescriptive in nature, but fluid (e.g., varying by location, course, and instructor).

I agree with the thesis writer's observation that the design studio-learning environment is under-researched and also agree with a number of future research areas that can use this study as a foundation to launch from:

- More discussion about what exactly occurs during a jury or critique including: how a critique is accomplished via resources (models, presentations, etc.) and through the discourse (verbal and non-verbal) that is interactionally accomplished.

- Investigate how the processes and practices are enacted within the design studio by analyzing multiple layers of course records from course artifacts, to video records, to literature connected to other types of design studios, given there is no "one" curriculum or definition of an architectural design studio.

- What opportunities can be made available through the inter-relationships of the varying actors, through events, and across time(s).

- A study on nomenclature and related definitions in this learning environment

- Future studies on the implications for how a researcher negotiates entry into a discipline that is unfamiliar.

Thank you for this well researched and written study. This study will provide a significant contribution to the profession of architecture (and to others who have an interest in the

design studio) since you have written an in depth and meaningful understanding / analysis of the significant educational process that all architects go through as a part of their training. And the benefits for outsiders to understand this learning environment of actors and how best to structure these learning experiences for disciplinary and non disciplinary students to obtain the greatest benefit for 21st learning will provide an important contribution to education.

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Appendices

Appendix A

Figure A1. Representing example of analog studio at Coastal University.

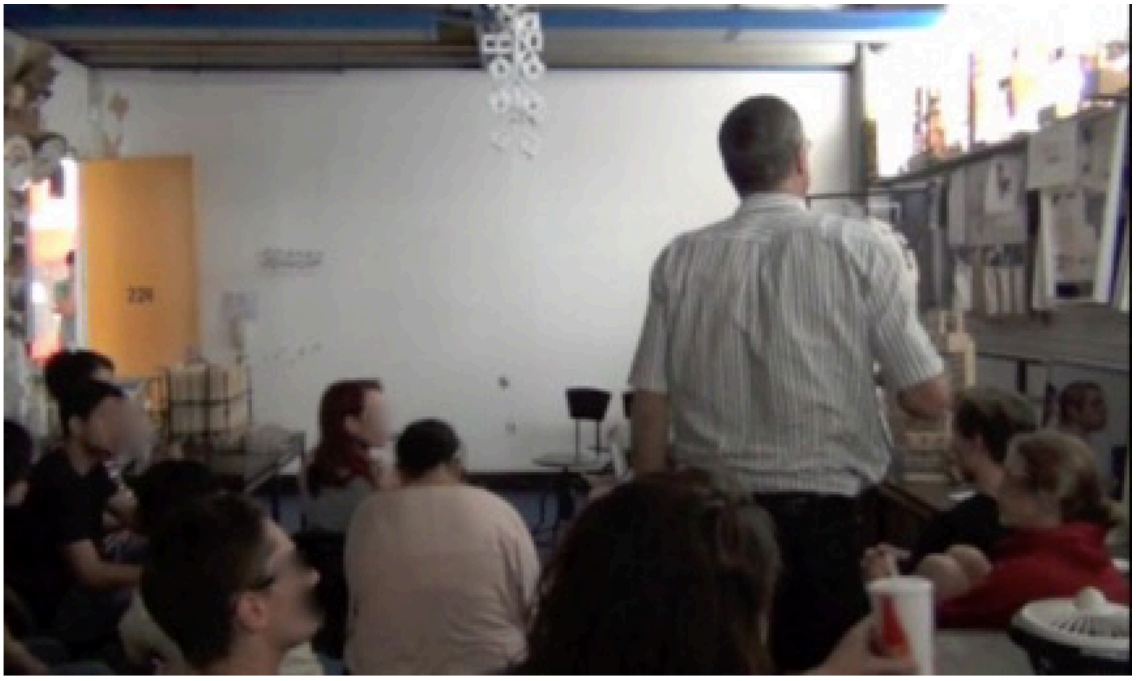

Figure A2. Representing example of digital design studio at Coastal University.

Figure A3. Representing example of outside review at Coastal University.

Appendix B

Table B1:

Interview 1 (Re)presenting Transcript Section 1 Focusing on Concept of Critique – lines 1353-1384

Line Number	Professor F	Researcher
1353		*But I did have the main question*
1354		*Since I was interested in the public critique part of it*
1355		*You kind of talked about you know*
1356		*You posting the stuff up in the classroom-*
1357	(overlapping)	
1358	Yeah-	
1359		*(overlapping)*
1360		*Having a discussion as a*
1361		*So how do you define the architecture critique*
1362		*And what are the components like you*
1363		*Feel are*
1364		*I guess go to critiquing*
1365	Yeah that's a that's a good question	
1366	I can send you some stuff	
1367	There's a whole a	
1368	Evaluation group that I developed	
1369	That talks about the a	
1370	The level of a	
1371	Let see	
1372	The risk taking that students might	
1373	Might a have	
1374	I mean there's	
1375	A fair amount of	
1376	Of	
1377	Of the critique is	
1378	Is	
1379	One way of summing up	
1380	A	
1381	A student's	
1382	The way you would critique a student's project is	
1383	What they done	
1384	Is what they said they're going to do-	

Table B2:

Interview 1 (Re)presenting Transcript Section 1 Focusing on Concept of Critique – lines 1385--1395

Line Number	**Professor F**	**Researcher**
1385		*(overlapping)*
1386		*Okay-*
1387	(overlapping)	
1388	And a	
1389	But that's just the basic level	
1390	I mean	
1391	I mean it's	
1392	It's more than just	
1393	Doing what you're saying you're going to be doing but	
1394	Another level is a	
1395	Is the amount of risk that a student would take	

Table B3:

Interview 1 (Re)presenting Transcript Section 2 Focusing on Concept of Critique – Lines 1511--1546

Line Number	Professor F	Researcher
1511	So it's a	
1512	It	
1513	It's how far the student would	
1514	Go to produce it	
1515	The oth-	
1516	The other aspect which	
1517	Which will probably a not be quite	
1518	You might have a lot of questions about	
1519	It's how	
1520	It's how	
1521	What kind of tools students are using to tell a story	
1522	How well are they drawing this thing up	
1523	I mean	
1524	If it	
1525	If you know	
1526	If the students were writers	
1527	And they had a really great story and the	
1528	I	
1529	I started to read the writing	
1530	And I	
1531	You know	
1532	There's typos and the	
1533	The syntax of the sentence were all backwards	
1534	And you couldn't	
1535	You know	
1536	The story was amazing but	
1537	Just hard reading this thing	
1538	And you couldn't really get the story through the writing	
1539	Like with the architect students if the drawings are really hard to read and	
1540		Mmhm
1541	The models are sloppy	
1542	Then the story is not as compelling	
1543	There has to be a certain level of quality	
1544	To the a	
1545	The graphics	
1546	And the physical models	

Table B4:

Interview 1 (Re)presenting Transcript Section 2 and 3 Focusing on Concept of Critique – Lines 1547--1562

Line Number	Professor F	Researcher
1547	There has to be a certain level of craft	
1548	There has to be a certain level of care	
1549	To the	
1550	Of to the story	
1551	And if all that stuff is sloppy then you don't really get the full reading of the story-	
1552		(overlapping)
1553		Mmhm-
1554	(overlapping)	
1555	Cause there's not enough	
1556	There's not enough	
1557	For me as a critic to visualize	
1558		(Okay)
1559	What they're trying to do	
1560	I	
1561	It shouldn't be my job	
1562	To visualize their project	

Table B5:

Interview 1 (Re)presenting Transcript Section 2 Focusing on Concept of Critique – Lines 1547--1562

Line Number	Professor F	Researcher
1583	It's not my job to choreograph a dance in	
1584	In the student's mind but it's	
1585	It's their job to	
1586	Give me a visual sense of what	
1587	Where they're going	
1588	So I can critique what they have	
1589		Mmhm
1590	So there	
1591	So there's a level of representation	
1592	There's a level of the compelling	
1593	Level of the story	
1594	There's a level of	
1595	Of understanding for the student to give	
1596	To take us through a process of how they got to the story	
1597	There's a level of risk taking that they should really	
1598	Kind of go out on a limb and	
1598	The trick is	
1599	If you go out on the limb	
1600	How are you going to represent	
1601	Go out on a limb and get out of your comfort zone	
1602	How are you going to represent the stuff	
1603	That you have no idea how to represent	
1604	And tell me the compelling story so I can	
1605	Give you feedback	

Table B6:

Interview 1 (Re)presenting Transcript Section 4 Focusing on Concept of Critique – Lines 1708—1718

Line Number	**Professor F**	***Researcher***
1708	I	
1709	I set the tone	
1710	I give feedback	
1711	But the other thing we typically do a	
1712	Is that I ask students what they think	
1713	And the students are very good critics	
1714	The other thing I	
1715	I've started to do more of is	
1716	Is having students	
1717	They call trade projects	
1718		*Mmm*

Table B7:

Interview 1 (Re)presenting Transcript Section 5 Focusing on Concept of Critique – Lines 1878--1887

Line Number	Professor F	Researcher
1878	They	
1879	They have to a	
1880	Send me a reflective statement	
1881	A	
1882	About the answering questions that I've given them about their	
1883	Their learning for the quarter	
1884	Things that they learned things	
1885	They wished they learned	
1886	And then they do a self-critique	
1887	Against this evaluation rubric	

Table B8:

Interview 1 (Re)presenting Transcript Section 6 Focusing on Concept of Critique – Lines 1911—1945

Line Number	Professor F	Researcher
1911		Mmm
1912		I think you answered
1913		I had a question about the forms of the critique
1914		But you mentioned the written the verbal
1915	Yeah	
1916	And the visual	
1917	Yeah	
1918		The visual
1919	Yeah	
1920		Okay
1921		And
1922		Um
1923		I guess one of my last questions
1924		In regards to your present
1925		The present studio
1926		What differences do you see in the critique in your studio
1927		Versus say other
1928		Other studios
1929	Well I'm a	
1930	The	
1931	The probably the biggest thing	
1932	Is that a	
1933	I	
1934	I'm	
1935	I have outdoor reviews all the time I	
1936	I don't	
1937	For me it allows me to have a critique at any time	
1938	I mean there others that have outdoor reviews	
1939	But I do it consistently-	
1940		(overlapping)
1941		Okay-
1942	(overlapping)	
1943	It's very rare that I have a critique inside	
1944	Typically I	
1945	I also a	

Table B9:

Interview 1 (Re)presenting Transcript Section 6 Focusing on Concept of Critique – Lines 1946—1955

Line Number	Professor F	Researcher
1946	We	
1947	We	
1948	We kind of in a funny way	
1949	We call them "tag team reviews" because I have a	
1950	I group of critics come in for an hour	
1951	And then another group comes in the next hour	
1952		*Okay*
1953	And they're all formal reviews	
1954	There's also a lot of distractions	
1955	It's outside	

Table B10:

Interview 1 (Re)presenting Transcript Section 7 Focusing on Concept of Critique – Lines 1987—2002

Line Number	Professor F	Researcher
1987	So as a result	
1988	They get used to really kind of focusing in on what they need to focus	
1989	And it's all timed	
1990	They have four to five minutes to give their presentation	
1991	And I also	
1992	Typically do a	
1993	You know two three students at a time	
1994	Where they five-five-five	
1995	And then we compare and contrast	
1996	So they're comparing contrasting the projects	
1997	Others do it but I	
1998	I do it consistently	
1999		*Okay*
2000	Cause I want them to understand the relationship	
2001	Of their project to a colleagues project in terms of feedback	
2002		*Mmhm*

Table B11:

Interview 2 (Re)presenting Transcript Focusing on Concept of Critique – Lines 1700—1732

Line Number	Professor F	Researcher
1700	A colleague of	
1701	Mine	
1702	And I	
1703	Many years ago we developed these 44 rules of how to accept criticism-	
1704		*(overlapping)*
1705		*Unhn-*
1706	(overlapping)	
1707	Learning from design criticism and then there's another	
1708	So they take one of those and	
1709	They pose a question and	
1710	They make a collage of it	
1711	And it's just one of the things that I noticed over the years	
1712	Students are not very good at	
1713	At	
1714	What I call "filtering feedback that they get"	
1715	So there's 44 different versions	
1716	Of how to look at it typically they	
1717	They feel more comfortable if I	
1718	Just go to their desk	
1719	And give them a list of things to do-	
1720		(overlapping)
1721		Right-
1722	(overlapping)	
1723	The problem with that when I do that	
1724	It's not	
1725	The class doesn't hear it	
1726	It sets up the wrong kind of precedent	
1727	Of how they think they can fix their project	
1728	Cause they think if I just give them a list and	
1729	They do things will be perfect	
1730	Ahh so	
1731	They have to hand in that	
1732	Ahh	

Table B12:

Interview 2 (Re)presenting Transcript Focusing on Concept of Critique – Lines 1733—1743

Line Number	Professor F	Researcher
1733	You know their reflective essay which is important	
1734	They respond to a series of questions	
1735	Then they have to do the	
1736	Self evaluation rubric analysis in terms of	
1737	By posting thumbnails of their project in terms how they met sustainability	
1738	Comprehensive design	
1739	Writing and some of the other categories which is a follow-up to	
1740	The initial	
1741	Self-evaluation that they did before the quarter started-	
1742		*(overlapping)*
1743		*Mmhm-*