

The Invention of Transformative Agency
Collaborative Inquiry as Graduate-Level Mentoring

by

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ABSTRACT

This dissertation examines collaborative inquiry as a form of graduate mentoring. To investigate this issue, I analyze the research and writing process of a team of five multilingual graduate students and their mentor as they collaboratively design, implement, and report a study based in their local writing program over the course of two years. Through a qualitative activity analysis of team meetings, participant interviews, and the team's written drafts and email correspondence, I investigate the ways in which self-sponsored, team-based collaborative research and writing supports participants' learning and development of a professional identity.

Key findings show that unanticipated obstacles in the research context present participants with “real-world” dilemmas that call forth disciplinary alignments, reinforce existing disciplinary practices, and, most importantly, generate new practices altogether. An example of this process is reflected in the research team's frequent need to adjust their research design as a result of constraints within the research environment. The team's ability to pivot in response to such constraints encouraged individual members to view the research enterprise as dynamic and fluid, leading ultimately to a heightened sense of agency and stronger awareness of the rhetorical challenges and opportunities posed by empirical research. Similarly, participants' demonstrated an ability to recognize and resolve tensions stemming from competing demands on their time and attention during the course of their graduate study. Actively constructing resonances across various domains of their graduate worlds—coursework, teaching, and non-curricular research and professionalization activities—served to clarify purposes and increase motivation.

An additional aspect of this study is the way graduate students leverage their language resources in the collaborative process. This dissertation extends the disciplinary conversation by investigating ways in which language resources function as rhetorical tools within the research context. This focus on language, in concert with collaboration and rhetorical stances to inquiry, challenges persistent views of authorship, apprenticeship, and language norms, while simultaneously lending insight into how graduate students invent new ways of participating in their professional worlds.

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In many ways, no genre speaks to the collaborative nature of writing more so than a dissertation. The present dissertation is certainly no exception. I could not have undertaken this project without the extraordinary generosity of the participants. The invitation to observe participants' meetings and the time and energy participants devoted to my long and meandering interviews set in motion this intellectual journey, the depth and excitement of which I could not have enjoyed without their help. For that, I am truly grateful.

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CHAPTER 1

TRANSFORMATIVE AGENCY, RHETORICAL SUBJECTS, AND LOCATIONS OF GRADUATE WRITING DEVELOPMENT

During the professionalization process, graduate-level learners must cultivate an identity that is as adaptive as the challenges they are likely to face over the course of their graduate careers and beyond. This professional identity is characterized by an ability to understand, coordinate, and put to use established disciplinary knowledge and practices in conjunction with one's individual purposes and unique contextual constraints. Such intensive and situated work calls for a type of agency that is at once individual and social, that calls for informed action with respect to the communal will of a group one hopes to enter.

To help articulate the features of this professional identity, I borrow a concept from recent work in activity theory—namely, “transformative agency”—because it encapsulates the dynamic interplay between individual and social goals in collaborative environments, an interplay I aim to capture in this study. Transformative agency encompasses not only individual agency—what Engeström (2007) has described as the “breaking away from a given frame of action and taking initiatives to transform it” (Haapasaari et al., 2014, p. 4). Crucially, transformative agency includes also the ability to do so in a collaborative context. Virkkunen (2006) defines transformative agency as the ability “to search collaboratively for a new form for the productive activity in which [the group is] engaged” (p. 43). In other words, transformative agency calls for an individual ability to transcend entrenched forms of action and to do so in coordination with others' goals, experiences, and expertises. The dialectical movements between self

and other are crucial features of the identity of a knowledge-worker whose aim is to be able to shape knowledge *in the context of* a broader disciplinary dialogue. As Haapasaari et al. point out, “Agency cannot thus be defined only as a primary characteristic of an individual, but it develops in collective interaction over time” (Haapasaari et al., 2014, p. 4).

This dissertation examines the process by which graduate students develop an individual agency in concert with a collective one—a transformative agency—in the context of a graduate program in a department of English. It traces the ways in which graduate students break from “a given frame of action” and “take initiatives to transform it” (Haapasaari et al., 2014, p. 4). To shed light on the process of developing transformative agency, I analyze the interactions of a collaborative research team of graduate students and their doctoral mentor as they conduct a research study in their local writing program over the course of two years. By examining the team’s interactions, I aim to describe how agency develops over time, a process that has garnered little attention in existing theories of agency (Haapasaari et al., 2014).

Graduate Writing, Identity Formation, and Challenges of Teaching

Learning to write is central to the development of a scholar. As Paré et al. put it, “Research writing is a highly specialized and discipline-specific social practice critical to knowledge making and to (re)producing disciplinary membership and identity” (p. 215). Put another way, according to Rose & McClafferty (2001), “Writing is one of the primary sites where scholarly identity is formed and displayed” (p. 30). That writing and professional identity are so tightly interwoven is due in large part to the fact that the products of writing function as smaller elements within much larger spheres of activity

(Dias et al., 1999)—what Prior (2006) refers to as “artifacts-in-activity” (p. 58). Seen from this level of analysis, writing is more than the mere scripting of words on a page; rather, it serves as a material reflection of the values circulating within a community while simultaneously constituting the signal practices of that community. In such systems of activity, learning to write is not necessarily seen as the target of instruction, but as an effect of participating in authentic disciplinary activities (Dias et al., 1999; Lave & Wenger, 1991).

Prior’s (1998) foundational treatment of graduate-level writing offers a rich account of the highly situated nature of this type of knowledge work associated with advanced literacy and disciplinary enculturation. For Prior, learning to write cannot be separated from the array of activities that surround it. By theorizing activity as the “fundamental unit of analysis,” Prior sees as linked “persons, practices, communities, and institutions” and shows that learning to write is necessarily dispersed across these various domains, co-evolving with them (p. 31). His explanation of how graduate education figures into this broader view of writing and disciplinarily is worth quoting at length:

In graduate education, literate activity points to the laminated processes by which students come to represent tasks and produce texts as well as the ways those texts are received and used by professors, peers, and others. This literate activity is central to disciplinary enculturation, providing opportunity spaces for (re)socialization of discursive practices, for foregrounding representations of disciplinarily, and for negotiating trajectories of participation in communities of practice. (p. 32)

What surfaces for Prior in his work with graduate writers is the different ways writers understand and carry out literate tasks, the “laminated” or layered systems of activity students must navigate, and the unique and varied pathways learners tread as they gradually enter target communities. For Prior, terms like “writing” and “discipline” are not stable structures, but rather *constructures* that are made and unmade through the active coordination and alignment of people, places, and things for various and often shifting purposes.

When writing is viewed from this dynamic sociohistoric perspective, the prospect of *teaching* writing becomes suspect for two reasons. First, because writing is so tied to broader networks of activity, much of what is learned is deeply embedded within the commonplaces of the community, the ways of thinking and acting that the group takes for granted, and thus difficult to explicate (Carrasco et al., 2012). Lonka et al. (2014) argue that “learning academic writing is difficult because it requires adopting partially tacit and implicit knowledge across extended socialization to disciplinary practices” (p. 246). Indeed, research in writing studies has shown (Beaufort, 2007; Dias et al., 1999; Tardy, 2009) that students learn through long-term engagement with the social practices of their field and gradually adopt complex syntactical, rhetorical, and other discursive patterns that support the construction of a “social identity as academic authors and researchers” (Castello et al., 2014, p. 445). This process is marked by a paradox, according to Paré et al. (2013), who say that the genres graduate students must learn, on the one hand, facilitate communication among established community members, but, on the other hand, exist largely in the “tacit realm,” which renders them “less accessible to critical examination and questioning” (p. 223). For newcomers, “what appears as universal to

long-time members represents new territory with established normalized ways of interacting that shape expectations of a genre long before newcomers enter the scene” (p. 223). The difficulty for graduate faculty, then, lies in the ability of graduate teachers and advisors to articulate that which is tacit and facilitate that which can be learned only through long-term engagement.

A second difficulty is that graduate learners are expected not only to learn the knowledge that is taken for granted within a community, but also to produce knowledge not already circulating among community members. That is, a crucial element of graduate education is the ability to generate “novelty” in their research and writing (Berkenkotter et al., 1995, p. 45). This requirement for “original knowledge production” at the graduate level has implications for the ways in which students are enculturated into the disciplinary practices (Paré et al., 2013, p. 217). While graduate students must gain facility with the established concepts, theories, and practices, they must also be equipped to seek out and address problems that established community members have not yet identified or encountered and thus have not developed a typical or conventional response. For the designers of graduate education experiences, this poses a challenge because what is being learned simply cannot be known beforehand and therefore cannot be precisely planned. The challenge, then, is finding ways to create conditions in which students inhabit problem spaces where no clear solutions exist while, at the same time, to provide the appropriate support structures amidst the opacity.

The Trouble with Classrooms

Viewing writing from this sociocultural perspective and considering the difficulties associated with teaching graduate-level writing raises questions about the

suitability of traditional institutional spaces to support this kind of intellectual work. If learning to write is an incidental effect of one's participation in authentic disciplinary activity (Dias et al., 1999; Lave & Wenger, 1991; Prior, 1998), then hands-on and action-oriented models of learning that facilitate such participation would seem warranted. But Anson and Miller-Cochran (2009) paint a rather staid picture of pedagogical models across higher education, which they argue tend toward passivity rather than action. They contend that banking models of learning are prevalent across all levels, including graduate school: "Higher education is still dominated by objectivist models of learning involving experts who convey information to novices" (p. 38). This circumstance, they say, "encourages the persistence of the lecture model" that is even "perpetuated in graduate education, a context where students are, ironically, assumed to be working alongside their mentors and becoming part of the culture of research in their fields" (p. 40; p. 38). Foregrounding the dissemination of content, or propositional knowledge, can overshadow pedagogies that emphasize action, participation, and the very constructive intellectual work theorized by Prior and others of his ilk.

Similarly, in a recent analysis of the English graduate seminar, Khost et al. (2014) question the "dominant signature pedagogies at the heart of English doctoral study—the graduate seminar, and its product, the seminar paper" (p. 20). The authors take issue with the passivity of the "conventional scheme of professional indoctrination" that drives graduate-level teaching and call for increased emphasis on action-oriented, process-based classrooms (p. 21). The shift they envision involves turning seminars from lecture-based to workshop-based and incorporating alternative writing projects not limited to the typical seminar paper where students simply display their uptake of course content. This

shift, they argue, would allow the seminar paper to be “a potential site of practice, not just a demonstration of scholarly work,” thus allowing emerging scholars to “more deliberately *construct* and *enact* scholarly identities that transcend casual assumption of the novice role” (p. 22, emphasis added).

Dias et al. (1999) postulate an underlying contradiction in social motives that sheds some light on the limits of classroom spaces. Beneath all school-based genres, they argue, is an “inherent and inevitable duality”:

On the one hand, such writing is “epistemic”—in the sense of enabling students, through the discourse production, to take on stances toward and interpretations of realities valorized in specific disciplines. At the same time, however, another fundamental activity of the university is sorting and ranking its students, and scripts are produced as ways of enabling such ranking. A second social motive for university discourse, then, is to enable students to be graded and slotted. (p. 44)

This duality, they add, is “pervasive and inescapable” (45). Even should teachers wish to disrupt this conflict by reorienting the classroom more toward a workshop-based site of practice, as Khost et al. call for, Dias et al. argue that “the institutional and ideological constraints of the university” still govern and limit the overall activity. At stake is the ability of students to move beyond merely “passing” or “procedural display”—forms of participation that reduce learning to an accumulation of credits or treat the artifice of schooling as an end in itself (Prior, 1998, p. 101)—toward what Prior (1998) refers to as “deep participation”—the ability of learners to take on multiple and privileged positions in the community and gain a richer picture of the broader disciplinary activity (p. 103).

When classroom roles are inscribed rigidly and narrowly, Dias et al. suggest, learning-as-participation-in-activity suffers.

These depictions of classroom limitations resonate with Reid's (2004) description of a graduate seminar on composition pedagogy in which the conflict is between discussing subject matter content, an approach she calls "coverage," versus promoting students' "constructive interrogation" and "discovery," what she calls "uncoverage" (p. 16). While her focus is a pedagogy course, the problem of "banking" content in place of inquiry-driven construction of knowledge is similar to the critiques above. Likewise, Prior's (1998) sociohistoric view of graduate-level literacy aims to elucidate, he says, not "*what people know*" (coverage) but "*how people, tools, and worlds come to be and act in the world*" (uncoverage) (p. 287, emphasis in original). For Reid and Prior, it is the "how" rather than "what" that will lay necessary groundwork for long-term development, deep participation, and, eventually, "full participation" (Lave & Wenger, 1991).

Attachments to "objectivist" epistemologies hobble attempts to address the two problems identified in the previous section, namely articulating the "tacit realm" of community practices and facilitating the discovery of that which is new to the writer and to the discipline. When writing and disciplinary practices are left unnamed and content coverage is prioritized over process and discovery, there is a risk of merely reproducing disciplinary norms rather than helping students construct for themselves (with and through others) the capacity and agency necessary for critique and reform (Reid, 2004). An approach to teaching writing at the graduate level, then, would seem to benefit from an emphasis on practices over coverage, on process and discovery over subject matter.

“Barren Territory” beyond the Classroom

In their reflection on the faculty-student mentor relationship, Simpson and Matsuda (2008) suggest that, while the classroom can “serve as a catalyst for further learning,” the most important part of mentoring “happens outside the classroom” (p. 92). It is in that extra-curricular space, they say, that students have a chance to interact more deeply with authentic professional activities, resources, and a broader network of colleagues working in the field (p. 93). Taking on such authentic tasks can effectively facilitate students’ participation in the practices of a discipline.

However, recognizing limitations of classroom spaces as well as the importance of ongoing support outside the classroom, some scholars have argued that there are too few formal or explicit opportunities for learning between coursework and the dissertation stage. Micciche and Carr (2011) refer to this gap as “barren territory” in the graduate curriculum: “How students get to this endpoint [the dissertation stage] and the extent to which specialized writing practices characteristic of advanced graduate study are part of content knowledge in English graduate programs is largely barren territory” (p. 485). Similarly, Aiken et al. (2013) point to a gap in the curriculum, as they argue that “all too often graduate students find themselves having completed coursework and facing dissertation projects” while “still being uncertain about their roles as researchers and contributors to the field and lacking experience ‘practicing’ or ‘testing out’ methods and methodologies for researching writing prior to conducting research for the dissertation” (p. 131). As a result of this lack of experience, Aiken et al. argue for more hands-on experiences for students to conduct research under guided direction prior to the dissertation.

Still others in writing studies have noted this curricular gap and called for additional support for newcomers. For example, Rose and McClafferty (2001) recognize a growing body of research on graduate writing but lament the lack of attention given to harness that knowledge to support graduate writers: “There is a small but growing research literature on writing at the graduate level...[but] there is little professional discussion of what we can do to help our students write more effectively” (p. 27). Similarly, Simpson (2013) points out that calls have been issued from various pockets of academe for “more research into alternative models of support” (p. 229). In English studies, Sullivan (1991) issued a similar call nearly twenty years ago when she found graduate writing to be more or less assigned but not taught. She argued that the process of writing should be taught as a tool of the trade, as intimately tied to the production of knowledge in the field, rather than merely assigned and forgotten. What these calls suggest is that the importance of learning to write at the graduate level appears to be misaligned with the support available. While writing plays a crucial role in one’s gradual entry into the discipline, its teaching is largely assumed to have occurred elsewhere.

Collaboration as a Locus of Learning

The complexity associated with writing at the graduate level and the lack of explicit instruction suggest a need for alternative pathways for learning. Indeed, in their critique of the classroom learning environment, Anson and Miller-Cochran (2009) advocate a “*collaborative* approach more suited to facilitating students’ involvement in the construction of knowledge,” which “would provide more relevant practical introduction to how scholars participate in the ongoing discussions of their discourse communities” (p. 40, emphasis added). While Anson and Miller-Cochran refer to a

classroom approach that involves collaboration, the thrust of their argument stems from a desire for a more active, hands-on work in which students can build for themselves the frameworks necessary for participating in knowledge-production at the disciplinary level. This emphasis on collaboration, I believe, provides a useful theoretical and practical response to the difficulties of teaching writing at the graduate level.

Collaborative writing—or the shared planning, negotiation, and production of a text—has garnered much attention from writing researchers and engendered a robust body of scholarship concerning the ways learners’ co-construct knowledge and improve their writing ability, language proficiency, and content competency through collective activity. In U.S. Composition Studies, researchers have investigated collaborative writing in relation to social epistemology (Bruffee, 1984; LeFevre, 1986; Reither & Vipond, 1989) and in relation to textual production in a variety of contexts: academic (Elbow, 1999; Yancey & Spooner, 1998), workplace (Allen et al., 1987; Ede & Lunsford, 1990; Thompson, 2001), extracurricular (Gere, 1987), and digital (Fey, 1994; McGrath, 2011).

A key feature of collaborative writing and one possible reason for its persistence in rhetoric and composition is that it relies on a social practice model of learning. That is to say, the virtues of collaborative writing lie in the fact that, philosophically, it reflects the process of social knowledge production and that, practically, it creates conditions for authentic engagement with knowledge-producers. Collaboration reflects knowledge-producing environments because knowledge, as many have argued (Reither & Vipond, 1989), is always produced in concert with others. Puncturing the ideology of individualism opens up space to explore the ways in which social relations contribute to the knowledge production process and how one’s individual subjectivity figures into the

collective ethos of the community one hopes to enter. Even when that negotiation occurs is in a writer's head (Flower, Long, & Higgins, 2000), collaboration occurs among competing voices vying for attention within one's consciousness. Practically speaking, collaboration is useful because it makes tacit knowledge visible. Giroud (1999) has noted the "significance of using collaborative writing as a methodology" to investigate discursive processing, in part because it forces writers to verbalize their thinking and because it provides an environment in which feedback can be delivered and negotiated with an immediacy not always available in asynchronous contexts (p. 149).

In classroom spaces, collaboration has been a way to incorporate these social elements. As Anson and Miller-Cochran (2009), Khost et al. (2014), and Micciche and Carr (2011) suggested, practices such as peer review allow colleagues to rely on one another as resources, encouraging peer-to-peer learning rather than relying on a single expert (Ding, 2008, p. 7). At the same time, collaboration invites active participation among class members, both helping writers see how their written words are received by readers and helping readers develop a critical eye. However, the limitations of classroom contexts persist when taking into account the often protracted and messy processes associated with learning to write. Despite the affordances of classroom settings, they may still prove inadequate to address the types of problems that can emerge in more authentic research contexts. That is, resolving tensions that arise in authentic research contexts may call for participants to devote more than the time allotted a typical semester. Indeed, given the long-term and complex nature of disciplinary enculturation, as Ding (2008) argues, incorporating collaboration into the classroom is "far from enough to help enculturate post-graduate students" into their target discourse communities (p. 7).

Collaborative Mentoring, Rhetorical Subjects, and Transformative Agency

The discussion to this point argues that learning to write is a long-term, identity-forming, and collaborative activity; that learning to write is best facilitated by active participation in authentic disciplinary practices under the guidance of a mentor; and that there is a gap between coursework and the dissertation stage of graduate programs in English. While these issues have been recognized by scholars in rhetoric and composition for some time, no study has sought to explore the ways in which collaborative inquiry outside the classroom in which participants share responsibility for a single project or text can support graduate learning. This dissertation explores such collaborative inquiry under the direction of a mentor as a potential site of professionalization for graduate students and endeavors to understand how that context provides unique opportunities for learning and growth.

More broadly still, this project seeks to understand the type of identity it is that graduate students cultivate in such spaces. In their study of identity formation of graduate students as they work with their dissertation advisors, Paré et al. (2013) argue that what graduate students learn throughout their program is how to function as “rhetorical subjects” (p. 216). By this they mean that a “transformation” occurs in which students become “capable of participating in the discourse practices that produce the specialized knowledge of their research communities” (p. 216). Paré et al. view this as highly rhetorical work, saying that “students find their location or position in the rhetorical situations that produce a community’s knowledge” and “learn to participate in the highly situated, interested, contingent, and constantly evolving process of knowledge production” (p. 216).

This notion of rhetorical subjects helps shed light on the type of identity graduate students cultivate along their learning trajectory, but I aim to expand that vision by linking it to the notion of transformative agency, described at the outset of this chapter. Just as Paré et al. use “rhetorical subjecthood” to describe the outcome of an identity transformation, I wish to investigate how such a singular subjecthood operates in relation to others. That is, I want to push the concept of rhetorical subjects in a more explicitly collaborative context where individual and communal agency must function in concert. This study, then, examines ways that foregrounding collaborative inquiry and situating it outside a classroom setting facilitates graduate students’ adoption of a rhetorical subjectivity in relation to disciplinary colleagues—what I refer to as transformative agency.

Overview of Chapters

This chapter has laid out the broader context in which the present investigation is situated. Chapter 2 provides a more thorough theoretical framework for the study by describing ways in which activity theory, and its various instantiations, can be used to capture learning that takes place in the unique context under investigation. Chapter 3, then, details the concrete ways data was collected and analyzed in order to speak to the issues raised about graduate learning through collaboration.

Chapters 4, 5, and 6 present findings from three distinct perspectives. Chapter 4 examines the ways in which graduate students navigate the overlapping and often competing activity systems of conducting research outside the institutional structure and being a graduate student within it. The ability of graduate students on the research team to recognize those tensions and coordinate the activity systems led to new understandings

of the activity they were undertaking and to an awareness of the rhetoricity of the one's alignments in a graduate program.

Narrowing the focus from multiple activity systems to only one, Chapter 5 analyzes the ways the group encountered methodological problems due to constraints in the research environment and how those constraints led to a redefinition of the research situation, a reinterpretation of the data, and renewed understanding of the problem under investigation. These moves to redefine the research context reflect participants' developing awareness of the dynamic and contingent nature of research. Chapter 6 narrows the focus further by examining one element of the research activity system, namely, the language resources possessed by participants and their effects on the research activity as a whole. Chapter 7 concludes the dissertation by offering a summary of findings, considering implications, and considering areas for future research.

CHAPTER 2

EXPLORING COLLABORATIVE INQUIRY IN DYNAMIC CONTEXTS

To study the development of transformative agency as it develops through collaborative inquiry under the direction of a mentor, I draw on activity theory, which is useful both for its flexibility and its focus on social activity as the primary unit of analysis. In this chapter, I explain how activity theory and its various instantiations provide a variegated perspective into the process of mentoring through collaborative inquiry and writing.

Activity Theory: Capturing Learning in Dynamic Contexts

Activity theory is a dynamic theoretical lens because it recognizes people, places, and things not in themselves but as nodes within complicated networks of goal-oriented action. People perform actions with certain objectives in mind, and the achievement of those objectives is mediated by tools employed to meet the demands of a specific context. These tools can be physical, such as a hammer and nails, or symbolic, such as utterances and texts, but they can take on meaningful significance only when understood in relation to the broader purposes they support. Developments of activity theory in the latter half of the 20th Century complicate the interrelationship among people, their goals, and the tools used to achieve them. In “The Problem of Activity in Psychology,” Leont’ev (1979) elaborated Vygotsky’s earlier formulation by incorporating other features of the activity environment: other community members, divisions of labor, and rules, ultimately acknowledging that individual action is mediated by the actions of others, an elaboration summarized in Engeström’s (1987) *Learning by Expanding*.

Still further developments can be found in the influential work of Engeström (1987), which theorizes multiple activity systems operating simultaneously, the interactions of which help to generate novel forms of activity. Shifting the focus to a broader analysis of systems, Engeström helped articulate how conflicts across multiple systems create opportunities for reshaping interrelations among subjects, objects, outcomes, tools, roles, and divisions of labor at play in a social context. By binding individual action with collective action, activity theory provides a useful theoretical perspective on the development of transformative agency.

Activity theory is suitable for studying learning environments not only because it foregrounds the individual-social dialectic, but also because of its definition of learning. In *Learning by Expansion*, Engeström (1987) advances a theory of learning, which he characterizes as transformative actions taken in response to contradictions within an activity system—a process he calls “expansive learning” because learners resolve contradictions by expanding their conception of the initial activity and thus producing a new and more “culturally more advanced.” The activity is culturally advanced because it draws on and strategically employs knowledge embedded in the concrete situation itself. Building toward culturally advanced activity is important for learning in disciplinary contexts because it requires both technical expertise and situated knowledge of participants. Prior’s (1998) formulation of disciplinarity recognizes the situatedness of disciplinary knowledge and suggests that its development calls for individuals to coordinate their unique individual understanding and goals with a broader disciplinary community represented in the learning environment. The learning theorized by

Engeström in broader systems of activity resonates with Prior's view of literate activity in graduate education environments.

A particular aspect of learning that activity theory can help illuminate where collaboration is concerned is the way in which participants with varying degrees of expertise, ability, and experience work with one another and, in the process, support one another's learning. That is, activity theory is the mooring for important perspectives in education research—namely, “situated action models” (Lave & Wenger, 1991; Nardi, 1996)—which attach activity theory to the notion of apprenticeship (Nardi, 1996, p. 36). Like activity theory, situated action models view learning as a social practice and sharpen activity theory to include not just novices but masters as well, i.e., expert participants who can help guide and support those less knowledgeable in the enactment of some task. Lave and Wenger (1991) describe situated learning as “a transitory concept, a bridge, between a view according to which cognitive processes (and thus learning) are primary and a view according to which social practice is the primary, generative phenomenon, and learning is one of its characteristics” (p. 34). That is to say, learning is, in their view, neither strictly cognitive nor social, but an interplay of the two. Furthermore, they argue, learning not a discreet feature of a dedicated learning environment, but rather an incidental outcome of participation in goal-directed activity.

For Lave and Wenger, participation is the primary focus of analysis. Examining participation—or, more accurately, what they term “legitimate peripheral participation”—offers a language for talking “about the relations between newcomers and old-timers, and about activities, identities, artifacts, and communities of knowledge and practice” (p. 29). Lave and Wenger theorize that effective learning occurs when people

are engaged in situated, authentic tasks that are aimed at producing outcomes that would be recognizable and useful to members of the community. Learners first gain entry into the social practice by taking on smaller or “peripheral” tasks that a novice could complete with support from other participants. As the learner becomes more adept, he or she takes on more and more difficult tasks until, over time, becoming a full-fledged member of the group. The process is metaphorically a movement from the periphery of the community to the center, a movement that is facilitated by engagement in situated tasks with a community of knowledgeable peers. While not “learning by doing” per se, it is an action-oriented model of learning that puts “doing” in a collaborative and supportive environment.

This view of learning as a social practice facilitated by frequent interactions among experts and novices of a particular community resonates with sociohistoric accounts of writing development (Berkenkotter et al., 1995; Prior, 1998; Dias et al., 1999). Such accounts view writing development as a long-term and complex process in which learners gradually adopt the complex practices of a target community. Writing, then, is not learned for itself, separate from the community practices, but rather as form of participation in the community. On the sociohistoric view, the criteria by which writing might be judged “good” or “bad” emanate directly from the goals, purposes, and values of the group itself. In other words, writing is inextricably tied to the group and to the context, as the writing both facilitates participation in a group’s activities but also reflects the group’s values. Learning to write, then, becomes part of a larger process of learning to participate as a member of a community, and collaborative interaction serves

as the mechanism by which participants circulate shared communal knowledge, practices, goals, and values.

The three topics discussed to this point—activity theory, situated learning, and sociohistoric accounts of writing—are interrelated views on what learning is, how it occurs, and where writing fits into the larger process. These topics comprise to a unique theoretical perspective intended to bend along with complex processes associated with learning at the graduate level, learning to write as a professional, and developing the cognitive flexibility needed to act (not just think) like a member of a particular community. With this theory in mind, the overarching question driving this dissertation asks, *How do graduate learners develop “transformative agency” through prolonged engagement with an authentic disciplinary task?* Or, to put the question in terms discussed in the previous chapter, *How do students “break away from a given frame of action and take initiative to change it” and do so in collaboration with members of a target discourse community?*

In addition to these general questions, activity theory also offers strategies for narrowing focus. Engeström’s contributions to activity theory have led to an understanding that multiple activity systems are at work at any given time and their interactions add layers of complexity and potential contradictions. If, as he argues, contradictions become visible when multiple activity systems come into contact with one another, then another potentially useful heuristic question is: *What tensions across activity systems emerge and how are they resolved through expansive action?* Similarly, an additional heuristic question derives from Engeström’s claim that historical circumstances can lead to contradictions within an activity system, which can manifest

when different nodes of the activity system become incongruent. To put this notion in the form of question, I ask, *What tensions within the activity system emerge and how are they resolved through expansive action?*

While activity theory has a rather clear and firm formal structure, its primary purpose is as a heuristic for opening up spaces for further investigation. Implementing activity theory proves widely useful because it is dynamic enough to allow for the complexities and uniqueness of a given context to become visible. The sub-questions above regarding conflicts across and within activity systems, then, serve as heuristics and offer additional clues for how activity theory can be utilized to shed light on the social practices under investigation. The present study is no exception. To understand learning in this context, additional theoretical apparatus is needed to illuminate the many different ways action leads to the adoption of disciplinary practices and the transformative identity of a professional scholar. Below, I delve deeper into activity theory and into these sub-questions to develop a more situated theoretical orientation that will shed light on the unique learning in this context.

The “Primary” Contradiction: Capturing Learning *across* Activity Systems

At the heart of this process of expansion is what Engeström (1987) labels the “primary contradiction” (p. 66). In any activity system, the primary contradiction stems from a conflict between an activity’s “use value” and its “exchange value.” Engeström draws this distinction from Marx’s economic analysis of capitalism, primarily in the opening of *Capital* (1887), in which Marx lays out his analysis of commodities and their objectification. A commodity, says Marx, can be valued for its direct usefulness to a consumer. (An avid runner, for example, values and pays money for a pair of running

shoes because of the use she is sure to get out of them.) At the same time, a commodity can be valued not for its direct usefulness but for the commodities with which it might be exchanged in the future. (The vendor who sold the running shoes values the money she received not for any use it serves but for its potential exchange value in future transactions.) Engeström, like Marx, sees the conflict between use value and exchange value as at the heart of social life in capitalistic societies, and Engeström extends that insight into educational settings.

From an educational perspective, the value of learning itself can be seen in this contradictory way, and it is the aim of activity theory analysis to make visible the cracks formed by this primary contradiction. In educational settings, as writing studies scholars Russell and Yañez (2003) have put it, the primary contradiction can be framed in terms of “learning as intrinsically worthwhile” (use value) and learning as “doing school” or “playing the game” (exchange value) (p. 343). Put another way, the process of learning has use value when it is practiced for its own sake or for its direct connection to other aspects of the learner’s life, and it has exchange value when it is perceived to be a hurdle or just an accumulation of credits eventually traded in for a degree.

Bonneau (2013) points out that even the higher levels of educational institutions are subject to this tension brought on by such thinking, a problem that she says can be solved through a standardization process from the top levels of management. She writes:

Although university, as an institution, has existed since the Middle Ages, it is not immune to the cultural and economic transformations that occur in this day and age. Current developments in the Western university sector are following a path marked by global competition, reduced state involvement, underfunding and

restructuring. Some have also described this transformation as a move toward “academic capitalism,” which obliges universities to meet the demands of the market by setting up performance-oriented governance and assessment instruments. (p. 10)

One way to control performance, according to Bonneau, is “by standardizing the management process” (p. 10), an institutional arrangement that has the potential to conflict with research when it calls for non-standardized tools and protocols.

Standardization, which can be seen in nearly every facet of educational institutions (Turley, 2009), has the potential to squelch the dynamism of learning and the flexibility of tools needed to support that learning.

Given the messiness of the research process as indicated in the previous chapter, one obstacle that emerges is the difficulty planning for unexpected phenomena within the parameters of a large institution—the troublesome task of using Euclidean tools to make sense of non-Euclidean geometry. The model of apprenticeship in graduate education calls for conditions in which outcomes are necessarily undefined at the outset (Russell, 1998). Authentic research begins, that is, with genuine, open questions, the pursuit of which is by definition a process of discovering what is not known. Planning, therefore, is at best provisional and fragmentary. An effect of the inability to plan for authentic intellectual discovery is that institutional spaces might not admit of the flexibility required of the inquiry. Institutional spaces—and the bureaucracies they often represent—tend toward a conservative stasis rather than fluidity and adaptation.

In educational settings, the tension between standardization and its more fluid counterpoint can manifest in fairly obvious ways. Students in school-settings meet at

periodic intervals, the schedules of which are determined well before the class and subsequent inquiry begins. Class meetings last as long as the pre-determined schedule dictates and do not proceed along the unexpected and probably non-linear dimensions of the inquiry itself. Graduate courses often take place in seminar rooms, a setting usually detached from the object of inquiry, rather than in a lab or in close proximity to the object of investigation. The work and its products are eventually reduced to a discrete quantity of credits that is traded, more or less, for more advanced standing in the institution.

This is not intended as an indictment of institutional spaces. Rather, it is an acknowledgement that the intensive process of building disciplinary expertise—of professionalizing through hands-on experience with qualified colleagues in pursuit of genuine questions with unknown answers—is often at odds with the institutional structures in which it takes place. In the context of the current project, recognizing these often opposing forces proved useful in explaining the tensions that arose in throughout the graduate students’ research and writing. Chapter 4 of this dissertation offers an account of graduate learners as they inhabit the extra-curricular space outside of the classroom, encounter tensions stemming from competing activity systems, and work toward building alignments across activity systems to resolve tensions.

Formative Intervention: Capturing Learning *within* the Research Activity System

Formative intervention is an approach to learning in collaborative contexts that seeks to draw on participants’ situated knowledge in order to devise new and smarter forms of collective activity (Engeström, 2011).¹ In a recent aggregation of scholarship on

¹ Formative intervention is markedly similar to “dynamic assessment,” a Vygotskian approach to learning that posits that “assessment—understanding learners’ abilities—and instruction—supporting learning development—are a dialectically integrated activity” that asks teachers to understand learners’ needs and

formative intervention, Penuel (2014) summarizes the theoretical framework by highlighting three key features: (1) making tensions visible, (2) introducing a new tool into the activity system that helps resolve the tensions, and (3) working toward expansive action that transcends the tensions initially posing as obstacles. Here, I describe each feature in more detail.

First, researchers and subjects begin by analyzing contradictions, tensions, and disruptions in the research context. Penuel writes,

[Discussions] of problems are disciplined by the call to identify contradictions and dilemmas embedded in the structures of everyday activity. [...] A core premise behind the methodology of change laboratories is that the analysis of these contradictions is an integral part of and requisite to the success of any intervention insofar as such an analysis leads to transformation of practice (Engeström & Sannino, 2010).

As indicated here, a key starting point for any successful learning is a critical analysis of problems. It is out of the recognition of those problems that participants seek new activities that resolve them.

A second feature of formative intervention is Vygotsky's (1987) notion of double stimulation. In response to problems in the research context, researchers must fashion some type of tool that serves to resolve the problems evident in the data. Penuel (2014) summarizes the concept of double stimulation as follows:

devise suitable responses unique to that learner (Poehner, 2008, p. 2). While formative intervention and dynamic assessment are similar in orientation, the contexts in which they play out are different. Dynamic assessment is typically discussed in classroom contexts while formative intervention occurs primarily in workplace contexts or among advanced level learners. To maintain the distinction between classroom learning and "extra-curricular" learning that I have established in Chapter 1 of this dissertation, I rely on the term formative intervention.

In everyday activity—as opposed to a laboratory setting—a first stimulus might be a situation experienced as challenging or as presenting obstacles to the accomplishment of a given object. The *second stimulus* involves the introduction (by a researcher, or anyone else in the situation) of artifacts or tools that can be appropriated to overcome the challenge, which triggers a process of development or a cycle of expansive learning that can be observed as it unfolds. (p. 102, italics added)

The process of designing a tool that confronts tensions experienced by participants—i.e., a second stimulus—is crucial for the creation of new, smarter activities, but also for the development of the participants’ knowledge and adaptability in the research context. By leveraging their own knowledge of the problem, participants redefine the situation and fashion altogether new forms of action. This process is an even more narrowly focused example of the kind of learning theorized by Lave and Wenger (1991), and proves useful in analyzing the learning taking place among graduate learners.

A third feature is the “expanding agency of participants,” what learning at advanced levels is ultimately driving toward (p. 103). Again, Penuel offers a clear characterization:

[T]he chief object of design activity is the transformation of work activities. The analyses of contradictions is intended to serve as a basis for constructing what Engeström calls a “novel concept” (Engeström, 2011), that is, a new form of activity that draws on resources and ideas from the existing activity system, and that in some ways also breaks away from it. [...] The content of the concept and its realization in an intervention are negotiated among the participants in a change

laboratory. Moreover, the course of implementation ultimately determines the shape of the intervention, so participants themselves ultimately take charge of the process. In this respect, the researcher's role is principally in helping to provoke, organize, and sustain a transformation process that is owned by practitioners.

Expansion, then, is the development of new concepts that anchor new tasks; agency is the capacity of individuals to initiate and enact those changes. Formative interventions, then, see learning as expansive action that incorporates the agency of a community of practitioners with shared goals.

Formative intervention is a helpful framework for understanding graduate-level learning because it addresses two key concerns associated with advanced writing education. First, formative interventions foreground problems for which no clear answers exist. Because graduate students must inhabit problem spaces that cannot be known beforehand or planned for, they must learn strategies for responding to difficult problems that others in the discipline may not have addressed. Formative intervention recognizes the uniqueness of such problems and takes such situations as a starting point for investigation. At the same time, formative invention expects collaborators to develop discursive tools that make problems visible to all members as well as the surrounding discourse that anchors deliberation and the development of new practices. It is through this kind of agentive action that learners are able to move from the periphery to the core of disciplinary activity. Chapter 5 of this dissertation illustrates the process by which graduate learners develop discursive tools in response to situated constraints that then serve to anchor new forms of activity.

The Rhetoric of Language Resources: Capturing Learning in Language Negotiations

An important feature of the research context under investigation was the graduate students' use of Mandarin Chinese in reading and speaking. This language-based tool was crucial for the graduate students to conduct their research, but also played an important role in their individual development and professionalization because it provided additional avenues for participation in scholarly research. From an activity theory perspective, this language resource can be understood as a tool in the activity system. But, to understand the rhetorical force of that tool in context, I turn to recent work in rhetoric and composition that has recently taking more specific aim at theorizing the rhetoric of language resources. In order to set up the theoretical apparatus for an investigation, I use a fairly large amount of space to provide background on the debate surrounding language within the field of rhetoric and composition as well as substantive critiques that must be addressed in order for a more useful theoretical approach to emerge. In what follows, I describe how the rhetoric of language resources (what scholars often refer to as language *difference*) has been theorized in recent work in rhetoric and composition, how views from that body of work are severely limited, and how a theoretical adjustment can open up pathways for inquiry into language in written composition.²

² A number of scholars have been critical of the translingual movement (Matsuda, 2014; Atkinson et al., 2015), and I certainly wish to invoke those critiques in this section. But I also wish to add a more detailed critique not about how the fields of second language writing and composition studies relate, but by analyzing the arguments and assumptions underlying the idea of a translingual approach itself.

A “Translingual Approach” to Composition

Gestures toward a future in composition that is sensitive to language diversity seemed to have coalesced into what some have called a “translingual approach to composition” (Horner et al., 2011). In the frequently cited essay “Language Difference in Writing: Toward a Translingual Approach,” Bruce Horner, Min-Zhan Lu, Jacqueline Jones Royster, and John Trimbur (2011) outlined an approach to composition, which extended earlier disciplinary resolutions and position statements in keeping with currents of globalization (p. 303). Recognizing linguistic plurality as the norm in U.S. colleges and universities, the co-authors called into question monolingualist ideologies circulating in the field and aimed to broaden compositionists’ understanding of and engagement with nonstandard varieties of English. Proponents of a translingual approach argue that teachers, researchers, and administrators would do well to address language difference by deemphasizing the importance of arbitrary norms and, instead, aiming to understand and leverage the ways difference is conscripted in service of rhetorical action (305).

Horner et al.’s approach puts the notion of “difference” at the center of the debate, arguing that language differences remain little understood by teachers, researchers, policy-makers and therefore ineffectively addressed in various ways. Two types of responses have patterned how language difference is addressed in composition studies, they believe, neither of which is adequate. The first response says that language differences reflect some form of deficit, some inability on the writer’s part to accede to an abstract usage standard. This view, they say, has fostered a desire to eradicate differences and assimilate speakers and writers into what is perceived as “good” English.

A second response, while more accommodating than the first, also fails to account for the active negotiation of linguistic difference in the process of meaning making. This more tolerant view, codified in the 1974 CCCC position statement “Students’ Right to Their Own Language,” sees language differences not as deficits but as codes suitable in certain domains of use, such as the home, work, school, in writing, etc. Despite its tolerance, Horner et al. argue, this view remains inattentive to the way language necessarily seeps across these different domains. Just as in the first response, language varieties are treated as discrete and stable. Horner et al. write,

Both these kinds of responses are aligned with the ideology of monolingualism by treating language practices as discrete, uniform, and stable. [...] Both kinds of response ignore the inevitability and necessity of interaction among languages, within languages, and across language practices. Both also ignore writers’ and readers’ need to engage the fluidity of language in pursuit of new knowledge, new ways of knowing, and more peaceful relations. (p. 307)

The translingual approach, so articulated, seeks to offer an alternative to these two responses by both valorizing difference and acknowledging its fluidity and centrality to the everyday practices of negotiating meaning. Difference in language, then, is not viewed *a priori* as unsuitable or an obstacle to communication, but rather as a resource for invention: “This approach asks: What might this difference do? How might it function expressively, rhetorically, communicatively? For whom, under what conditions, and how?” (p. 304). A teacher’s role, then, involves helping students manipulate their store of linguistic resources with the recognition that languages are constantly in flux, that language diversity is the default, and therefore that it should not simply be relegated to

the home or ESL classrooms.

Canagarajah (2012) contributes to the discussion by proposing a theory of “negotiated literacy” (Canagarajah, 2012, p. 131), which is grounded in the view that “practices” are “fundamental and generative” to the analysis of meaning and language use (p. 106). Language norms, he holds, are negotiated by interlocutors *in situ*, and it is from this negotiation process that meaning emerges (rather than exclusively from an adherence to pre-established norms). Based on this claim, Canagarajah sees sufficient reason to argue that strategies for negotiation across languages should be studied, taxonomized, and taught to students in composition courses.

Indeed, his recent monograph *Translingual Practice: Global Englishes and Cosmopolitan Relations* follows this trajectory, as it defines translingual literacy, identifies translingual practices, and promotes derivative pedagogical strategies. Elsewhere, Canagarajah has characterized the focal problem in this way: “The urgency for scholars to address translingual practices in literacy derives from the fact that they are widely practiced in communities and everyday communicative contexts, though ignored or suppressed in classrooms” (p. 2). The assumption is that, because languages and meaning are negotiated in the everyday world, compositionists are obliged to incorporate those practices into their day-to-day practices.

A Theoretical and Practical Critique

However valuable such a move might be, a number of problems stand in the way of Canagarajah (and, by extension, Horner et al.) attaining his desired ends. First, the recommendations for integrating different language resources (what some have termed “code-meshing”) derive in large part from pedagogical contexts (Young, 2009, p. 50).

This is not a problem in itself, but the insights drawn from these contexts are necessarily limited. Despite justifying the study of translingual practices by noting that such practices are common in people's everyday non-academic lives, the research focuses primarily on eliciting translingual practices in classroom contexts without fully understanding how those practices function in more authentic "real world" contexts.

For example, in one study referenced in *Translingual Practice*, Canagarajah and Paul Roberts analyze the negotiation process of a group of five multilingual students in a United Kingdom school setting. Canagarajah explains that this "simulated activity" asks students "to plan the forthcoming visit to the university of an international dignitary and to make proposals for spending for spending the budget for the visit" (p. 85). An examination of this interaction among five students leads to Canagarajah's development of a taxonomy of five general "macroscopic" strategies that are used in contact zones to negotiate meaning—a move that draws broad generalizations based on a quite limited classroom-based data set. Elsewhere, when looking at language difference in writing, Canagarajah describes in detail a student in a graduate course whom he encourages to code-mesh in her native Arabic. Canagarajah examines her texts, reflections, and interactions with peers to show how his taxonomy, initially illustrated in the oral context, plays out in writing. Here, too, the taxonomy is derived from quite limited data yet generalized broadly under the assumption that the strategies being used are, in fact, rhetorically useful.

This push to taxonomize code-meshing strategies is hasty since the practices and attendant differences have not been fully contextualized. If language is to be understood as a "fundamental and generative" spatio-temporal practice, then the virtues of the

differences—the value of the deviations from standard forms—must be weighed against their effects in the immediate context, the spatio-temporal domain that produces and is produced by the language in use (p. 106). Because the exigency driving the cross-language interaction is not initiated by the students themselves, but is rather imposed on them as a school assignment, the type and quality of difference that emerges takes on a diluted significance, and so too the metric by which that significance is evaluated.

To get at this point another way, Canagarajah simultaneously takes for granted the inherent and universal value of language difference while asserting that the value of difference is determined by the context. We can see this latter issue when he writes of his own friendliness to code-meshing during his time as editor of *TESOL Quarterly*:

My position has always been that I will accept codemeshed essays if they were rhetorically justified, strategic, and displayed a critical and creative design. What will help me decide if those choices can be permitted in a published article is whether they are appropriate in that text and context. (p. 125)

While the context determines the value of code-meshing, the way in which it is studied and advocated assumes that difference, regardless of context, is universally valuable. The commitment to a universal value of difference allows Canagarajah to bypass any critical evaluation of the effects language differences bring about in context. This is a contradiction that needs addressing if researchers are to develop and make use of a theory of language difference in writing.

The problem is compounded, and perhaps made more obvious, considering the fact that advocates of code-meshing do not themselves code-mesh in their scholarship. Stanford (2013) takes issue with the absence of mixed languages and dialects in the

scholars' own published work, and urges her readers to stop censoring their nonstandardisms by incorporating them into their writing and thus turning the dial of acceptable generic conventions. Crucially, Stanford places the weight of experimenting with code-meshing on the shoulders of scholars themselves rather than on students', as she writes, "It may be unwise to have our students work out experimental writing strategies for us, especially with a strategy that, as far as we know, may not work" (p. 129). A warranting assertion underlying her reticence is that teachers must have reasonable indications that their pedagogies will improve students' rhetorical agency. Also tucked into her argument, it seems, is that teachers must be able to get behind what they teach—they must have skin in the game. If it turns out that code-meshing leads to problems in students' futures beyond the writing classroom, no negative consequences are likely to befall the teacher, but of course the same cannot be said for the student. This is a morass, and one which researchers must tread with care. Only additional research, conducted in such a way that does not put students at risk, can offer insight and suggest directions on how best to proceed.

Another critical problem with the scholarship advocating a translingual approach lies in the ambiguity between the terms code-meshing and code-switching, a distinction that has been used as a key exigency for the development of this line of research (Matsuda, 2013). Young (2009) argues that code-switching assumes language varieties are inherently stable and can be kept separate, thus ensuring that users replicate the norms of certain discourses based on the appropriateness of that code in a given situation.

Young links this way of thinking to a "separate but equal" ideology: languages are said to

be equal, but relegated to non-overlapping spheres of life (and thus undercutting the initial claim that they are equal).

Young—along with Horner et al. (2011), Lu & Horner (2006; 2013), and Canagarajah (2006; 2011; 2012; 2013)—sees code-meshing as a potential resolution because it does not assume languages to be stable or even capable of being teased out and neatly separated into distinct codes. Languages should be allowed to be integrated because, among other reasons, that is how language is used in everyday practice and how it has always evolved. Yet, in “Translingual Literacy, Language Difference, and Matters of Agency,” Lu and Horner (2013), both advocates of code-meshing, make the curious claim that language norms *can* be replicated and still be considered novel linguistic turns. They argue that all uses of language are new and creative insofar as each use requires the speaker or writer to establish new spatio-temporal relationships; and this creation of new relationships can be done agentively, even if the speaker or writer is replicating established norms. Regardless of the accuracy of their claim, Lu and Horner advocate a practice that, from a functional perspective, looks equivalent to code-switching, the very construct they disparage. If writers can replicate codes based on appropriateness to the situation, the “separate but equal” ideology remains intact.

The ambiguity of these terms has been noted by Gerald Graff (2013), who sees the need for additional clarification. In *Code-Meshing as World English*, Graff writes, [The] distinction between code-switching and code-meshing—which for Young can be the difference between a racist and a nonracist pedagogy—is itself not always self-evident. At the boundaries, to be sure, is a clear difference between encouraging students to inject some of their home language into their academic

writing and speaking and asking them to restrict that language to nonacademic and nonpublic situations. But as one audience member suggested to Young at a 2008 Modern Language Association session I attended in which he presented his thesis, what looks like code-switching to some people might look like code-meshing to others, and vice versa. In short, further analysis of the distinction would be helpful, as would more specific examples. (p. 17)

David Joliffe et al. (2013), too, see the need to work around this confusion. They contend that code-switching and code-meshing do not necessarily invite a value judgment without reference to context in which they occur and, further, that the terms may not be as distinct as Young posits. They write,

[Code-switching] is something that nearly everyone does. Whether we change the level of formality we use to accommodate our audience's expectations or we actually move between languages, the concept of switching one's voice from one sound to another is part of performing a range of daily tasks involving a range of participants. The implication of using these definitions is that neither code-meshing nor code-switching should be coded as particularly good or bad. In addition, we must recognize that the two are not mutually exclusive. In the context of these ideas, our collective task is to explore methods with which we might ensure the usefulness and cultural sensitivity of our literacy pedagogies. (p. 68)

Joliffe et al.'s pragmatic approach suggests that additional investigations of these issues are warranted. Without clarifications, stakeholders in the debate have no way to build a coherent and shared research agenda.

An even more critical problem lies in the way scholars characterize Standard Written English (henceforward, SWE) as “bankrupt” (Horner et al., p. 305), “invalid” (Lu & Horner, p. 598) a “false ideal” and a “myth” (Horner et al., p. 306). Clarification of SWE is called for because the term is, at other times, used as if it were indeed valid, true, real, and rich in propositional content. For example, Lu and Horner’s assertion that writers can exert agency by conforming to dominant norms presupposes that dominant norms exist (and that they can be understood and at times should be followed, but we’ll get to those later) (Lu & Horner, 2013). Moreover, by acknowledging the “ongoing, dominant political reality” of SWE as well as the “industry of textbooks and mass media-style pundits” who “maintain that reality,” Horner et al. suggest that SWE is indeed all too real and has serious consequences for those who have not learned it (p. 305). A crucial concern for scholars in this area, then, is determining more precisely in what ways SWE is invalid/mythical and valid/real?

An answer to this question would seem to have clear implications for advocates such as Delpit (1988) who believes that the tools of the “culture of power” must be explicitly taught to outsiders if those outsiders are to gain a foothold in the dominant culture. Such a discussion, which is still taking place (Perryman-Clark, 2012; Elbow, 2013), seems to be quietly set aside when SWE is dismissed as merely a myth about which nothing useful can be said. Such a dismissal overlooks the realities of standard norms as a source of knowledge and as an essential feature of language use in the work-a-day world. Delpit’s claim speaks to contemporary views on language difference as they did in the late 1980s, but a productive rejoinder to her problem remains elusive. The ambiguities attached to code-meshing, the universal valence ascribed to difference, the

reticence to precisely define and strategically teach SWE all stand in the way of substantive progress in this debate.

One important clarification can be made by concentrating on SWE's ontology as it is represented in the scholarship on this issue. When Horner et al. assert that SWE is mythical, they are making an ontological assertion about SWE existing as a social construction: "A translingual approach," they write, "treats standard rules as historical codifications of language that inevitably change through dynamic processes of use" (305). In other words, SWE is a wholly human development, as diverse and malleable as the people who use it, and is thus ontologically subjective—dependent upon the human subject for existence. The assertion works to counter the idea that SWE exists beyond our human subjectivity as an "unchanging, universal standard for language" somewhere in the ether as a Platonic form (p. 305). Horner et al. are saying, albeit in different words, that SWE is ontologically subjective in that its existence necessarily relies on human capacities; they are also indicating that SWE is considered a myth when it is mistakenly thought to exist independent of human capacities.

The aim for these researchers is to sever the link between the term "SWE" and its ever-changing referent. Doing so allows Horner et al. to argue that SWE doesn't signify anything meaningful because the referent, a product of socio-historical contingencies, is a fluid and inevitably elusive target. Thus, no meaning can be squeezed out of the sign because it simply isn't pointing to anything. To presuppose SWE's ontological objectivity would mean that any subsequent claims are necessarily incoherent because no ontologically objective SWE exists—a move analogous to dividing a number by zero. But Horner et al. run into trouble when they suggest that claims regarding SWE are either

false or merely politically motivated value judgments. What Horner et al. assume is that claims related to SWE, given its purely subjective ontology, cannot be anything more than politically motivated and ideologically naïve. That is to say, ontologically subjective realities cannot generate anything more than epistemologically subjective claims (i.e., mere opinions). Nothing more than opinion can be expressed about SWE.³

But this assumption does not hold up, and, when applied to language, creates more problems than it solves. Searle (2004) uses an example of a calendar to illustrate how an ontologically subjective entity can still permit epistemologically objective claims about it, an example useful for illustration in this case as well. Calendars are no doubt ontologically subjective because they are a uniquely human construct; they need human subjects to exist and have meaning. Despite their subjective ontology, however, one can make epistemologically objective claims about them. Indeed, they are only useful because one can say objective statements about them. The success of meeting at an agreed upon date and time, for example, is evidence of the ability to speak objectively about a subjective construct. In the same way, people can identify and make objective statements about language conventions even if those conventions are ontologically subjective. And, indeed, the usefulness of the conventions is at least in part due to our ability to make objective statements about them. If the assumption held by Horner et al. is dismissed, then the idea of teaching conventions of SWE does not equate to enforcement; teaching those conventions can indeed be helpful and as benign as agreeing on a date by using a calendar.

³ For more on the distinctions between subjectivity and objectivity in ontological and epistemological senses, see Searle (1995) *The Construction of Social Reality*.

Dispelling this assumption also helps clarify the purported distinction between code-meshing and code-switching. However, as Matsuda (2014) suggests, what we find is that there really is no difference between the two. That is, code-meshing and code-switching are different instantiations of the same phenomenon, namely, hybridizing communication (Matsuda, 2002). On the one hand, Young (2009) argues that keeping languages and dialects separate and following conventions of SWE is silencing the voices of writers; on the other hand, Horner and Lu argue that keeping languages and dialects separate and following conventions of SWE can be an agentive, empowering act. Although both claims may be “right” in some sense, rather than resort to a troublesome distinction between code-meshing and code-switching, a more accurate depiction of the problem of Young and Horner et al. take issue with is the idea that different dialects are functionally equivalent—that to represent an idea, “any ol’ language or dialect will do.” Horner et al. argue that it is not the case that “any ol’ language will do”—that spatio-temporal relations change with each utterance. If this is the case, what scholars really object to in this debate is the idea of “functional equivalence” of different dialects and languages—and it is the “myth of functional equivalence” that poses problems for those who wish to integrate language differences in rhetorically savvy ways.

All of this theoretical background provides space for justifying the theoretical lens needed to study the rhetorical effects of language difference in context. While Canagarajah aims toward taxonomizing the ways writers might integrate their different language resources, I believe it is important to shift the focus prior to taxonomizing and teaching writers how to mix codes. What the translingual approach is missing is an understanding of the different kinds of effects rhetorical differences can have in context.

In other words, before considering how to teach language difference in writing, researchers must study what the rhetorical effects themselves are—what it is that teachers would be teaching toward. Furthermore, moving toward a more rhetorical approach to language resources also renders the distinction between code-switching and code-meshing not only untenable but unnecessary. Rather than distinguish among types of cross-language integration, a productive step forward will be to understand language integration in terms of its rhetorical exigencies, enactments, and effects. The work I take up in Chapter 6 seeks to shift the disciplinary discussion by focusing attention on rhetorical uses of language resources in the context of authentic research by asking, What effects result from participants' visible negotiations of language resources?

CHAPTER 3

METHODS

To study the development of transformative agency among graduate students, I observed a team of five graduate researchers conducting an independent study under the direction of their doctoral mentor. Over the course of two years, the team designed and implemented a study initiated by the mentor and worked collectively to produce a research report to share their findings. This chapter details the steps taken to collect data in the context of the faculty-led research study. The following sections provide background information about that research study and mentoring group, the institutional context, the participants, data collection, verification, and analysis, and ethical concerns regarding my position as a researcher in this context.

Background of the Chinese Student Project

The Chinese Student Project (CSP) began in October of 2012 and was a collaborative effort by graduate students and their mentor to investigate the experiences of Chinese-speaking undergraduates in required first-year writing courses at a large U.S. research university. The exigency to which the team was responding was increased enrollment of Chinese-speaking students who were perceived to have low English proficiency and who were struggling to meet the demands of their required writing courses. Although these undergraduate students under investigation by the graduate research team had fulfilled placement requirements through standardized test scores on such language examinations as IELTS or TOEFL, they still struggled in their first-year writing classes, a phenomenon which became a cause for concern among teachers at the

university but also among the larger disciplinary community who were beginning to voice similar issues in public venues.

The CSP, then, sought to investigate this issue by interviewing students and teachers who had direct experience with these problems. To gain a rich account of the students' perceptions, the principle investigator—who conceived of and initiated the project—invited graduate Chinese-speaking graduate students onto the project who would be able to converse with the undergraduate student subjects in their native language. To make contact with the teachers—all of whom spoke English—the principle investigator invited a graduate student specializing in teacher cognition. Decisions to bring graduate students onto the project, then, was one of expedience as well as professional development, since all graduate students involved were invested in the project personally and professionally.

Institutional Context for the Study of Transformative Agency

My investigation of the graduate students' learning took place within a large and diverse English department in a large research university (LRU) in the Southwest United States and in association with LRU's writing program. In recent years, LRU has pushed for more global awareness in its research and student experience, commitments which are also reflected in LRU's English Department. The department is home to a range of doctoral-granting programs including rhetoric and composition as well as Applied Linguistics, two graduate programs with which the graduate student participants in this study are affiliated. While the graduate programs represent different fields and courses of study, there is substantial disciplinary overlap, as graduate students in TESOL, Applied Linguistics, and rhetoric and composition often find themselves working in

interdisciplinary contexts. The study and teaching of writing is one such context in which institutional commitments to transdisciplinary research, student success, and global engagement bear out.

Also housed within the English Department is LRU's writing program, which serves as the research site for the collaborative study under investigation. A large program, LRU's writing program positions itself not as a service unit—a space for students to learn the mechanics of writing in the academy—but also as a site of intellectual activity. Framing writing as an intellectual activity, rather than strictly skills-based, the writing program sees as its mission to encourage intellectual inquiry across all levels, to celebrate that inquiry through innovation, assessments, and alternative delivery models.

Participants

Over the course of the collaborative project, six researchers participated: five graduate students and one full professor. All of the graduate students were pursuing a doctoral degree in programs housed within the English Department and come from diverse language backgrounds. Below I describe the backgrounds of each of the participants in the study.

- Participant 1 (Dr. Maddox) is a full professor at LRU and served as Principal Investigator of the study. In addition being a full professor, Maddox holds an administrative post in the writing program that draws on his expertise in second language writing. Among the responsibilities associated with the post are overseeing the training of teachers to teach sections of first-year composition for students of speakers of other language, to offer courses and workshops on

- linguistic issues in the classroom, help develop writing program policy, and being the “go-to” person for issues related to language development. Maddox is fluent in both English and Japanese and has a reading-level facility with Chinese.
- Participant 2 (P2) began the project as a third-year PhD student in Applied Linguistics with a specialization in second language writing and teacher cognition. P2 is a relatively experienced researcher, having worked with mentors on past research projects as well as research projects he designed himself. His experiences include transcribing interviews, coding data, and writing research multiple research reports, two of which have been published. P2 is a native English speaker, but, like Maddox, has a reading-level proficiency in Chinese.
 - Participant 3 (P3) began the project as a fourth-year PhD student in rhetoric and composition with a specialization in second language writing. A native of China, she is fluent in English and a mainland variety of Chinese. By her own admission, P3 is a novice researcher and hopes participating in the CSP will help clarify her own research interests, which remained rather murky at the outset of the study.
 - Participant 4 (P4) began the project as a third-year PhD student in rhetoric and composition with a specialization in second language writing. She is a native of Taiwan and speaks both English and a Taiwanese variety of Chinese. P4 is a self-described novice researcher, having little experience participating in any research study.
 - Participant 5 (P5) began the project as a third-year PhD student in rhetoric and composition with a specialization in second language writing and portfolio assessment. She is a native of Taiwan and speaks both English and a Taiwanese

variety of Chinese. P5 is a self-described novice researcher, having little experience participating in any research study.

- Participant 6 (P6) began the project in her final year as a doctoral student in Applied Linguistics with a specialization in second language writing. A native of China, she is fluent in English and a mainland variety of Chinese. Although in the late stages of her doctoral program, P6 considers herself a novice researcher to some extent, having never conducted a study outside of her dissertation. After earning her degree in May 2013, P6 left the project but her work continued to be acknowledged in the team's communications to one another.

Data Collection

The data collection for the dissertation study began in October of 2012 when the CSP first convened. This initial phase of the data collection began with observations of CSP planning meetings, which I audio recorded and in which I took field notes. In November of 2012, I conducted the first of two rounds of interviews with the graduate student participants. The second round of interviews took place in November 2013 as the research team began drafting their research report, and it is at that time I held the first interview with Dr. Maddox. In December 2014, in place of an interview, I conducted a focus group meeting with the four remaining graduate student participants before one of their team meetings.

Data for this dissertation came from five sources: observations and recordings of CSP team meetings, participant interviews, CSP team members' email correspondence and other digital communication, and the documents the team generated throughout their study. Below I offer more detail about each source.

Observation and recording of face-to-face group planning meetings. Throughout the process, I observed planning meetings involving all team members. These meetings served many purposes for CSP team members: to negotiate the goals of the CSP's collaborative inquiry, determine appropriate and effective courses of action, divide workloads, and update one another on ongoing findings. Dates for planning meetings were determined collectively as the project progressed. Additionally, group members agreed to be recorded during meetings and to have those recordings be subject to analysis and possible publication. During these meetings, I also took field notes, which were later used to triangulate and contextualize findings.

Participant interviews. An important source of data came from interviews with all participants. Overall, these semi-structured interviews, which lasted approximately 30-60 minutes each, sought to elicit information about participants' past experiences with collaboration, their experiences with the CSP, and the relationship between the CSP and the participants' learning and professional development. I interviewed the graduate student participants at two points during the study, at the beginning of the CSP study when the team members first convened and during the drafting stage. Guides for these interviews can be found in the appendix to this dissertation. The audio recording of the second interview with P6 was unfortunately lost because of a computer malfunction; data from that interview came from the hand-written notes I recorded after the interview once I realized the audio recording had failed.

Online communications. In addition to planning meetings, I was included on email communications during the early part of the project when the CSP group was

designing their own data collection materials. These data were used by me for the purposes of triangulation.

Drafting documents. At various stages, participants shared with me copies of the drafts that they produced either by themselves or with another participant. These drafting documents serve as a way to gauge the level of contribution from each participant and a source for conversation during interviews in which they will discuss the process of drafting. As a source of data, these documents helped contextualize discussions found in the audio recorded meetings.

Focus group. Toward the end of the research process, four CSP graduate students participated in a focus group in which I shared highlights from my ongoing data analysis and they provided feedback. This focus group meeting served three primary purposes. First, this was a way to verify data and my understanding of the CSP. Second, it allowed members to speak back to the data in meaningful ways by pointing out to me what they found interesting and useful. Third, it was an opportunity to help support the ongoing learning of the graduate students themselves. The impetus for the focus group was scholarship on formative interventions (Engeström, 2011; Penuel, 2014), which theorized interventions in which researchers and subjects share information in the ongoing formation of improved research practices and learning.

Data Analysis and Verification

Transcriptions of interviews and meetings resulted in nearly 25 hours of recordings and over 300 pages of transcript text. Transcriptions of interviews were conducted by hand early on, but, in an effort to increase efficiency, soon relied on talk-to-text software. Analysis of all data followed an emergent, inductive approach (Thomas,

2006). After transcribing audio recordings and collecting observation notes from each meeting, I conducted multiple readings of the raw data with an eye toward identifying emerging themes and developing categories, which were used as a framework for understanding key themes across the multiple planning meetings. At the outset, no specific theoretical approach was prioritized until it became clear what kinds of issues were most salient in the data.

After multiple readings of the entire data set, three key points of negotiation were identified. These three points of negotiation were issues around which the graduate students in the CSP seemed to dwell, to deliberate, and to generate unique understanding about their research, their graduate work, and their developing professional identity. For each site of negotiation below, I link back to the theoretical discussions of the previous chapter and describe the specific coding strategies employed to shed light on how negotiations led to learning.

First Point of Negotiation: Coordinating Multiple Activity Systems

The first site of negotiation was the way graduate students navigated the multiple activity systems at work throughout the CSP. The activity systems at issue were identified by CSP team members in interviews and during team meetings. These included the research activity system of the CSP and the activity system of being a graduate student. To study the way participants navigated this overlap, I identified tensions explicitly described by team members during interviews. These tensions were then aggregated and read alongside the six nodes of the activity triangle in an effort to frame the tensions in light of the conflicting activity systems theorized as the primary contradiction, detailed in the previous chapter.

Second Point of Negotiation: Redefining Research Questions

The second site of negotiation involved the research questions at issue in the CSP—how they were initiated, how they developed, and how the constraints of the research environment contributed to that process. Early on in the CSP, it was clear that the initial goals of the study investigating the experiences of Chinese-speaking undergraduate students who were struggling in their first-year writing courses would be impossible. As a result, the team needed to redefine the situation and develop an alternative set of research questions to make sense of the data they had already collected. The negotiations that ensued became the focus of my analysis and the topic of Chapter Five.

In order to access learning at this point of negotiation, I needed a theory that would account for the initial failure of the research design of the CSP and the subsequent discussions aiming to redirect the collaborative inquiry. Formative interventions, detailed in the previous chapter, served my purpose well. To make sense of how the research team responded to the first stimulus (being unable to carry out their original study) and collectively construct a second stimulus, I analyzed the negotiations in team meetings that aimed toward developing new research questions. This process of developing new research questions was the second stimulus described by Penuel (2014).

To study the construction of a second stimulus, I conducted a layered qualitative content analysis of transcripts from team meetings. In the first layer, I analyzed the topics of the CSP team's discussions, categories which emerged over multiple readings. These topics fell into four categories: previously collected data, potential audiences, relevant scholarly or professional sources, and the prospective text the team would eventually

write together. By discussing these topics, the team identified problems different from the ones that initiated the CSP and constructed new justifications for the collaborative inquiry. The second layer of analysis identified the features of these justifications, which included articulating new exigencies and setting the domain of possible implications. A chain of an exigency and its set of implications was considered a new tool, a second stimulus, that was introduced into the activity system and that was used to resolve an earlier problem in the CSP activity system.

Third Point of Negotiation: Leveraging Language Resources

To identify the rhetorical use of language resources in the CSP, I focused on what Dobao (2012) has called “language-related episodes” (p. 41). Language-related episodes (LREs) are “any part of a dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others” (qtd. in Dobao, 2012, p. 41). To identify these moments and elicit students’ thinking, I devoted a portion of the second round of interviews to discourse-based prompting. Specifically, I modeled my interview practice on a “critical incident” approach (Clifton, Long, & Roen, 2013), which prompts interviewees about language deliberations and asks them to explain their experience of them. As Higgins, Long, and Flower (2006) put it, “critical incidents elicit carefully contextualized accounts of how people actually experience problems” (qtd. in Clifton, Long, & Roen, 2013, n.p.).

Thus, I asked participants to examine hard copies of the data collection tools they had created months earlier and to point out places they recalled having difficulties or deliberations. I examined transcripts of participant interviews of these critical incident

discussions looking for instances. These moments were then aggregated and coded according to salient themes that emerged through multiple readings.

Verification

I verified the data in three ways: triangulation across various data sources, member check, and focus group feedback. The various types of data collection allowed for many ways to triangulate my findings. Interviews served as opportunities to clarify what I was witnessing in group meetings, for example, and field notes clarified and contextualized drafting documents and other issues that emerged in meeting transcripts. Recognizing a tension across multiple interviews, for example, suggested to me that the tension was an important one to probe further.

Along the way, I also was able to check facts with participants through an informal member-check protocol. The relationships I developed with team members over the course of the study opened up the chance to conduct these verifications when necessary via email or in person as needed. I also shared all transcripts with the graduate student participants and asked them to clarify or redact information they felt needed addressing.

Finally, I was able to verify my interpretations by conducting a focus group with the remaining graduate student team members. In December of 2014, as the team was assembled for a meeting, I joined the group to share my findings to that point and to elicit their reactions. Team members' responses helped me clarify what I was seeing in the data and directed me to interesting questions and issues that I had not addressed or emphasized enough.

Design Challenges, Limitations, and Opportunities

Because of the Principle Investigator's knowledge of my interest in collaboration, I was invited by the Principle Investigator to observe the CSP collaboration, and thus I owe much of the design of the study to the Principle Investigator and the graduate students who worked on the CSP. Indeed, the CSP would have been carried out regardless of my participation. Additionally, the design of the study was such that I knew and was friendly with all participants before the study began. My relationships with CSP members meant that we would discuss the project in casual situations off-the-record. While this was helpful in my ongoing understanding of the project, it also meant that I had to be careful about what role I was playing when speaking with team members—friend, colleague, or researcher.

One challenge in the design had to do with the difficulty of maintaining anonymity of participants. While people outside of the project will be unable to identify participants, those inside the study, due to the level of detail needed for me to marshal arguments, will likely be able to identify other participants. This could be dangerous considering the confidential information subjects might share with me as a researcher. For example, what I report in this dissertation had (and still has) the potential to impact the way the PI views a particular participants and could affect their relationship. To avoid such complications, I shared all interview data with participants for them to review and strike out any information they had shared that they would not like public. This allowed the participants greater agency in what would be shared in my analysis and reporting.

As a researcher, I had to negotiate my own positioning. I came to learn that I was more valuable as a resource for participants than some objective, outside observer.

Discussing data with participants, then, became not simply a matter of data verification. Near the halfway point of the process, I discovered that in order to make my project as useful as possible for the team members, I would have to elicit the graduate students' input on my findings. This input not only helped me understand my data better, but also allowed me to shape the direction of my future investigation and analysis. For example, when one team member noted that she was interested in a more systematic account of the "modeling" strategies used when the team constructed a second stimulus, I used that as an opportunity to look closer at those data and create a more useful tool to satisfy her perceived needs. This interplay of researcher (me), participants (CSP team members), and data created a feedback loop that eventually took a central role in the dissertation.

Research of this kind, when viewed from an objectivist or positivist lens would position these limitations as obstacles to a discoverable truth. From an objectivist-positivist perspective, this study fails the test of clinical experimentalism. But, when viewed from a critical postmodern perspective, this study serves an important function as research *in the face of* various limitations, obstacles, and potential conflicts of interest. In fact, this study turns on viewing those potential limitations serving as useful and enhance the study. Indeed, the underlying principles of formative intervention is precisely that—the unanticipated and often tacit knowledge of a research context is essential for creating "culturally more advanced" forms of activity. As a researcher, I took this idea to heart and began injecting myself more actively into the graduate student participants' lives, sharing my findings and opening the door to talk with the graduate students if they wanted to hear my perspective. Additionally, I consulted in person and via email with some of the participants in the latter third of the project.

Ultimately, the topic of the dissertation fed directly into its method—that is, this project is an instantiation of the type of work I am arguing for in graduate level education, research, and writing.

CHAPTER 4

COLLABORATIVE INQUIRY IN LIMINAL SPACE

One point of negotiation occurred at the intersections of two concurrent activity systems: the CSP research activity system and the institutional activity system in place to help graduate student earn degrees. This chapter identifies tensions experienced by members of the CSP team and, given the unique context of the CSP, aims to understand how Engeström's notion of the primary contradiction operates in collaborative spaces outside the typical seminar classroom. At issue in this chapter is the question, "In a collaborative space outside a classroom, what tensions emerge across activity systems and how are those tensions resolved?" Following a description of the tensions in relation to the primary contradiction, I show how team members worked to resolve those tensions by finding resonances across the competing activity systems.

The Primary Contradiction in Context: Subject, Object, and Community

In the context of the CSP, the primary contradiction reared its head regularly. To gain professionalization experience, the graduate students would have to contribute to work that was not always visible in the institutional exchange system (i.e., to engage in work that fell outside of coursework) yet simultaneously required large amounts of time and energy. *Figure 1* below represents this contradiction at each node of the activity triangle.

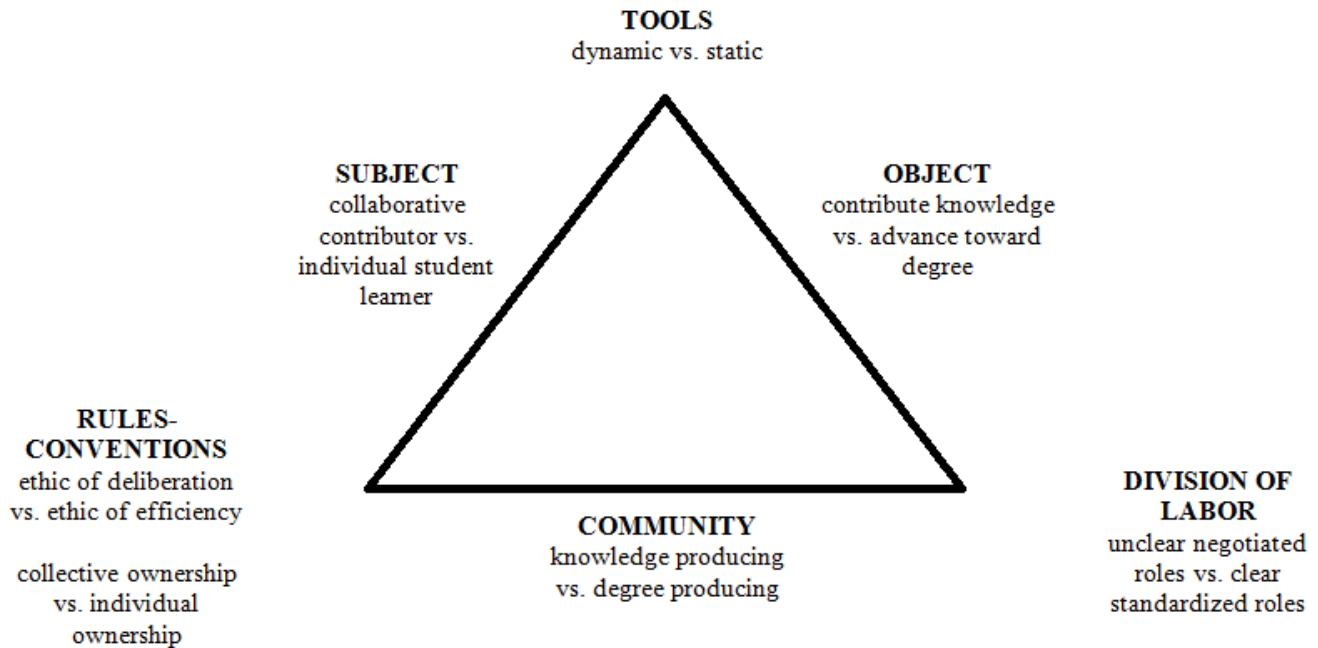


Figure 1. Activity triangle representing the primary contradictions.

Often, the graduate student researchers found themselves in a quandary when it came to the object of their efforts because they had to choose between devoting time to their individual graduate work or to the collaborative research project. Maddox acknowledged this tension in a meeting when he made sure to ask whether the graduate students had been making their own individual progress toward degree. At the end of one meeting prior to leaving for summer break, he said to the group,

Make sure you are not taking on too much, because I want you also to work on your portfolio papers and your exams and things like that. And if you're not doing it, I'll give you comments. And I want you to finish your dissertation, so make sure that you are protecting your time for your own work, OK? And if that's not happening, if you need to take time off, feel free to say that.

In an interview, Maddox also noted the time-intensive nature of the CSP and the potential conflict that might create with participants' progress toward degree. He said,

I was also concerned that some of the students were struggling with the current topic so much, and also working on this project and spending a lot of time doing the data collection and analysis that I felt I was taking time away from their dissertation.

Both comments make clear that the graduate students' work associated with their degree progress was in competition with the work associated with the CSP research and that that competition was evident to participants.

As a result, the graduate students had to negotiate working as an individual student learner (subject), within the formal education system (community), to move toward their degree (object) or as a collaborative knowledge-worker (subject), within the disciplinary setting (community), to contribute new knowledge to the discipline (object).

Division of Labor: Unclear, Negotiated Roles vs. Clear, Standardized Roles

The competing activity systems also contributed to a lack of clarity about the division of labor. Outside the scripted world of classroom interaction, roles were often unclear and had to be negotiated. The lack of clarity was evident in one participant's comment about the division of labor in the CSP: "As I said, we are not clear about who plays what kind of role. So that's a question I have." This insecurity about the division of labor was a tension that ran throughout the CSP.

Evidence of this lack of clarity regarding the division of labor emerged when the team considered who could provide commentary on one another's work. The following interview exchange with one team member illustrates this lack of clarity:

P2: What I understand from my discussions with the Chinese researchers is that, although they divided it into groups, they were unsure of where they could give feedback to each other because they were mutually exclusive. If two people were doing part A and two doing part B, then can the people with part A give feedback to B, and vice versa?

Dan: What would be holding them back?

P2: That they didn't write those [interview] questions, so they don't know the purpose of those questions. So they don't want to get into—and the reason I bring this up, and even though I wasn't part of this issue, as a member of this research group, what I felt pressure about was the bulk of the revision was occurring in a section of the project that I wasn't a part of. And so, should I be giving them feedback? I can't read Chinese! Or maybe that question is important to a Chinese person, and because they are Chinese they know that that question is important. Or they asked that question because they've had a similar experience. I'm born and raised in America. I don't have that experience. I would never have thought of that question. So, I felt at times like I really couldn't say, "Oh that question is not important, or that question is important." Because maybe it's important to them because they have some inside knowledge that I don't share. And so I just didn't touch it.

As this participant indicates, the specific roles team members could take up was unclear. In a formal education context, there would likely not be such ambiguity, as students conducting peer review would how to at least approximate the peer review role. But, in

the context of the CSP, where roles had to be negotiated, exactly how peer review was to be enacted was not a scripted activity.

This lack of clarity led to a dilemma for one member, P4. On the one hand, P4 wanted to allow others in the group to take on whatever role would leverage their expertise. But on the other hand, this team member also did not want to appear apathetic or unwilling to contribute. She says of this dilemma,

We were kind of waiting for someone to initiate or take charge of something. This was my fear at the beginning about delegation or who is in charge of what. This is sometimes I feel kind of confused, and that's why I feel like I don't know how far I can step into their domain or something.

Here, P4 recognizes an ambiguity and references her resulting confusion about what role to take on. In the same interview, P4 elaborates, referring to a more senior member in the group and still not knowing how to resolve the issue of taking a leadership role. She says,

[P6] definitely knows a lot and she knows how to IRB forms and much more prepared than I am, so...I kind of rely on her expertise and her working style, but I still don't want them to feel like I'm too laid back; I don't want the responsibility, so I don't want to overpower things, to take over, but I don't want to get to step into their domain, but I want still to show that I want to help, but you have to let me know to what extent I could be involved... Yeah, from my view point, I don't know if they think we are trying to stay away from responsibility.

This recognition of ambiguity set the stage for negotiation. In the following quotation, P4 describes her thinking process as she decides what role to assume in her next steps. She said:

P4: And so I was thinking should maybe me saying something like “OK, I’m taking over some part of the work.” But I feel like there should be someone saying, “OK, now, you do this, you do that.” If there is no one doing this, I’m actually thinking about writing an email talking about this first so that we know and we won’t be overwhelmed not knowing who is doing this, who is doing that.

Dan: Right, so you’re foreseeing problems down the road?

P4: Yeah, before everyone freaks out. I feel like we should do this. It’ll be more complex at the end of the semester because it’s at the end of the semester and I don’t really want to see that happen because we don’t have better communication among the group.

Here, P4 follows up her dilemma with considerations about what role should be taken up and how she might do so. Unlike the typical classroom setting in which roles are often scripted, the roles of participants in the CSP, a project falling outside the formal system, had to be negotiated.

Rules: Ethic of Deliberation vs. Ethic of Efficiency

Because of the competing objects, different sets of rules governed the CSP activity. One rule-based tension was the need to follow an *ethic of deliberation* (i.e., to learn through discussion with peers) and the need to follow an *ethic of efficiency* (i.e., to set the CSP aside and get back to individual degree progress). On the one hand, the object of learning for the graduate students was to occur through deliberation, an often slow

process. On the other hand, the object of making degree progress called for the graduate students to move through the CSP tasks as quickly as possible.

The group's ethic of deliberation was noted by many members of the CSP in participant interviews. One team member, referring to the slow-moving process of working through collaborative revisions online, acknowledged that "that is [Maddox's] role, to slow us down, by giving us feedback. Bring us back to the right track. I know it takes time." As these comments suggest, members of the CSP team had an awareness of the deliberation process and saw it as a site for their own learning.

Additional evidence of this awareness came through one team member's mentioning that she avoided quickly revising in response to Maddox's feedback so that everyone on the team would be able to see and benefit from his comments on their work. She said,

About the written feedback, another thing that is troublesome or challenging with collaborative project is...Dr. Maddox is the supervisor, suppose he provided some written feedback, and I saw it. I hold back; I don't want to change it, because, if I change it, the correction will disappear, and I will be taking away other students' learning opportunities. So I will leave it there. I feel that others will do the same for me. So sometimes, for written feedback especially collaboratively, we tend to correct things differently because eventually we'd get confused. There are so many editing on the same document, we are also concerned that everyone sees the feedback before we make changes to it.

This participant was aware of the multiple objects motivating the research, but indicated that the rules guiding those objects were not always clear. The ethic of efficiency (i.e., to

just complete the task) was in tension with the ethic of deliberation (i.e., to let everyone on the team see the feedback and discuss the possible revision).

It is important to note that the ethic of deliberation was indeed called for, as it appeared that the CSP members did not always know when a particular writing task was sufficiently complete. Maddox, as the quality control manager, was sure to provide feedback on materials when necessary before the team could progress. In an interview, when asked whether the graduate researchers on the team could hold their own meeting without Maddox in attendance, one participant said,

I don't think we could meet without Dr. Maddox because...[the Chinese-speaking graduate student researchers] didn't see...the edits were constantly from Dr. Maddox. They already thought it was done and were constantly asking, "Is this done?" and then Maddox would say, "Look at question 27." "Is this done?" "Look at question 38."

Maddox's feedback, then, was an effort to ensure high standards, and it was important for the graduate students to recognize when they had not met the mark and would need to make further revisions.

Still further evidence of the tension emerged in the way participants described their frustration with the deliberations. One member noted a conversation in which other CSP members agreed that "the more opinion you express, or the more you disagree, the slower your process goes," a frustration given the need to focus on school work outside the CSP. Similarly, another pointed out that "the more opinions we have, the slower we are." The dilemma experienced by the group can be best summed up by one member's statement regarding the process of creating an interview guide for data collection:

“Without Maddox, maybe our questions would have been flawed, but we would have been done.” Deliberating was at times a struggle, but was an important component of learning; efficiency was desirable but would have undercut the learning process and the quality of the product. This is the dilemma the group had to negotiate on a regular basis.

Rules: Collective Ownership vs. Individual Ownership

Another tension that emerged was related to data ownership, an issue that strikes at the heart of the individual and collective dialectic. When individually focused, data ownership tends to be fairly straightforward. But when multiple stakeholders have a vested interest in the data and have their own designs on how those data might be used, the rules become murky. As Maddox put it in an interview, in the humanities, “collaboration itself is rare, so there are no set standards or conventions.” Given the lack of standards, then, the rules governing how the shared data was to be used by individual were unclear. Indeed, although the initial aim of the project was to produce a coauthored article, the data were used for many other purposes. Early in the data analysis phase, Maddox put a portion of the data to use for a conference presentation to share the team’s preliminary analysis. He also paired up with one of the CSP team members to write a spin-off essay based on a subset of the data. Another team member used some data for a conference presentation. This is all to say that there were moves to make the project work beyond its original scope of producing a terminal article that was collaboratively written.

The lack of clear rules was at times a source of consternation for the group, a fact which was indicated by Maddox in an interview: “One of the biggest conflicts,” he said, came after a more senior member left the group after her graduation [Participant 6], which precipitated poor communication among the remaining Chinese-speaking team

members and “misunderstandings about the ownership of the project.” He continued, attributing to himself the reason for the misunderstanding regarding data ownership:

And I think this misunderstanding was prompted in part by my off the cuff comments that you could use this data as part of your dissertation project or spin-off projects. But at that time I wasn't really thinking clearly about the guidelines about when and how this data could be used outside, and that probably should have been clarified much earlier on more explicitly.

The problem to which Maddox referred was recounted by another team member in an interview with me. She said,

Everyone owns the data, and then I remember one time I made a proposal to [a conference] and waited until I was accepted, and I know I definitely used the data. And then I should have just informed everyone, but actually before I submit that proposal I called P3, and I asked her, “I remember Maddox said everyone has access to the data, and we can feel free to use it, he really said that, right? And it's OK for me to do that?” And P3 said, “Yeah, for sure.” And so I waited until that proposal was accepted, and I announced that, let everyone know....

Despite this acknowledgement that data was collectively owned, the rules by which that ownership was made public to the group was not clear. For one member, because she shared her time, effort, and expertise to collect much of the data, there was frustration that resulted from others' use of data without public knowledge and consent of the whole group.

Maddox took responsibility for the confusion resulting from this tension. He said,

[I]t's partly my responsibility for mentioning the possibility of using this data, without providing them with specific guidelines.... I felt that it was OK, but I probably should have let them know. I think telling them honestly about the mistake that I made and acknowledging that is an important part of it as well. Because I don't want it to be a conflict among the students—you know this is a team effort and I'm very much a part of it—and if things don't go well, it's ultimately my responsibility as a team leader.

In the humanities, research is typically conducted individually rather than collaboratively. As Maddox had indicated before, there are no clear conventions in the humanities for working with collaboratively collected data. As a result, the tension between individually-focused education system came into conflict with the collectively-focused research system.

Tools: Dynamic vs. Static

The communication tools characteristic of the typical institutional activity systems were at times in conflict with the communication tools characteristic of the CSP in the early part of their work. In the institution setting, participants come together periodically to meet at certain intervals and conduct their work around a shared theme. Early on in the CSP setting, for the first three and a half months, participants came together online when they could, often at non-business hours, in order to complete shared tasks. In interviews, a clear tension emerged from the types of communication tools used—face-to-face versus online. But participants did not indicate a clear preference for one over the other; rather, they desired tools that were dynamic, that were flexible and willing to accommodate the frequently changing needs of the group. Below, I show how

tensions emerged from the different types of tools and the team's desire for dynamic tools rather than static ones.

Since efficiency was a concern, the group needed an orientation to tools and instruments of production that would flex according to the needs of the group. And since those needs were emergent and adaptive and thus unable to be identified beforehand, those tools needed to be flexible. But this was in conflict with the standardized tools of the institution, which were often serviceable but not ideal for the team's purposes.

One tension involved deciding where to hold team meetings. Because of everyone's busy schedule, meetings had to take place outside typical hours. The first meeting, for example, was on a Saturday afternoon. The next meeting, four weeks into designing data collection tools, was arranged early on a Sunday morning and conducted online later that same day. Similarly displaced were the times in which team members worked on their pieces of the project. According to one team member: "Yeah, so it's like part of the like very late at night, at eleven and twelve late night. Yeah, it's like, we start work at like eleven, and then towards twelve and one and then sometimes send an email right after." Due to the competing activity systems, work fell well outside typical business hours, and the tools needed to flex accordingly.

During this time, work was conducted online and the tool of choice was Google Drive in which participants could collaborate in real time remotely on a single document. While this tool accommodated the atypical time schedule required of the CSP tasks, it was not suitable at all times. For example, one of the most common frustrations among team members was the inability to have a face-to-face meeting. Because so much of the

feedback from Maddox was local edits, many members felt that working online was not the most efficient approach.

If there were no need to progress efficiently, this might not have been a problem, but the need for efficiency caused consternation and increased the pressure to complete the editing work. This pressure was evident in a variety of interviews. One member said, “If we just sit down for an hour and go through all the questions, we’d be done.” Another expressed a similar sentiment:

[It’s so tiring.] Tiring to not be able to talk. Because both P4 and I agreed [...]:
“Why can’t we just have a meeting?” The most frustrating thing was that these little edits—there were thirty questions on this questionnaire—and the little edits were like one liners, but like one liners every day over thirty questions takes one month.

Still another indicated that “the problem is that we all communicate via emails and online google editings. So we work on the project and then have some online chat in the margins. I don’t think that’s an efficient way of communication, especially when you’re actually editing.” She continued,

I’d rather have like one face to face meeting and work on the problems now, instead of like Skype and doing all this online editing. Even though sometimes it works, but we’ve had only one face-to-face meeting and after that we’ve just all work on computers—making it more complicated. Sometimes that just talk about it and we’ll get done. I think that’s the most frustrating part about this project so far.

In each of these quotations, the need for alternative forms of meetings was evident. Unfortunately, the tools at the team's disposal were not always able to accommodate those shifting needs.

What's interesting is that one approach was not necessarily favored over another—the issue was not whether or not to communicate online or in person. The team's work called for an adaptive orientation to tools, one that would respond to an immediate need. While the school activity system makes use of the face-to-face most commonly, it does not have the flexibility that the online does. And while the research activity system makes use of the online tools, it does not have the flexibility to come to a face-to-face meeting. As one put it about the Skype meeting, which she had really been wanting: “I told P2 that I'm glad that I couldn't make the meeting; I feel bad but I'm happy I wasn't there because my being there would have probably only made things worse or slowed down the whole process.”

Constructing Resonances across Activity Systems

In many ways, team members found strategies for resolving conflicts that stemmed from the overlapping and competing activity systems. Engeström refers to this type of resolution as a process of expansion in which people create new activities in response to difficult situations. In the following analysis, I show ways in which team members constructed resonances across the overlapping activity systems, all of which helped resolve tensions arising from the primary contradiction.

Aligning Individual Experience, Interests, Abilities, and Goals with the CSP

A key initial step toward building resonances was Maddox's configuring a research team whose interests, abilities, and goals fell within squarely within the domain

of the CSP study. But beyond this attention to group composition at the outset, interviews with the graduate student participants made clear that they too were constructing their own justifications for their participation in the CSP. By aligning their past experiences and professional interests and goals with the CSP, team members were able to overcome the tensions inherent in this learning environment and to create expansive, smart action. These resonances occurred by linking the CSP to professional interests and goals as well as past personal experience

For example, when asked whether work on the CSP was “extracurricular,” one participant rejected the idea that the CSP fell outside of the “curriculum,” so to speak, or his professional agenda as a teacher and scholar. P2 said:

It’s [the CSP] not “extracurricular” because I was brought onto the study because of my current experience with investigating teachers’ experiences, so my role on this is investigating teacher experiences. This aligns with my current research interests, because it’s another context to understand teachers’ experience. I’ve looked at teachers’ experience in the general sense of how they interact with multilingual writers with low proficiency, now I’m looking at it with a specific population.

Similarly, when asked to what extent the project was “contrived,” this participant again rejected the idea that it was somehow separate from his professional identity and purpose, which is deeply connected to the lived experiences of others connected to the issue of language learners and writing. He said,

I wouldn’t say it’s contrived because we all have a vested—or at least, I can’t speak for the others—but I have a vested interest in it, because I *am* interested in

the experience of the teachers. And the other thing is, for example, I think you got the email where I was just chatting with the advisors at the Intensive English Program and they were just talking about a student who had just left two minutes prior to me walking into the office, and to contextualize that email, I was literally where those people who are talking right now [near by], and I just heard someone talking really loudly—I'm friendly with the advisors. So I just walked in there and said, "Dude, were you mad? I just heard you talking really loudly." Actually, I wasn't mad, he said. But you can't help but want to speak loudly when someone doesn't understand what you are saying, especially if it has to happen after a number of times, plus it was a Chinese student and he shared an experience. I'm vested in the interests of the study because I experience these issues regularly. I mean just a happenstance occurrence, and I'm already experiencing into the frustrations faculty are dealing when taking care of these students. So I *want* to know.

In this recounting, this participant demonstrated professional interest in the study and its potential implications by connecting to a real life issue that he had been experiencing. The motivation to learn more was tied directly to the issues he had faced in real life, a link that others on the team made.

For this participant, the project was also tied to an even broader professional role he envisioned for himself and others in his field. When asked why he joined the project, he said it was because it would give him insight into a pressing issue of the day and one which he believes he must have a clear answer. He says,

The other things is from a professional perspective—and Maddox raised the issue and I'm glad that he did—with the growing demographic change of Chinese students in American universities, we have to be able to answer the questions that other faculty have about Chinese students. And having this experience, whether it's published or not, we can say look I know what students teachers face—I investigated it, and I know what students do, I investigated it—and having that professional background, saying I have experience dealing with these issues, because I didn't just observe it, I methodically observed it. That's another thing.

In this resonance, the participant rejects valuing the CSP simply for its exchange purposes. Instead, P2 emphasizes the knowledge-building object, the use value of the CSP.

Another participant found resonance across her responsibilities in school and as a prospective researcher. She said,

Because I just started teaching [English composition for second language learners] this year, and I noticed lots of problems going on, difficulties with those students, for example. So I feel like this project is a great way to, not only as a teacher interacting with students, but also by participating in this project. I will be able to look at these issues from the researcher's view points. So I'm kind of like doubles my teaching experience and then my research, and what I've read before and a real-life situation. I feel like students are changing all the time, and now with so many Chinese students coming here, so I think this is the best time to really looking at this issue and with so many people working on this issue rather

than just me working alone. That's part of the reason I want to be part of this research project.

Here, the resonance comes from linking the professional activity of teaching with the topics being addressed in the CSP. She continued, saying that, in addition to the resonance with her teaching, all of her research interests contributed to her motivation for participating on the CSP:

All of my past learning is contributing to my motivation to participate in this. and also all my research interests now, I'm also looking at international students here, especially I'm looking at...actually, but I feel like it would be better to know um, and I feel like it's the trend. I just heard an increasing number of Chinese students coming to the states. So I feel like I'm drawing on my past, but I'm also looking to the future. So I feel like this project is great for me helping me with my research now and in the future, probably better I can orient my research directions and career. That's a reason, my motivation for this project.

As the above quotations indicate, professional background and goals were important motivators for participants. This interest was also clear when participants mentioned the ways the work of the CSP was transferring to other areas of their professional life. One member, when asked about transfer, said that the CSP was helping with the general skill of analytical thinking in research:

P2: I think that kind of framework for understanding how to simply operationalize a concept or variable is something that I'm now applying to understanding other messy concepts in my own studies. So there is a two way kind of direction in

terms of applying knowledge that I'm getting here and applying knowledge that I've gotten from elsewhere.

In addition to professional interests, participants built resonances by connecting the CSP to their personal histories. For example, one team member used her relevant past life experience to create for herself a hypothesis that might be tested and answered through her work on the CSP. She said,

P3: I think our study is more kind of like more investigative, so what classes those Chinese students they are struggle, right? I think I kind of know and this is part of the reasons because I come from that culture and then I actually know a lot of Chinese students they are struggling, and then some of my friends they are struggling as well. So I kind of know part of the reasons. And actually I really want to see the result of this study to see whether it matches myself or not. I think this is my, and that's why another strength is especially like communicating with the Chinese students, I kind of know like how they're thinking.

Because this participant had experiences similar to those of Chinese-speaking students under investigation, she was able to construct an internal motivation. This motivation was reinforced by the informal research question she posed to herself.

Previous personal experience lent another participant insight, and that insight was part of her motivation to participate on the CSP:

P3: [Especially] back in China, we have I think, for each student, we have at least nine years studying English, so they [the undergraduates] kind of don't know why they are struggling here. And then me, as a Chinese, because I have been-there-done-that, and then I think the first time I was in my Master's program I was

struggling as well. [...] Yes, and also I feel like some instructors they kind of have some misunderstanding. Yeah, so although I as the researcher and, I cannot change how they thought about Chinese student, but I just want to contribute a little to this project and I just want let people know exactly how Chinese students thinking, especially in their writing class.

For P3, CSP acts as a thread that ties together her prior educational experience and her current professional experience as a researcher and teacher of writing. This thread, though, is not simply “there” in the sense that the binding of these experiences and identities was inevitable. Rather, P3 is actively connecting these spheres in order to provide a rationale for participation. Armed with such a rationale, whatever tensions that emerge in the CSP will serve as learning opportunities rather than mere obstacles. The ability of graduate student participants to construct resonances in terms of their own personal experiences and professional interests helped mitigate tensions caused by the competing activity systems.

Negotiation of Rules

As indicated above, tensions associated with rules were two-fold. First, graduate students were conflicted with the need to move slowly through the project and deliberate over choices so they could gain deep understanding and learning, but also to move quickly so they could return to the work associated with their degree such as coursework, preparation for examinations, and dissertation progress. Second, the rules surrounding data ownership were ambiguous, an unsurprising reality given the infrequency with which collaborative research is conducted in the humanities. These tensions created the need for alternative conventions to guide activity.

The key expansive action that took place involved shifting the scope of the project from using the data to coauthor an article to allowing team members to use the data to write dissertations. This move resolved both tensions in various ways. Here, I illustrate how the team came to make this change in scope of the CSP and how that shift allowed participants to find resonance across the competing activity systems. Maddox explains the process by which this expansion occurred:

I explained the whole situation and suggested possible solutions, and part of the solution was to formalize the spin-off project, and in that coincided with my concerns about the workload that are associated with this project. So I decided to suggest using this dissertation project, this collaborative project, as part of their dissertation, systematically and more strategically, as a possible solution out of this situation, and that seems to have worked for now.

From one of the collaborator's perspective, this option to develop spin-off projects from the data was an important shift in terms of her commitment to the CSP and her interactions with fellow team members. In an interview, she said

P4: Maddox emailed us and provided three options or something. That was a very important at least for me because I have never thought about like having the data from a group project and turn that into a dissertation. So in that email he actually provide lots of different directions for how we can develop our dissertation on this group project. So he provide three options, so I was thinking, I thought, P5, OK she wants to use this, but I guess she didn't later on, so only P3 and I will be using the data for our dissertation. I guess we'll, P3 and I, will still work closely because we're looking at similar data, so I'll probably have to use her knowledge

about Chinese. I told P3 about the using agency in China, and I said we should watch that movie and maybe we could find more information about that.

Here, this participant indicates taking Maddox up on the possibility to use the shared data for an individual dissertation project, which would allow her to invest herself more fully into the project. This bridge between individual and collective work is the kind of resonance that facilitated ongoing commitment to the CSP.

The collaborators who took advantage of the opportunity to produce dissertations out of the data were able to build in motivation for continued participation on the project. As Maddox noted, “Since they have decided to use this as part of their dissertation, what they are learning right now, directly translates into how they are going to conduct their own dissertation projects. So the direct benefit is much more visible now in terms of the learning that can come out of this project.” The key success of this move was that it helped resolve the two key tensions brought on by the primary contradiction: the need to work efficiently and the need to solve the problem of ownership. The need for efficiency was obviated because working on the CSP was, in effect, working on the graduate students’ individual work (for those who took the option to write a dissertation using the CSP data). The problem of ownership was resolved as well by addressing it explicitly and making the guidelines for using the data more clear.

Negotiation of the Division of Labor

The division of labor, because it had to be negotiated among team members, was not always clear. One problem that resulted was who on the team would take a leadership role. After one of the more senior graduate students graduated and left the CSP in May of 2013, there was even more of a question about who would take this leadership position.

Despite the lack of clearly scripted roles characteristic of the typical classroom, the graduate students were able to develop a division of labor that supported both the CSP and each individuals' needs. The key divisions of labor were a configuration of two pairs of the four remaining graduate students. P2, the most experienced member of the team, took on a leadership role and paired with P5, a self-described novice researcher. The second pairing was with P3 and P4, both of whom chose to use the shared data for their dissertations. By working together, they were able to hone their individual projects and ensure distinctions between their unique individual foci.

The pairing between P2 and P5 was an example of the kind of master-apprentice relation theorized by Lave and Wenger (1991) in their notion of situated learning and legitimate peripheral participation. As Maddox put it:

And I think in terms of the leadership opportunities and the opportunities to practice qualitative research skills, I think it provided just the right kind of context for P2 and in fact he has been taking a leadership role and mentorship role. [...] [H]e kind of took on one of the collaborators [P5] and helped her, worked with her in order to help her participate more fully in the project. And I thought that was a really positive development that came out of a possible conflict. And the ability to manage anticipate these issues and manage these issues is also something that scholars need to learn. So I think going through that experience first hand both from the mentor side and from the discipline, student side, I thought that was a great learning opportunity.

P2 took the role of mentor and, as P5 said, the role of teacher: "So to me, he's like my teacher," P5 said of P2 in an interview.

A second way the division of labor was organized resulted from the pairing of P3 and P4, both of whom decided to use the shared data to write their dissertations. In effect, both graduate students were working on the CSP and their individual dissertations simultaneously. This resonance also led to a resonance across the division of labor insofar as it allowed the two participants to collaborate closely on their work. While peer review was an issue earlier in the project, it became second nature to this pair who welcomed feedback on their work and gained from the time they spent consulting with one another. In an interview, P4 described this shared approach to conducting work on the CSP. P4 said,

I don't know how much longer this project will take, so I just tell P3 this is really good, we still have a partner working on the same project with different options. We're still able to share some of the information ideas and probably I can ask her to read my draft as well so I think this is great, kind of the value or the purpose of having this group project, you are able to use some of the resources we probably wouldn't be able to get if you were working on this on your own. So I kind of feel like, yeah it's good, not only because before I worked with P2 a lot, just hang out and everything. Now it's like with P3.

As P4 indicates, not only would working closely with P3 allow them, because they were drawing on shared data, to distinguish their individual projects from one another, but P4 also indicates that she will have a chance to gain from P3's personal knowledge of China and its education system.

Shifting the focus of the project facilitated the creation of new relations among collaborators. While the most advanced graduate student (P2) worked more closely with

the most novice (P5), the two participants working on their dissertations through the CSP (P3 and P4) were able to coordinate their projects in close proximity with one another. The negotiation of roles was a unique feature of this learning environment. Maddox summed this up nicely in an interview when he said,

[T]hat's a kind of incidental learning that comes with these collaborative projects. I can create where learning can happen, and I can direct, point at certain directions, suggest certain things that students can do, but it's these spontaneous, the real conflicts that are consequential, when they are addressed well will lead to much better learning in the end.

Negotiation of Tools

Unfortunately, the communication tools remained a troubling issue for the team, as no clear resolution was found. Additionally, it was never quite clear just how the group as a whole felt about the communication tools. While P4 found the communication tools quite frustrating, for example, P3 recognized their hindrances but ultimately found them most suitable for the CSP's needs. P3 said, "But I think for this project, although I think email communication has some drawbacks, it's still the best. Because we cannot meet very frequently, once a week or twice a week, like for such a big group of people, but yeah I think email's the best." Online communication tools, then, appeared to be serviceable but not perfect.

A provisional resolution to this issue came in the form of a comment from P6. Acknowledging that there were some issues with the online communication tools, she said that she sought an approach that was somewhat in-between. Before leaving the project, P6 said, "So I think that in future collaborative projects have an open discussion

at the beginning, and during we have informal discussions, but when there are particularly tough questions I think that formal discussion is necessary—to talk about things, but not necessarily to talk about every complication.” This response is similar to Storch’s (2002) findings in her study of online collaboration, which she calls a “blended.” Because subjects in her study found online communication tools both beneficial and hindering, Storch recommends a blend of the two when conducting collaboration. The CSP would seem to benefit from a similar, locally negotiated arrangement.

Summary of Chapter 4

Despite falling outside the typical classroom setting, the primary contradiction theorized by activity theorists persisted as an ongoing concern for the graduate student participants in this liminal space. Nevertheless, the actions taken by CSP members worked to resolve those tensions and offered an opportunity for the graduate student participants to negotiate key aspects of their positioning as students and as researchers. Although the primary contradiction emerged, the types of negotiations it engendered proved useful in helping graduate students participate in the rhetoricity of the research context. On the one hand, the actions taken by CSP members were individual-focused because each graduate student had to construct alignments for him- or herself in order to render important the large amount of time and attention invested in the CSP. Without such alignments, the members of the team might have felt they were being kept from the necessary work of progressing toward degree completion. Being able to connect the research study to past experiences, present professional work, and future scholarly ambitions served a useful narrative to render the negotiations in the CSP immediately relevant and applicable. On the other hand, the team’s actions were communal in the

sense that shifting the scope of the CSP as a whole had implications for all involved. Thinking through the implications such a shift in scope would have for each member of the team as well as their future interactions put the graduate students in a position to consider issues rarely available in the individually-focused classroom. Recognizing the need to construct resonances across these competing activity systems and the need to do so in concert with other participants suggests a developing awareness of the dynamism and rhetoricity of research.

CHAPTER 5

FORMATIVE INTERVENTION AND THE SEARCH FOR A RESEARCH QUESTION

I kept asking, “What exactly are the research questions Maddox is trying to ask?” because I don’t think at the beginning at that first meeting we actually made it clear. So I feel like our research questions were formed or formulated during our back-and-forth in our responses over email.

–P4, interview, November 2012

[Maddox] knows a lot, but definitely he learns something by how we ask questions. So he tries to use our feedback to redirect us and probably to reformulate his ideas on how to do this research.

–P4, interview, November 2012

A second point of negotiation for members of the CSP surrounded the motivating research question itself. While, initially, a straightforward research question prompted Maddox to call together the research team, it became clear four months into the project, after putting the data collection tools into the field, that answers to that research question were inaccessible given the CSP’s initial design. As a result, the team had a choice: either negotiate an alternative reason for having collected the data or give up on the research project altogether. For practical reasons, because so much time had gone into the project, it was unlikely that the group would choose the latter option. Instead, the team opted for the former, adjusting the research design where possible and negotiating alternative exigencies and implications that would make effective use of the data the team was able

to generate. This chapter illustrates the process by which team members recognized problems in their research design, negotiated alternatives, and constructed an altogether new activity that would give meaning to the data they had collected. *Figure 2* below provides a visual illustration of this process, which I describe in turn.

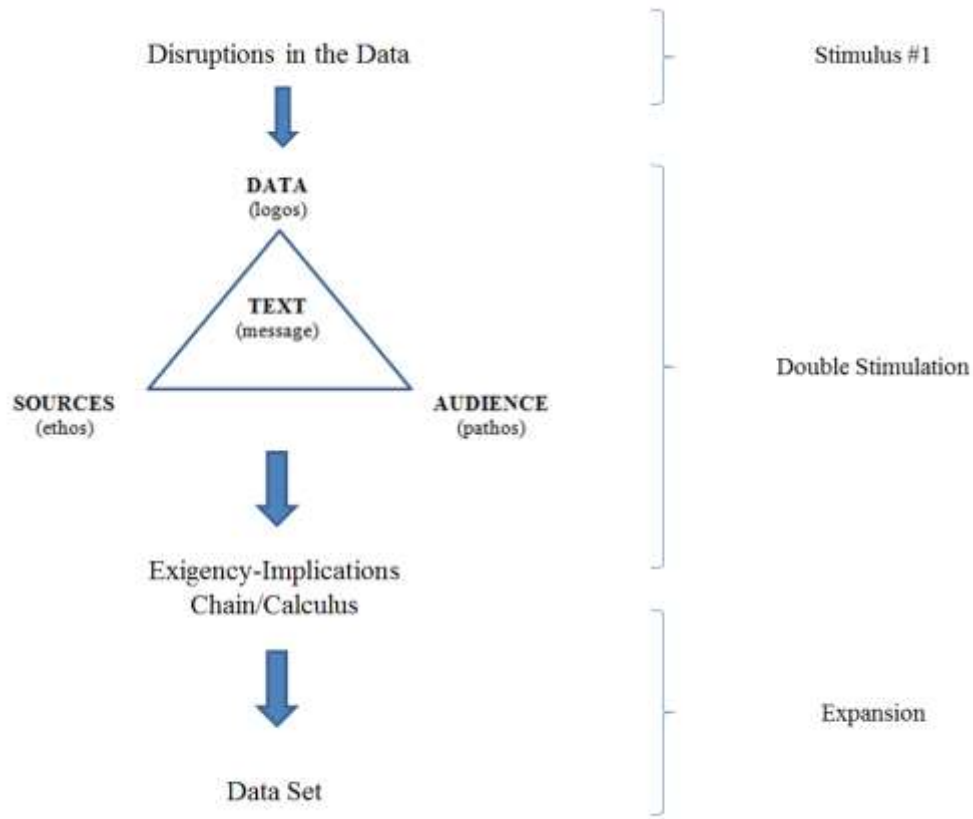


Figure 2. Model of formative intervention in the context of the CSP.

The first step in this negotiation process, represented at the top of *Figure 2*, involved the identification of disruptions in the CSP’s research design and initial data collection. While the CSP’s motivating research question involved investigating the experiences of native Chinese-speaking undergraduates who struggled with communication issues in their first-year writing courses, the team’s inability to recruit “low English proficiency” students inhibited their ability to investigate that issue. This

disruption in the research context, then, presented the need for CSP team members to redefine the research situation and develop an alternative rationale that would anchor a new form of activity.

The middle portion of *Figure 2* indicates the process of redefinition. Team members constructed shared interpretations by aligning their understandings of four elements of the rhetorical situation in which they found themselves: (a) the data they collected, (b) the audiences they hoped to reach, (c) the scholarship and professional literature they were in conversation with, and (d) the type of text they hoped to produce. Discussions of these four elements helped team members build a situated understanding of the CSP's overall purpose.

The bottom third of *Figure 2* indicates a key outcome of these discussions. As the team worked to redefine the context, they identified and articulated an exigency or pressing need to which the team was responding as well as a hypothesis regarding the potential implications their analysis might engender. By constructing an exigency and a set of potential implications, what I call an "exigency-implications chain," CSP team members were able to re-analyze their data in light of new purposes and thus enact a new form of activity that was shaped by the unique circumstances of the research context.

By engaging in this ongoing process of negotiation, CSP team members developed increased flexibility interpreting data, as they learned to use exigencies and implications to animate data in novel ways. Participants also gained an awareness of the contingent, shifting, and rhetorical nature of research, an awareness that can be attributed in part to the unique context in which the research was conducted, namely, outside of the space and time of a typical seminar classroom. Because the team conducted research

outside such institutional space, they were positioned to encounter difficult problems and, with the aid of a mentor, take the time needed to develop among themselves situated responses.

Disruptions Evident in the CSP's Data Collection

As indicated in *Figure 2*, a critical problem was apparent after the CSP's data collection commenced: only two students had responded to the recruitment email, neither of whom were considered "low English proficiency," the team's target population. Feeling a sense of urgency, the team shifted their research design to accommodate the conditions in the field. One adjustment, for example, was to recruit students with low English proficiency even if they were not currently enrolled in an English writing course and to hold post hoc interviews regarding their experiences in a writing course from a prior semester. Although this was not an ideal way to conduct interviews, the need to gather data took precedence. Another adjustment was to broaden the wording in the recruitment email to include all native Chinese-speaking students rather than only those with low English proficiency. Despite these efforts, however, a total of only two Chinese-speaking students had volunteered to participate, leaving the CSP research team with a fair amount of uncertainty about the future directions of the study.

In a last ditch effort to collect data from students, the team members decided to visit first-year writing classes in person (after making arrangements with the teachers of those classes) and invited all students to participate whose home country was China. This strategy proved effective, as 21 additional students volunteered to participate in the study. Although the target population had not volunteered, the pool of willing participants was

large enough that the team held out hope that they might still be able to investigate the struggles that Chinese-speaking students experienced in their writing classes.

In the subsequent months, however, another conflict emerged when synthesizing data from interviews with Chinese-speaking students and teachers of Chinese-speaking students. The team did indeed secure interviews with teachers of the writing courses, a total of seven teachers, who shared their experiences with Chinese-speaking students whom they perceived to be struggling and to have low English proficiency. But the conflict emerged when the team realized they could not actually recruit low-English proficiency Chinese-speaking students. This was a problem because the teacher data was speaking directly about low-English proficiency students, while there were no such students in the study. As one CSP team member put it:

We can't compare. So in the same study, we can't say the teachers felt [one way] and the students felt [another way], but the teachers felt like this with students who are not here.

In the end, the initial question driving the CSP was outstripped by contextual constraints, and necessitated a thorough re-negotiation in order for the project to proceed.

Redefining the Research Context

To respond to the problems evident in during data collection, the research team had to redefine the situation and reconstruct the activity in a way that would justify the data set the team was able to secure. The process of redefinition involved retroactively constructing a new exigency that would have motivated the collection of the data presently in hand and, relatedly, articulating a domain of possible implications, of

activities and stakeholders that might gain from knowledge generated through analysis of the data set. This section illustrates the CSP team's process of redefinition.

To show this process, I first describe in more detail what I mean by an exigency-implications chain. Next, I show how discussions of the research situation—the data the CSP members collected, the audiences they hoped to reach, the scholarship they engaged with, and the text they planned to coauthor—played crucial roles in the collective identification of exigencies and implications that anchored the team's activity.

Identifying and Linking Exigencies and Implications

A key outcome of the team's negotiations was the articulation of an exigency-implications chain. By pairing an exigency and set of potential implications and seeing them as causally linked, the team was able to use that chain to frame their analysis. Generally, an exigency-implications chain followed the form: “because of x circumstances, we must generate data and analyze it in y way, which will have z implications.” Of course, this linear structure appears cleaner than the messy discussions leading up to it, but the general form holds in the case of the CSP.

An example of an exigency-implications chain and the logical relationships holding it together can be seen in the following exchange among CSP team members during a meeting. After discussing preliminary findings and uncovering an interesting and unexpected issue in the data, Maddox consolidated the discussion by linking a new exigency (one different from the initial exigency motivating the CSP at the outset) with possible implications, in light of which data would have to be re-analyzed. Toward the end of the meeting, Maddox says,

So what do you think about shifting the focus from low proficiency students and more centrally focusing on the gap between teachers' conception of what writing is, what the course is about, and in relation to how they interact with Chinese students particularly, on the one hand, and, on the other hand, Chinese students' experience being in writing classrooms? Not just focusing on the language issues, communication issues, but their conception of what writing is and their experience of interacting with writing teachers. And then drawing implications based on some of the gaps between what the course is supposed to be about, what the teachers consider it to be about, and what the students consider it as.

Here, Maddox points out a new exigency by directing attention not only to so-called low English proficiency students, but to all Chinese-speaking students and the misunderstanding between their expectations for a writing course and the writing teachers' expectations for a writing course.

This exigency is then linked to possible implications for teachers and even the broader discipline's understanding of the goals of first-year writing courses. In terms of the form described above—"because of x circumstances, we must generate data and analyze it in y way, which will have z implications"—Maddox's statements begin filling out the x and the z variables: "because it is the case that native Chinese-speaking students understand the goals of a writing course differently from the writing teachers themselves" and "an analysis of data can contribute to the way teachers and the discipline frame the goals of first-year writing courses."

This shift in focus would require that the group re-analyze the data in a new way, thus determining the y variable in the above general form. P2 immediately responds to

Maddox's comment by considering ways this chain calls for a re-analysis of the "teacher data" set gathered through interviews with teachers of low-English proficiency Chinese-speaking students. P2 says,

I think it's fascinating, and I think it's easily operationalizable. And in my data are the teachers because it would be looking at their goals, looking at their means of assessment, and then looking at when a student does poorly at this what did they say... So having a clear, I think, definition of how we're findings goals in the data is important, so that is how we would operationalize that coding schema.

Implied in P2's comment is the type of data that would need to be generated to address the issue identified by Maddox, and explicit is the analytical lens through which that data would be studied, interpreted, and represented. This exchange serves to illustrate that a new tool would need to be created to make sense of the data and that a new tool would necessitate and be the mechanism for a new analysis.

Maddox rounds out the discussion by acknowledging the need for additional analysis in light of the new exigency-implications chain and clarifying his hypothesis about possible implications:

Maddox: So it may require some new analysis, coming up with new categories that help us articulate their [Chinese-speaking undergraduates'] conception of what the [first-year writing] course is about on both sides, and in comparison with the foundational documents, the outcomes statement for the program, and also the national WPA outcomes statement. And the implications will be about...

P2: There will be a ton of implications

Maddox: [...] [The] one thing that needs to be communicated [to students by teachers] is not just about the instruction about language or argument, but framing what the course is about, making that clear, aligning the goals, learning goals, and negotiating what gets taught and what get learned to some extent...

Here, Maddox moves the discussion from exigency to implications to analysis, the linking of which will be used to drive subsequent analysis. Indeed, analysis without this exigency-implications chain in mind would be rudderless.

The exigency-implications chain, once developed, not only helped redefine the research context but also became a tool that anchored subsequent action. For example, at the next meeting following the one described above, team members recalled the exigency-implications chain (albeit not necessarily in those terms) to re-orient their discussion and to provide situated critique of the data analysis that transpired in the interim between the two team meetings. When, at the beginning of a meeting, a graduate student team member shares her tentative coding schema, another team member offers constructive critique in light of the exigency-implications chain previously articulated. To critique the coding scheme, P2 says to P3 (who conducted the coding):

P2: Last time, one of the guiding questions we had put together was “How do writing teachers and Chinese students conceptualize the goals of writing, of their writing class, specifically [English writing courses for multilingual students], highlighting differences and similarities?” And that any differences and similarities could help kind of target how the program needs to re-evaluate, how it needs to move forward, addressing the needs of the students as well as how teachers move forward their perceptions of their thought. *But looking at this data,*

or looking at kind of overall things that you highlighted in looking at your data for the Chinese speakers, it seems to be a little bit broader.

P3: Yeah, I think it's more about the experience, their experience. Yeah, it's like descriptive experience. Yes, not necessarily like they, what's their conceptualization of the goals because I don't think they're...

P2: You don't think that unit...

P3: At that level of thinking about, "OK, well this is the goals of the writing class." But they [the Chinese-speaking undergraduates] more talk about...and also it's also because of like our interview questions; it's really that specific. Yeah, so what is, share we have difficulties, questions about that...So I think basically they more talk about their like individual experiences.

This exchange is important because it restates the exigency-implications chain, thus moving it to the center of conversation, but also because it demonstrates a key function of the chain to serve as the tool guiding constructive critique. First, the exigency is restated, this time in terms of a question: "how do writing teachers and Chinese students conceptualize the goals of writing...." Second, the possible implications are also clarified: "any differences and similarities could help kind of target how the program needs to re-evaluate how it needs to move forward addressing the needs of the students...." Third, the critical feedback offered by P2 is conditioned by those concerns, as indicated by the disjunctive at the end of P2's initial comment: "*But* looking at this data, or looking at kind of overall things that you highlighted in looking at your data for the Chinese speakers [i.e., the part for which P3 held responsibility], it seems to be a little

bit broader.” The ability of P2 to offer feedback that is situated with respect to the exigency-implications chain is a key function this discursive tool.

P3, in response to this criticism, attempts to clarify her point that the undergraduate students were not actually speaking specifically about the goals of the writing class, but were rather talking more generally about their experiences. The generality reflected in P3’s analysis of the data, however, fell outside the more narrow frame set by the new exigency-implications chain. In other words, the exigency-implications chain should have sharpened the analysis, but, according to P2, it did not.

In sum, the exigency-implications chain is a crucial outcome of negotiations among CSP members because it serves as a mechanism through which to re-interpret data. It does this in two ways: first, by helping redefine the situation and, second, by anchoring subsequent action. The exigency-implications chain anchors subsequent action by serving as a calculus for analysis and thus shaping the way the data set is interpreted. Such a calculus serves not only the analysis but also acts as the framing out of which team members offer constructive critique of one another’s work.

Of course, the exigency-implications chain did not emerge out of the ether. Rather, it was actively constructed by members of the CSP through frequent discussions of the data set, prospective audiences, relevant outside sources, and the prospective text that the team planned to write. The following sub-sections describe these different discussions as they contributed to the fashioning of a useful exigency-implications chain in the context of the CSP.

The CSP's Negotiation of Data

The team's negotiations of the data they collected were an entry point into the collective construction of an exigency-implications chain and thus a new understanding of the CSP's work. The examples detailed below illustrate how the team progressed from a discussion of data to a renewed understanding of the CSP's purpose. The interactions described below took place during one meeting early in the project just after the team realized their initial purpose was problematic. The exigency-implications chain that results from this discussion eventually became the driving force behind the CSP's study.

In the meeting, after a team member described how the teachers perceived the students' struggles with writing, another team member countered by pointing out what she called a discrepancy between students' and teachers' perceptions about writing:

P3: So there is, I think like there is a discrepancy. Ok, here is the teacher saying, like, "I see this student, this Chinese student, as really low proficiency; they have difficulties in my class." Whereas the students, yes, they are struggling, but I think in a different perspective. They really want to improve, but they don't know how.

While P3's initial formulation of the discrepancy was somewhat vague, it set in motion a series of further developments and clarifications. Soon after, another team member responded:

P2: [...] if [students'] expectations for improvement are defined differently than teachers', [then there's a] fundamental mismatch [...] because their expectations are fundamentally different.

P3: So I think probably like the teachers, well they do read their assignments, and then, while they're reading, probably they are like well this student has these problems. But they [the teachers] do not provide enough specific explicit feedback for the students so that the students will know how and where they can improve. And then also that is another problem. Probably the instructor is more concerned with the broader issue—the organization, the structure, the ideas—whereas the students, it's more looking at the local issues.

In this exchange, P2 contributes a useful interpretive concept—the idea of a “fundamental mismatch” of students’ and teachers’ goals—which helps clarify P3’s initial insight. And P3 responds constructively by offering possible explanations, thus developing her initial point.

At this stage in the development, a third graduate student researcher jumps in and provides additional clarification:

P6: I was thinking that maybe the teachers and students they may have different expectations or definitions of writing. Maybe the teachers teach them writing in order to make them good writers. And maybe students they think of writing as one of the four skills, so to improve their overall writing, their overall proficiency.

[...] They think a writing class is an extension of their previous English learning

What is evident in this interaction is that the team moves from an insight about a conflict in the data, develops a provisional interpretation, and triangulates that interpretation across other collaborators’ understanding of the problem and broader context in which the study took place.

After this interpretive process, the new understanding was consolidated by Maddox who articulated the shift in focus for the project as a whole. He says,

So what do you think about shifting the focus from low proficiency students and more centrally focusing on the gap between teachers' conception of what writing is, what the course is about, and in relation to how they interact with Chinese students particularly, on the one hand, and on the other hand, Chinese students' experience being in writing classrooms—not just focusing on the language issues, communication issues, but their conception of what writing is and their experience of interacting with writing teachers? And then drawing implications based on some of the gaps between what the course is supposed to be about, what the teachers consider it to be about, and the students consider it as.

Here, Maddox explicitly articulates a new exigency—i.e., a gap between teachers' and students' conception of writing—and sets the domain of possible implications, which are “based on some of the gaps” revealed in the data. Through this interaction, the team moves from a discussion of data to the articulation of a new exigency-implications chain.

What is especially interesting about this redefinition of the research situation is that it effected a complete reversal of an earlier decision during the same meeting to keep the student data separate from the teacher data. At the outset of the meeting, the team on multiple occasions rejected the idea that the two data sets—data from interviews with teachers and data from interviews with students—were compatible. When asked whether the two data sets could be combined in a single article, P2 insists on keeping them separate because the teachers discuss low English proficiency students, but, because no

low English proficiency students could be recruited, the student data showed no evidence of struggles emanating from their language proficiency. P2 says,

I personally see them [the two data sets] as separate, just because I feel that they inform each other as separate articles more successfully than trying to put them together. Because I could see a significant critique, I could see a critique of combining them as not having the same overarching focus since the teachers targeted specifically low proficiency students, and we didn't target low proficiency students in our recruitment of Chinese speaking multilingual writers. So I think that that would be an issue.

But after the second stimulus was clarified (i.e., the identification of a discrepancy of perceptions about writing and the goals of the writing class), this judgment was reversed, as the exchange between Maddox and P2 shows:

P2: There is a way that we could put these two studies together. [...] I really find it fascinating understanding the implications of the fundamental difference of unshared goals. And if we were to put these two studies together we would clearly acknowledge that the, you know, basis of inquiry for the teachers and the students were fundamentally different. [...] But we could still extrapolate what the actual goals were and what their value is.

Maddox: And now I was trying to imagine writing two separate articles. That would be really frustrating.

Intriguingly, not only was the initial plan of keeping the two data sets reversed, but, as Maddox says, it was hard even to imagine keeping them separate. This turnabout serves

as evidence of the power of redefinition and the way it can contribute to the transformation of activity.

The CSP's Negotiation of Audience

Another element of the research context that contributed to the team's overall understanding of their research was the team's negotiation of audience. The topic of audience was not only a space to discuss the nuances attached to the goals and readerships of different scholarly journals—no doubt important issues for professionalizing graduate students to consider—but it was also a space to negotiate the overall goals of the CSP. Below, I walk through an extended discussion of potential audiences and illustrate how that discussion contributed to the team's construction of the exigency-implications chain.

The discussion is prompted by P2's move toward reframing possible implications for the CSP. He suggests that, "for further research," it might be valuable to look at the influx in international student populations in "non-first-year composition contexts" because those composition contexts, he believes, are at least somewhat equipped to respond to changing demographics. He supposes that maybe "other disciplines may not have as much rigorous training in dealing with international students, and so managing other disciplines, or understanding how other disciplines managed population changes, might be an area for future research." Recognizing the expanding scope suggested by P2's comment and the potential effect that scope could have for the team's interpretation of data, Maddox moves the discussion forward by asking, "Did we decide on a journal?" With this question, Maddox hopes to help reframe their work in a more situated way. The

following discussion elaborates the connection between audience and a new exigency-implications chain:

P2: At the end of May last year, the two journals that we were looking at were *Journal #1* and *Journal #2*. Those were the two that we're looking at.

Maddox: Right, because of the audience.

P2: Right, because we're looking at composition, and so both of those were composition journals. We're dealing with North American composition context.

Maddox: Yeah, *Journal #2* is trying to be international, and their question is this "How does this apply to other countries?" It [the current CSP study] doesn't.

At this point, Maddox and P2 have recalled an earlier conversation about where the CSP was situated, in a North American composition context. Given that context and given that the study does not appear to have international implications, *Journal #1* would seem to take priority. But P2 counters that assumption and tries to stretch the possibilities by reframing the study in a way that could garner international interest. He says,

One possible way that we could do that [reach an international audience] is that we present this is a case study of the situation where a population shifts, and then make implications and generalizations based on a case study of a population shift. I think that if we're relying on the difference, or if we're relying on the fact that a specific population changes, then that doesn't really jive with the case study perspective.

In other words, if the team wanted to reach an international audience (and thus shifting the domain of possible implications), then the data would have to be read as an example of a population shift *in general*. However, if the team elected not to reach an international

audience, then the data would need to be read with recalibrated critical eye. P2 is able to entertain and shift deftly across different exigency-implications chains.

Maddox entertains P2's suggestion by reframing the CSP as a case study with international implications. He says,

Right, so it's a case study of transnational education, writing education. And we can also mention that, in new contexts, students are coming from different countries, and sometimes people see an influx of students from particular countries. And in Southeast Asia with the EC, Economic Corporation communities, that's happening next year, and that's going to open up the borders for educational economic exchange. So some countries will see an influx of students from other neighboring countries so in anticipation of that shift this provides an example of how we might try to understand the student population and a model of multilingual collaborative research.

P2 quickly follows by clarifying the different purposes in terms of the different audiences. He says,

P2: That's for...these are issues we will address if were looking at *Journal #2*. If were looking at *Journal #1*, then these may be issues that we may not need to...

The connection being made, though subtle, is important because it illustrates P2's understanding that the purpose of the CSP—the way in which the exigency-implications chain is fashioned—is contingent upon the audience the team aims to reach and, by association, the publication venue most suitable to that goal. Changing one variable necessitates changing the others.

But the relationship between audience and publication venue was not so clear, as one participant's comments helped bring to the group's attention. While the earlier discussion focused on scholarly journals as a proxy for thinking about audience, P3 asks for an explicit discussion of who exactly is the appropriate audience. Importantly, P3's question is framed in terms of the findings the team has already gathered, as the following exchange shows:

P3: And that's what I'm thinking, like, what exactly is the audience of this? So who needs this information?

Maddox: The people in need this the most are WPAs [writing program administrators].

P3: Writing teachers...

Maddox: Writing teachers and writing program administrators [...]

P3: So which of these journals can actually get to the, like, the real writing teachers?

While many options are available for framing the study, a clear discussion of the audience is called for to make substantive progress. Any hope of reaching an intended audience necessitates a clear delineation of just who that audience is. Toward the conclusion of the conversation, P2 describes his preferred audience in terms of his understanding of the exigency and implications motivating the CSP and the most suitable journal given those goals:

I'm personally leaning toward *Journal #3* just because, that's where I'm leaning towards, because they do have empirical studies but at the same time I feel like dealing with shifting populations in the first your composition course is

something that is perfect for program administrators. And I think from an indirect perspective and it will reach a direct audience of the program administrators surveyed did because of the ones, there are the disseminating knowledge disseminating tier for their programs. My fear is that I don't want to sacrifice reaching audience just because we have a pre-existing structure.

This comment demonstrates P2's understanding that the audience a writer chooses is necessarily bound up with the exigency-implications chain. Furthermore, P2's "fear" is an example of this sophisticated understanding at work. He recognizes that a pre-existing structure of a text or interpretation of data has serious influence on what audiences are able to be reached. This knowledge of the rhetorical situation reflects his awareness of both the importance and constructed nature of the exigency-implications chain. Below, P2's final remarks in this discussion provide further evidence of an awareness of this link—that the audience shapes the way a data set is analyzed and interpreted:

P2: The goal of picking a journal was to pick an audience, but we picked an audience, I think. It's pretty clear, we just don't know how to reach that audience through which way. So as long as we have that audience in mind, then *we are still narrowing our focus in how we consider what data is valuable and what information is important to present.*

In other words, a data set does not speak for itself. It is a particular audience that helps give voice to the data.

The CSP's Negotiation of Relevant Sources

Another factor contributing to the construction of the exigency-implications chain involved discussions of relevant sources, including scholarly research and professional

documents. Members of the CSP, by situating their discussion in terms of the larger disciplinary conversation, were able to build alignments between their work and ongoing disciplinary activity. Such alignments provided the criteria by which participants responded to one another and thus enabled a type of participation that foregrounded the CSP team members as disciplinary actors.

For example, when the team identified the discrepancy between students' and teachers' understanding of the goals of writing and of writing classes—the example described earlier in this section—the team turned to such professional documents as the WPA Outcomes Statement to help frame the discussion of the CSP's goals. When one team member suggested a way to bring together the data from teacher interviews with the data from student interviews, he suggested extrapolating from both sets of interviews what the goals teachers and students assumed regarding writing and first-year writing courses.

But P6 questioned the need to analyze the teachers' goals because, as she said, those goals are already articulated in the WPA Outcomes Statement, a professional document shared nationally that articulates expected outcomes for first-year writing courses. P6's reservation then prompted additional clarification of the goals of the CSP in relation to that professional document, as the following exchange illustrates:

P6: But the goals [in] the WPA outcomes statement, so all teachers, all writing teachers are taught these are the common goals in writing instruction, so why do we need to write [extrapolate from the teachers' interview data]?

P2: [...] These teachers situate themselves, and position themselves including the programmatic goals, which would be the WPA [Outcomes] Statement goals, and

then their own goals which are often unique and different from the goals that are prescribed by the institution and the larger you know university life setting. So...

P6: So what's the difference about their...

P2: [...] As much as this overlaps and doesn't overlap with the WPA goals, these teachers' positions themselves uniquely from the WPA goals in a very explicit way.[...] So what do you make of that, if you have a WPA [Outcomes] Statement that's supposed to be uniform? So we can't rely on a WPA statement for uniformity.

P6: But then that [is] like two different problems. One is the individual teacher's perceptions of goals and the WPA outcomes statement. That's question one. And question two is teachers' perceptions of goals in general and students' perception of goals in their.... So there are two different questions.

P2: Uh huh. But, I think, could we say that, if we're comparing goals per se, these fundamental goals, then we could we say while the WPA Outcomes Statement exists as a way to inform teachers, we know that teacher agency allows for individuality resulting in unique manifestations of these goals, and unique manifestations of these goals often contrast the goals that students have, or something like that?

P6: But WPA [Outcomes Statement] itself is not in contrast with students' goals, so there are two differences, right? WPA [Outcomes Statement] is different from students' goals and individual teachers' goals are different from students' goals, and then teachers' ...

P2: You have these three circles that are all riding against each other for understanding what the goal of writing is. But, anyways...

P6: But I think that maybe we need to interview more teachers, and we need to analyze differences between WPA goals and teachers' individualization of goals.

Maddox: Yeah, and [the writing programs] here has its own set of objectives. They are based on the WPA Outcomes, pretty similar, but we need to refer to that document.

This discussion of the WPA Outcomes Statement as well as the local institutional outcomes statement becomes a way for the team to clarify their purpose, thus further shaping the exigency-implications chain. P2, for example, even begins formulating a strategy for integrating the WPA Outcomes Statement in an analysis of teachers' goals for their writing courses. Ultimately, if the team plans to integrate the teacher and student data, then the goals extrapolated from those populations would have to be analyzed against the goals evident in the WPA Outcomes Statement. This move sharpens the team's focus, situating the CSP more firmly in the disciplinary dialogue.

Furthermore, subsequent discussion immediately following that episode serves to illustrate how these sources influences the implications side of the exigency-implications chain. In light of the conversation surrounding the WPA Outcomes Statement and the teacher data the CSP team had collected, P6 makes suggestions about what possible implications could be derived from such an analysis. She says,

So one implication I can think of to draw from the teaching part is maybe to educate students from the beginning that this course is writing, and then talk to them and the way you can write in the first language well, that you have speak

first language that really makes you a good first language writer, and that same logic applies to the English writing. So tell them that we are actually teach them the difference between their speaking in Chinese and then their writing in Chinese, the same kind of difference is in English. So this way they feel kind of elevated, and I think that kind of communication is usually absent in instruction. The discussion of the outcomes statements clarifies the gap highlighted earlier, that the goals of a writing course are a complex overlap of goals from teachers, students, institution, and the broader discipline. This complexity, then, leads P6 to surmise possible implications for the CSP study, which would entail letting teachers know about the gap in expectations and to explicitly communicate the different goals to Chinese-speaking students in class. In short, the pressing need being addressed and the implications an analysis would yield is shaped by the team's discussions of relevant disciplinary documents.

Another example of the way outside sources contributed to the fashioning of the exigency-implications chain occurred when the team discussed relevant scholarly research. During a meeting, team members assigned the task of reading scholarly literature found that they had trouble identifying the unique contributions the CSP findings made in relation to the broader disciplinary debate. For example, P2 describes the ambiguity:

One of the things we found difficult was trying to find literature that represented the gaps that you're feeling. And in our previous discussion of the data and of the study one of the things that we found really clear was kind of the overall goals that the students had and the relationship of their goals to how they manage the

difficulties of the class of their overall impressions. And so much of the research that we've been reading so far has been focusing on students goals in writing classrooms and language classrooms, students impressions and experiences in writing classrooms in language classrooms. [...] And so, in relation to what we've read so far, I had some additional questions that I wanted to discuss to see what gaps are still existing so that we can highlight those gaps or exploit those gaps in the existing research.

After highlighting this difference, P2 frames the problem in terms of those goals, thus coordinating the present state of the team's analysis with his understanding of the research. The reference to "exploitation" is an indication that the exigency-implications chain must be informed by the unique situation referenced in the research scholarship.

Another team member, P5, follows up by pointing to a different piece of scholarship that helps elucidate the CSP's findings, saying

P5: Some, um, in "Source #1," that one did mention that like teachers and students have different systems for understanding things.

P3: In understanding writing?

P5: It is just a general difference not just focused on writing but that [source] did discover that that might be an issue and also some of the other entries [on the compiled bibliography] talked about like students' perceptions have been ignored in the past. Some researchers for some reason didn't think that students' perceptions were important, so I feel like that claim might support the rationale of this study a little bit...

Here, P5 brings up a source she had read and used that source to clarify the exigency motivating the research, namely, that teachers and students have different cultural schemas shaping their understanding of academic work. The follow-up question from P3 serves also to help P5 further contextualize her understanding of the CSP's exigency in relation to her synthesis of multiple sources. By pointing out that scholarship doesn't examine students' perceptions, she is making a case for the CSP's use of student interviews as a data source. In other words, P5 is justifying the CSP *in terms of* outside sources, thus sharpening the exigency driving the research team.

Finally, adding complexity to P5's rationale, P2 responds by stating what he thinks is real contribution the CSP offers to the available scholarship, which pushes the team in a fruitful direction:

I think one of the things that this study [the CSP] highlights that the previous studies don't highlight is the interactions with the actual task or the specific people that are transitioning from the specific context to new contexts, something that hasn't been discussed [in other scholarship]. What's worth highlighting in our study is a transition.

Framing the CSP in terms of a "transition," a framing that could only come from thorough engagement with relevant scholarship, orients the team's focus in a new way. Now, the exigency propelling the team's research stems from a disciplinary lack of knowledge about the transition Chinese-speaking students make from their home country to recruitment agencies to intensive English programs to writing classrooms in U.S. colleges or universities. A new exigency, then, breeds new implications as well, as Maddox notes in reaction to this reorientation. Framing implications in terms of a

question, Maddox asks, “What does it mean for writing programs for helping students learn inside and outside first-year composition classes and possible alternative structures?” To put it in terms of the form of an exigency-implications chain, discussions of sources shape the exigency and set the domain of possible implications, which in turn offer a way to go back and re-analyze the data.

The CSP’s Negotiation of a Prospective Text

Planning and drafting the eventual research report were additional pathways toward constructing and further narrowing the exigency-implications chain. For example, discussions of the rhetorical style of research reports influenced the way the graduate students conceived of the project. During a discussion of different journals and the types of articles found in them, the team expressed insecurity with the type of article they might soon have to produce. P3 shared her anxiety:

And to be honest, if we want to send it to *Journal #1* or *Journal #4*, I’m not quite sure how we can write in a way that is kind of like narrating.

Recognizing that the discourse of the two particular journals deviates from her understanding of the type of empirical work she is familiar with, P3 is apprehensive. This led her and others to assume that the type of article they would produce and the audience might be able to reach was directly tied to the rhetorical style they would feel most comfortable writing in.

Maddox tried to assuage those apprehensions by saying,

You know, this is a qualitative study. It is systematic but I can change those settings. Once we have a draft, I can come up with ways with arranging them and presenting them so that they are more palatable to the humanistic taste.

Despite this assurance, however, the difficulty with shifting rhetorical styles of the prospective text was understood to be more difficult by the graduate student participants because it was tied to their own scholarly identity and thus the kinds of claims they could make and audiences they could reach. A comment by P2 illustrates this connection between rhetorical style and professional identity:

P2: It's so funny. I feel like we're situating ourselves really as applied linguists in our empirical leanings. We are trying to really connect to our inner transdisciplinarity.

P2 is pointing out the connection between identity and textual production and that writing a text in a more “narrative” rhetorical style would force the graduate students to bend their decidedly non-narrative understandings of research reports. In doing so, however, P2 is also pointing out the new horizons crossing disciplinary boundaries may open up.

Also contributing to the way the team conceived of the exigency and implications of their study was the genre the team would eventually employ. After many meetings, it became clear that the team would have enough data and enough interesting findings to support a wide variety of publication types. In particular, the team considered writing a single collaborative article, writing a collaborative monograph, and, for those interested, writing a dissertation using the shared data. While these genres were not necessarily mutually exclusive, they did represent different ways of approaching the same data; and for each, a new exigency-implications chain would have to be constructed. Maddox's outlining three possible options at the end of one meeting illustrate the ways discussions of texts informed the construction of exigency-implications chains.

For example, Maddox offers an outline of an article that would include an “introduction and theoretical framework and research methods” as well as a comparison of Chinese students’ prior educational experience with their educational experience in first-year writing. Such an article would be “fairly dense,” “relatively short,” and a “quicker process,” calling for a strategic “integration of keywords” that would fit a tight narrative about the ways students coped with the difficulties of learning to write in an American university.

This approach was distinct from a potential monograph, which would examine students’ previous educational experience “but much more extensively.” Not only would data from student interviews be more pronounced, but so too would the discussion of the institutional context, which would call for “describing who the teachers are,” who “the students are,” “what assignments look like,” and detailed information about the “program, the website, materials and contrasting that with students’ actual experience.” This more elaborated account, according to Maddox’s suggestion, could be written in concert with a recent dissertation (and now book) about “Chinese students in U.S. higher education.” While the article would focus on students’ experiences more closely, the monograph would position itself in relation to scholarship surrounding a much larger issue, namely, Chinese students’ experiences in U.S. higher education. Such a broadening would call for a re-articulation of the purposes of the project, a refashioning of the exigency-implications chain.

Applying the Exigency-Implications Chain

A third step in the team’s negotiations involved applying the exigency-implications chain in order to re-interpret data and findings. This section illustrates the

difficult process by which the exigency-implications chain was applied by graduate students in the CSP. To illustrate this process, though, I first describe ways in which CSP members struggled to apply an exigency-implications chain effectively. Below, I show how team members struggled to implement a new exigency-implications chain because they were mired in a prior theory; next, I show how members struggled to apply a new exigency-implications chain because they, though not mired in prior theory, still lacked a useful guiding theory; finally, I show how team members enacted the exigency-implications chain to various degrees of success while working in the absence of their mentor. In the end, I argue, it is the process of working to enact an exigency-implications chain that evidences team members' abilities to respond effectively to the dynamic nature of research.

CSP Members Impeded by Prior Theories

Once an exigency-implications chain was established, the charge of the team was then to apply it to interpretations of the data set. But this transition was not always smooth. Indeed, working through the difficulties of this transition was a key source of learning. Often, some graduate students attempted interpretations but were too tied to prior theories to be able to see the data in new ways, in light of a new exigency-implications chain. The following example shows how one graduate student's ability to interpret of the data was obscured by her attachment to a prior exigency-implications chain:

Maddox: Do you think you can synthesize their [the Chinese-speaking students] comments and describe their idea of what good writing is and what they need to know in order to be a good writer?

P4: Because we didn't ask this question directly, so we can only like...

Maddox: That's exactly what I am asking.

P4: I think I had this impression because like they kept saying the difference between English writing they learn in China and here so they learned a lot like memorizing vocabularies and sentence strategies. I haven't really seen any students say, "Well, this is what good writing is."

Here, Maddox is requesting that P4 put to use a particular exigency-implications chain—namely, to respond to the circumstance that students' and teachers' conceptions of "good writing" are different and to analyze the data in light of that circumstance with the aim of helping teachers and program administrators understand and possibly attend to this gap. But P4 is stuck firmly in a prior understanding of the purpose of the study and is thus employing a now outdated exigency-implications chain. Her entrenchment is made evident by her assumption that because the interviewer did not ask the question "What is good writing?" she is unable to access that information in the data already gathered. In other words, her interpretation of the data is infused with her understanding of the prior purpose embedded in the interview questions; P4's assumption is that the data cannot be wriggled free of that prior purpose and re-analyzed with a new one.

But, of course, Maddox sees things differently. He does not see the data generated through interview questions as inextricably tied to the interview questions themselves or to the prior purposes those questions reflect. This free-floating nature of data generated through interviews is made clear in later comment in which Maddox tells P4, "What question the student is responding to is not as important as what the question tells us." At bottom, Maddox seems to say, data are underdetermined. As a result, data admit of

multiple interpretations. What sets the scope of suitable interpretations—i.e., what generates the criteria for valuing data in certain ways—is the exigency a researcher is addressing and the domain of possible implications he or she hopes to engender. What sets the frame, in short, is the exigency-implications chain. Maddox’s response to P4 reflects his awareness that, in order to re-analyze data, P4 must wrest herself from the interview question itself and pose a new question based on the refashioned exigency-implications chain:

Maddox: So if you can come up with an ideal situation that they [the students] have defined based on their voice, then compare that to where they are, which is exactly what they’re saying about the writing, that may be a good way of identifying the issue that they struggle with.

For Maddox, the important analytical lens is the one a researcher brings to the data *after* it has been gathered, not before. (Of course, constructing the “right” lens beforehand is certainly convenient and desirable when possible, but the flexible researcher is one who is unfazed by the need to re-interpret.)

Interestingly, the same issue came up again at a later meeting, but rather than Maddox offer his explanation again, it was P2 who stood in to clarify that data could be read in different ways without the lingering pull of the initial interview question. When P3 and P4 point out that the Chinese-speaking undergraduates did not explicitly state in interviews their goals for taking first-year composition, P2 offers an explanation similar to Maddox’s. When P3 says that the Chinese-speaking students “didn’t specifically talk about what their goals were,” P2 responds by saying that

goals can be understood in different ways, because you can understand goals not just by explicit statements of “these are our goals;” but gaps in what they perceive in their knowledge is a way to articulate a goal. Acknowledgement of what they have done can be an articulation of a goal.

P2 astutely responds to P3 in the same spirit as Maddox, suggesting that the group’s analysis of the data can be driven by questions other than the ones posed during the interview.

CSP Members Impeded by a Lack of Theory

Another difficulty implementing a new exigency-implications chain came when the graduate students coded small packets of interesting insights from the data but were unable to construct claims that would link them together in a cohesive fashion. While not impeded by a prior theory, members were nevertheless impeded by the fact that they had *no* clear theory in mind guiding their analysis. In response to one student’s analysis, Maddox tells P4 that she must

put that [coded data] in the larger context of how does this particular concern or question or comment fit into the larger understanding of this group. Otherwise, if you just take these isolated instances and then present them as single categories, it’s going to sound like “here’s one thing that student said, isn’t that interesting,” “here’s another thing students said, isn’t that great?” So what you are doing [now] that is valuable in itself, but when we put them together we need to get a general sense of how all of these comments fit together to create a sense of the whole.

Maddox’s assessment of the situation is that isolated bits of analysis must fit into a larger narrative, which is another way of saying that the data must be subsumed into a particular

exigency-implications chain, which gives meaning to the data set. Without a connection to a causal chain of exigencies and implications, the data, as Maddox says, “doesn’t mean anything.”

Although participants were not impeded by a prior theory, the lack of theory proved just as problematic for analysis. The lack of a guiding theory failed to provide the criteria needed to make broader claims. Such a theory (or narrative or exigency-implications chain) is the structure in which data are to be read and interpreted. Without it, no cohesive analysis could be conducted. What was needed was an ability to construct, in a situated way, an exigency that would lead to a certain type of analysis and suggest a certain type of implications: “because of x circumstances, we must generate data and analyze it in y way, which will have z implications.” As the next sub-section illustrates, continual practice over the course of the CSP allowed the graduate students the ability to construct such a chain of reasoning and to apply it to their own individual work in relation to that of their colleagues.

Constructing and Applying an Exigency-Implications Chain

The most salient examples of graduate students actively constructing and enacting exigency-implications chains occurred almost exactly two years from the start of the CSP. The meeting itself was arranged and attended only by the remaining graduate students, P2, P3, P4, and P5, without Maddox. The discussion that took place reflected a rather remarkable transformation in participants’ ability to work nimbly with data, interpretations, and delineations with respect to one another’s work. By this time, the team had elected to pursue a monograph, which called for each graduate student to contribute a single chapter on a unique topic with a unique purpose. In order to

successfully complete the task, the graduate students would have to be able to articulate and apply an exigency-implications chain and also to do so without infringing on another student's chapter. Because the team was drawing from shared data, subtlety in the clarification of individual and collective purposes was essential.

During the meeting, each graduate student explained their plans for their chapters and P2, as the de facto leader in the absence of Maddox, worked with the others to build coherence within and across those different chapters. Most importantly, the students demonstrated an ability not only to be unimpeded by prior theories, as they were earlier in the CSP, but also the ability to subsume the shared data into distinct interpretive schemes, distinct exigency-implications chains.

As evidence of this awareness of unique individual purposes, when discussing P5's task of writing a literature review that would serve as a preface to the monograph and tie all the chapters together, P2 says,

And I think we really need to consider that as we go along: what purpose are the different parts that we have serving for the overall construction of this book. A literature review canonically in an article looks to set the background as well as place the situation for where the data is going to be informing. But we're looking at a book with multiple kinds of data, multiple purposes, right? P3's chapter's purpose is different a little bit from P4's purpose, is a little bit different from my purpose. And, as a result, a literature review can't do what a literature review does for an academic article. And so the way that you'll approach it will be slightly different.

This explanation evidences an understanding of the many purposes constructed by each of the graduate student team members, but also frames that understanding in terms of the genre of a typical research article, a genre the rest of the team is well familiar with. That is, the team must not rely on an abstract, decontextualized set of standards, but must construct them anew out of their own purposes.

P5, who is in charge of writing the literature review, indeed recognizes that her chapter is dependent on the writing of the rest of the team. This recognition is evidenced by the questions she asks P4 at the outset of the meeting. In order to ground her literature review, P5 must have a sense of what the other chapters will be. After asking P4 for more detail about her chapter, P5 says,

I feel safer to go forward with my literature review so that I can kind of try to connect what you were talking about, integrate that in my part. Otherwise I feel like I'm always reviewing something over there without connecting it...So I'm looking for a more concrete way for me to start rather than maybe abstract.

P5 recognizes that she must devise for herself a narrative structure to animate her literature review, but she also recognizes that that structure must also be informed by the work of others. The “theory” guiding her reading and writing cannot be abstract or decontextualized. Rather, she must cobble together an analytical lens that is grounded in the work of her collaborators. To enact a transformative agency, that is, she must develop an individual plan in conjunction with the plans of others.

P3's task for the monograph, based on earlier determinations, was to describe the ways Chinese-speaking students enter universities in the United States. During this meeting, P3 demonstrates her ability to construct an exigency-implications chain when

she describes her purpose, which is informed by historical trends evident in other outside sources. As she describes her aim, what is worthy of note is the way in which she represents her purpose in terms of an exigency and formulates it in a narrative-like structure:

So I am going to talk about four things mainly. So the first one is the backgrounds of this Chinese students in the United States. And the by talking about the background, I mean their educational background, their background in China, and also the change...for instance, if we were looking at 10 years ago, most of the Chinese students in the United States and the universities they are graduate students. They are coming here, I mean mostly scholarship or fellowship so they have money, I mean the university is paying them for either teaching a course and then they have findings, but now especially in recent five years most of the students population here in the United states they are undergraduates. And then they are paying so they are financial resources are basically coming from their family and then they are paying full tuitions.

P3 aims to talk about the pathways Chinese undergraduates travel on their way to American universities, and she represents this purpose in relation to a particular historical trend that took place in the past ten years. Whereas earlier, P3 had trouble creating a cohesive narrative that knit together various findings, by the end of the project P3 was much more adept at constructing and employing a narrative structure that animates the reading. By situating her own purpose within a historical trend, she is actively constructing an exigency that creates the conditions and mechanism for conducting her own analysis of relevant data.

Crucially, P3 is able also to use this narrative to describe the way she plans to analyze the various data sources upon which she is drawing. After describing her purpose, P3 also tells of her data:

I am getting the background of these Chinese students first leave from the China Education Center and also from different magazine newspaper articles, for instance like the *New York Times*, talking about the trend of Chinese students, talking about the difference of for instance 10 years ago or five years ago or five years ago, now what the population of these Chinese students is.

Not only has P3 constructed an exigency to drive her analysis, but the way she describes her data sources is clearly informed by that narrative. In this representation, the mention of data sources comes in relation to the broader purpose, namely to contrast that earlier trend with current trends. P3 has knitted together a patchwork—what I have been calling an exigency-implications chain—that generates meaning for her at every turn, how she reads sources (as in the above quote) and how she plans to interpret her data set.

Furthermore, when discussing another data source, interview data with Chinese-speaking undergraduates, she again discusses the data in direct relation to her broader purpose.

And then I'm going to use some of the data from our interview to kind of like to demonstrate OK here is the students' experiences for some of the difficulties that they experienced in the FYC course, and then because of their background Chinese education in English and then that's probably one of the reasons that why they are having the experience here they are having in FYC.

The interview data here is not being examined in a decontextualized way; rather, P3 incorporates this data with a clear justification. The last sentence is an articulation of what she hopes to find, a domain of possible implications, because she is making a hypothesis about the relationship between earlier experiences and current descriptions. Her approach is crucial to her development as a researcher because it does not posit data as standing on its own. Rather, the data attain meaning by virtue of the exigency-implications chain through which they are read.

Perhaps the most salient illustration of this ability to control data using exigency-implications chains came when the team realized both P3 and P4 would be drawing on similar data to discuss a similar topic. That shared topic was Intensive English Programs (IEPs): P3 planned to write about IEPs in relation to the pathways students were taking to get to American universities. P4, however, planned to write about IEPs in relation to other contexts for writing instruction, as her chapter was aiming to demonstrate the importance of understanding FYC classrooms as a unique learning environment. The following exchange shows how P2 helped P3 and P4 see that their unique individual purposes precluded there being a problem of redundancy when talking about the same topic:

P3: One thing that we do overlap is about the IEP.

P2: That's OK.

P3: But the way I think we are looking at...

P2: The way you talk about it is different. IEP is an avenue for entrance whereas IEP is a contrast in context. Right? Avenue for an entrance, contrast in context.

Here, P2 points out that, although both P3 and P4 cover the same topic, their purposes were distinct. Thus, there would be no redundancy. This distinction rests on the assumption that data are fundamentally underdetermined and that they are given meaning only when they are taken up into an exigency-implications chain.

Summary of Chapter 5

The unique space in which the CSP took place provided opportunities for the graduate student members to encounter difficulties that could not be anticipated or planned for and to collectively fashion suitable responses to those difficulties. Through an ongoing process of negotiation, graduate student participants developed an understanding of their research in terms of exigencies and implications that were situated firmly in various manifestations of broader disciplinary activity. The graduate students also demonstrated an ability to work more skillfully with the process of interpreting data. The capacity to move across interpretations more fluently suggests that learners developed a heightened awareness of how research operates in their field and how to participate in its production.

CHAPTER 6

LANGUAGE RESOURCES, DELIBERATION, AND DEVELOPMENT

There are so many ways of translating words.

–P5, interview, February 2014

I feel like no one really taught me that.

–P4, interview, January 2014

The two previous chapters examined tensions that emerged *across* layered activity systems (Chapter 4) and *within* the research activity system (Chapter 5). This chapter narrows the focus further by taking a more detailed look at the tensions posed by one particular tool within the research activity system to examine its effects within the CSP. This third point of negotiation was the way in which graduate students negotiated their various language resources, a key feature of the CSP research design and graduate students' contribution to the project. Over the course of the study, given the uniquely multilingual nature of the CSP, frequent language-based deliberations took place over how to translate words, how to interpret cross-lingual data, and how to represent language variations in writing. What I am interested in asking in this chapter, then, is, “What learning effects does the negotiation of language resources have in the context of the CSP?”

To identify the effects, I used a discourse-based “critical incident” approach (Clifton, Long, & Roen, 2013) during interviews to isolate language-related episodes (LREs) (Dobao, 2012) in which participants described instances of language negotiation. These LREs were then aggregated and coded according to salient themes that emerged through multiple readings. The findings here, though brief, represent an exploratory

investigation that seeks to offer an account of language that pushes beyond the difference-as-inherently-good ideology.

Findings

The LREs described by participants in discourse-based interviews indicated three types of effects in the CSP: (a) negotiation of the division of labor, (b) negotiation of subject positions, and (c) negotiation of data interpretation. “Negotiation of social roles” effects refer to alterations of the relationships among team members and their responsibilities in the CSP; “negotiation of subject position” effects refer to instances in which participants negotiated their individual identity in relation to the CSP; and “negotiation of data interpretation” refers to knowledge-building strategies that leverage language resources to support the team’s interpretation of data.

These three types of effects, it is important to note, fall into a broader category of problem types, namely, adaptive challenges. As noted earlier, adaptive challenges are problems for which no clear answer exists, even among experts. What made negotiations of language so useful, then, was that answers to the questions they posed could not be derived from an external authority. Rather, answers had to be sussed out by the graduate student learners themselves. And, at best, these answers took the force not of universal “correctness” but of provisional suitability given the situated needs and constraints of the research context.

In order to show what types of learning opportunities emerged, below I report one student’s description of a typical language negotiation followed by illustrations of the three effects as described by the CSP participants in discourse-based interviews.

A Snapshot of a Typical LRE

In the design phase of the CSP, a typical language negotiation involved the translation of a term or phrase. Because four of the team members spoke some version of Mandarin Chinese, there were often diverging accounts of how a term might be translated for the purposes of the CSP. In the interview represented below, one participant described the way in which this type of negotiation occurred:

P5: For some reason we had a really hard time how to translate that to Chinese—because I have a version [of the term in mind], P6 has a version, and Maddox just asked us, “So, in Chinese, does this say ‘x’?” because I don’t think Maddox is really that familiar with the way they talked in mainland China. So that’s when the word became obvious. So we talked through it, like “Are you sure?” Because, me, I would have very strict responses of translating one-to-one in Chinese, but somebody—I forgot who that was—they said it doesn’t sound really right. It sounds weird, whatever. And then we just, we had a couple options, and then we asked P6, “How do you say that in China?” And then she would ask, “You don’t say that in Taiwan?” And then we kind of went through a negotiation. And then she said, “Well how about this? What do you think, P5?” And I would say, “OK, that sounds fine; let’s use that.” So there’s little struggles here.

P5 recounts the way multiple versions of a translation would proceed from proposition to discussion to, eventually, some suitable determination. P5 also suggests that participants brought with them different approaches to translation, which contributed to the discussion. Here, P5 indicates having a strict “one-to-one” approach to translation while her counterparts took alternative approaches, generally relying on a sense of what

“sounded weird,” as P5 says, or at times relying on tools such as Google to find collocates as an indicator of what terms or grammatical structures were most commonly used.

Perhaps tellingly, P5 also refers to these negotiations as “our translating headaches.” This is likely due to the fact that the aim of such negotiations was not to “get it right” in some abstract, decontextualized sense; indeed, the diversity of opinion suggested that “right” was largely a matter of one’s frame of reference. Instead, such negotiations were grounded in the unique aims of the CSP. The negotiations, then, were tempered by an awareness of how best to serve the project. Frustrating though they may have been, these negotiations opened up critical space in which participants were able to make substantive contributions to the CSP as a whole and to their individual learning trajectories. Such critical spaces are detailed in the sub-sections below.

Negotiating the Division of Labor

As detailed in Chapter 5, participants encountered difficulty establishing a clear division of labor and thus had to negotiate with one another to determine who would be responsible for what tasks. The presence of various language resources facilitated this process.

One way in which the division of labor was negotiated was in relation to Maddox, who had a reading knowledge of Chinese, but still deferred to the graduate students when it came to language negotiations. One participant, referring to these discussions over translation, indicated as much in an interview:

P2: So eventually, Maddox conceded to the Chinese speakers because it was in Chinese. [...] Once we agreed what the English questions were going to be,

Maddox talked about some of the Chinese translations, but everything ended up being deferred to the Chinese speakers, and it was always “Oh, well ok, that sounds good.” Maddox would say, “Is that really what you mean?” and P6 would be like “Yes.” And Maddox would be like “Oh, OK.”

P2’s account suggests that the role of translation fell squarely on the shoulders of the Chinese-speaking graduate students. As a result, graduate students were able to take on authentic, specialized tasks. This finding serves to support Russell’s (1998) claim that traditional master-apprentice models of learning are ill equipped to explain the “elaborately distributed networks of late or post-modern social practices” in which it is sometimes “devilishly hard to tell the masters from the apprentices” (n.p.). Participation in this fashion opened the door for graduates to “learn by expanding their involvement with various social practices” (Russell, 1998, n.p.).

The negotiation of the division of labor occurred in more subtle ways as well, particularly in discussions about the translation of individual words or phrases. For example, when the issue of translation came up during the design phase of the CSP, there was disagreement regarding the subtleties of meaning among different terms. As multiple participants noted, the group often deferred to two particular participants (P3 and P6) because of their cultural and linguistic backgrounds represented experiences in mainland China, the presumed background of the undergraduate students the team was investigating. The other two Chinese-speaking participants, being from Taiwan, had different cultural backgrounds and thus were familiar with somewhat different discourse patterns. Since the target undergraduate population in the CSP spoke a variant of

Mandarin found in mainland China, it made sense to defer to the graduate students with similar cultural backgrounds.

In the following interview exchange, P5 explains her thinking during a negotiation over translation and indicates that, despite many viable translation options, the needs of the CSP as a whole were privileged:

P5: This is “interesting.” There we have an equivalence of “interesting” in Chinese, but here P6 made it another way. It’s the way they [P6 and P3] talk I found interesting, because they would say, “The way you’re saying ‘interesting’ might be too broad. It’s just not the way we talk [in China]. It’s not the way...students will interpret it differently. So let’s put this.” And then I say “OK.”

Dan: So you deferred to P6 because presumably she knew...

P5: Because our participants are Chinese. And, sorry I don’t have much of my own agency here. Like, otherwise, it (took) discussion to finalize it. There are so many ways of translating words.

P5’s description suggests determinations about translation were justified by the target audience they intended to reach. While there were “so many ways of translating words,” decision-making authority was generally handed to those with the most intimate knowledge of the Chinese-speaking undergraduates. As a result, among the four Chinese-speaking CSP members, two in particular took a more prominent role due to their expertise.

Interestingly, in the above exchange, P5 says that her agency was limited. But my analysis suggests that her withholding is precisely the kind of agency that is at times

called for in negotiating roles in the context of collaborative inquiry. Elsewhere, P5 said, “I felt like sometimes, for Taiwanese partners [P4 and P5], I feel limited contributing,” but controlling her contribution was an important aspect of the negotiation of the division of labor because the CSP benefited from the unique perspectives offered by P6 and P3.

Negotiating Subject Positions

Because the division of labor was such that translation determinations often fell to the graduate students, members of the CSP had to try on new identities and adopt new practices in order to leverage that linguistic expertise. In Chapter Five, I argued that each graduate student had to negotiate, on the one hand, a subject position as an individual student learner and, on the other, as a collaborative knowledge-worker. The following examples show how language negotiations provided unique opportunities for graduate students to navigate these subject positions as they developed their professional identities.

For P5, the negotiation of her subject position came as a direct result of her facility with language. Throughout the project, P5 marked herself as a “novice” researcher and, as a result of that status, was somewhat tentative as a contributor to the project. She attributed this hesitance to other factors as well, but the primary factor was her sensitivity to others’ perception of her English fluency. She said that she is “always sensitive” to “what other international students think” and that, linguistically, she “might still be limited in terms of expressing things.” Affectively, this sensitivity hampered her confidence, which in turn limited her level of participation.

Interestingly, P5’s facility with Chinese opened an avenue to participation that might have otherwise been closed off. When discussions in the CSP turned to issues of language and translation, P5 was much more likely to speak up and consider herself a

viable contributor to the project. When asked about her increased participation during language negotiations, P5 explained the confidence she gains through her knowledge of Chinese:

Dan: Why do you feel you can speak at that moment and not at other times?

P5: I think because I'm confident in my native language. And in terms of that, I don't think my Chinese is worse than any of theirs [the other CSP team members]. Their English might be better than me, or maybe we're equal with the second language; but with Chinese, I am way more confident than I am in English. That's the moment I think I can speak up, and I'm not afraid of making mistakes for giving information, because their Chinese is not necessarily better than mine. That's where my confidence is.

This confidence, a direct result of her unique expertise, helped P5 think of herself as a participant with something substantive to contribute to the team. While, elsewhere, she had assumed the position of a novice while working closely with a more advanced member of the team (P2), language negotiations provided space to take on an identity that facilitated more visible action.

Questions also emerged about how to represent language varieties in writing as the graduate students struggled to cross languages in their drafting. Such questions presented the chance to shift subject positions. P3, for example, ran into some confusion when deciding how to show interview data in Chinese in her writing. At one time, she was encouraged to put the Chinese first, followed by the English in parentheses; at another time, she was encouraged to do the opposite. This confusion highlights an opportunity for a developing researcher to negotiate how she understands herself in

relation to the expert authority in the context of the CSP. In an interview, P3 described the dilemma:

[Maddox] put the English first, but then he said that we should use the Chinese first because that's the data, and then we need to put the English in parentheses. But then he had the example, here, so that's the English first and the Chinese in parentheses.

After encountering this contradicting evidence, P3 was put in a position in which she had to make a determination in the face of not knowing what the “correct” action was. In the end, P3 decided to make her own judgment: “But I’m still going to do this” (i.e., do it “this way”). In activity theory, instances such as this mark moments when learners begin to take initiative in action. Confronting opacity, that is, is the stimulus for agentive, expansive action. As a result of the variety of language resources, then, P3 is put in a position where she must act in a way that stands in contradiction to the suggestion of the expert.

A broader issue regarding written representations of language difference came up when P4 attempted to figure out just how her using Chinese to elicit data from Chinese-speaking undergraduates was leading to a richer data set. What exactly was the virtue of conducting interviews in Chinese, she wondered. An answer to that question, she found, was not easy to uncover. She said, “I feel like no one really taught me that. [...] That’s a process I haven’t really had experience with about how to solve those problems.” Because P4 was unaware of an answer to her question, she was faced with a problem that related to her own understanding of her subject position on the project.

P4 described the translation problem thus:

So actually, when I was writing this, at the beginning I thought it would be easier because it's in Chinese, but I feel like it's harder now because students use Chinese to describe their experience. And those [descriptions] are so different from the language we use among teachers describing student experience. We use different terms or we have specific terminologies for that. Well, now they use their own languages to describe, maybe we're talking about the same experience, well, they have these different descriptions. I felt like, should I maintain their ways of expression, or should I change it to the way that other people would be able to understand.

P4 finds herself in a real quandary as a translator and interpreter of data. The problem as it is represented here is one of discourse. The students speak the way typical students speak about their academic work, which is vastly different from the professional discourses circulating among professionals in the field. P4's question then, as a researcher, has to do with capturing the student interviewees "voice" while still "translating" it into the professional discourse of the field. This task is made even more difficult by the fact that the translation of discourse must occur concurrently with translation from Chinese to English.

The next layer of difficulty for P4, then, is the subject position from which she will address this quandary. Does she address the problem as a student and seek a pat answer from an external authority, or does she cobble together a response drawn from her own expertise as a researcher and as a disciplinary participant? Indeed, in the interview, P4 formulates her response in terms of this dilemma. Her negotiation is framed in terms

of “going to Maddox” versus relying on her own knowledge: “I want to ask Maddox,” she says, “but I can’t really ask him every single [time]. It should be my expertise.”

Electing to assume the “collaborative contributor” subject position, P4 then turns to devising ways to address the problem at hand. Her first step is to investigate other scholarly sources that have dealt with similar data sets. She says, “[It’s] so hard, that’s why I go to other books trying to see the books investigating Chinese students specifically and how they [conduct interviews]. But, as far as I notice, most of the interviews were conducted in English.” Even at this turn, she is unable to locate a suitable answer to her question. Toward the end of the discussion, P4 explains where these investigations have left her:

So it was like, there’s something very important, but I don’t really know how to articulate it exactly at the beginning [of the CSP]. They [other CSP members] probably think it’s easier for students to express themselves, but how do we make or take advantage of that, and then make our researcher project, our results, different from other studies?

P4 has a strong intuition that this issue is “very important” to the study, but is unsure how to proceed. What is most telling about her explanation is that she is framing her understanding of the study in terms of other scholarship and in recognition of a broader disciplinary context.

What this dilemma suggests for P4 as well as the other Chinese-speaking CSP team members, in short, is that the negotiation of language provides opportunities for novice researchers to carve out and occupy subjectivities that position them as researchers, as collaborative contributors in a disciplinary context, rather than as students

driving toward a degree. If a goal of learning is facilitating more robust participation within a collective, then the negotiation of language resources seems to support that aim.

Negotiating Data Interpretation

In Chapter 4, I argued that the collective construction of a tool that could be used to analyze the data set was key contributor to graduate student learning in the context of the CSP. Here, I make a similar claim, but point out the important role language played in the process. One effect of language resources, that is, was the way in which it supported the team's analysis of interview data. In the example below, P3 describes a discussion regarding a single Chinese term, "shui," and the way it contributed to the analysis and understanding of their findings.

During a discussion about the findings in a team meeting, CSP members came across a term used by an undergraduate Chinese-speaker, "shui," that the student had used to characterize his experience in his first-year writing course. The term itself did not have a clear correlate in English and thus prompted discussion about its meaning and the way it reflected the larger claims that the team was trying to develop. In the exchange below, P3 explains how the Chinese term took on increasing significance for the CSP:

P3: So one example I think you've heard a lot of times in our discussions, they say the class is "watery," and then in Chinese it is "shui." And that really is a common expression in Chinese but is very hard to find an equivalent in English. But there are some things like that, especially the negative evaluation of the course or their teacher or their peers, they [the undergraduate interviewees] are more comfortable using their home language rather than their second language.

Dan: Can you re-describe when the word watery how that came up in the meeting?

P3: I think, so when we first mentioned that “shui,” “watery,” I think Maddox laughed at that, and then he said this is really a good and unique example of how—because not only that student but also some other students have similar comments. But they are using different ways, but this word is really representative.

P3’s explanation suggests two important effects of language resources in this context. First, as she says, there is no common equivalent in English and therefore the team had to discuss just what that term meant. Crossing languages, then, served as a way to facilitate discussion about what this student meant and thereby facilitate discussion about the CSP’s findings in general. “Watery” was one close synonym, according to P3, but so too were other English phrases such as “there is nothing” and “nothing special.” These alternative translations that P3 described gave a richer picture of the kind of experience this student had in his first-year composition class. As P3 suspected, it is possible that this kind of candor from the student might not have been accessible were the interviews conducted in English: in interviews, P3 says, “[students] are more comfortable using their home language rather than their second language.”

The second effect is that this term came to serve as a representative keyword of sorts, a handle upon which the team could hang the argument they were developing. As P3 notes, “shui” became a flashpoint term that encompassed how many of the undergraduate interviewees were feeling about their first-year writing courses. As an interpretive device, “shui” came to anchor the team’s analysis of students’ experiences

and provided a helpful metaphor to conceptualize the undergraduate experience of writing in an American university. In activity theory terms, Engeström argues that an important step toward expansive action is what he calls “concept formation.” Here, the team leveraged language resources in the formation of an anchoring concept that helped structure their analysis.

Summary of Chapter 6

Language resources, as a unique and essential feature of the CSP design, presented opportunities to examine their rhetorical effects in the context of the CSP. The need for participants to address the rhetorical use of language resources opened up critical space in which to resolve challenges for which there were no clear answers. More specifically, it offered the chance to negotiate the division of labor, participants’ subject positions, and the team’s data interpretation. By engaging in discussions about language, rather than simply stamping it out, members of the CSP were able to take actions in the project that might otherwise have been impossible.

CHAPTER 7

IMPLICATIONS AND FUTURE RESEARCH

This dissertation has explored from three perspectives the ways in which graduate learners gain insight into the dynamic and rhetorical nature of disciplinary participation by engaging in hands-on, self-sponsored, and authentic inquiry. In Chapter 4, I argued that students demonstrated a recognition of and a flexible orientation to the multiple activity systems operating simultaneously during their graduate study. The ability to recognize such complexity and to find ways to build resonances across activity systems served both to build an awareness of the dynamic nature of research and agility to align various streams of activity in effective and productive ways. While it is well-documented that graduate students must contend with various activity systems (Russel & Yañez , 2003; Lundell & Beach, 2006; Tardy, 2009) as they navigate through their graduate program, it is not particularly clear how those activity systems are negotiated while participants engage in inquiry that falls outside the curriculum. The findings from this dissertation indicate the contradictions found in classrooms still emerge, but in somewhat different ways. Graduate students' ability to construct narratives that link their previous experience, present circumstances, and future goals can help coordinate activity systems and resolve tensions that might emerge.

In Chapter 5, I argued that students gained an awareness of the contingent, shifting, and rhetorical nature of the research context by encountering problems that emerge organically due to constraints and other problems resulting from the initial research design. The affordances of the extra-curricular space allowed participants to dwell in the problem space. Additionally, by using the unique constraints of their

research context to formulate new plans and conduct altogether new types of inquiry, members adopted more flexible and situated orientations to research. The findings from this aspect of the study speak to questions rhetoricians have taken up for half a century—namely, do rhetorical situations simply exist “out there” waiting to be discovered and acted upon or within (Bitzer, 1968)? Or are rhetorical situations purely the machinations of rhetors who call them into being (Vatz, 1973)? The findings from this investigation suggest that the answer falls somewhere in the middle. While the constraints of a particular rhetorical situation are indeed real and play a crucial role in what types of action is possible at any given time or place, it is also the case that rhetoricians have the ability to call into being new exigencies. This capacity both to recognize constraints while also using those constraints to redefine the situation and construct pathways to effective action speaks to the rhetoricity of the research context and the skills necessary to operate successfully within it.

In Chapter 6, I explored ways in which language resources within the research activity system were used to support this process of building awareness and agency. By leveraging language resources, participants were able to negotiate roles, subject positions, and data interpretation in ways that would have otherwise been out of reach were it not for an awareness of their unique tools. These findings are easily distinguishable from the findings of studies investigating language difference in writing in that they did not seek to taxonomize strategies for integrating multiple languages in writing. Rather, the investigation into language resources as a design feature of research is an attempt to push the discussion in new ways, to study the ways language resources operate rhetorically within research contexts.

Through leveraging their unique abilities, fashioning discursive tools in response to situated constraints, and coordinating with colleagues in person and in scholarship, the graduate student participants took active steps toward integrating what Vieregge et al. (2012) have referred to as an “individual and communal agency”—a process by which “people find their voices individually and effect change by becoming part of something larger” (p. 18). This dissertation, then, offers a glimpse of what kind of learning can occur through collaborative inquiry and writing under the direction of a faculty mentor and suggests implications for students, faculty, and graduate program administrators.

For students, a key element gained was recognition that research contexts, especially qualitative empirical ones, are *always* under negotiation. While it is advantageous when conducting qualitative research to have a clear research question in mind, that question necessarily shifts by virtue of what affordances are available in the context and to whom the findings will eventually be directed. Approaching research with an adaptive orientation allows for constraints not to serve as obstacles but as opportunities for more effective research. Indeed, gains are made precisely because of obstacles and one’s critical responses to them. A second implication for graduate students is the recognition that data sets gain meaning by virtue of the exigencies to which they respond and the implications their analysis might engender. The work of the qualitative researcher, then, is to foster an ability to read data in various ways. Working collaboratively with colleagues provides unique approaches toward shedding new light on data, sharpening interpretations, and building more situated knowledge. While this study provided synchronic glimpses of the learning that took place over a two year study, future research would do well to pay more close attention to process itself, to the unique

elements of the environment that lead to students' gaining a rhetorical awareness of research. Including in that type of investigation students' writing and ongoing revisions from draft to draft would be a useful site for studying this gradual learning over time.

Faculty mentors directing such types of collaborative inquiry can benefit from understanding their own practices as situated and rhetorically flexible. What experts in any disciplinary context bring with them is not only an ability to see the world through their disciplinary lens, but also an ability to triangulate that lens with the circumstances on the ground, the data that can be gained in light of the constraints in the research environment. Helping students see the mentor respond to problems is a key aspect of what students can gain in such environments. Recognizing problems in the research context as problems and using metadiscourse to describe them and pose strategies for obviating them is a key role that can be played by the faculty mentor. For future research, analyzing the different strategies employed by graduate mentors during periods of deliberation would serve to generate a useful heuristic for mentors interested in pursuing similar approaches to research.

A key feature of this study and of the CSP itself was that members of the research team engaged inquiry relating to the local writing program. This was made possible by the fact that the writing program supported researchers' systematic investigations into the writing practices within its bounds. That is to say, the writing program served not as a place for inoculating undergraduates from bad writing, but as a site of intellectual work for various stakeholders. An area for future research that is suggested by the results from this study is investigating how the insights from systematic study can be filtered back into the writing program from which they emanated. That is, what are the mechanisms by

which that information was shared by various members of the writing program, with other writing faculty, and with the students themselves? Working toward building infrastructures of communication through this kind of work can lead to feedback loops that improve writing development for undergraduates, for graduates, faculty, and administrators.

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APPENDIX A
IRB APPROVAL

To: Paul Matsuda
LL

From: Mark Roosa, Chair *MR*
Soc Beh IRB

Date: 10/18/2012

Committee Action: **Exemption Granted**

IRB Action Date: 10/18/2012

IRB Protocol #: 1210008367

Study Title: Learning Through Collaboration

The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(2) .

This part of the federal regulations requires that the information be recorded by investigators in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. It is necessary that the information obtained not be such that if disclosed outside the research, it could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

You should retain a copy of this letter for your records.

APPENDIX B
PARTICIPANT INFORMATION LETTER

Learning through Collaboration

10/5/12

Dear colleagues:

I am a graduate student under the direction of Professor Paul Matsuda in the Department of English at Arizona State University. I am conducting a research study to track graduate students' learning through the process of collaboration.

I invite your participation, which will involve meeting with me for three 30-minute interviews in which to discuss your perceptions of collaboration and learning. You have the right not to answer any question, and to stop the interview at any time. Your participation in this study is, of course, voluntary, and you must be 18 or older to participate in the study.

Although there is no direct benefit to you, possible benefits of your participation in this research include helping create a better understanding of how collaboration functions as a tool for learning and mentoring. Your feedback will provide valuable data for determining the best possible approach to creating effective learning environments for graduate student researchers. There are no foreseeable risks or discomforts to your participation.

Your responses to the interviews will be kept secure in a locked filing cabinet in a secure office on the ASU Tempe campus. Only the primary investigator and co-investigator will have access to these surveys. Your identifying information will be kept confidential. The results of this study may be used in reports, presentations, or publications, but your name will not be known.

I would like to audiotape these interviews. The interviews will not be recorded without your permission. Please let me know if you do not want interviews to be taped; you also can change your mind after an interview starts, just let me know. Interview tapes will be kept secure with interview notes in a locked filing cabinet in a secure office on the ASU Tempe campus. Tapes will be destroyed after the interviews have been transcribed, which should occur within six months of the interviews.

If you have any questions concerning the research study, please contact the research team at: pmatsuda@asu.edu or dan.bommarito@asu.edu. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the study.

Sincerely,
Paul Kei Matsuda and Dan Bommarito

APPENDIX C

INTERVIEW GUIDE FOR STUDENT PARTICIPANTS: ROUND ONE

1. Prior to this study, what experiences have you had with collaboration?
2. What is the most successful collaboration experience you have had? What is the least successful? What made those experiences successful or unsuccessful?
3. Have you experienced moments of “productive conflict” while collaborating with others? Can you describe them?
4. Could you describe the collaborative project you are involved in?
5. What are your goals in pursuing this research?
6. How would you characterize your level of experience as a researcher?
7. How would you characterize your role as a researcher on this project? What experiences working on the current project have led you to form this view?
8. How would you describe the strengths you bring to this collaborative research project?
9. How does this research relate to your degree progress or major area of focus?
10. What guidance and/or mentoring you have received from the Principle Investigator on this project thus far.
11. How has that guidance contributed to your development as a researcher and scholar?

APPENDIX D

INTERVIEW GUIDE FOR PARTICIPANTS: ROUND TWO

1. Could you describe your overall experience with the process of this collaborative project?
2. What are some of the memorable moments in this collaborative project?
3. In your view, what makes a collaboration successful/unsuccessful? Has your view changed since starting this project?
4. Has your role as a researcher on this project changed? If so, how?
5. How have you worked to make your strengths visible to the group?
6. Have there been times when you were unable to contribute successfully? Can you describe them?
7. Have you experienced any moments of “productive conflict” in this collaborative project? Can you describe them?
8. What individual goals have you set for yourself in this project? What progress you have made toward achieving your individual goals while conducting this research. Have these goals changed throughout the project? How so?
9. How has this research project impacted your degree progress or major area of focus?
10. Please describe the directions and mentoring you have received from the lead investigator throughout this project.
11. What guidance and/or mentoring you have received from your peers on this project thus far.
12. What guidance and/or mentoring you have received from the Principle Investigator on this project thus far.
13. Please describe the influence the collaborative process has had on your learning and professional growth throughout this research project.

APPENDIX E

INTERVIEW GUIDE FOR FACULTY PARTICIPANT

1. Can you describe your professional title(s) and the responsibilities associated with each?
2. Prior to this study, what experiences have you had with collaboration?
3. What is the most successful collaboration experience you have had and what factors led to that success?
4. What is the least successful collaboration experience you have had and what factors led to the lack of success?
5. Can you describe the collaborative project you are currently involved in?
6. In what ways does this current project relate to your larger research agenda?
7. What, if any, relationship exists between this collaborative project and your institutional position as an administrator?
8. How would you characterize your specific role in this project?
9. What design decisions did you make in the project's early stages or incubation?
10. What other decisions about design have you made during the project itself?
11. What are your general expectations for the graduate student researchers as a group in this project?
12. What specific expectations do you have for each individual graduate student researcher in the project?
13. What role has language played in the project?
14. Can you describe instances in which language or linguistic difference played a significant part in shaping interaction?
15. Can you describe instances in which you have intervened and describe your reasoning for doing so?
16. Can you describe instances in which you have **not** intervened and describe your reasoning for doing so?
17. Can you describe, if possible, instances in which *you* have received guidance and/or mentoring in or because of this project?
18. Can you describe, if possible, instances in which your role as mentor in the project has shifted?
19. How have you developed as a researcher and scholar through participation on this project?