Towards a Theory and Practice of Translingual Transfer: A Study of 6 International Undergraduate Students

by

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Preface

To begin this discussion of translingual transfer, I would like to make some broad theoretical claims. This dissertation is, after all, a theory-building endeavor. I discuss the experiences of six students in order to understand not only how and what they learned about writing across contexts, but also how we might build on their learning in order to construct a translingual approach to transfer.

Investigations of writing transfer have flourished over the past few decades in writing studies fields more broadly, including research in composition and rhetoric, second language writing, and English for academic and special purposes. There has been an important range of discussions of what students know when they come to class, how to help them build on that knowledge, how to prepare them to build on that knowledge, and how to assess if those connections are being made (and, if so, whether or not they are being made effectively). Central to the development of these discussions is the recognition that the things we know and the ways we communicate are intertwined, not only with each other, but with the contexts in which we construct those knowledges and communicative practices. Transfer is not just a matter of doing in one situation what has been done in another, but of adapting and reworking knowledges and practices to fit the goals and needs of a new moment. Therefore, a pedagogy aimed at teaching for transfer is one that helps students develop awareness of the need to engage in these adaptations.

However, discussions of multilingual students and transfer are still permeated with deficit-framed approaches that posit the presence of more diverse language experiences as potential problems. These approaches come in a wide variety, including observations that writing practices differ across languages, that students might not know how to draw on practices across languages, or that doing so might lead to bad writing. Such concerns are reminiscent of old conversations about "language interference" that describe signs of one language appearing in uses of another as unfortunate bumps along the road to full fluency. According to such views, good writing transfer for multilingual students, it would seem, is one that erases any signs of the

existence of these multiple languages. Languages are rigid structures that, when things are working well, neither change nor interact.

The problem is that this does not seem to be the way language works. Even before translanguaging and translingual views of language pointed out the problematic monolingual orientation to such rigid divides, literary theorists, (socio)linguists, semioticians, teachers, rhetoricians, and philosophers pointed out that every utterance is permeated by a range of other utterances, from the ways we have heard others talk to the ways we have written in other contexts and the responses we expect from a range of audiences. In many early college writing contexts, the fact of this polyphony is central to the curriculum. Argumentative essays written by first-year writing students are often amalgamations of high school writing assignments, models provided by the instructor, and non-academic views of what makes something persuasive, while also carrying along the myriad ways students might have encountered the topic at hand in course readings, popular media, and day-to-day life. Assuming that students do not bring this range of experiences with them not only misses out on pedagogical imperatives to helps students learn about the ways writing creates and responds to exigencies differently based on audiences, goals, and contexts. Similarly, assuming that multilingual students cannot, do not, or should not leverage their full language repertoire simply misses out on an opportunity to think more complexly about what these students do with language.

Both of these kinds of assumptions are based in monolingual ideologies that presume that the natural state of language is one of containment, where individuals tend not to recognize the differences in language they encounter across contexts and even less frequently transgress those stark boundaries. We have to teach students how to transfer – and we have to teach multilingual students how *not* to transfer in the wrong ways – because their natural tendencies would be to stick to one set of language practices in one context and another set of language practices in another context with no productive dialogue between the two until we tell them to do otherwise. However, as the wide range of research surveyed in this dissertation suggests, language and learning are multitudinous and messy affairs. The hybrid use of language practices associated with a range of contexts described by researchers using terms like *translingual, translanguaging,*

and *code-meshing* are not divergences from a monolingual norm, but are, themselves, the normal expression of living language in interaction. Similarly, instances in which a learner encounters something new, but does so in the absence of at least implicit awareness of other situations, other ways of knowing, other knowledges and practices must be relatively few. Development, as I argue in this dissertation, is not a straight line but a process of continual interaction between all the possible experiences and understandings an individual might encounter.

Therefore, in this dissertation I suggest a change in assumptions. Instead of assuming, as monolingual ideologies do, that transfer is not happening unless we can definitely put our finger on it, I ask what we might see if we assume that transfer – like difference – is the norm. If a text does not seem to contain traces of other contexts that a student says they were drawing on, what if we do not consider this failed transfer, but a negotiation of language difference that entailed the productive reflection on one context in order to produce a different kind of text in another? If a student does something different in one context than they might in another, why assume there is no transfer happening instead of assuming that the student has done the smart thing and recontextualized what they knew to suit the new situation, sometimes in a way that obscures those connections unless the writer is asked to reflect on them? If a student does not report thinking about the overlaps and divergences among contexts, what if we ask what factors contributed to their decision not to focus on such connections and under what circumstances they might otherwise have been more open to discussing them? In short, what if we stopped asking how we can make transfer happen for students devoid of the ability to see such connections and instead asked how we as researchers and teachers might learn to see the connections students already make but sometimes choose – for a range of reasons – not to discuss or leave visible on the page?

In the spirit of translingual theories that presume language difference to be an omnipresent norm and of translanguaging theories that illustrate the ways that all of an individual's language resources are inherently interwoven, throughout this dissertation I approach these 6 participants' discussions of their experiences and their actual writing through the lens of these kinds of questions. It is certainly a theoretical exercise, helping me to engage in

the construction of a new way to frame transfer in the abstract sense. But, as I discuss in the early pages of the first chapter, it also allows me to think more effectively about what I can learn from these particular students and how that might apply to teaching across a range of other contexts. I looked to these students for inspiration and, together, we started sketching out questions of what to do with those ideas moving forward.

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Abstract

This dissertation brings together research on writing transfer and translingual views of writing through a description of the experiences of six international transfer students during their first semester at an American research university. This work pays special attention to the wide range of knowledges and practices that such students bring to new writing situations, broadening the definition of what might constitute a prior text in discussions of transfer. Findings from this study illustrate the ways that students do not simply import writing practices from one context to another, unchanged, but recontextualize them to suit the needs of new audiences, situations, languages, and genres. Of particular importance is these students' recontextualization of the metalanguages they learn to associate with given contexts and kinds of writing. These metalanguages correspond to the language ideologies that pervade particular contexts and often structure the silos into which particular languages and practices are artificially bounded. Students' recontextualization and blending of such metalanguages illustrates a potential for more fluid ways of conceptualizing writing across a range of contexts. This potential is displayed in these students' negotiation of writing practices they bring to new situations from their math courses, and through their negotiation of institutional pressures that actively discourage effective transfer of knowledge and practices.

Taken together, these findings suggest that a translingual approach offers new avenues to discussions of writing transfer, shifting from questions focused on whether or not students effectively draw on prior knowledges to questions focused on how better to identify and understand the inevitable interaction of the many knowledges and practices students encounter as they move across a wide range of contexts. This shift in focus further suggests potential changes for both researchers and teachers, who might come to better recognize and build upon the rich repertoires that students bring to classes by adopting a translingual approach to transfer.

Chapter 1: Theoretical Framework

Introduction

For good reason, behind much education research, specific classrooms linger. Our lines of inquiry often come directly out of the exigencies of our teaching. At least in my own case, that inquiry is driven by moments when I did not have the theoretical or pedagogical tools to help a particular student. In the second semester of my literature and theory master's program, fifteen years ago, two students from China enrolled in my first-year writing course, and though I was beginning to feel comfortable as a teacher, I found myself struggling to meet their needs. They were bright, excitable, and diligent. But they encountered the texts and assignments differently than their monolingual English-speaking classmates, and my teaching was not designed with those differences in mind. I spent a few hours a week extra with these students and the three of us got through the semester on a shared joke, after I introduced them to the mantra of Jurgis Rudkis, the protagonist of Upton Sinclair's *The Jungle* who struggled mightily against the trappings of capitalism: *I will work harder*. I knew that there was something important that I wasn't providing for them in the classroom, so I was determined to make it up with sheer labor.

But the point I never quite shared with these two students was Sinclair's real polemic. Jurgis couldn't depend on solitary individual strength forever. He needed to reimagine the social relations of his work, the ways that it connected to his bosses, family, neighborhood, union, and the heterogeneous community of largely-immigrant workers that he was a part of. That is, Jurgis had to do what I was not equipped to help these students do: to draw on and build connections across the range of contexts they moved through, developing their abilities to understand (and even eventually change) the material conditions of the work they were doing. In my years of teaching since then, I have collected small snippets of insights into the different knowledges and practices that students have access to: their ways of learning and, in particular, of writing in different school contexts, at home, at work, and in different places and languages. The more I learn about the kinds of language my students live in, the more likely I have been to succeed in helping them build on that wide range of practices in ways that reflect the omnipresence of

language difference and its effects in learning and writing in new situations.

Thus, an overarching purpose of this study – though it is also aimed at theory-building – is to continue this pedagogical endeavor. My primary question is simple: what are some of the language practices that Chinese transfer students bring to English-dominant American universities? My goal is to improve my understanding of the ways that these practices interact with new ones encountered as part of student development over the course of college. While my focus is on Chinese international students, my broader purpose is one that is at the heart of good teaching in all writing classrooms. As Mary Jo Reiff and Anis Bawarshi have argued, though "research on outcomes and transfer has begun to shed some light on the challenges students face as they negotiate disciplinary and professional writing contexts after FYC, there has been less attention to incomes, or the 'discursive resources' that students bring with them" (313). In the monolingual English context of American education, this "ignorance of student experiences in varied contexts" is even more pronounced when considering multilingual students (Ruecker, 3). Though Matsuda's widely-cited critique of the "myth of linguistic homogeneity" is more than ten years old, we still know far too little about the wide range of backgrounds and knowledges multilingual students bring to college classrooms ("Myth").

By better understanding the writing experiences multilingual students bring, instructors will be better able to serve the individualized needs and goals of these students. Eli Goldblatt argues that this is the case because any "acquisition and exercise of language is always mediated by and reflective of conditions that can be traced to the geographical, social, and economic locations" of writers and readers (9). Similarly, it is important to understand the ways that students have been encouraged to see particular language practices as related, incommensurate, fluid, static, bounded, context-driven, interchangeable, or otherwise. In the simplest sense, knowing what kinds of experiences learners bring to the classroom – both in terms of what they have done and what they have been told about writing – as well as understanding how students might or might not draw on those experiences in future work could to construct a translingual approach to writing transfer which will, I argue, help to enrich research and improve the teaching of such students. In this study, I attempt to contribute to knowledge of prior language

experiences, drawing on classroom observations, writing samples, and interviews with students to better understand those prior experiences and to investigate the ways they might inform students' future experiences.

Research Questions

At its core, then, my interest is in knowing how international students might draw on and navigate among rich ranges of experiences when writing. Therefore, my central research question is an inquiry into writing transfer, and I situate this inquiry in terms of a translingual approach to writing that posits "difference in language not as a barrier to overcome or as a problem to manage, but as a resource for producing meaning in writing, speaking, reading, and listening" (Horner, Lu, Royster, and Trimbur 303). This difference shapes and is shaped by memories of and interactions with a range of contexts, always iteratively informing new instances of writing. I ask questions similar to those investigated by Kathleen Yancey, Liane Robertson, and Kara Taczak: "How is it that students, drawing on previous writing knowledge, are able to recontextualize it for new situations? When students cannot do so, can we see why not, and given what we see, are there adjustments we should make to the curriculum?" (Yancey et al, *Writing Across Contexts*: 3). However, such questions are especially fraught when focused on students who are negotiating, on one hand, the same differences in genre and register as their classmates, and on another, differences impelled by complex and messy movements across geopolitical language and space (Cozart et al; Depalma and Ringer; Friaberg, You, and Wang). Put simply, answers to questions about multilingual and international student transfer have not been definitive, showing at best mixed results and at worst an ambivalent view of transferability at all (James; Leki; Tardy "Researching"). One explanation might be that such studies have not drawn on the full range of tools that are available across the global field of writing and L2 studies (Donahue "Negotiation"; Poe "Research"). Indeed, Mya Poe argues that while investigating the ways that individuals use language across contexts, it is important to develop research that "is not content with understanding the reproduction of disciplinary knowledge but

how individuals learn to manage, resist, reframe the communicative practices in their fields to support their own goals and purposes" (178). It is within this field of inquiry that I ask a series of related questions:

- How do Chinese students in a transitional writing course describe their incorporation and adaptation of knowledges and languages from other contexts when writing?
- How do these students describe the relationships between the writing practices they use across contexts?
- What kinds of metalanguages do these students use to describe practices and contexts?
- How do students recontextualize the knowledges, practices, and metalanguages they bring to new tasks and situations?
- In what types of situations do these students tend to report *not* drawing from across contexts when writing?
- What can these students teach us about different ways to conceptualize transfer?

These questions allow me to consider how students might transfer knowledges and practices, but they also provide an opportunity to better understand the ways that language difference influences this transfer. As I discuss below, it is important to distinguish when students can draw on their understandings of differences across contexts, how their experiences across languages and contexts attune them to these differences in particular ways, and why some differences might seem incommensurable (though, as I also argue, sometimes this sense of incommensurability of practices in new contexts is, itself, a productive kind of awareness). In this introductory chapter, I further explore these central questions, highlighting the ways that this study's focus on international students provides a distinct picture of translingual transfer.

In subsequent chapters, I then illustrate the ways that answers to these questions begin to take shape in the form of metalanguages study participants draw on, the ways that participants think about transferring language practices in the context of writing in math, and institutionalized reasons that some participants decided to silo language practices in some instances. As I argue throughout, understanding these participants' experiences in terms of a translingual approach to

transfer provides a more nuanced understanding of the choices such writers might make and richer potential for helping them language more fluidly across contexts.

International Students, Deficit Framing, and Calls for Localized Studies

In investigating such questions, it is important to note that the participants I highlight in this study – six transfer students from China, working through their first semester at a Large and Prestigious Research University (LPRU) in the Great Lakes region of the United States – are only a select part of the large and diverse body of students designated "international students." While, in the simplest sense, *international student* is used to describe a student who has come from abroad to attend school in another country, the term has become entwined with a host of other terms like *English as a Second Language (ESL), English Language Learners (ELL), bilingual, multilingual,* and *second-language (L2)*. As Dana Ferris notes, all of these terms come with their own history, and they are by no means undisputed in terms of their referents or interchangeability ("Teaching" 3-6). International students are not always users of more than one language, and users of more than one language do not always read or write in all of those languages. Furthermore, users of more than one language are not always international students. Finally, not all international students who are users of more than one language are transfer students with at least some exposure to academic genres and practices, as the participants in this study are. Therefore, it is necessary to limit the claims of generalizability from studies like this one.[1] Still, I present a localized picture of students at one university, who may have experiences similar to those of other students who have also attended this university or will attend it in the future. This dissertation, therefore, provides an opportunity to think about what a translingual approach to transfer might entail and what such an approach might offer to students like those

[1] Like many qualitative researchers, I am wary of questions of generalizability. As Ilona Leki notes in reference to her own study of four multilingual students, such projects are les about creating a "grand narrative" but instead offering a glimpse of "the details, the side alleys that here and there may serve to illuminate our understanding of the kinds of experiences L2 students may encounter in their undergraduate lives" ("Undergraduates" 12).

discussed in this study as well as to others from a wide range of language and education backgrounds.

With this diverse range of students in mind, it is still useful to note that the body of "international students" – defined by the Open Doors Report on International Educational Exchange as "anyone studying at an institution of higher education in the United States on a temporary visa that allows for academic coursework," including F-1 students and J-1 exchange visas – has grown rapidly (Institute of International Education). In the 2014/2015 school year – just two years before the present study was conducted – international student numbers grew, nation-wide, by 10% to 974,926. That rate of growth has slowed considerably over the past few years, perhaps in part due to nationalist discourse and xenophobic policies under the Trump administration. Nonetheless, the 2017/2018 Open Doors Report put the number of international students studying in America at 1,094,792, just over 5.5% of the total number of higher education students, and enrollment rates for Chinese students, who make up just over one third of all international students, continue to grow. Such growth has been heralded as a hallmark of twenty-first century global education; indeed, the Association of American Colleges and Universities lists "intercultural knowledge" as an essential college outcome, with international students figuring heavily in the development of such knowledges (Barnet et al).

As Megan M. Siczek points out, even though "the presence of international students – in growing numbers – on U.S. campuses is often touted as evidence that schools are globally connected," it is still frequently the case that "L2 students tend to be viewed through deficit perspectives by administrators, faculty, and fellow students" (xvii). This deficit framing is largely, though not exclusively, centered on issues of standardizing monolingual norms of English. Though students might "feel welcomed and broadly respected" for the diversity they bring to campuses, many are "primarily expected to engage with – and some might say assimilate to – the linguistic, content, and epistemological preferences of the U.S. academy" (Siczek, 166). Certainly students studying abroad might expect to learn new languages and epistemologies. Adding new ways of knowing and communicating is central to any learning experience, especially in higher education. However, problems arise when this kind of learning

comes in the form of subtractive models that replace other languages with English (García and Wei) or when it creates structures of appropriacy where one language is deemed more or less acceptable in a particular context (Fairclough).

For writing programs in particular, Jonathan Hall laments that, despite the growing multilingualism of the university, language diversity is still seen primarily as "a problem to be solved, a disease to be cured" ("WAC/WID" 37). Such a view can lead to ineffective one-size-fits-all approaches to writing instruction that emphasize sentence-level error reduction to the exclusion of other broader rhetorical considerations (Matsuda "Second-language"). Hall advocates, instead, a response to the globalization of the university that is explicitly inclusive in a localized way, by learning as much as possible about "a particular local student population" and asking "what can we find out about their linguistic backgrounds, their educational histories, and the interaction between the two?" ("WAC/WID" 45). Such studies could produce much deeper insights into what particular students have been taught about writing, how they encounter new exigencies in new contexts, and the ways they navigate across these similarities and differences. Through these localized investigations, teachers and researchers can potentially develop greater understanding of the ways that all local practices are constructed in dialogue with and as part of global language dynamics.

Steven Fraiberg, Xiaoye You, and Xiqiao Wang produce an admirable model of such a localized study in a global context, highlighting the cultural and rhetorical negotiations in the Michigan State University community during a boom in Chinese students beginning around 2011. They describe this one institution's responses to rapidly growing international populations explicitly in terms of the inability of instructors to effectively serve the needs of international, particularly Chinese, students, noting one survey that found that only 24% of faculty felt they were prepared to teach newly-arrived international students (41). This lack of preparation took shape in ways that further emphasize the localized social dynamics, as Fraiberg, You, and Wang illustrate in profiles of three different courses. Even in the most effective course, though, both students and instructors grappled with difficulties effectively bridging different language practices from across contexts. The authors note that this was, at the core, a problem of unclear

goals for agency: "At the center of each [class] was a struggle based on who changes, how much, and into what" (48). Though many of the struggles Fraiberg, You, and Wang describe result at least in part from issues of sheer lack of institutional capacity, they also serve as a reminder of the extent to which "the university exists in deeply interwoven contexts with different intersecting forces comprising multiple positions, ideologies, and motives of diverse actors" (26). Understanding the kinds of transfer that international students might engage in, then, is not a matter of identifying connections between two static contexts or looking for the influence of one in the other, but of unraveling the connections among a number of practices that are consistently reworked to fit the needs of new situations. This distinction is an important one for a translingual approach to transfer, which asks not only if a student is doing something in one context that they learned in another, but how, why, and in what ways we might be able to understand the choices those students are making, given the fact of their experiences across a range of contexts.

Indeed, because international students are moving – both literally and intellectually – among so many cultural, disciplinary, and linguistic contexts, the multitudinous and interconnected nature of their repertoire of practices is inevitable. As an example of this multiplicity, Fraiberg, You, and Wang present a chapter-long case study of Yisi, a Chinese student who aspired to be a creative writer. The chapter illustrates how that student's "relationship webs were densely knotted into their movement in and across an array of contexts: lecture halls, assignments, instructors, classroom activities, study sessions, genres, languages, class materials (textbooks, assignment sheets, syllabi), presentations, disciplines, and educational technologies" (86). In their analysis of Yisi's negotiation of this array of contexts, the authors note that these negotiations complicate studies of international student writers that "adopt a relatively bounded approach, centered on discourse communities, communities of practice, or activity systems," when a more accurate approach would recognize the ways students "weave and are woven into academic and disciplinary practices as part of a dialogic, contested, and deeply distributed process" (87-8). Yisi developed an "assemblage" of "networks, or knotworks, of technologies, texts, tropes, people, and objects [that] made up a complex sponsorscape" (100). Discussion of this kind of literacy assemblage – distinct from the paired-context comparative

analyses common to discussions of transfer – is important for understanding "the need to situate literacy and learning beyond single moments, modalities, languages, genres, cultures, spaces, disciplines, and technologies" (112). Students often resist static binaries, instead illustrating the ways that a multiplicity of language practices and experiences inform the texts and understandings they construct.

Therefore, it is useful to consider the ways that such students might be doing multiple things at any given moment, related to a range of experiences, languages, and goals across time. It is possible – and even quite likely – that students can simultaneously want to develop an appreciation of language difference *and* a greater awareness of the language practices associated with a given context, like those categorized as varieties of standard academic English (Shapiro, Cox, Shuck, and Simnett). That is, during a single semester, students can sometimes actively work to incorporate practices that mark their writing as different, reworking those practices for the new context in ways that make their writing seem like a form of hybridization or code meshing (Young). Other times, the same students might narrowly target a single set of practices to the exclusion of others in order to produce very normative approximations of a given genre. And in still other times, students attempt to do the latter while subtly doing bits of the former. As I illustrate in the following chapters, the messy and complicated nature of languaging across contexts, mixed with the complex cultural and institutional ideologies students must navigate, often requires students to strive to foreground both language difference and homogeneity in ways that makes it difficult to see a straightforward one-to-one connection between what a student has learned in the past and what they are doing in a new writing context.

Therefore, as I argue throughout this dissertation, the experiences of students who are engaged in multiple movements across a range of contexts problematize any too-easy paired-context views of transfer, which fail to see the potential for a given instance of language that does not conform to a given set of expectations. What, to a teacher or researcher who is not aware of the negotiations such students are engaged in, might seem to be a lack of transfer, a

moment of failed application of a particular practice, or simply an infelicitous choice,[2] could represent a much more rich instance of language when considered as one part of a larger trajectory of learning. In the theoretical framework that follows, I lay out my consideration of this view of transfer, based on the understanding that students' incorporation of prior learning in new contexts is best understood as a process of languaging and translanguaging that offer a less deficit-oriented perspective on student writing. This translingual approach to transfer views difference as a norm and thus assumes that students cannot help but be influenced in some ways by practices from across their lifespans as they compare, consider, import, reconstruct, and recontextualize those practices to respond to new situations.

Theoretical Framework

In this section, I detail the theoretical considerations informing this current study, which stem from across fields of composition and rhetoric, L2 writing, sociolinguistics, and applied linguistics. I draw on this range of research trajectories to illustrate a common theme, namely, that language and writing practices are dynamic, shaping and shaped by the contexts in which they are found, depending on goals. Though taken up differently in each field, this dynamism is understood to be a feature of language. While my primary goal is to better understand the ways that students like those described in this study bring a wide range of language practices to bear in new situations, I also hope that putting the work done in each of these fields into dialogue with each other could help to address critiques that disciplines that study such writing compete with each other (Atkinson et al), are enmeshed in "false binaries" (Matsuda "Lure"), and create more divides than they cross (Tardy "Crossing"). If, as Christine Tardy suggests, bringing these fields together could offer an "untapped potential of a truly trans-disciplinary approach to language and language difference in writing studies," then I frame this study in that spirit ("Crossing" 187).

[2] I take up Mary Schleppegrell's occasional use of this term here because it evades the notion of *error* while still noting that this just might not have been the most effective choice in the most general sense .

I begin by defining my theoretical relationship to *development, languaging,* and *practices*, three widely-used concepts that I deploy in distinct ways, impelled by my findings. Next, I situate my use of these terms in theoretical and pedagogical discussions of *translingualism*, which question the rigid demarcations among languages across contexts. Finally, I answer Rebecca Lorimer Leonard and Rebecca Nowacek's call to bridge translingual and transfer studies, providing a background in transfer research to help develop a more critical approach to thinking about how participants might draw on and recontextualize practices they have developed elsewhere. Like Lorimer Leonard and Nowacek, I argue that a translingual approach to language is particularly useful for understanding the complex and messy ways that students transfer knowledge and practices because, taken together, these two research agendas can account for the ways that practices are bounded by a given context, reshaped for others, and capable of creating new insights when used in novel or innovative ways. By framing a study of Chinese international student transfer practices through translingual theories, I hope to contribute to greater "understanding of how writing moves across both time (longitudinal) and space (cross-contextual)" (Leonard and Nowacek 262).

From Development to Languaging and Practices

This research is, at its heart, an investigation of development, at very least in the simplest sense of the word, since the study is highlighting a moment in which students are engaged in what they considered to be a new and formative experience. However, while I am interested in the ways that participants position themselves as writers with complex histories, learning in one particular moment among many, I am wary of *development* insofar as it can seem to resonate with linearity, which suggests that learners are lacking but go through an experience to be better, thereby positioning them as empty vessels in need of filling. In this sense, *development* can index problematic standardizing notions of aiming for a static form of expertise, which reflects a rather monolingual orientation toward learning. Such an orientation assumes that the goal of learning is to fine tune a broadly autonomous set of skills (as critiqued by literacy researchers like Street and

Gee) or to build fluency in an often-static and siloed set of practices associated with a particular discipline or professional context. Such a static view of development and disciplinary context has been critiqued by theorists of "new disciplinarity" who emphasize the elasticity of the "borderlands" between disciplines (Markovitch and Shinn) and by advocates for transdisciplinarity who argue that WAC/WID researchers and teachers could more effectively understand and build on the writing experiences of students by conceptualizing learning to write as a messy and adaptive process (Hall, "Rewriting"; Hendricks). Even studies that are less wary of "development" as a frame reveal a more non-linear nature of learning to write, highlighting the ways that students move back and forth between "expert" and "novice" positions over the course of their college years (Sommers and Saltz).

Too often, I argue, *development* can be mired in association with monolingual language ideologies that posit learning to write as a matter of developing practices that are both static and unrelated to practices in other contexts. Such monolingual orientations are critiqued by dynamic systems theorists who note that such views fail to recognize "the individual's cognitive processes as inextricably interwoven with their experiences in the physical and social world" (Larsen-Freeman and Cameron, 155) and translanguaging theorists who note that much learning and language use is a matter of "original and complex interrelated discursive practices that cannot be easily assigned to one or another traditional definition of a language, but that make up the speakers' complete language repertoire" (García and Wei, 22). Therefore, such understandings of *development* are ill-matched to a translingual approach to transfer.

However, my wariness of *development* is not only theoretical, but also based in research that has illustrated students' tendencies to pursue more dynamic approaches to learning. Studies of the choices undergraduates make when selecting upper-level writing courses (Gere et al) and longitudinal studies of writing development of undergraduates at the University of Michigan more broadly report that many students reject a monolingually-oriented kind of single path to writing expertise in a particular discipline, instead drawing on a wider range of writing knowledges to develop a sense of how to write adaptively across contexts (Gere, Knutson, and McCarty; McCarty "Complicating"). For these students, this ability to draw from across their

repertoires to be more adaptive writers constituted effective writing development. These findings and those of the current study resonate with other well-documented descriptions of the messiness of student navigation of writing experiences across contexts (Beaufort; Carrol; Gere "Developing"; Leki "Undergraduates"; Sommers and Saltz; Thaiss and Zawacki). In this view, it likely is not possible – or perhaps even desirable – to find a "grand theory of writers' developmental processes," as Anne Beaufort has pointed out (24). Instead, I frame the current study in terms of *languaging*, which Walter Mignolo refers to as "thinking and writing between languages" (226) and Ofelia García and Li Wei describe as "the simultaneous process of continuous becoming of ourselves and our language practices, as we interact and make meaning in the world" (8). In the simplest sense, *languaging* can be understood, according to García, as engagement in "social practices that are actions performed by our meaning-making selves" ("Bilingual" 32).

So, as the participants in this study discussed their growth as individuals, moving through formative moments in their undergraduate years, it makes sense that these students discuss their continuous development in fluid frames like those García and Wei use to describe meaning making in the world. I define *languaging,* then, as the continuous building of a self that happens as language practices and experiences increase, interact, and change. This building of a self through languaging is an active and iterative process, insofar as the self is not something that is static or approaching completion, but is in constant flux, impelled by interactions with new contexts and languaging. *Languaging* can be taken, in this sense, as an activity that is similar to *development*, though stripped of the too-often monologic, linear, and short-term views that can seep into such discussions. The interactions between individuals and a range of contexts are, then, sites in which those individuals are languaging: developing selves and language practices as two inseparable elements.

My distinction between *development* and *languaging* is important because it highlights the contextually-driven nature of learning in and through language interactions. As Alastair Pennycook reminds readers:

> language is a result of local interaction, not a prerequisite for it. That is to say, language emerges from social practice rather than being mobilized in order for social practice to happen. Language does not therefore happen outside the realm of practice; languages are not tools that are used in contexts; languages are not pre-given entities but the results of practice (133).

When students are successfully drawing on a range of practices and experiences when writing in a new context, it is not a matter, then, of bringing old knowledges to bear in new situations. Instead, they are doing things in new interactions by testing out old forms of interaction, reconfiguring and remixing them to address what the new situations seem to require. Practices, then, are a range of activities that can include ways of articulating, responding, listening, incorporating, framing, arguing, emphasizing, empathizing, and supporting. Practices are constituted by the context of an interaction, but they also continually construct that context so that participants recognize intentions and a range of response possibilities.

This sense of *practice* is central to my interest in students' conceptions of what kind of language happens in a particular context and how that language creates an interactive meaning with their audiences. It is important to note that the reified forms of "languages" and "genres" that result from these practices – to use Pennycook's term, the sedimented form and meaning that tends to be recognized in terms like *English* and *Chinese* and through genre instantiations like *research paper* and *love song* – are not things that individuals acquire, but instead reflect a range of practices that they engage while acting in particular contexts. Therefore, for instance, as theorists of mathematical proofs (Pedemonte; Recio and Godino) would agree, proofs are not things, but an enactment of a relationship between an individual, the problems they are engaging with, and the audiences of the proof. Writing a proof entails a navigation of language and mathematical practices in context-specific ways. Similarly, writing a response for a TOEFL exam asks students to engage in certain kinds of languaging that respond to the formulaic requirements of that situation. These are context-specific practices that students choose, based on the requirements that students face.

However, it is important to reiterate that *practice*, as Canagarajah (2013) notes, "is becoming so clichéd in [language and writing studies broadly] that we have to be mindful of the distinction being proposed" in any given work (27). Like Canagarajah, I do not ascribe to a view of practices that are ontologically related to a set of meanings that exist independently in any given context. Instead, the practices engaged in by individuals are themselves generative of the respective meanings associated with the given context. Nor do I view any one given context as "a passive location for the application of cognition, structure, or abstract principles" (27). Horner makes a similar point, insisting that contexts "are not so much stable locations to which students arrive but rather the ongoing product of practices, including student practices" ("Rewriting" 89). Instead, a given collection of practices contributes to the formation of that context itself. In studies discussing multilingual students and writing transfer, it is important, then, to consider the ways that participants are learning to engage in the kinds of reshaping moves that allow them to both draw on and recontextualize the practices and experiences they bring with them. In the following section, I outline the ways that theories of translingual approaches to language provide me with effective resources for such investigations.

Translingual Approaches

To investigate the ways that students incorporate, adapt, and think about the range of writing experiences and practices they have encountered, this study brings together critical theories of languaging – including those that discuss translanguaging, translingual practices, and multilingualism – with research in composition and L2 writing that investigates the many facets of transfer. In doing so, it responds to calls like those made by Rebecca Lorimer Leonard and Rebecca Nowacek to bridge transfer and translingual research. Lorimer Leonard and Nowacek argue that this connection would be particularly generative because, "in both areas of study, writing practices are viewed not as static possessions that can be carried and applied, but as emergent and in-process activities sensitive to an immediate context" (260). Indeed, as I will argue in the final chapter, there is much to be learned from study participants about how to

conceptualize writing in such dynamic ways, which might be useful for improving classroom practices for all students. In this sense, my work resonates with Jay Jordan's note that teachers and researchers need to reinvestigate "what role culturally and linguistically diverse students can play [in writing contexts] – other, that is, than the role of the always-needy" student (21).

In the section that follows, I outline aspects of the translingual approach, which underpin my research and analysis. I highlight ways that the translingual approach contrasts with other approaches to language, and I develop an approach to translingual practice that speaks to the potential overlap with transfer studies suggested by Lorimer Leonard and Nowacek.

Defining Translingual Practices and Approaches

The 2011 *College English* opinion piece by Bruce Horner, Min-Zhan Lu, Jacqueline Jones Royster, and John Trimbur, which "insists on viewing language differences and fluidities as resources to be preserved, developed, and utilized," is often cited as the beginning of conversations defining translingual theories (304), although discussions of the trends emphasized by translingual theories predate this article. As Zhaozhe Wang has pointed out, drawing on Canagarajah's reflection on "Negotiating Translingual Literacy," from the 2011 publication date forward, translingual theories have spread into a range of terminological emphases, including translingual practices, literacies, approaches, and dispositions. For the purposes of this current study, I use some of these terms, though not interchangeably, as they each highlight slightly different activities or orientations. Roughly, *translingual practices* correspond to the ways that translinguals engage in communicative interactions, including through code meshing (Young) and critical language awareness that decenters standardizing language norms (Lu; Canagarajah "Translingual"). *Translingual approach*, in my own use here, refers to pedagogical and research orientations aimed at better understanding and developing such practices. Similarly, I use *translingual theories* to discuss the disciplinary foundation of such research and practices, though the pluralization generally highlights the still-diverse nature of ideas about translingualism.

But, beyond these differences in usage, the emphases of translingual practices, approaches, and theories are all grounded in the sense that they enable "a consideration of communicative competence as not restricted to predefined meanings of individual languages, but the ability to merge different language resources in situated interactions for new meaning construction" (Canagarajah "Literacy" 1-2). An emphasis on "new meaning construction" was especially important for my understanding of participants' discussions of language practices they had experience with, since references to concepts like *Chinese writing*, *academic English, math proof writing,* and even just *good writing* provided less insight into a static sense of language practices associated with any of those terms than they provided a sense of how those practices seemed relevant to discussions and exigencies of the particular moment.

Thus, I adopt a translingual approach as defined, in Bruce Horner's terms, as one that "takes difference in language not as an option writers may choose to pursue or not, nor as a feature marking some writing but not others, but as an inevitable feature of all writing, whatever forms that writing might take" ("Teaching" 88). Horner distinguishes translingual approaches to teaching writing from two other approaches: eradicationist, which – like subtractive bilingualism – seek to replace learners' practices with standardized forms of English, and accommodationist, which tolerates student's rights to other languages insofar as differences are not construed as error and do not otherwise breach limits of appropriacy. Such divisions between languages are ultimately problematic because they reify differences that do not necessarily exist in everyday use. Instead, Rebecca Lorimer Leonard argues that researchers should engage in work "exploring writing activities that reveal the negotiated, flexible quality of language" ("Multilingual" 228). Through the lens of a translingual approach, language difference is not a matter of adherence to strict boundaries, predefined and fixed by static norms, but instead an innate function of language, with the very definite differences in language use across context resulting from an ongoing series of social interactions, borrowings, and innovations.

However, it is important that such approaches do not fetishize simple notions of translingual products, which uncritically engage in code-meshing without a clear sense of what meaning such practices might actually convey (Lee "Beyond"; Lee and Jenks; Matsuda "Wild").

In a particularly poignant example of such cautions, Jerry Won Lee describes a student whose writing received high praise because of its translingual appearance, mixing English sentences and Chinese characters to describe challenges of living as an American while maintaining a Chinese identity ("Beyond"). However, when the Chinese writing was eventually found to be incoherent, perhaps copied and pasted from an online translator, it illustrated that such an emphasis on translingual products is clearly problematic. Therefore, researchers have suggested that such product-centered approaches should be avoided in favor of translingual orientations (Canagarajah "Negotiating") or dispositions (Lee and Jenks). Jerry Won Lee and Christopher Jenks emphasize that this difference is an ideologically important one, arguing that an alignment with "translingual dispositions, then, does not simply mean developing an appreciation for texts that incorporate multiple languages or varieties; rather, it means going beyond the conceptual metric of 'language' in the traditional sense as a basis of determining a particular enunciation's assumed rhetorical appropriateness or social value" (320). In my discussion in chapter three of the range of metalanguages that participants were exposed to across contexts, it is especially important to consider the ways that each metalanguage indexes a particular set of language ideologies, rooted in context-specific understandings of what constitutes "good writing."

However, it is not the case that the translingual approach I bring to in this research prohibits discussion of reified conceptions of particular languages such as Chinese or English, nor is it the case that a translingual approach is ill-equipped to recognize the ways that language practices are subject to sedimentation (Pennycook) or the ways that "building up over time [. . .] produces the appearance of language stability" (Lu and Horner 30). Indeed, many important insights that participants in this study offer are based on their discussions of "writing in Chinese" or "exam writing" or "math proof writing" as static concepts. But such discussions illustrate important moments of languaging, as participants draw on and negotiate among these reified understandings of particular language practices to better understand their relationship to new writing contexts. As Canagarajah notes: "Language practices lead to sedimentation of certain forms/patterns via repeated situated use over time, and their gradual shaping into grammars, norms, and other products," but it is important to remember that these "norms and products are

constituted by practices and are always reconstructed to be meaningful" in the moments in which they appear in use ("Translingual" 16-17).

Therefore, this study focuses on the ways that participants see certain language practices as linked to given contexts and are in the process of being reconstructed as they happen in new moments and new spaces. It also explores the ways that participants sometimes do and do not see connections among the various contexts they have experienced. Even in those cases, though, the contrasts participants draw often inform their views of how language choices make meaning in and across contexts. That is, sometimes recognizing that a given way of writing is usually only acceptable in very narrow situations is still an insight that might reflect a translingual disposition insofar as it highlights one possible response to the multiplicity of languaging choices. Noting that a given context favors a narrow set of prescriptive norms is, after all, noting that those norms are context-bound and ideologically-determined. With this possibility in mind, researchers and teachers aligned with translingual perspectives have emphasized the multitude of ways that any given practices might reflect the mobile and heterogeneous nature of individuals' languaging experiences. Indeed, students sometimes learn to employ certain practices under specific conditions that force more fluid language use into reified forms, a tendency which often "requires that speakers act 'monolingually' at times" (García and Wei, 2014: 15). Therefore, the practices students encounter as sedimented forms that seem so immutable might encourage those students to act as if the language practices encountered across a range of contexts are incommensurable, even as students, themselves, move fluidly back and forth in and between languages. Such considerations might complicate the tendency Vivette Milson-Whyte identifies in her discussion of Jamaican Creole-speaking students who "decline invitations to code-mesh or disregard translingualism because these students live/operate in situations where languages are still treated as discrete systems" (121). Students can silo writing practices in ways that are both visible on the page and are explicitly discussed when suggesting translingual approaches, but – as Canagarajah also points out – this does not prove that such practices are inherently incommensurable, but just that students are reflecting the reality that "while language resources are mobile, they acquire labels and identities through situated uses in particular contexts and get

reified through language ideologies" (15). If these students reject code-meshing, preferring to approximate a monolingual standard that silos language practices rigidly, it does not necessarily mean that they are not developing awareness of the ways that language can shift fluidly across contexts, just that they have become aware of these ideological demands, which sometimes require individuals to not take up more fluid practices.

Thus, I distinguish between a set of dispositions that are not mutually exclusive but instead are closely interrelated, based on a range of individual and contextual factors. On one hand, students can sometimes reflect an "attunement to difference" that fosters an awareness of the nuanced connection between practices and contexts, developed over a lifetime of movement among many spaces and languages and often productive of rich linguistic insights and dexterity (Leonard "Multilingual"). At other times, recognition of differences across contexts can lead to a tendency toward "siloing" language within distinct boundaries in ways that ignores potential for productive interactions between practices from those distinct contexts. In such moments, students often refer to the ways that particular disciplines might demand different approaches. While this siloing is problematic insofar as it shuts down the potential for transfer, it is possible that discussions of rigid distinction between contexts might draw attention to the ideological nature of those distinctions, thus helping to construct more fluid practices. Transdisciplinary scholars have worked to highlight the material reality of "the narrow areas of subjects and disciplines which have been constituted historically, but which have lost their historical memory and their problem-solving capacities due to an excessive specialization" (Mittelstrass 332). Similarly, discussions of siloing of practices more broadly can lead to awareness of the possibility for more fluid languaging, as I illustrate in findings from this dissertation. I argue that it is important to note instances when students discuss practices in siloed ways that reinforce notions of rigid boundaries between contexts, but to also consider the ways in which such siloing is itself a moment in which distinct practices are being put into dialogue with each other, even as they are being framed as distinct. This is not to say that there are not times when practices turn out to seem more or less incommensurable, but just that it is important to consider the difference between instances where students are displaying an attunement to difference, a tendency toward

siloing practices while still drawing insights on the effects of those boundaries, and a flat-out denial of any productive way to put practices associated with one context into dialogue with practices associated with another.

But emphasizing this spectrum of fluidity of language practices used to negotiate new situations does not necessitate fetishizing the image of linguistic difference, as Lee illustrates in his discussion of the Chinese/English hybrid text that turned out to be incoherent ("Beyond"). Indeed, such a fetishization of difference runs the risk of actually negating the importance of context in moments of writing. Juan Guerra reflects that he made a critical mistake when asking his students to translanguage in a classroom context, realizing that he "inadvertently assumed that students can ignore the circumstances they face in the new rhetorical situation (an assigned essay in a classroom) and can easily transfer their language practices from one site to another" (231). An openness to language difference and a pedagogy that helps students to language more broadly is, therefore, one that might help such students produce texts that seem monolingual, though without the static monolingual methods of subtractive bilingualism or an ignorance of the multilingual realities of many classrooms.

This understanding of translingual negotiation serves as the frame through which I discuss participants' experiences with writing across contexts. I try to avoid framing their writing choices *only* in terms of successful approximation of a target language, though, at times, my discussions with participants center on moments when they were trying to target certain kinds of language use and felt as if they had not quite hit the mark. But I also try to emphasize the ways they describe those choices in dialogue with other possibilities based on other practices and other contexts. A choice not to draw on rhetorical affordances from other contexts is, of course, a choice that is based on awareness that context matters, that meaning making happens in a range of different ways, and that the writer's sense of this context and their own goals are driven by this contrastive awareness. As Rebecca Lorimer Leonard points out in her discussion of the literate resources of multilingual women, mobility – both the literal and can linguistic movement that occurs on a day-to-day and lifespan scale – encourage "fluidity," in which individuals freely

incorporate practices from across their linguistic repertoires. But mobility can also lead to frustration, causing individuals to feel "stalled" and "fixed" in their languaging ("Writing").

However, as she stresses, even "stalled" language movement that inhibits the incorporation of practices from across contexts is a sign of mobility and a site of potential for future languaging. It is, after all, the need to move among so many different contexts engaged in so many different language ideologies that causes this feeling of "stalled" or "fixed" languaging. Therefore, in the following discussions of transfer research, both from composition and second language writing fields, I am especially interested in surfacing the strains of research that highlight the fluidity of language, the extent to which all languaging is a matter of adapting and reworking, and the ways the translingual negotiations can lead to a wide variety of text types, with greater or lesser levels of visible influence across contexts. Transfer, it turns out, is often as invisible as language difference, until someone asks students to reflect on their respective processes, as studies like this one do.

However, it should not be considered necessarily problematic when researchers and teachers cannot easily see transfer happening directly on the page. As García and Wei point out, when understanding language practices across contexts as fluid and interrelated activities, it is possible "to shed the concept of *transfer* and to adopt a conceptualization of *integration* of language practices *in the person of the learner*" (80, emphasis in the original). Observable connections between practices across contexts is one way to find transfer happening, but student reflections on the range of practices they might or might not adapt in a given situation are equal proof of such integration of possibilities. And, as I argue in this dissertation, a translingual approach to transfer that assumes language resources to be naturally interrelated further suggests that researchers should not ask *if* transfer is happening, but *in what way* and *in response to what conditions and motivations?*

Theories of Transfer

This investigation is, thus, a modification in a long line of theories of transfer, which

have generated a range of approaches to thinking about connecting knowledges across contexts, from the unidirectional wholesale carrying-over of practices from one context to another, to the adaptive reuse or remixing of prior knowledges, to messier and more agentive processes of rupture between old and new ways of knowing and doing (see Moore for an excellent discussion of this history). However, most recent work, especially in the somewhat broader field of learning transfer in education studies, has focused on more transformative definitions that emphasize two important distinctions outlined by Perkins and Salome ("Cognitive"; "Teaching"; "Science"). The first distinction is between near and far transfer, a question of how similar new tasks are to previous ones. The second is between low-road and high-road transfer, determined by the level of conscious abstraction necessary to see tasks as similar. Such a distinction draws important attention to the question of whether or not individuals might learn something in one context and automatically do it in a new situation, consciously reapply those practices, or critically adapt to fit new exigencies. For both the translingual approach and the approaches to transfer more common in recent conversations in studies of writing, there has been a good deal more emphasis on the latter higher-road approaches to transfer.

One reason for the emphasis on non-automated transfer is that it reflects the ways that a given set of practices necessarily shifts to adapt to other practices and contexts. Because it is well-understood that learning is best done in authentic contexts, it is less useful to abstract a set of skills or practices from a context, then see if they are reused in another situation that is equally stripped of any authentic context. Instead, Bransford and Schwartz describe a view of learning transfer that emphasizes not a "sequestered problem solving" that teaches something and then tests for it in isolation, but instead is based on the tendency of learners to "know with" when approaching a task. They argue that such approaches to learning better reflect the ways that through "our cumulative set of knowledge and experiences, we perceive, interpret and judge situations based on our experiences in the past" (10). The *cumulative* aspect of this definition is important. They offer the example of a new classroom teacher who learns many things about content, classroom management, assessment, and differentiating instruction, but could hardly be expected to "transfer" all of these knowledges seamlessly into practice without continually

drawing on resources from their pre-service training, from more experienced colleagues, and from any number of other resources. What is transferred – if indeed this multifaceted and cumulative example qualifies as transfer at all – is a range of experiences and understandings that must be adapted for the new experience of the classroom. Taken in this way, it is very hard to imagine a simplistic and measurable kind of transfer in such complex situations.

Because of the difficulty with identifying transfer in actual learning situations, many writing transfer researchers have drawn on theoretical approaches discussed by King Beach (1999), who dismisses the term *transfer* entirely, suggesting instead that teachers and researchers think about *transitions*, highlighting identity shifts that come with development of consequential new knowledges. Like Bransford and Schwartz, Beach insists that this kind of shift is complex and multifaceted, including interactions and changes in the individual, the object of inquiry, and the context in which learning is taking place. Beach posits a taxonomy of developments, but for the purposes of the current study, it is particularly useful to consider his notion of "horizontal development," which "consists of the transformation or creation of a new relation between individuals and social activities, not continuities or discontinuities experienced by the participants at some points in the transition" (128). The extent to which participants in this study assigned new and adapted uses and values to practices learned in other contexts reflects Beach's sense that, for learners engaging in consequential transitions across contexts, each experience "can involve transformation, the construction of new knowledge, identities, ways of knowing, and new positionings of oneself in the world" (113). Of course, it is important to add the crucial category of *language* to this list of transformations, both as a means of making sense of transformation and as a practice that is itself transformed through the process of languaging into new positionings of the self invoked by Beach.

In the sections that follow, I outline the approaches to transfer that inform work in studies of writing, first in the field of composition and then in L2 writing. My goals here are not to show discontinuity between the theories of writing in these two fields, though the disciplinary division of labor between the two has been well-articulated (Matsuda "Composition"; Tardy "Crossing"). Instead, I am interested in illustrating a common trajectory towards critical and context-

conscious views of writing that recognize the extent to which students can successfully "recontextualize" practices (Nowacek) when they engage in "adaptive transfer," which provides not a one-to-one learning approach to L2 writers, but instead sees new situations in terms of a context-specific "process of applying or reshaping learned writing knowledge" (Depalma and Ringer 135). Central to both of these disciplinary conversations about transfer is the understanding that writing development – in the broader sense of languaging I have outlined above – is a messy process that involves consideration of context, goals, identities, and other practices. That is, both recognize writing in a way that is particularly translingual in its orientation, with an emphasis on the ways that writing is always a matter of reconstruction, negotiation, and awareness of choices and difference.

Transfer in Composition Studies

Composition research has, in the last fifteen years or so, produced studies of transfer that span questions of genre (Nowacek; Reiff and Bawarshi), individual dispositions (Driscoll and Wells; Wardle "Mutt"; Wardle and Clement "Double"), threshold concepts (Adler-Kassner and Majewski), instructor views on transfer (Baird and Dilger; Hendricks), and large-scale multi-institutional research (Anson and Moore; Moore and Bass). This list is hardly exhaustive. Indeed, as Jessie Moore notes in her outline of recent transfer research in composition, it seems as if the wide range of theories on transfer is illustrative of the range of transfers that are taking place ("Mapping"). Like other forms of languaging, transfer is a messy process, with some students trying – often unsuccessfully – to import practices from one context into another (Wardle "Understanding"), and other – often more successful – students recognizing the necessity of learning from moments of difference, revising or sometimes completely overhauling prior ways of knowing and doing (Robertson, Taczak, & Yancey "Notes"; Roozen "Tracing"). Other transfer-related research has specifically focused on the fact that, often, writing development can be a long and meandering process, given the time needed to develop experiences in a range of contexts and then make sense of the ways that those contexts require similar, radically different,

or repurposed approaches to writing (Beaufort; Rounsaville "Genre"; McCarty "Complicating"). More simplistic views of transfer, based on a value-added drive to see verifiable evidence of learning transported from one context to another over a relatively short span of time, run the risk of misreading the connections or lack thereof between writing done across a range of times and contexts. As Rounsaville notes in her study of one transnational writer's lifespan writing development, such individuals often spend their lives developing genre repertoires that can be rendered invisible beneath "predictable enculturation models" (318). Rounsaville advocates for a process of recognizing fuller genre repertoires, investigating the relationship between an individual's "literacies 'from below' (uses of writing considered unofficial or unsanctioned by dominant groups or institutions) in parity with literacies 'from above' (those forms of writing promoted by the school, the workplace, the government, or other entrenched literacy sponsors)" (335). However, to understand such broad repertoire developments involves a fairly long timescale.

Even shorter investigations of writing development, limited to the span of student's undergraduate years, produce fairly messy narratives. As I found in my own longitudinal study of two undergraduates developing broad repertoires of writing practices across a range of contexts, it is sometimes the case that students see direct connections between the writing practices in two contexts, but those connections would be difficult to spot without a significant amount of reflection from the students (McCarty "Complicating"). One student, Kris, regularly produced prose that looked like very close approximations of the disciplinary biology genres she was learning, with no clear signs of transfer from other contexts. However, in interviews, Kris attributes a great deal of her understanding of audience from insights developed in philosophy and physics courses where she learned new ways to think about how different disciplines address audiences; she reports that these writing experiences directly influenced her writing in biology, even though it retains very few visible traces of those other practices. In another study of Spanish and English speakers transitioning from high school to college, I found similar results, with participants describing a range of highly-productive "translational learning" practices that were not immediately visible in the writing they submitted for class assignments (McCarty

"Translational"). Transfer, like the wide range of negotiations that underpin student languaging, is often not wholly clear until students identify it as such. Therefore, discussions of transfer benefit from research methods that will allow researchers to examine a range of texts, sit with students and discuss writing both in general and more broadly, and allow those students to point out (and, in some cases, come to recognize for the first time) moments in which transfer is happening.

However, even in such cases, sometimes it is difficult to determine what leads some learners to engage in moments of explicit transfer and others to choose not to recognize opportunities to draw on their full range of languaging experiences. Like Wardle and Clement, Dana Driscoll and Jennifer Wells argue that, given this ambiguity, it might also be important to consider student *dispositions* when discussing the effectiveness of different kinds of transfer – or whether anything like transfer can be said to happen at all. Driscoll and Wells define dispositions as "individual, internal qualities that may impact transfer" but are not themselves actual "knowledge, skills, or abilities – they are qualities that determine how learners adapt their knowledge." Such allusions to abstract individual qualities has been echoed in discussions of translingual dispositions (Horner, Lu, Royster, and Trimbur; Lee and Jenks) in which individuals can develop a tendency to see and act in ways that reflect the fluidity of language practices, and in terms like "rhetorical attunement" that suggest that multi/translingual individuals have a finer sensitivity to language difference, due to their everyday processes of negotiating such differences (Leonard). The difficulty with such discussions is that taxonomies and even the names given to those dispositions are externally-generated. Such etic categories are useful insofar as they allow researchers and teachers to identify patterns and construct responses to them, but if these etic frames do not fit those of the participants, then misunderstandings about what is driving those dispositions are likely (McCarty "Translational"). Furthermore, the division of students into dispositional categories runs the risk of creating static views of individuals, which do not correspond to the fluid and dynamic identity interactions presumed by translingual orientations. Indeed, one possibility raised by my conversations with Faker, outlined in the final chapter of this study, is that students might shift in the degree to which they adopt a translingual

disposition, given the specifics of a particular moment. Therefore, my translingual approach to transfer depends less on discussions of dispositions that encourage or discourage translingual practices.

Instead, it is useful to emphasize trends that lead not to failed transfer or un-translingual orientations but simply to negative experiences with writing development. One common theme in transfer research that is particularly important in this sense is that strictly separating contexts can lead to negative experiences with writing in new situations. Critiquing the way that some transfer research limits transdisciplinary potential by emphasizing the role of FYW over other WAC contexts, C.C. Hendricks argues that attending to "writing as a mode of learning in WAC/WID and the convertability in transfer studies, together, can position academic writing as a rhetorically dexterous process rather than a product-based practice" (56). While Hendricks's critique is mainly leveled at faculty who might inadvertently fall into "silos of specialization," longitudinal research in student experiences with overly-constrained views of writing in a given context has shown that failing to see relationships among writing across a range of experiences leads to luke-warm writing development.

In the most drastic cases, seeing writing with a fixed mindset that does not allow for fluid interaction across contexts can lead students to "take refuge" in a limited range of writing settings, where they already feel comfortable (Knutson "Grace"). Even when students continue to seek out new writing situations, factors related to disciplinarity sometimes confound potential for transfer, with some students suggesting that writing knowledge either cannot be drawn on across contexts or, at the very least, cannot be carried from English classes to other disciplinary contexts (Bergmann and Zepernick). Unsuccessful moments where students try too rigidly to adhere to the strict forms they have adopted in previous contexts lead to a "boundary guarder" tendency that shuts down the possibility for reshaping previous knowledge (Reiff and Bawarshi). Students who seem not to be transferring are sometimes acting because, as Nowacek notes, the seemingly static genres that are sometimes taught as belonging to particular "discursive spaces can thus confound instructors' efforts to teach for transfer" (29). Therefore, it is important to consider how the relationships of genres to contexts and exigency (Devitt "Writing") might be

useful for discussing the ways that transfer is often (if not always) a matter of reshaping in light of the new situation.

This need to think about the ways that transfer acts as a process of reworking and reshaping practices is, according to Nowacek, not merely one aspect of transfer but central to the phenomenon itself. She argues that "scholarship takes too limited a view of transfer" and should understand it in terms of "recontextualization" (18). Such a view emphasizes that it is important to recognize "multiple avenues of connection among contexts, including knowledge, ways of knowing, identities, and goals" (20). The ways that learners think about reworking their previous practices in new contexts is, in this sense, always a matter of choices related to how a particular task might resonate differently with each writer, as they suggest slight overlap with other experiences. Taken in this way, transfer as recontextualization encourages teachers and researchers to understand how such

> shifting units of analysis reflect a basic reality of students' experience of transferring writing-related knowledge: students shift back and forth between formal conventions and broader epistemological constructions, between local knowledge and general strategies, between the conventional and the rhetorical. (Nowacek 104)

This approach to transfer is most useful for my construction of a translingual approach to transfer in this dissertation. "Recontextualization" allows for an emphasis on multiple nodes of influence, both formal and epistemological, highlighting the ways that new writing tasks are not a matter of transposing old genres or even old approaches more broadly. Instead, new writing situations invite students to consider how to reshape all the ways they have learned, written, known, negotiated, and positioned themselves, then make choices that best fit their goals for the current situation.

However, one element that is lacking in Nowacek's work – and one that is under-emphasized in transfer work in composition more broadly – is the importance of language itself. What influence do different languages and language ideologies have on transfer? In the following section, I outline some of the ways that questions of transfer have been addressed by composition's fellow traveler, L2/second-language writing. Besides addressing questions of

language and multilingual learners more explicitly, my goal is to avoid what has been seen as a tendency in composition to create a division of labor (Matsuda "Composition") between Composition and Second-Language Writing practitioners, which then sometimes fails to acknowledge the long tradition of work by teachers and researchers in second-language writing (Tardy "Crossing").

Transfer in Second Language Writing Research

It is important to step outside current conversations about transfer in composition circles to consider other parallel discussions of international student transfer. Like Tardy's argument that, as a field embracing translingual approaches, composition has ignored important strains of research in second language writing and applied linguistics ("Crossing"), there are rich under-examined strains of thinking about transfer vis a vis the ways that international students language across practices and contexts. Indeed, as Leki and Carson noted quite some time ago, transfer is a central consideration in contexts like ESL and English for Academic Purposes (EAP) courses because the explicit point of such writing instruction is to provide students with knowledge and skills they can use in other concurrent or future contexts ("Completely"). Despite this emphasis, as a whole, these fields are somewhat more skeptical of transfer claims (Hanson; James "Far"; Leki "Living"; Leki "Undergraduates"). However, transfer discussions are much more optimistic in strains of research in L2 writing contexts that – like translingual approaches – emphasize languaging as a process of fluidity and adaptation (Depalma and Ringer "Toward"; Hyland "Disciplinary"; Matsuda "Contrastive"). In presenting these views of research, then, my goal is to show the productive overlap between fields of study that consider language and writing in these more dynamic ways. I recognize the problem with over-emphasizing the distinctions between such clearly related disciplines, since a handful of researchers readily traverse these divisions of labor (Matsuda "Composition"). However, I find it important to highlight the potential for dialogue, particularly in light of important critiques of the under-development of

dialogue between composition and L2 writing research in conversations about translingual approaches (Atkinson et al; Tardy "Crossing").

Genre and Transfer in L2 Writing

Like conversations about the uncertainty of transfer in composition circles, L2 writing and EAP researchers have developed their own skepticism about the transferability of complex writing knowledges and practices across contexts. Leki illustrates the ways that an ESL nursing student struggled to write the highly-specific disciplinary genres she encountered in upper-level courses, arguing that first-year writing did not provide either the specificity or generality that might have prepared them to write such texts ("Living"). Similarly, her longitudinal study of four L2 writers moving through college found that these students transferred very little in terms of writing knowledges, with the exception of "the subset that pertained to sentence-level features, such as rule governed grammar and mechanics, and mundane text requirements, like the use of a particular documentation style'' ("Undergraduates" 239). For critiques like these, the goal of transfer research is firmly rooted in immediate replication of a set of practices in a new context. This emphasis on near transfer is a feature of many discussions in L2 and EAP research. Indeed, some who have found evidence of transferability of writing knowledge from EAP courses often still note that these findings rest on student perception of task similarity (Hanson; James 2009). As these critiques make apparent, many studies in L2 writing transfer are experimental in nature, emphasizing teaching of discrete skills and testing them in similar situations. Because of this methodology, they might provide limited understanding of far transfer or the broader kinds of recontextualization that Nowacek describes.

These experimental strains of transfer research face an especially difficult challenge when considering the prevalence of "discipline-general" pedagogy in EAP classes. As Mark Andrew James points out, such "instruction targets learning outcomes believed to be applicable across disciplines (e.g., using a writing process [e.g., planning-drafting-revising], and using resources [e.g., summarizing, paraphrasing, synthesizing])" ("Investigation" 184). However,

such generalizations can lead to a homogenization that ignores the important and contextually-bound differences in writing practices across disciplines. Ken Hyland critiques such teaching for transfer of basic skills that generalize disciplinary writing into "laundry lists of common features" that ostensibly transcend particular contexts ("Specificity" 392). In his later discussion of the ways that disciplinary identities develop in tandem with an awareness of language practices in those disciplinary contexts, Hyland draws on John Swales' notion of genre prototype ("Genre") to note the ways that writers construct connections between new examples of a genre and those they have experienced in the past. Hyland argues that – while patterns are important for developing fluency – the notion of more general prototypes of genres illustrates that writing development is not a matter of building experiences with genres as static containers but should instead be taught as a range of choices:

> Our ability to recognize the resemblance of any text to a genre prototype is thus a consequence of exposure to that genre and our experience of using it in specific contexts. Such pedagogies can provide learners with a means of conceptualizing their varied experiences with texts and, by highlighting variability, can undermine a view which misrepresents writing as a universal, naturalised and non-contestable way of participating in academic communities. (206-7)

Underlying Hyland's critique of such static views of writing is a perspective that understands writing in ways that resonate with translingual approaches, emphasizing ongoing and fluid moments of language reconstruction that engage questions of agency and intention. This understanding of each instantiation of a genre prototype as a matter of variation based on the needs of both the given context and the immediate situation and audience lays the groundwork for an approach to writing that sees recontextualization as central to languaging. Like Nowacek, Hyland sees the variability of genres as a way to teach students to see possibilities for participating in disciplinary communities, not in terms of acquiring and learning to mimic static forms, but in terms of drawing on a range of potential choices of language practices in a given instance.

It is worth noting that Hyland's own predilections – common to those in EAP more

broadly – are toward teaching awareness of conventions so, eventually, students can see how to adapt them, though the emphasis is on learning conventions rather than considering how to integrate or adapt other practices. Christine Tardy explains that, though her research highlights genre innovation in student writing, in her teaching "explorations of convention are given the majority of attention" since her students are

> "multilingual writers who are often contending with unfamiliar genres and unfamiliar social settings in an additional language. They want and can benefit from exposure to and exploration of the socially preferred patterns (or conventions) that mark the genres of their academic lives. Innovation, however, provides an important occasional counter-balance, a way to highlight the flexibility of genre and the ways in which individuals use genres for their own purposes" ("Beyond" 145).

Though Tardy's goals are genre awareness, not necessarily transfer per se, the exigency of transfer can be seen beneath her discussion, as students learn to write in certain ways with the goal of eventually developing a more fluid relationship with writing in new situations. In a similar manner, Kubota reflects: "the more the publishing community recognizes the credibility of my work, the more I feel empowered to explore alternative ways of expressing ideas. Thus it is advisable for a writer to follow closely the conventions at least in the initial stages of writing for publication in order to gain the cultural capital" necessary to innovate ("Striving" 65). Again, genre awareness precedes the ability to transfer, largely because the writer is seen as lacking in resources to draw on. Like Tardy, Kubota frames this lack in terms of a need to develop socially-appropriate knowledges, which then can be drawn on at later times.

When considering questions of transfer via a translingual approach, it is useful to consider the ways that this type of L2 writing research posits genre awareness as a path to innovation in the future, though in doing so, as Anis Bawarshi argues, it considers norm and agency in a hierarchy in which "difference, transgression, and creativity are associated with more agency, cognitive ability, and language fluency, while norm and convention are associated with less agency." He argues that, instead, "a translingual approach posits a horizontal view in which agency is in play in all language use across the spectrum" ("Beyond" 245). That is, a writer can

be innovatively languaging in the creation of a text that resists the push to fetishize difference, much in the same way that Lee critiques the questionable application of Chinese characters in a piece of ostensibly translingual writing.

Language-based Transfer Considerations in L2 Research

Because of its focus on students who are writing in different languages, often associated with different geographical spaces and purposes, L2 writing research is especially important to consider when thinking about the effects of the practices indexed by words like *English* and *Chinese*. A good deal of L2 transfer research has been dominated by discussion of first language (L1) "interference," where language patterns in one language show up in another, causing unintentional "non-native" effects (Kubota "Investigation"). Such research often stems from the early work of Robert Kaplan, studying the contrastive rhetorics common across different languages and cultures (Kaplan "Cultural", "Contrastive"). The initial goal of this work was to identify differences in organizational structures across languages and cultures, but the connections between this identification and actual classroom pedagogy were less clear (Kaplan and Grabe; Matsuda "Contrastive"). While the ostensible original impetus behind contrastive rhetoric research was linguistic analysis, aimed at identifying the ways that students and teachers might learn from the productive differences across languages and cultures, problematic essentialisms that fix culture in static forms pervaded such discussions (Pennycook "English" 187-9; Spack; Zamel). As Matsuda points out, such L2 writing pedagogy often understood the learner not as an individual constructing meaning through a negotiation of their different languages and knowledges, but "as a 'writing machine', as it were, that creates texts by reproducing the pattern provided by his or her linguistic, cultural, or educational background" ("Contrastive" 49). From a transfer perspective – especially one informed by views that assume writing to be a matter of local practices – such static conceptions of culture seem especially problematic insofar as they emphasize the problems with drawing on previous knowledges and

experiences, rather than investigating how students might successfully recontextualize and benefit from such practices.

However, as Ulla Connor notes in her review of new directions in contrastive rhetoric, not all studies informed by Kaplan's original research depend on such static constructions of context and culture. In some studies outlined by Connor, researchers emphasized the ways that discourse analysis can identify weaknesses in Kaplan's categories, while at other times, researchers found that what might otherwise have been attributed to cultural differences was actually a matter of fine-tuned attention to contextual exigencies on the parts of writers. Connor explains that "these researchers have explained such differences in written communication as often stemming from multiple sources, including L1, national culture, L1 educational background, disciplinary culture, genre characteristics, and mismatched expectations between readers and writers" (504). That is, like Nowacek's "multiple avenues of connection," critical contrastive rhetoric research identifies a range of considerations that writers bring to new writing contexts. Indeed, the questions asked by such researchers and teachers sound quite relevant to a discussion of a translingual approach to transfer:

> In a pedagogy of critical contrastive rhetoric, questions emerge for students: How can I add English writing to my existing literacies?, Do I want to add English writing to these?, What do I intend to achieve with such an addition?, etc. It is also important for teachers not to position English writing as fixed or monolithic, let alone ''better than.'' We are calling for a pedagogy of difference in which presumed rhetorical distinctions are naturally located among competing ideologies and exploited by students. (Kubota and Lehner 22)

While translingual scholars might be hesitant about the use of such static categories of "English" set in opposition to other languages, as if they or the "competing ideologies" are fixed in absolute distinction from each other, both the de-centering of English and the recognition of the situatedness of language practices are highly compatible with the goals of a translingual approach.

Though they are less common than in translingual research, second-language research has

made some inquiries into the fluid blending of languages, with less emphasis on discussions of issues like language interference. In one of the few L2 studies from the Elon research seminars on transfer, Cozart, Jensen, Wichmann-Hansen, Kupatadze, and Chiu note that, for teachers of Chinese students at Michigan State University, it is important to understand how "transfer of prior knowledge affects individuals' engagement with writing tasks in new writing contexts and how the students engage with the ecological system and their writerly identity across contexts" (315). Through a series of text-driven interviews with students, not unlike those in the present study, researchers identified moments of language difference that, they suspected, might highlight moments where the students were transferring writing knowledge. The moments identified illustrate rich writing knowledges from previous experiences, which students were incorporating into their course writing at MSU. However, the researchers ultimately describe this process as one of struggle, calling it a "constant contest among identities they embody in and outside the classroom, on and off campus" (324). Therefore, while Cozart and her colleagues observed a fluid interaction of a range of practices in these students' moments of transfer, those interactions were still framed as creating problems, if not being essentially problematic in and of themselves. While there were moments in the present study when participants suggested such conflict, their overall framing of their experiences does not reflect the degree of dissonance that the MSU study does, a difference that might be attributable to any number of reasons from differences in educational background, relationships with instructors and researchers, or idiosyncratic individual factors. Regardless, the two investigations provide a useful contrast that, taken together, helps to fill in the picture of the range of experiences that Chinese students studying in American universities might encounter when negotiating across their full repertoires of writing practices.

Still, other studies in L2 research suggest, like the present one, more productive and fluid interactions between language practices. In perhaps the most notable and well-cited study of this kind, investigating one fairly gifted writer's shifts between Japanese, Chinese, and English, Kobayashi and Rinnert found that "the relations between L1 and L2 writing knowledge appear to have changed from almost separate systems to substantially overlapping ones as her repertoire of

writing knowledge evolved, and later L3 writing knowledge was integrated into her existing repertoire" (24). While Kobayashi and Rinnert note that this integration might have been a result of the long-term developmental trajectory of one particularly talented and reflective writer, they suggest that the ability to critically engage and experiment with experiences across languages might allow writers more latitude for developing similarly fluid approaches to languaging. Of especial importance is the extent to which such studies illustrate that transfer is not a matter of linear development. Wenxing Yang and Ying Sun investigated the Chinese, English, and French writing development of five undergraduate writers, concluding that changes in all three languages are "characterized by recurrent and elusive progression/regression, emergent and persistent changes, chaotic iteration, and by complex interactions among variables" (307). They note that such messy and non-linear developmental processes illustrate "that multilingual development is indeed a dynamic and complicated process, which may supplement and provide further insights into forgoing and ongoing empirical studies and theories on multilingual acquisition/development" (307). Therefore, what might seem like instances of interference or failed/lack of transfer could otherwise be seen as exciting moments of rich drawing across language practices, when considered in terms of a longer-span of an individual's ongoing experiences languaging (Becker; García and Wei).

Michael-John Depalma and Jeffrey Ringer suggest that, because of this developmental messiness and because L2 writing research has focused too heavily on questions of reuse, the discipline would benefit from shifting the conversation to the ways that writers "reshape" practices. They argue for a view of "adaptive transfer," which recognizes the extent to which such reshaping is messy and complicated, noting that it is often simultaneously dynamic, idiosyncratic, cross-contextual, rhetorical, multilingual, and transformative (141). Depalma and Ringer's description of a multifaceted adaptive transfer resonates with Nowacek's "recontextualization," which she argues consists of "multiple avenues of connection among contexts, including knowledge, ways of knowing, identities, and goals" (20). Both sets of research highlight the extent to which students reshape practices to sometimes conform to and sometimes innovate in new situations, based on a complicated set of priorities and individual

dispositions. And both emphasize that a view of transfer that prioritizes adaption and recontextualization could help to better understand what students are doing when writing in those new situations. Depalma and Ringer suggest that such improved understanding of student writing is important insofar as it shows possibilities "for L2 writers to do more than assimilate into U.S. academic discourse communities. They can instead transform ''standard'' discourses into expressions that are more pluralistic" (142).

This rethinking of student agency is, perhaps, of most interest to a translingual approach, and it informs my insights throughout this study. As Lu and Horner note, when taking on a translingual approach, researchers can "recognize agency even in the production of the most seemingly clichéd, resolutely conventional writing" ("Translingual" 31). And, indeed, many participants in this study seemed to be striving to produce the most clearly conventional pieces of writing possible. However, the transformation of practices and experiences with writing underlying the ways in which they went about producing those pieces was rich with adaptation and recontextualization, suggesting that understanding their writing in terms of a translingual approach provides a nuanced sense of moments of transfer in a larger frame of participants' languaging.

Transfer Research: Toward a Translingual Approach

My interest in how students draw on their full range of language practices is, in many ways, an interest that is central to all transfer research, insofar as I am investigating the ways that students bring other knowledges to bear on their writing in the course in question. However, my work builds on and expands discussion of transfer in important ways. The foremost of these differences is my focus on language and the ideological work that underpins such negotiations instead of more traditional transfer emphases. As Leonard and Nowacek (2016) note:

> While transfer studies in composition have devoted a great deal of thought to double binds, dispositions, and the role of reflection, they have not yet attended in sustained, systematic ways to language negotiation, despite the fact that such choices and

> navigations are indeed being made, even among primarily monolingual students and instructors. (260)

Therefore, translingual approaches can provide transfer research yet another way to conceptualize the relationship between contexts and practices, as well as the ways that recontextualization works not only in terms of genre, but in terms of languages and their associated ideologies. Considering the ideologies that are surfaced when investigating languaging is important for maintaining awareness of the ways that transfer is a process of recontextualization, since those ideologies are likely to be surfaced precisely at the moments of interest in transfer research: when navigating differences and overlap across contexts. As Alistair Pennycook reminds us, such ideologies always highlight the specificity of the local because they are "contextual sets of beliefs about languages [. . .] located in certain histories and articulated from certain perspectives" (Pennycook 5).

That is, awareness of the functioning of language ideologies is at the heart of research rethinking transfer, calling for us to look for *because we assume the presence of* adaptive moves, shaping and reshaping practices and contexts even in the most simple or seemingly-formulaic instances. A translingual perspective on transfer, like this one, reminds researchers and teachers to see the ways that language ideologies, genres, and writing development writ large are more complicated than might be assumed when looking at the final writing products students submit. A translingual approach is, therefore, based on a series of assumptions about how language functions. This series of assumptions is important, as Canagarajah notes, because "multilingual students and communities do face pressure from monolingual ideologies to shape their practices in a conforming manner. Transnational conditions don't lead automatically to translingual practices" ("Transnationalism" 44). Furthermore, even when they do, they are often covert practices that aren't invited into the discourse of the classroom and are thus too-often stymied in their growth (McCarty "Translational").

As this study illustrates, moments of transfer are rich sites of possibility that can help teachers and students better navigate the translingual endeavor of moving across so many spaces and contexts. Canagarajah points out that this kind of pedagogical impetus is intimately tied up

in transfer pedagogies that foreground the agency and dignity that come with developing more fluid approaches to languaging, arguing that teachers who adopt translingual perspectives "can consider how they can help students remain committed to larger communicative, social, and identity goals as they learn languages and literacies. In some ways, this is a question of reminding students of the rich semiotic resources they bring from their homes and communities" ("Transnationalism" 58). This kind of translingual approach to transfer shapes my explorations in the remainder of this dissertation.

Chapter 2: Methodology

Introduction

Given the complicated relationship between scholarship addressing translingual and transfer research, outlined in Chapter 1 and following from my interests in developing a more translingual approach to transfer, I conducted a one-semester study of a transitional writing course for International Students. I observed classes, and collected writing samples for analysis and to drive discussion in qualitative interviews with six focal case students. In this chapter, I outline my methodological choices in designing this study, based on my research questions and given the research context in which I was working. First, I describe that context, both in terms of larger institutional elements and to provide an illustration of the class and students I encountered over the course of the semester. Next, I outline my choices in terms of data collection, including my methods of observation, interviewing, and preliminary analysis of writing. Then, I explain the development of my more formal analytical tools for coding. Throughout, I highlight instances over the course of the semester that helped me to reframe my inquiry, particularly during interviews. As I argue below, these moments are important insofar as they draw attention to the importance of researchers and teachers continually developing their abilities to negotiate across a broad spectrum of language and knowledge differences (McCarty "Translational").

Research Questions

As I indicate in Chapter 1, there is much room in research about multilingual writers for consideration of a more fluid and adaptive frame (Depalma and Ringer) that recognizes the recontextualization (Nowacek) at the heart of such students' experience writing and transferring writing knowledges. With this in mind, my research questions were developed to uncover not only the practices that students associate with experiences across a range of contexts, but also the productive ways that they understand the similarities and differences in the languages,

knowledges, and approaches to writing in those contexts. Because my initial over-arching goal was to better understand the ways that students do and do not draw on productive connections (or disjuncture) between language practices from across their experiences, my questions reflect an interest in participant talk about relationships between language across contexts and their impressions of the effects of moving between different languages and approaches to meaning making. I am also interested in the ways that language ideologies influence such moves, leading me to investigate the kinds of metalanguages that might be used to talk about writing and the ways that those metalanguages might correspond to particular contexts and language ideologies. Similarly, these language ideologies sometimes drive students to see particular practices as incompatible with some situations. It was important to me to identify such incompatibilities, even though I ultimately argue that they also provide important insights into participants' languaging. Therefore, I frame my lines of inquiry through the following questions:

- How do Chinese students in a transitional writing course describe their incorporation and adaptation of knowledges and languages from other contexts when writing?
- How do these students describe the relationships between the writing practices they use across contexts?
- What kinds of metalanguages do these students use to describe practices and contexts?
- How do students recontextualize the knowledges, practices, and metalanguages they bring to new tasks and situations?
- In what types of situations do these students tend to report *not* drawing from across contexts when writing?
- What can these students teach us about different ways to conceptualize transfer?

Research Context and Participants

This study was conducted at a large and prestigious research university (LPRU) in the upper Midwest. In the fall of 2017, after receiving IRB approval to conduct a study, I was a participant observer in one section of "College Writing for International Students," a writing

course designed to precede first-year writing, transitioning international undergraduate students to academic writing in English. Because LPRU uses directed self-placement for placing students in their first-year writing courses, students in this course generally have low writerly self-conceptions and are often focused on very formalistic goals for improving their writing in English. As is common in these kinds of transitional courses students often are advised by peers to take the course as an easier introduction to English writing and conversation than they might expect if they went directly into a first-year writing course (Leki "Undergraduates"; Ruecker; Saenkhum). Generally, this course serves incoming freshmen who have recently completed their secondary education in other countries, making it simultaneously an introduction to college writing *and* college writing in English. The course description emphasizes that the course is designed for "students who feel most comfortable with academic writing in a language other than English," but like many incoming freshmen, the students do not arrive with a developed sense of what *academic writing* might mean. However, the section that I observed happened to be filled largely with transfer students who had completed one or two years of college in their home countries. Though several of them reported doing very little writing in college prior to coming to LPRU, this experience meant that students in the class were already familiar with some structures of college classes like larger lectures and labs, as well as some of the goals and methods associated with their personal fields of study.

The instructor, Iris, was beginning her second year teaching as a lecturer at LPRU, where she also taught higher-level courses designed for international students on academic communication and writing in the disciplines. We met during her first semester at the university when I informally observed another section of College Writing for International Students, inspiring some aspects of the current study. We also both participated in a departmental reading group on teaching multilingual writers and investigating translingual pedagogical methods. In the summer before my observations began for this study, we emailed and met several times, with Iris offering feedback on my research materials, emphasizing her sense of how to clearly present my goals and questions for the students.

Iris' fine-tuned awareness of international student needs was a consistent feature of her teaching. Because of her own past experiences as an international student from China, struggling at times to acquire academic literacies, she designed the class to be what she thought was fairly straightforward, prioritizing discussion of aspects of the hidden curriculum ranging from email conventions to day-to-day work expectations in American institutions, while emphasizing a genre-focused approach to writing. She reiterated frequently that her main priority was to help students develop awareness of the rhetorical conventions of academic writing in America. The course highlighted broad rhetorical moves to help students enter academic conversations, drawing heavily on patterns from the course text, *They Say / I Say* (Graff and Birkenstein), as well as some formal logic as it is reflected in Toulmin's model of argumentation (Toulmin). She introduced the latter to students to emphasize the need to make all parts of an argument explicit, which she cited as a particular difficulty for international students.

These choices of texts were illustrative of Iris' sense of the general difficulty that international students often have developing rhetorical patterns common to American universities. She was conscious of the lasting effects of contrastive rhetoric on particularly Chinese students' experiences learning to write in English, which I discuss further in chapter 3. Iris rejected the essentializing positions of Kaplan and others in the early contrastive rhetoric moments (Connor, 1996; Kaplan, 1966; You, 2014) in an early class session. However, helping students to see the ways that writing in America was sometimes structured in terms of different audience expectations was central to her overall approach to teaching rhetorical awareness and academic writing. However, as I argue in chapter 3, Iris' pedagogical choice to foreground the linear nature of American academic writing did not introduce students to this concept, as many of them discussed similar advice from writing teachers in high school and early college in China.

Recruiting and Student Profiles

During the first class session, I introduced myself and my research project to students in the course. I framed the study as one that would provide important insights into the experiences

and learning needs of international multilingual students transitioning to college in the United States. Wishing to avoid any chance that the research might initially seem to reinforce deficit views of the students and their abilities, I emphasized the productive potential that multilingual students brought to classrooms and the rich literacy resources that I was interested in learning about. Throughout the semester, my conversations with students were aimed at maintaining this focus on the productivity of multilingual students' experiences and literacies, with respect to interviewing and commenting on student writing.

Of the 16 students initially enrolled in the course, all but one agreed to participate in the study. However, of those 15, there were 5 who eventually dropped the course. 7 students agreed to participate in interviews as focal cases, but because of technical difficulties and unforeseen circumstances related to first semester work, one focal case was not included in this dissertation. The remaining 6 focal cases were all Chinese transfer students with at least 1 year of college experience in China (see Fig 1). Their shared national background was an accident of circumstances, but perhaps not too surprising, given that, in 2017, Chinese student enrollment (3,088) made up nearly half of the international student population at LPRU (6,965).[3] Still, this homogeneity narrowed and redirected the focus of the study in ways I had not anticipated, making my original investigation about multilingual international students into an investigation of Chinese students.

Through funding from Rackham Graduate School and the Joint Program in English and Education, I provided $20 tokens of appreciation to participants who agreed to complete an initial questionnaire, allowed me to collect writing samples, and allowed me to observe them during class sessions, including occasionally audio recording small group conversations or photographing their notes, in-class writing, or other class work. On the class observation consent form, participants were able to choose how they would like to be observed, indicating each form

[3] Figures according to the LPRU Registrar Web Site https://ro.umich.edu/reports/enrollment-report/enrollment-geographic-location/enrollment-geographic-location

of data collection they agreed to. The six focal participants that I discuss in this dissertation all agreed to full observation. I also provided students with $20 tokens of appreciation for each interview.[4]

Figure 1. Participants

Name	Home country	Intended Major
Cameron	China	Computer Science and Math
Neil	China	Math
Apple	China	Computer Science
Lexi	China	Business
Ox Man	China	Economics
Faker	China	Computer Science

Data Collection

This study draws on a rich set of data from notes on classroom observations (Emmerson, Fretz, and Shaw; Glesne; Maxwell), in-depth interviews (Seidman), and writing samples (see Fig. 2). This data provides me with multiple perspectives to bring to bear on the questions driving this study. On one hand, these multiple perspectives offer me an opportunity to triangulate my findings by drawing conclusions from different kinds of sources (Maxwell;

[4] While several students suggested that they would be willing to participate in the study in exchange for the one-on-one native speaker conversation practice it afforded them, all eventually took the tokens when I explained that the money came from a research grant I had been awarded. Besides illustrating the general kindness of these students, who always expressed that they were more than happy to be recorded, interviewed, questioned about math proofs, and talked to about any number of things before and after class, the gesture of initially refusing pay also suggests the high priority that the students placed on native speaker interactions as a way to improve their English. When positioning myself as a researcher, I was frequently conscious that this was a more valuable reimbursement than the monetary token of appreciation, but given the raw exchange value of dissertation data, I was very grateful to be provided with funding for tokens of appreciation insofar as it helped me to compensate for the time students spent with me, which is a valuable commodity for undergraduate students shouldering heavy course loads.

Creswell). But, perhaps more importantly for the day-to-day collection of data, the use of observations, writing samples, and interviews were mutually supportive insofar as a specific moment of classroom observation often led to the individualized questions I asked in interviews; the same was true of writing samples, which drove sections of interviews. Seidman notes that a qualitative interview is "not designed to test hypotheses, gather answers to questions, or corroborate opinions. Rather it is designed to ask participants to reconstruct their experience and explore their meaning" (92). Seidman stresses that such interviews must necessarily "follow from what the participant has said." I would add that, for this dissertation, interviews also followed from what participants *wrote*. Therefore, methods were co-constitutive and continually drove my understanding of student experiences. Classroom observations and interviews provided me with participant perspectives through their direct talk and actions, while my own reading of student comments in class or choices when writing provide me with insights which could be fed back into interviews for confirmation or correction by participants via "member checking," which provided me with a kind of internal validity that reassured me that I was not attributing views to students that they did not hold (Creswell). However, the corpus of writing I collected also allows me to make substantiated claims about what students do as writers even if those students do not always confirm those observations. While I avoid claims of absolute certainty about the ways students do or do not draw on resources from across contexts, the range of data collected helps to balance the conclusions I offer in methodologically rigorous ways.

Figure 2: Data Collected

Name	**Data Collected**
Cameron	Class observations, 1 questionnaire, 5 small group conversations, 3 peer reviews, 5 rough drafts, 4 final drafts, 1 presentation, 1 initial interview, 1 follow-up interview, 2 math proofs, 1 UROP research abstract
Neil	Class observations, 1 questionnaire, 4 small group conversations, 3 peer

	reviews, 4 rough drafts, 4 final drafts, 1 presentations, 1 initial interview, 1 follow-up interview, 2 math proofs
Apple	Class observations, 1 questionnaire, 2 small group conversations, 3 peer reviews, 5 rough drafts, 4 final drafts, 1 presentation, 1 initial interview, 1 follow-up interview, 1 set of formal logic notes
Lexi	Class observations, 1 questionnaire, 3 small group conversations, 3 peer reviews, 4 rough drafts, 4 final drafts, 1 presentation, 1 initial interview, 1 follow-up interview
Ox Man	Class observations, 1 questionnaire, 1 small group conversation, 3 peer reviews, 4 rough drafts, 4 final drafts, 1 presentation, 1 initial interview, 1 follow-up interview
Faker	Class observations, 1 questionnaire, 4 small group conversations, 3 peer reviews, 4 rough drafts, 4 final drafts, 1 presentation, 1 initial interview

Questionnaire

During the first class session, I asked students to take a short questionnaire and return it completed for the next class (see Appendix A).[5] Perhaps because it was early in the semester and

[5] At Iris's suggestion, the questionnaire responses were hand-written on the sheet I provided to students. She speculated that sometimes seeing how students interact with the actual material object give her insights into their language and writing development. At this point, I have not analyzed this aspect of the student data but it is worth noting that – with the exception of some of the math proofs I photographed – this was the only data I collected that was hand-written.

many of the students had arrived only days before, responses on the questionnaire were sparse. Students identified their areas of academic focus and their general goals for coming to the university, but information about when and how they learned to write in each language or where they tended to use it generally provided me with little insight that I would not have picked up in the first weeks of class and the first interview. However, the questionnaire did provide small glimpses of the personalities I would later get to know. A handful of friendly (if not sometimes somewhat apologetic) smiley faces marked the occasional answers that indicated that students didn't really like writing or that they learned Chinese in China.

Limited Participant Observation

I observed 23 class sessions over the course of the semester, recording rough jottings, which I later transformed into more coherent field notes (Emerson, Fretz, and Shaw). When groups consisted entirely of consenting students, I also made short audio recordings of small group discussions, peer review sessions, and workshops. I reviewed these recordings and transcribed significant portions that supported reflections in field notes I wrote on daily classes, which included initial trends I observed with partial quotations I overheard and my own paraphrases recorded in my jottings. Often, these notes served one or more of several functions, as I made an effort to keep track of details regardless of their seeming relevance to my research questions but also framed questions and hypotheses that were directly related to my immediate interests. Though the distinction between the two is not absolute, when I was writing bits of fieldnotes that seemed to be learning toward moments of early analysis, I began switching the font to red, both to distinguish between different approaches in the fieldnotes and for easy reference when reviewing. For example, after one class on developing research pitches, I wrote:

> A lot of student pitches are leaning toward informative frames – Apple's is the most notable of these, asking "How does school violence influence children?" It would be hard to steer this question away from the 5-par approach of discussing 3 ways that violence influences children, then concluding by saying it's important to stop it. What is the

relationship between the structure of the 5-par essay and explanation modes as students try to apply this old form to new writing situations? The 5-par essay can be argumentative (state a claim and give 3 reasons why you're right) but when that form is applied to more complex topics, does it gravitate just toward informing?

In cases like these, fieldnotes provided me with data about what happened in a class, what a particular student said, and how these observations fit into trends I was beginning to see, but they also provided me with preliminary analysis that could be discussed with students in interviews at a later time.

It is important to note that I chose not to talk with participants about moments of preliminary analysis like this one during or after class, but saved these questions for interviews. This decision was important because, especially during the early days of the semester, I chose to position myself as a limited participant observer in the class, meaning that I interacted with students before and after class in an informal way (complaining about the weather, talking about basketball, recommending places to eat when students planned to travel to New York over break), but once class began I remained more or less silent: listening, taking field notes, recording conversations, and collecting interesting comments or discussion points to ask about in later interviews. This was particularly true in the early weeks of the semester as I wanted to develop a sense of how students thought about their own languaging without my own views interfering, keeping my participation in class fairly limited, focusing instead on collecting as much observational data as possible (Spradley).

However, as the semester went on, I more actively engaged with students to better understand how they were experiencing the class. As Barbara Kawulich notes, this is an important shift to make when the researcher realizes they are "interested in participating [more actively] as a means for conducting better observation and, hence, generating more complete understanding of the group's activities." Because I was the only participant in the class who was not an international student, and therefore did not share that experience with participants, I gravitated toward the most familiar means of interacting: as another teacher who was observing the classroom. On one hand, this position came naturally, stemming from my background as a

teacher working in classes of many kinds for 15 years. But the choice to position myself as a teacher also grew out of observations about the role of teachers who are also researchers like those made by Stephen Fishman and Lucille McCarty. I considered it unethical to remove myself entirely from the class if the situation suggested I do otherwise. For example, when addressed in class or when a class structure would have made my silence seem more unusual than my participation, I engaged with students and shared my own perspectives and knowledges as a writer and as a teacher. This role was suggested initially by Iris, who reflected that, in her past experience, international students regularly sought native-speaker feedback and interactions in their first semesters. Indeed, there were instances in class where she explicitly planned for my interaction, most notably using me as a judge for two formal class debates and as a regular participant in Q&A sessions during student presentations. Although my questions during student presentations often developed insights that were salient to my research project, their main function was to model good audience participation or to get the conversation going if classmates were reluctant to be the first to ask a question.

In addition to these planned interactions (and perhaps partially because of them), I also participated in the class as a proxy and/or compliment to the main class instructor. Often, students would turn to me as another teacher figure during small group discussions or workshopping. At times this took the form of questions clarifying directions or consultations on phrasing or nuance because of my status as the only native-speaker of English in the class. Similarly, I was occasionally called on by students to talk about future writing expectations because of my experience teaching FYW at the university, which many of them planned to take the following semester. At other times though, students turned to me in moments of difficulty or frustration while the instructor was working with other groups. In these kinds of cases, I was acting more explicitly as an instructor, asking questions to prompt students in their work identifying the function of particular genre features, for instance. At times, these interactions were clearly aligned with the goals of my research and insights from interactions appeared directly in my notes on that day, but more often I found myself just acting as another teacher because that was how I was perceived, both by myself and by the students.

Recalling such times, it is tempting to suggest that I was acting as Emerson, Fretz, and Shaw's vision of an ethnographic researcher who "want[s] to relate naturally to those encountered in the field" so they "focus their efforts on figuring out – holistically and intuitively – what these people are up to," leaving questions of writing and research to be teased out later (p. 22). However, that might imply that in particular moments of interacting with a student I was guided by a conscious decision to engage in authentic research, while the real explanation is likely more related to the tendencies I have developed in my construction of teacherly identity. However, because Iris and I share many views about writing and good teaching – and because I was conscious to follow the tenor of the class when interacting with students – the impact of these interactions on student learning or views on writing was potentially quite small compared to the net effect of being in the class in the first place. As Joseph A. Maxwell points out, "in natural settings, an observer is generally much less of an influence on participants' behavior than is the setting itself" (p. 125).

Student Writing

After students consented to my observation, Iris gave me access to the course website, allowing me to see student work as it was uploaded for draft reviews and for final submissions. Because instructor feedback was not relevant to my research questions and because I did not request consent from either Iris or the students to do so, I did not collect the graded copies of students' work, which included instructor comments. I also did not look at or solicit information about the grades students received on their writing, since assessment of the writing was not an explicit goal of this research.

In the course, students worked on a series of mainstay FYW genres, all of which I collected, along with peer review notes they wrote for each other, some revisions, and reflective pieces. The first major writing assignment was a "Comparative Summary," which asked students to build on discussions drawn from Graff and Birkenstein's *They Say/I Say*. The prompt asked students to read several articles on a topic of their choice and write a short synthesis piece that

should "focus on summarizing what 'they say' to support a theme." Next, Iris asked students to built on these skills by writing a "Critical Analysis" that gave them a chance to "practice how to evaluate, analyze, and synthesize scholarly sources to make [their] own arguments." The most substantial writing project of the semester was a large "Research Project" that required students to write annotated bibliographies and a standard academic research paper, as well as give a brief presentation to teach the class about the topic. At the end of the semester, Iris assigned a "Genre Analysis" that asked students to make observations about the kinds of writing they read for their research project in order to "practice skills of identifying a specific set of language use in a specific discourse community (e.g., writing in psychology), and therefore raise [their] awareness of the patterns in writing." My analysis of these major pieces of writing inspired the individualized questions in each interview and provided examples of trends I describe in the case studies presented throughout this dissertation.

I also read and collected student writing in discussion forums on the course website. Early in the semester, students completed an identity presentation in which they gave a slide-based talk about themselves, their background and their interests, then answered questions from the class. Iris made video recordings of these presentations for the students to review while writing reflective self-critiques. I collected copies of these presentations, but their main contribution to this research was the individual notes they provided about each participant: that Lexy thought of herself as a photographer, that Apple had never been out of his home province before flying to the university, and that Neil had struggled with math before meeting an instructor who inspired his deep love of the subject. Still, these presentations contributed to my ability to engage in important relationship-building conversations, both before and after class sessions and during small talk before and after interviews.

Interviews

In the fourth week of classes, I emailed all participants to ask if they would like to participate in an interview as part of my dissertation work. Over the course of the next 3 weeks, I

interviewed all 6 students who were interested. During the final week of classes, I emailed these 6 students to ask if they would agree to participate in a follow-up interview. Five students participated in follow-up interviews, three immediately following the end of the semester and two in the first weeks of the next semester. The goals of these interviews were threefold: (a) to collect student descriptions of the kinds of language and meaning-making practices they engaged in, as well as any insights on the relationships between those different practices, (b) to discuss preliminary analysis I had done while observing and reading writing samples from the course, and 3) to gain a general sense of how each student saw themselves engaging in the process of negotiating transitions between countries, educational institutions, languages, and cultures.

Interviews with students were loosely structured and individualized. Although all interviews were based on the same general plan, including questions about particular assignments, writing in other courses, and relationships between writing across contexts, I added questions to each interview to address individual observations that arose in class and during my initial reading of students' writing (see Appendix B). For example, when Lexy mentioned journal writing in her questionnaire or when Cameron mentioned an in-depth undergraduate research opportunity, I added those specific details to my interview guides when prepared for their respective interviews. Similarly, for follow-up interviews, I also asked the students who mentioned math proofs in the first interview to bring examples. Still, I maintained a congruence across all interviews that was driven by the overall goals of the project. Though I was careful to let the flow of the interview guide me rather than doggedly pursuing a pre-determined order of questions (Kvale), I nonetheless asked about the same things: the kinds of writing done in Iris's class, how it compared to writing in other classes, the kinds of writing students did before coming to the university, what makes good writing in those different contexts, the benefits and difficulties of communicating in different ways based on the requirements of the situation, and some specific discussion of choices made in composing the writing samples I analyzed. These questions were structured to produce "spontaneous descriptions of the lived world" by participants, which Kvale suggests is the most effective way to structure questions in interviews since it is difficult for most people to generate broad theoretical statements (129–30). However,

patterns of follow-up questions asked participants to take their descriptions and begin to make broader theoretical statements about them. As the examples questions in **Fig. 3** illustrate, initial questions asked participants to describe particular contexts and the writing required of students in those contexts. Follow-up questions asked participants to begin to make generalizations about the writing goals and values reflected in those contexts. While some participants merely responded to a follow-up question about what makes "good writing" in a particular context by reiterating their recent description, such follow-up questions provided other students with an opportunity to talk about writing in another way, building on their initial descriptions to make broader generalizations. In this way, my process of questioning was designed to elicit analysis from participants, as they began with a set of specific observations and built their theories about those observations in the process of responding to follow-up questions.

Figure 3: Alignment of Research and Interview Questions

<table>
<tr><th>Research Questions</th><th>Interview Questions</th></tr>
<tr><td rowspan="2">What kinds of metalanguages do students use?</td><td>Interview Question #1 Can you start off just by telling me a little about the kinds of writing you've been doing for this class?

Follow-up: What makes "good writing" in this class? How does that compare to your definition of "good writing"?</td></tr>
<tr><td>Interview Question #2 How does the writing</td></tr>
</table>

	in this class compare to writing you've done in classes for your major? (if undeclared/uncertain, sub "in other classes")? **Follow-up:** What makes "good writing" in those classes?

Importantly, what these questions allowed me to see was the ways that participants might respond to ostensibly similar questions when I shifted my focus ever so slightly. For example, Interview Question #1 asked participants to "tell me about" the writing in a particular class. The question was framed in terms of description, often leading to genre-related answers, ranging from naming the assignment (critical summary, research paper, report) to more in-depth discussions of what the participant had to do for this particular assignment or how it related to a particular audience or context. In these responses, I found data to inform my interest in the metalanguages that participants use. As I argue in Chapter 3, the concept of a metalanguage should be taken as broadly as possible when trying to identify ways that participants connect their practices across contexts. In each instance, participants are indicating the metalanguage they associate with a particular kind of writing. So, in asking questions that led to students saying "it's a research paper" or "you should support with evidence," I could identify the basic metalanguage underpinning these students' description of writing in a particular context.

I also crafted my interview questions to elicit participant responses that might provide insight into themes that were germane to my broader research questions, but I often did so in ways that would address multiple research questions at once. When looking for participants' conscious reflections on writing for a particular situation as it related to writing for other situations, questions generally asked them to compare their experiences writing across contexts or to describe particular kinds of writing, with follow-up questions asking participants to describe other kinds of writing in other contexts. For instance, when conducting a follow-up

interview with Neil, I asked about the choices he made when beginning his final research paper in Iris's class, then shortly afterward I asked him why he had made rather significantly different choices in his introduction to a research paper he wrote for an Anthropology course. This line of questioning opened up space for Neil to discuss the differences between the secondary research he did for the former and the primary research he conducted for the latter. Therefore, I was able to identify the ways that Neil saw practices in distinct contexts as similar or distinct, while also noting the ways that his metalanguages for talking about writing were influenced and reshaped by the new writing contexts he was encountering.

Especially with respect to discussions of writing samples and writing in other classes, individualizing interviews allowed me to focus on asking students about specific phrasings, discussions, and writerly choices, keeping students' discussions grounded as much as possible in actual practices from specific contexts. Perhaps of equal importance, grounding questions in specifics drawn from observations and writing samples allowed me to use the interview space as one way to triangulate my own observations and preliminary analyses with students' own sense of what they meant by a particular language choice in class, what they were (or were not) thinking of when making a particular writerly choice, and what other language or meaning-making experiences might have influenced those choices. Therefore, these individualized interviews allowed me to respond more directly to the data I was collecting in my observations on a day to day basis, but they also allowed me to continually refine my own early analysis of those observations vis a vis participants' own analysis. As Maxwell points out, while "interviewing is often an efficient and valid way of understanding someone's perspective, observation can enable you to draw inferences about this perspective that you couldn't obtain by relying exclusively on interview data" (p. 103). Observations and writing samples gave me concrete moments and language choices to offer up for student responses in interviews, but they also provided me with data that did not rely wholly on participants' own perceptions of the writing or the course in general. Such an interaction between multiple types of data was a fundamental feature of interviews for this study, contributing – I hope – to a more well-rounded and reliable series of discussions.

Analysis

While reviewing fieldnotes and reading student writing samples, I wrote short memos drawing together things I began to see about individual students and the ways they were and were not exemplary of trends I noticed. For example, I wrote the following piece about Cameron in an early memo about a class session on choices that create voice (first-person vs third person, stance, engagement, etc):

> He says it's ok to show indeterminacy "because finding a clear solution is impossible most times" but when asked if using I is always related to subjectivity he said "it's a positive linear relationship" and laughed. There is a rising sense that students can use technical/mathematical knowledge and language to jibe Iris and me, since we have both joked about our lack of mathematical training. To what extent do these moments of code-meshing index identity positions that the students share in opposition to Iris and my (perceived) humanistic/non-scientific positions? Later, Faker joked again that Iris was the audience of the first paper. He is willing to voice roles w/ laughter.

Again, I tried to mark where my observations turned to speculation and early analysis by marking in red. In the first sentence marked in red, my analysis is aimed at identifying trends that I wanted to track as the semester progressed, planning to follow up on them in interviews. The later sentences were also written with the interview in mind, but were starting to draw longer connections, linking this student's comments to those of other students, suggesting very different lines of inquiry. I wrote these kinds of memos frequently in October, when I was beginning to develop a deep pile of data but had not moved into the first interview phases yet. This kind of analysis was useful during this study simply because of the sheer mass of data collected across a long semester. Keeping track of the questions I wanted to follow up on with each student would have been impossible without a series of notes for me to skim through when preparing for interviews. The reflections that I generated when memoing were the first phases of my development of my codes and other methods of analysis.

Interview Coding

My next phase of analysis occurred as part of the process of developing and applying codes to interviews. This analytical work began in my thinking about the process of transcribing the interviews and making use of the audio recordings of those interviews. The eleven interviews I conducted were transcribed by an independent transcriber and I reviewed each transcript for accuracy, then I coded interviews in the months following the end of my observations.[6] I chose to have the interviews transcribed for two reasons: the first was because of expedience. The transcriber I was able to hire – again because of generous institutional funding for which I am grateful – completed the first batch of interviews in a week, allowing me to quickly begin the pre-analysis process of reviewing transcripts. The second reason was that I thought it was important for an uninterested outsider to hear and help to frame the conversations. While I am aware that many qualitative researchers see the act of transcribing as a part of their analytical process (Bird, 2005), I was much more interested in listening to and reviewing transcripts to see if what was on the page represented what I thought was happening in the interview and whether or not any similarities or divergences were significant.

The process was a slow one, largely because of my desire to sit and listen to interviews over again before beginning analysis. The accuracy of the transcripts – which were verbatim, including all pauses, stutters, laughs, and mis-starts – did not read like the conversations I recalled. So, after listening to correct the transcripts, I listened again to remember the tone of the

[6] Although transcripts were verbatim with many markers of the choppy language common to all improvisational speech (let alone improvisational speech about complex topics in a second language), quotations from these transcripts are edited to remove non-meaningful markers (*um*, *mmm*, stutters, restarts, etc). The main reason for this is for the sake of presenting readable quotations. However, I do not edit overall syntax of student speech or my own in order to attempt present a version of standard edited English. Instead, I choose to maintain markers of the messiness that exemplifies difficult and engaged conversation between two participants who grew up speaking different languages and are trying to make meaning together. These choices are reflective of the fact that *all* transcription is, itself, an act of interpretation that positions participants and researchers in particular ways (Green, Franquiz, and Dixon, 1997).

interview at different moments, when we were both laughing or when one of us was nervously chuckling, when we were saying things definitively and when we were offering a hesitant and tentative possibility. While those readings are mine and subject to my own individual perspective, they provide a more detailed recollection of the conversation than transcribed speech does. This process might not seem to materially impact the analysis that I present in the following chapters, but it was necessary for me to be secure in my reading of the transcripts. Also, in cases like the points I raise about students' discussion of math writing in Chapter 4, it was very necessary for me to be certain that I was not convincing students to talk about writing in math, but that they were at first hesitant then, when encouraged, excitedly discussed this kind of writing.

Once I was satisfied that I could move forward with analyzing the interviews, I developed a small set of codes instead of the more extensive sets of thematic codes or literature-based codes that are common in composition research (see, for example, Schiavone or Gere "Writing"). Saldaña recommends that researchers adopt the disposition of a "lumper, not a splitter," using selected codes repeatedly because, after all, the point of the coding endeavor is to find patterns in the data (79). My coding process entailed a concerted but slow movement toward lumping for just this reason. I began with a process of initial coding to develop the lumps that I found most useful given my research questions, and prevalent in the data set (Saldaña; Charmaz). As Saldaña notes, initial coding helps to set up a starting point to see what is in the data and where it *might* lead (p. 115). Thus, it is a broad kind of coding that can take the shape of line-by-line practices of grounded theorists, but can also code larger chunks of data. The emphasis is on the development of a coding practice that allows researchers to approach the data with the disposition to see unexpected things. Adele Clarke takes the notion of early encounters with the data still further, suggesting that even before these forays into line-by-line or chunk-by-chunk coding, it is important to allow for a time of "digestion and reflection" before beginning true initial coding ventures (84).

While Clarke sees the reflective potential in delaying coding as a path toward development of more complex series of "situational maps" that "lay out the major human,

nonhuman, discursive, and other elements in the research," my own initial-phase digestion seemed necessary for even the development of a code book, to say nothing of doing the actual coding (p. *xxii*). Therefore, my initial coding phase was essentially a reflective process of labeling, emphasizing broad overviews of what was happening in the interviews, developing "tentative ideas about categories and relationships" (Maxwell 105). Often, large chunks of interviews were coded together with multiple descriptors, serving the double function of highlighting sections that seemed especially rich and also marking that they warranted later review and narrowing to develop codes further.

For example, Neil's talk about reading as a writer when giving peer feedback struck me when I first reviewed the interview, and I commented: "Reflecting as a reader and as a writer; comparing peer feedback to self-reflection; consideration of author's feelings in peer feedback." My emphasis was on what he was doing at this particular moment, especially the ways that he blurred the boundaries between reading and writing. If I had been working more slowly, I might have italicized the "and" connecting "reader" and "writer," since it was the fact of his discussing doing *both* that interested me, especially since he was also describing two other processes: giving feedback to others and reading his own work critically when revising. While the labels I applied to this chunk of interview maintains a residue of the theoretical considerations I brought from other research (reflection, reading like a writer, and peer feedback), I cautiously avoided use of these theoretical constructs as labels for what students were doing, instead emphasizing the activity described. Neil was talking about connections between reading and writing, but was not necessarily "reading like a writer" (Bunn), nor was he engaged in the structured kinds of reflection that is typically discussed in transfer research (Yancey et al, 2014).

These initial labels served as material to refine into my first formal list of codes (see Appendix C). Unlike my initial codes, these new codes sometimes described content of participants' talk (Logic, Math, Readers/Audience, Contrasts) and sometimes marked places where I identified participants' language as doing something (Metacognition, Meta-awareness, Argumentative Metalanguage). As my iterative coding process progressed and as I wrote through an ongoing series of analytical memos to make sense of the trends I saw developing, I found the

most value in the codes describing the content of participants' talk, *not* the codes where I marked what they were doing in their descriptions. Places where students discussed "logic," for instance, led me to think about what exactly this term meant to students and how it intersected with their frequent discussions of templates and making sure that their writing conformed to the "step-by-step" expectations of American academic writing in English. Codes that I had brought with me from transfer research, such as Metacognition and Meta-awareness, were ultimately less useful because they named things I saw participants doing, not necessarily things the participants discussed. These two particular codes seemed like central concepts, largely because of the extent to which they are dealt with in the literature, and I devoted time to carefully delineating between when participants were being metacognitive (talking about their thought processes) and when they were exhibiting meta-awareness (understanding of the function of things like genres or context-based discourses).

However, this distinction – and even the categories themselves – ultimately seemed to be less important than a rethinking of why the excerpts those codes identified were interesting. For instance, after amassing a collection of metacognitive statements, I realized that I had only collected moments in which I identified participants describing how they through the ideas of an essay. *Metacognition* examples simply identified how students thought about connecting ideas in a fairly narrative fashion. In a different way, *meta-awareness* examples were interesting insofar as they identified participant understanding of how languaging in a particular genre or context worked, but that code co-occurred with other codes that marked discussion of genres and contexts. Not wanting to throw this analytical work out completely, I reviewed the kinds of things coded as metacognition and meta-awareness and realized that these categories could also be re-coded into new groupings. In this re-sorting, I recognized the prevalence of *logic* as a term and attention to step-by-step writing as features of English academic writing. These inspired some of the codes that led to the analysis underpinning my discussion of participant metalanguages in Chapter 3. Therefore, coding was an iterative process that led me to the analysis I present in the following chapters, but it also led me away from terms that I thought would be particularly important, reminding me of an earlier finding that – especially given the

linguistic, cultural, and experiential distance between my participants and myself – it is important to recognize moments when, as a researcher, I am asking the wrong questions or using the wrong words (McCarty "Translational").

Ongoing Analysis

As my analytical work progressed, I continued to write short analytical memos to summarize the trends I was seeing while coding and looking back over the distribution of those codes. Increasingly, these memos took the shape of descriptions of what I was seeing in data from individual participants, giving the analysis the look of what Seidman describes as analytic "profiles or vignettes." This focus on individuals' stories allowed me to see the ways that themes I identified took shape for a given participant. This choice reflects my preference for research that prioritizes the ways that an individual experiences writing across a range of contexts (Beaufort; Roozen; Rounsaville) or that a small number of cases can be used, not to generalize broadly, but to suggest that some individuals have had such experiences (Herrington and Curtis; Leki; McCarty "Complicating"; Ruecker).

Thus, my analysis began to treat participants as 6 specific case studies that each provided individual insights into my research questions. Since one of my goals during analysis was to understand the trends I saw across participants, it might be argued that I was engaged in what Michael Patton describes as "operational construct sampling," drawing on "case manifestations of a theoretical construct of interest so as to examine and elaborate the construct and its variations and implications" (269). When my coding process drew my attention to multiple instances of recontextualization when discussing math writing practices, for instance, it prompted me to write about the ways that I saw theoretical constructs like recontextualization operating in these instances. However, as Anna Knutson explains, grounded theory inquiry often can require researchers to "straddle the line" between such theory-driven sampling and case study research proper, which "often starts with a particular case and then states the questions in specific terms" (195). As I strove to understand thematic findings across cases and also the ways

that those themes were arising in particular ways for individual participants, my analytic memos were designed so I could try to reflect the interaction of individuals with larger themes.

Unlike in my earlier memos, I did not mark analysis in red to separate it from presentation of data, largely because the purpose of these pieces was to develop analytical themes and to identify cases that exemplified them. For instance, in an analytical memo about Apple, I noted that

> his growth as a writer over the course of the semester was marked by a high level of integration and recontextualization of practices – thinking about wen cai and about TOEFL writing and formulaic 5-paragraph structures. It is marked by a shift in his conception of the reader, moving from the physical body of the exam reader to the more interactive reader that is talked to through more complex interpersonal features. He learns to improve the use of these interpersonal features by broadening his languaging to include recontextualizations of all the practices. Apple begins by consciously applying some of the practices he brings from other contexts, but goes on to internalize them and "just write" – suggesting that he is not dividing these practices into static containers, but seeing them as fluid and recontextualized ways to approach the needs of his readers.

The purpose of this piece was to begin to identify which of Apple's practices were consistently appearing, especially through codes that illustrated his shifting sense of "the reader," a finding that is significant to his overall navigation of different writing contexts. In this kind of memo, I thus began to link the ways that Apple's changing conceptualization of the reader reflect one instance of recontextualization, illustrating the ways that an individual case embodies a theoretical concept in a particular way.

Another part of the same analytic memo identifies Neil as a particular kind of case, presenting him as an instance of a theme I was beginning to recognize, then identifying the compelling reasons that I was categorizing him in that way:

> Neil is a comparative/contrastive case, as he develops his sense of writing via a growing awareness of the ways that exigencies are addressed differently through different writing approaches and methods of inquiry. The 120 research assignment provides him a chance

> to research the views of others, constructing an overview of a topic so that he can say something about it. On the other hand, his anthro paper allows him to present a perspective based on his own observations in an experiential learning activity. While he acknowledges he likes the latter better because it includes his own perspective (he has generated the ideas and the data), he sees both as *research writing* that are interlocked components of a larger process of learning about a particular thing.

The final point of this excerpt – that he sees practices from across contexts as components of his larger sense that writing is a series of negotiated choices – was an important understanding for me to draw from an iterative process of developing, refining, and applying codes, facilitated by this process of individual case-focused analytical memos.

Iterative analytical insights also came from participants themselves, usually through comments in follow up interviews, but – although it played a less-significant role than I would have liked – member-checking (Emerson, Fretz, and Shaw pp. 129-69) contributed another element to my ongoing analysis. I checked in with participants during preliminary analysis, both in class and during follow-up interviews, and followed up with them in short email conversations, which they had consented to engage in.[7] In face-to-face member checks, participants were more responsive but their feedback was corrective, not particularly analytical. These instances were often opportunities for participants to correct small points like early on when Cameron corrected me that he had studied extensively for the Test of English as a Foreign Language (TOEFL) exam, not the International English Language Testing System (IELTS) exam. In two instances, when I asked about things participants had said in small groups, they asked me not to include that in the study because they were not comfortable with the ways their comments made them appear. More seldom but still quite importantly, students responded to

[7] All but one of the focal cases contacted me at some point during the semester following data collection, either through friendly emails wishing me a good new semester or for more formal requests for letters of recommendation, help with writing, etc. I was careful to avoid conflating these moments with my own research, largely because I understood participants' requests for help as a chance to reciprocate for their own help with my research and I did not want to make them feel that further participation was a requirement of securing my assistance.

quick email questions after the semester ended and my analysis deepened. In almost all cases, these emails were short confirmations of something I sent for their feedback or, in a few cases, suggestions that what I was describing could be slightly more nuanced, as in the discussion Apple and I had about *wén cǎi* after the semester ended. However, conversations about math proofs with Cameron and Neil added to analysis by providing me not only with confirmation of my points, but sometimes with additional examples. For instance, when I emailed Neil to ask about my analysis of differences in math proofs across contexts and situations, I asked if his discussion of these differences gave his "writing a different voice or mood," his response helped to redirect my analysis in a nuanced way:

> Definitely! For example, when I finish a really long proof and am in a good mood, I may comment in the end like "by this beautiful detailed proof, we conclude...", while I may just say "therefore, we prove..." in other cases. Also, when I write something useless and am happy, I may comment like "the above result is just a good detour to see what happens to....", while in other cases I may just note "they're useless, please skip them"

These very interpersonal phrases, which he noted would not appear in formal proofs but in working pieces circulated among peers, furthered my sense that proofs did not just differ by context but also by audience, a consideration that my math-outsider status had not allowed me to see previously. Therefore, I was able to refine some of the insights I was developing about recontextualization of math proofs, reworking the analysis that eventually became the bulk of Chapter 4.

This dissertation, then, entailed a careful consideration of the ways that a researcher can attempt to proceed by "using different methods as a check on one another" in an attempt to strengthen the validity of my arguments (Maxwell). I drew on 15 weeks of observations, questionnaires, multiple interviews, analysis of writing, and member checking to reduce the possibility that my interpretation of one kind of data will provide a false narrative. Indeed, as I have described above and highlight further in the following findings chapters, I actively sought out my own misconceptions in an attempt to better understand the experiences of these six participants. Still, I make limited claims about generalizability beyond voicing the assumption

that, if these students had such experiences, it is reasonable to consider that they are not the only ones and, even if their experiences could be found to be outliers (which is, I think, unlikely) they are still the experiences of students who moved across a range of spaces and contexts in sometimes fluid and sometimes very constrained ways.

Chapter 3: Metalanguages as Prior Texts: Recontextualizing Ideologies about Writing

In this chapter, I present a detailed analysis of the ways that participants talk about what constituted "good writing" in a range of contexts. The contexts they discussed are diverse and reflect the multiple forms of movement that participants engaged in. As international students, these participants quite literally moved across geographic space, between China to the United States, from STEM labs on the north end of LPRU's campus to their writing classes a mile and a half away in central campus. Participants also traversed linguistic boundaries as they learned to think and write in contexts dominated by one language or another. They moved among a range of disciplines, each offering a particular approach to conceptualizing writing. Importantly, participants report not simply encountering different approaches to writing, but also distinct ways to actually talk about writing. My analysis reveals that these ways of talking about writing often come with a distinct set of vocabularies and assumptions: that is, they serve as metalanguages that both describe and prescribe ways of writing. As I argue in this chapter, these metalanguages that participants encountered are deeply entrenched in localized ideologies that privilege certain practices. Therefore, to understand the ways that a student might recognize, draw on, and recontextualize practices in new contexts, it is important to be aware of the metalanguages that bring with them to describe those practices and to acknowledge connections to ideologies that underlie those practices. In this chapter, I argue that a translingual approach to transfer – because it assumes language difference as the norm and asks not *if* transfer is taking place, but *how* an individual's exposure to a range of practices across contexts might influence the choices they make in a new situation – can illuminate the ways that students draw on and recontextualize metalanguages they have encountered in the past. Indeed, because of the prevalence of these metalanguages in the experiences of participants, I argue that they function as prior texts in their own right, and, like in other strains of transfer research, considering these

prior texts that students draw on when discussing a given piece of writing can shed light on the kinds of ideologies and practices that students bring with them.

However, it is not enough simply to identify the particular metalanguages participants in this study brought with them. It is also important to ask how participants applied, adapted, or recontextualized those metalanguages, and how those actions affected participants' writing. With these questions in the foreground, then, this chapter does two things: first, it makes the argument that we should look at metalanguages as part of a translingual approach to transfer, and, second, it identifies a monolingual ideology that encourages participants to rigidly silo their application of metalanguages, illustrating the extent to which they have been taught that writing practices should not transfer across different contexts. This siloing lead participants to frame their writing in more narrow ways than they might otherwise, but, as I illustrate below, these rigid divides break down occasionally as participants learn to blend metalanguages, often leading to more complete and transferable approaches to writing.

Metalanguages as Prior Texts

The approach to metalanguages I use in this study developed out of my analytical coding process. Initially, I was interested in the absence or presence of metalanguages prevalent in Composition (Yancey "Coming," for example) and L2 writing (James "Investigation") fields: looking for words like *genre* and *audience* or *draft* and *reflection* as proof that participants had language to draw on when talking about writing. This view of metalanguage resonates with the definition provided by Roman Jakobson, who describes metalanguage as a matter of "interpretation of one linguistic sign through other, in some respects homogenous, signs of the same language" (121). In this view, an individual either has metalanguage or does not. However, analysis of interviews with participants revealed several metalanguages I had not set out to investigate, which I describe in detail below. My analysis reveals that participants regularly used similar terms and phrasings to describe writing in particular contexts and, when switching to discussions of other writing in other contexts, often altered the terms they used accordingly. The

regularity of these shifts suggest that such phrasings function as metalanguages insofar as they reflect consistent views of how writing does and should work in a given context. Therefore, in this dissertation, I discuss a plurality of *metalanguages*. While Jakobson's definition focuses on the act of talking about language as a whole, mine considers the range of different patterns students have learned to use when talking about language. The metalanguage a student uses when talking about writing at a given moment is, after all, just one metalanguage that they have heard used by others in one particular place, and they have learned to apply this metalanguage to discussions of writing in that particular context.

Such a distinction is important for understanding the ways student metalanguages index the language ideologies students bring to new contexts. Pennycook defines language ideology as "contextual sets of beliefs about languages" that should be understood to be "located in certain histories and articulated from certain perspectives," that he describes as particularly "*local* perspectives, insights and worldviews" (5, my emphasis). The ways participants were taught to understand writing across a range of contexts each drew on a distinct set of phrases and priorities for their respective descriptions. Therefore, teachers and other authorities in each context encouraged participants to think about writing in a particular way and gave them a distinct language for doing so. For this reason, I would argue that, while Becker describes *languaging* as a reshaping of prior texts in new experiences, it is important to add that these metalanguages – specific ways of talking about how writing can and should work – also function as prior texts, as students draw not only on things they have written in other contexts, but also on things they have been told about writing in other contexts. That is, the prior texts that participants in this study describe drawing on are sometimes not essays or research papers or things like that, but the actual metalanguages themselves: the descriptions of what writing can or should do.

In this chapter, I identify some of the specific metalanguages that participants frequently brought to bear on discussions of their experiences with writing in their first semester in an American university. Through my coding process, I identified a series of systematic references to specific terms and ideas about writing that corresponded to discussion of a particular context. Because they were systematic ways of conceiving of and talking about writing, I understood

these as distinct metalanguages. Through further rounds of coding, I labeled these metalanguages as *contrastive rhetoric*, *wén cǎi*, and *TOEFL/exam writing*. Throughout, I highlight some of the ways that drawing on and recontextualizing these metalanguages influenced participants' writing. While Nowacek discusses recontextualization as a matter of recognizing "multiple avenues of connection among contexts, including knowledge, ways of knowing, identities, and goals," I would also argue that a translingual approach to transfer would include metalanguages as another distinct way of thinking about recontextualization, as these metalanguages are sites by which we can see participants negotiating not just the nodes of practice that Nowacek identifies, but the actual language ideologies that help frame what writing is and should be in a given context (20). I hope to show that participants' exposure to and replication of these views of writing serve as important prior texts and function as key factors in languaging experiences during their first semesters in an American university. Throughout, I argue that participants' use of these metalanguages provides insight into their prior experiences of being taught about writing and what makes it effective in particular contexts, and that attention to student metalanguages can illuminate the language ideologies shaping participants' writing choices.

This illumination is important insofar as it provides insight into how a student who has been exposed to *any* of these metalanguages can potentially bring the view of writing espoused by that given metalanguage and import it into a new context. Indeed, the goal of teaching these metalanguages often is to encourage students to do just that. So, *metalanguage* certainly can function as a broad category of activity: a structured process for talking about language. But as these few examples illustrate, students are exposed to a range of metalanguages on which they draw in their languaging, and these metalanguages carry particular language ideologies. As Suresh Canagarajah argues, it is important "to acknowledge that there are competing language ideologies and indexicals in global social space" (*Translingual*, 29). While much of the important translingual work that Canagarajah and others offer frame these ideologies in terms of negotiations of practices across contexts, I suggest that participant use of these metalanguages themselves – instantiations of language ideologies that prescribe what "good" writing does in a given context – reveals negotiations that sometimes constrain the ability of some participants in

this study, and sometimes lead them into contradictions, but also sometimes provide them with ways to language in a most effective way, blending and recontextualizing a range of knowledges and practices in the process. Therefore, a translingual approach to transfer could illustrate the ways that not only practices, but metalanguages, can be reflected on, brought into dialogue with each other, and recontextualized in a new situation.

Contrastive Rhetoric

In my initial coding, I identified many instances where participants discussed differences, broadly speaking, but during my ongoing analysis I noticed a specific focus that was common to these discussions: a very defined metalanguage that seemed rooted in Kaplan's (1966) early work in contrastive rhetoric, often drawing on his terms when describing their own understandings of writing. In interviews, it became clear that students had not read Kaplan's work, but in their English classes they had been heavily exposed to a metalanguage that conveyed the language ideologies espoused by Kaplan. While L2 writing researchers have reworked discussions of contrastive rhetoric to avoid some of the cultural essentializing underlying the uptake of Kaplan's original work (You 2014), the prevalence of this very defined Kaplanesque metalanguage was somewhat surprising to me, especially after roughly three decades of the pushback against the early phases of contrastive rhetoric. Research long ago pointed out that there were very few clear pedagogical implications to be directly drawn from Kaplan's original contrastive rhetoric work (Leki "Twenty-five") and Kaplan himself attempted to clarify that he was not offering a direct pedagogy, because "the needs of the language analyst are quite different from the needs of the language user" ("Scope" 59). More recently, critiques of the cultural presumptions inherent in Kaplan's early framework have thrown Kaplan's early work further into question (Atkins; Kubota and Lehner; Matsuda "Contrastive").

Still, participants were indisputably influenced by a metalanguage that bore striking resemblance to Kaplan's deficit-framed argument that often the "foreign-student paper is out of focus because the foreign student is employing a rhetoric and a sequence of thought which

violate the expectation of the native reader" was central to many student comments about what was expected of them when writing in academic English (4). Kaplan described American writing as "dominantly linear" in its structure, rigid in its adherence to paragraphs with topic sentences followed by examples or illustrations that are then linked back to the central focus of the writing, while "[t]he flow of ideas occurs in a straight line from the opening sentence to the last sentence" (6). In contrast, he described "Oriental" writing as "marked by what may be called an approach by indirection," producing writing that tends to "turn around the subject and show it from a variety of tangential views, but the subject is never looked at directly" (10). Though participants did not usually take up the pejorative tone that Kaplan applied to "Oriental" rhetorics, they reported that instructors in China and in the United States explicitly taught such differences and used such metalanguage to give feedback on writing. Thus, participants learned this metalanguage as a tool for conceptualizing and talking about writing, leading them to see the writing practices common in one context to be inherently distinct from practices common in others.

The clear separation of approaches to writing in English and Chinese, as it is delineated in this metalanguage, sometimes limited students' abilities to engage in richer understandings of rhetoric and style. Often, when drawing on a metalanguage reflecting Kaplan's views about students from other countries and the ways they should learn to write in English, participants mentioned an awareness of a wider range of rhetorical principles, but – in keeping with Kaplan's metalanguage – they opted for a narrower approach to writing. For instance, when describing what he assumed was going to be expected of him in his writing at LPRU, Apple notes: "Here I think we pay more attention to the structure, logics of the essay. So, the main idea is to prove our arguments instead of using rhetorical - maybe that is important, too." His aside at the end of this description indicates that he is aware of other rhetorical considerations beyond an emphasis on structure and logic but is convinced that they are secondary to these other formal considerations. For participants who had some training in thinking about the effect that language might have on readers, the distinction is a stark one. Ox-Man described an awareness of nuanced approaches to writing in Chinese, explaining that logic and structure weren't the only important features:

> Chinese academic writing also two kinds of writings. First kind of writing is similar to English academic writing. And another is . . . it's more like, poem? It's not the same structure as poem, but it's another way to express our feeling. Express to make our sentence beautiful. We write that kind of writing in order to make our article special.

His description of features of writing in Chinese that make sentences beautiful suggests an awareness of *wén cǎi* principles, another metalanguage invoked by several students, as I discuss below. But more generally, Ox-Man's sense that Chinese academic writing could also be expressive and aesthetically interesting contrasts with his description of what seemed important to learn when writing academic English: "for English writing, mostly I think for now I'm focused on the academic writing in order to improve my logic." Again, the metalanguage for describing writing in English as more logical leads students to prioritize a rigidity in structure over considerations of stylistics, word choice, and audience response (aside from an abstract native English reader expecting explanations to take a particular form).

Though these metalanguages clearly constrain some aspects of participants' approaches to writing, as the semester progressed, there were still moments in which participants developed an approach to languaging that allowed them to consciously draw in more than the contrastive rhetoric-inspired writing influences they had experienced. As I describe below in my discussion of TOEFL metalanguage and writing practices, for instance, Ox-Man nonetheless found ways to build on these static notions of English writing as primarily linear, recontextualizing practices from past experiences and infusing his writing with elements that made it more "special" to him. Similarly, Apple eventually learned to leverage this contrastive metalanguage in more rhetorically-savvy ways, developing more flexible languaging practices for thinking about his experiences in more inter-connected ways. But, as Apple and Ox-Man's discussions of contrastive rhetoric show, when participants silo practices according to the divisions laid out by a given metalanguage it can limit their abilities to see the relationship between form and structure and rhetorical considerations. Because of this siloing, these participants' early understandings that "structure and logics" (by which, I understand them to mean the sequencing of ideas in a

linear fashion) were more important than "rhetoric" ultimately limit their senses of what they should or even could focus on while writing.

However, even when participants maintain the rigid divides between what they understand as formalized English writing and more expansive and adaptive Chinese writing, there is still a sense that they are developing a critical understanding of how these metalanguages fall short. These critical moments set up participants to draw on a contrastive rhetoric metalanguage, while also blending influences from other metalanguages in other contexts. For instance, when Faker explained what he thought was expected of him when writing in academic English, he described past feedback that emphasized a distinction that resonated with Kaplan's description of the differences between English and Chinese writers, setting up a dichotomy between linear logic and a kind of indirection related to "skipping steps." When I asked what the most important thing for him to consider when thinking about this kind of writing was, he replied:

> The paragraph structure, because I think my teacher would always say to me that my logic is kind of not clear to describe something. Because I always jump out in other parts. Do you know? That's when I'm writing something I just thought my uh, the reader would understand my mean, but I just give some point of this as some part of this. Yes. So that is very important things for me to correct this, because I need to write very clear to the reader. Because I don't write to myself. I write to the reader.

Faker's response is filled with terms that seem to be drawn directly from Kaplan's description of the problematic writing of non-native speakers, particularly from countries like China. Faker's writing is problematic, according to this feedback, because it does not have good structure or clear logic. The abstract native-English reader will fail to understand because he skips too many steps. These comments illustrate that Faker draws directly on a previously-learned metalanguage to talk about his writing decisions at LPRU.

As his discussion progresses, though, Faker begins to recontextualize this contrastive rhetoric metalanguage by blending it with yet another metalanguage, one rooted in Iris's writing class and in a math course at LPRU (discussed further in Chapter 4). In both of these classes

Faker encountered a new metalanguage: a reader-oriented approach to thinking about writing that posits the value of writing for particular audiences as an important step toward greater writing development because "practice adapting writing in various types of contexts is an effective way to improve writing competencies" (Yancey "Introduction" *xxii*). In a clear recontextualization of these two metalanguages, Faker talks about specific choices in his writing, by putting comments about his readers' needs in a direct dialogue with his sense that he has a tendency to "skip steps" in his logic. In a short paper on why Artificial Intelligence does not present the immediate risks that some might fear, Faker employs a high level of meta-commentary (underlined), signaling every step of his logic in direct address to his readers:

> Firstly, let it be more specific, why should we fear about the artificial intelligence? According to Arend Hintze (2), an AI expert, he said that it is fear of unforeseen: "The designers may have known well how each element worked individually, but didn't know enough about how they all worked together. And many of us try to engineer AI without understanding intelligence or cognition first." The point of this author is that there are far away too many things we cannot understand at this point. But we try to use them and with the development of AI, they will access the high level responsibility which means they may have right to do something without control. In short, if anything wrong or something unforeseen happens, AI may be an existential threat to human beings, because it is a really cutting-edge technique, and we may not forecast the development of its future. However, do we really need to fear about the AI right now?
>
> Based on the arguments before, we do know "why" we should care about or even fear about the AI, but is this the stuff we should really concern about?

When I asked Faker about these choices, his response highlighted the extent to which he was driven by a consideration of a linear step-by-step metalanguage, but with a certain kind of reader with a certain set of assumptions in mind. He emphasized the process of laying out his argument

in this linear fashion, highlighting via gestures[8] the fact that he moved from one idea to the next, down the page:

> It's a very hot topic and many people think this [pointing at the topic sentence of the first body paragraph] way. Think of it this way, and so I need to ... First, I need to point out this [pointing at sources suggesting AI is dangerous]. And then I write it as against [pointing to his next paragraph, refuting the previous paragraph] this. Because it's, I don't think so.

The physicality of Faker's response as he diligently moved down the page by pointed to each subsequent sentence highlights the extent to which he was still influenced by a demand for step-by-step writing. However, the content of his explanation suggests that Faker was also thinking of a reader he disagreed with – one that might be persuaded by the frequent public statements against AI by industry giants like Elon Musk. The two metalanguages blend together to inform his approach to the paragraph, giving him a reason to move step by step through his prose, leaving signposts along the way. I asked him why it was necessary to include all of these pieces in order to get to his actual argument:

> In fact I think this part may be redundant. (laughs) Yes but I just want to say something about why should we fear about. Because I cannot just say "Some scientists says we have to fear about," and then go through [to his own ideas], because I have to make it clear. So why they say that [pointing to an idea he disagrees with], and then maybe why they say that [pointing to another idea he disagrees with], and we can find some hole to attack it. To against it, yes. So yeah, just might make it clear, I think.

In Faker's response, he blends two metalanguages to explain how he engages with ideas that he associates with his readers, describing his choices in terms of achieving clarity by proceeding in a linear fashion instead of choosing to "go through" to other ideas. He has recontextualized the formalized insistence to "not skip steps" to suit a more reader-oriented context in which a writer

[8] Andrea Olinger identifies the ways that writers learn to embody discipline-specific ways of describing writing, tending toward the same kinds of hand gestures to convey certain approaches.

makes choices to construct a relationship with a reader. However, it is important to note that he does not substitute this new metalanguage for the previous one, but has conceptualized his conversation with an imagined reader through the same step-by-step manner of achieving clarity. Faker's recontextualization of a linear approach to thinking about writing to address the needs of particular readers is an important example, illustrating the ways that a translingual approach to transfer might investigate the ways that students recontextualize not only previous practices but also the metalanguages they associate with a given context when moving into new situations for writing.

However, a translingual approach to transfer can also allow teachers, researchers, and students to uncover ways that recontextualization of metalanguages might draw attention to differences in writing processes across contexts. In this way, students' recontextualization of metalanguages is not only productive of new ways to understand writing in a given context, but also provides students with the opportunity to develop new approaches to actually engaging in the act of writing in a given situation. In a particularly salient example of the development of such insights about the ways that different contexts conceptualize writing, Neil discussed a growing awareness of differences in deductive and inductive tendencies, which he saw as underlying, respectively, Chinese and American approaches to writing. Over the course of the semester, he modified this contrastive rhetoric-inspired metalanguage, turning a rigid divide between contexts into a way to think about how the practices he associated with those contexts could be recontextualized to suit the needs of new writing situations.

Early in the semester, Neil described a rigid divide between practices in Chinese and English language contexts. Like other participants, Neil discussed the importance of following a step-by-step logic and reflected on the differences between Chinese and English writing by describing a linear text that states a claim and then supports it through a process of systematic elaboration. Though this divide seemed overly-rigid to me, Neil described the process of coming to understand difference between contexts as a productive one:

Neil: Chinese people may prefer deduce, in which, so first we put the evidence, analysis, and then we get our outcome. But in English, I always put the outcome or the result at the very beginning. And then explain and elaborate on it.

Ryan: Um, how did you ... How did you learn how to do those two different ways?

Neil: By some reading. Yeah, when I first was just entering university in China, I also had English class at that time so I need to read some articles. In the very first few articles I got always puzzled me because when I started to read it, I always found a conclusion.

Ryan: (laughs) Yeah.

Neil: So at that time I said, "Why there's conclusions?" There should . . . the conclusions should have been in the very last part of the article. So at that time I found the Chinese people in using writing is quite differently from the way your people use.

Neil's description of his confusion when first reading writing in English reflects his growing awareness of the different ways that writing can be structured, which he attributes to the *preferential* differences between Chinese and English-speaking writers. But his comments also illustrate a developing understanding of *conclusion* in English-writing contexts. The "conclusion" that he expects to find at the end of the piece of writing more closely resembles what is referred to in English academic contexts as the thesis, claim, or central focus. In short, he recognizes that writers in different contexts make their point in different ways, stating their main idea differently, based on the views of writing that dominate those contexts. As Neil reflected on the different ways that he was learning to make a point or come to a conclusion, he came to realize that he knew multiple ways to do so. However, he relegated these practices to a strict divide between Chinese and English contexts.

Over the course of the semester, though, I saw a break in Neil's adherence to this divide. As he started to blend elements he associated with the two descriptions of writing, his terminology shifted. He recontextualized his sense of what *conclusion* meant, accommodating the idea of beginning with a strong focus and supporting that idea throughout instead of writing in an exploratory fashion and leaving the definitive statement of his point until the end. When I asked if his reflections on where "conclusions" go changed his writing process at all, he was

certain that he not only went through the steps of writing differently, but also tended to think in a different way:

> Yeah. When I write in English, I will be more focused. Because I put the idea at the very beginning, so the following paragraph must be closely related to this topic idea. And when I write in Chinese, I just maybe have a ultra, a general idea about this question and I just write in from the evidence and analysis to see what I will get from this reasoning.

The shift in metalanguage is noteworthy here. What he recalled as a "conclusion" in his early experiences of reading in English has become "the idea" and "this topic idea" in his description of his more current writing in English. And, indeed, the "focus" of his writing in English is very explicit, following his suggestion that he recognizes the need to find his point early on and structure his work so that it flows from that main idea, rather than beginning with a question that he answers by the end of the piece of writing. Here, he associates beginning with "a general idea about this question" with a Chinese approach to writing, dominated by a Kaplanesque metalanguage that describes such writing as less focused or straightforward. According to this particular metalanguage, the difference between Chinese and English language writing is that Chinese writing frames introductions with questions that are unraveled in search of an answer, which is provided in the conclusion when the "paper arrives where it should have started" (Kaplan "Cultural" 11). In contrast, Kaplan describes writing in English as one that uses a direct statement of a topic that is supported throughout the piece by a series of examples related back to the main topic (4-5).

Of course, questions often drive the creation of thesis statements in American academic writing, but Neil's exposure to this contrastive metalanguage impels him to determine that such writing is less focused on questions than statements.[9] But the difference, for Neil, is that his view

[9] In a study of students negotiating across Spanish and English practices, several reported that they were interested mainly in learning to write in ways that would conform to expectations of standard monolingual English ideologies. However, they described several ways that they drew on knowledges and practices from other contexts to do so (McCarty "Translational"). It would be interesting to further investigate the ways that students like Neil might be more effective at crafting questions to drive their inquiry because of the metalanguages they bring with them.

of English writing begins with a focused idea that determines the rest of the paper's trajectory, while Chinese writing encourages him to begin with a broader question that will be answered by his reasoning process. These different organizational structures allow him to reason in different ways – not simply because they are culturally different perspectives, but because the practices he associates with *English* and *Chinese* lead him to see his inquiry process in two different ways, which he initially associated with distinct contexts, but later began to recontextualize to develop into more effective practices.

Neil's recontextualization of practices he associated with the contrastive rhetoric framing of Chinese and English writing allow his to reshape his approach to inquiry in writing as a whole. His initial navigation of these different forms of inquiry – developing his thinking by fronting a strong thesis and moving from there versus writing his way from a question to a conclusion that encapsulated his main point – is particularly visible in the writing he did during the early part of his first semester at LPRU. His first paper was an argument that even framed itself as a question in its title: "Is Technology Shaping our Identity?" But his understanding of the writing process as an unfolding of a question is especially clear in the statement of his argument, which is not actually a *statement* at all:

> I do not deny that technology can help teenagers realize themselves and form their identity, but doesn't it just push teenagers to adapt themselves to the norms and rules from the cyberspace instead of finding a true self?

Neil makes his argument fairly clear, though the use of a rhetorical question as a thesis statement would likely be censured by many writing instructors. Still, the remainder of an approach to writing that begins with a question can be seen here, even as Neil moves to align himself with the "idea first" approach to writing he gleans from the contrastive rhetoric-inspired metalanguage that tells him this is what his academic English readers will expect.

Later in the semester, even as Neil becomes more comfortable with writing that "begins with the idea" instead of questions that lead to conclusions, a productive influence of the contrastive rhetoric metalanguage's framing of Chinese writing remains, as he learns to contextualize his arguments by nestling them in a series of questions. For instance, near the end

of the semester, in the end of the introduction to his research paper on the efficacy of after-school math tutoring programs, Neil is especially careful to explicitly state his argument and the ways he will discuss and substantiate that argument:

> The controversy suggests that the problems I encountered are general in this country and of great importance to the education. Therefore, I decided to focus on the big picture. In this paper, I will argue with the following two reasons that we should encourage students to take part in these after-school STEM programs, provided that the organizers run them effectively. First, students will benefit tremendously from these programs in terms of making academic progress and gaining social skills. Second, we can enhance the operation mechanism of the programs to assure that students will receive the maximum benefits.

Though this "I will argue" statement certainly fulfills the requirement that writers "put the idea at the very beginning" that Neil associates with academic writing in English, it is interesting to note the way that he leads up to this statement, situating his argument as a response to a problem he encountered. Indeed, earlier in the introduction, he begins by describing his experiences in the math tutoring program in terms of the questions he was driven to ask:

> At that time, I started to question whether it is actually beneficial for students to take part in this program. Hence, I want to figure out whether we should encourage this program.

While this is a common approach to justifying an argument, it is noteworthy that he has come to this approach, not simply by learning it in English language writing contexts, but by recontextualizing his understanding of how to write in Chinese contexts. He gets to "the idea" by modifying the question-posing moves he was familiar with previously. Therefore, though he is writing for an English language audience, he chooses to recontextualize the process of questions leading to conclusions, which he associated with writing for Chinese audiences. For Neil, it seems, the recognition that one particular language ideology privileges a "straightforward" claim-evidence structure does not preclude the possibility that other ways of thinking about how writing works can co-exist in a given piece of writing.

Considering the ways that participants draw on the language and understandings of contrastive rhetoric, we can see that it is possible to view metalanguages acting as reflections of the ways participants have been taught to view writing, with a prescriptive emphasis that marks certain features as "good writing" in American academic contexts. The contrastive rhetoric influenced metalanguage is, in many ways, an over-arching one that feeds into other metalanguages students draw on. The prevalence of the linear and (Western) logic-oriented descriptions of academic writing in English can be seen in each of the discussions below, but the nuanced differences between them illustrate that participants do not develop *metalanguage* but a multiplicity of *metalanguages*, each corresponding to particular local practices, ideologies, and individual moments in participants' own trajectories as learners. At times, the contrastive rhetoric metalanguage encouraged participants to silo their approaches to language, creating rigid divides between conceptions of Chinese and English language writing. But at other times, as participants came to see writing in these contexts as richer than this simple dichotomy, they began to see the language practices described by this metalanguage not as a set of irreconcilable absolutes, but as a part of their own growing literate repertoires. These metalanguages – like the practices they describes – could be modified and blended with others, recontextualizing ways of conceptualizing writing to fit the needs of new readers, situations, and processes of writing. The richness of participants' recontextualizations of prior metalanguages might ultimately seem unsurprising when considered from a translingual perspective that foregrounds the importance of understanding the innate interconnection between all of an individual's language experiences, especially given the wide range of practices and ideologies these metalanguages encompassed. However, as the following section illustrates, a translingual approach to transfer can shed light on the ways that students also can recontextualize even the most seemingly bland and a-rhetorical approaches to writing as those students move across contexts.

TOEFL and Exam Writing

Because of its assumption that drawing on prior experiences is the norm, a translingual approach to transfer is especially well-suited to identify the productive ways that students are leveraging and recontextualizing knowledges and practices. This was particularly true when discussing the influence of what might seem to be a fairly a-rhetorical genre: writing for standardized exams like the Test of English as a Foreign Language (TOEFL). For most participants, writing for examinations is the dominant (if not exclusive) experience with English language writing they brought to LPRU and, in many cases, writing for exams is the primary exigency students experience in either language.[10] Every participant had enrolled in at least one course designed to help their performance on the TOEFL exam and they reported writing numerous practice essays, somewhere between "maybe thousands?" and "all the prompts" according to Neil and Faker as they joked with me before one class. Therefore, participants brought a very defined metalanguage for talking about TOEFL writing. Understanding the ways participants drew on and adapted this metalanguage is particularly important for thinking about how students might engage in the messy process of recontextualization.

It is especially true that a translingual approach to transfer might help to uncover some of the possible recontextualizations of very formulaic approaches to writing that are too-often dismissed by teachers and researchers (see, for example, the collection on the 5-paragraph essay edited by Caplan and Johns). However, template-heavy approaches to writing hold rich potential for broadening students' writing abilities, as Christine Tardy argues in her discussion of undergraduates and genre innovation

> the emphasis placed on exam writing in tests like the College English Test (CET) in China or the TOEFL [. . .] may serve to reinforce template-like conceptions of writing

[10] Writing solely for purposes of examinations is, of course, common in many American educational contexts too, as Meltzer points out. However, there might be less pretense of writing for other purposes in Chinese schools than in American schools. A study following up on one like Meltzer's might look at Chinese and American writing curriculum and, for both, compare the distinctions between what curriculum purports to do and what the assignments actually ask of students.

> for many students, perhaps lending some added value to the exploration of variation and innovation in writing classrooms. ("Beyond" 174)

In this section, I illustrate ways that participants already began to engage in a process of innovation as they recontextualize the understandings of writing they bring from TOEFL writing prep. The views of writing that participants brought from these exam writing contexts, reflected in the metalanguages they used when describing their writing, do indeed reflect "template-like" conceptions of writing but, as I will illustrate below, participant discussions and writing also provide insights into the kinds of innovation and variation that Tardy sees as central to full participation in new writing contexts. Reflecting the ubiquitous nature of language difference and adaptation understood by a translingual approach to transfer, participants often negotiated their new writing contexts by critically examining their experiences with TOEFL training to find useful elements that could be recontextualized to more appropriately fit the situation at hand.

The TOEFL writing metalanguage depended on wide generalizations, so it seems at first to be fairly incompatible with more context-specific approaches to writing. However, some participants were able to recontextualize it in effective ways as they moved through their first semester at LPRU. They were able to do so because even the most seemingly-simplistic approach to discussing writing can carry both an approved vocabulary for talking about writing and an ideological prescription for what writing can or should do. It was in their reshaping of the central purpose of their writing that participants were able to draw on the TOEFL metalanguage in new and more rhetorically-informed ways.

When drawing on this metalanguage, participants used a very distinct set of terms to talk about form, similar to those used to talk about 5-paragraph themes or generalized academic writing. They all frequently used words and phrases like *introduce my main point, body, support,* and *reasons*. But they also used language that more broadly reflects the exam exigency like "show my ideas are correct" (Cameron) and "make the reader understand what I know" (Lexy). As both the terms and the broader exigencies illustrate, this metalanguage prioritized a highly-structured understanding of writing that acted as a conduit. The goal of writing, in this case, is not necessarily a matter of making a good point, but of convincing the grader-reader that the

point has been made clearly and effectively. Therefore, this metalanguage was especially clear about its role: it allowed participants to identify parts of their writing and to discuss what those features were intended to do: convince an exam reader that the essay had all the requisite parts and correct ideas, and thus was worthy of a high score.

While this approach to thinking about the reader is clearly quite narrow, it allowed participants to begin to think about the text as an interaction between a writer and a distinct audience, a central concern of rhetorically-savvy writers. The adoption of such a perspective was most clearly illustrated by Apple, who moved from a static view of a reader as a generality – the writing must be clear to the reader but there is not a particular kind of audience in mind – to a more specific imagined community with distinct needs and values that could be accommodated. This more generalized sense of a reader is clear in Apple's writing choices earlier in the semester. There choices were shaped by the metalanguage he was exposed to when learning to write for the TOEFL exam, where discussion of readers focuses heavily on facilitating their understanding of Apple's writing. His generic sense of making things clear to a reader is evident in the ways that his early writing is marked by generic forms of appraisal-engagement (Martin and White) and metadiscourse (Hyland). While those resources are rich in potential for engaging with readers in very distinct ways, Apple understood such language rather uncritically in the early parts of the semester. For instance, in a piece on artificial intelligence that discussed a program designed to play the abstract strategy game *Go*, his prose depended heavily on what he called "transitions" (e.g., *which means, as a result, but in fact, it is true that, so*). Apple's reliance on this set of stock phrases illustrates the ways that he had been exposed to instruction emphasizing explicit connection of ideas using key words and phrases, a central feature of both contrastive rhetoric and exam-based metalanguages: "I tried to use more transition words to lead readers like- what's the connection between this paragraph and next paragraph?"

Since Iris has also talked about connecting ideas in ways beyond the use of transitions, I asked Apple why these connecting words were necessary enough to be so prevalent in his writing. He suggests an almost habitual tendency: "When I think of writing I also want to make stuff comes after have more reason. If there is no relation with the previous paragraphs, I just

feel not comfortable." Apple's response highlights the extent to which he has learned to think of connections between ideas as abstract necessities, not really means of engaging with an audience. He identifies himself as the person who needs these transitional words and phrases, not necessarily an outside reader. Therefore, this practice was difficult for him to recontextualize because it was only a response to the TOEFL context in the broadest way. TOEFL writing demands transitions, so they must be there. Drawing on this metalanguage, he realized that this is the way he connects ideas, so when he needed to connect ideas in writing for Iris's class, these moves carried over in ways that did not reflect any significant recontextualization, perhaps because the TOEFL metalanguage only relates such practices to ideas of readers in the most generalized sense.

But other elements of the TOEFL metalanguage were more readily adaptable, especially if they were more directly related to the idea of an actual reader. Apple frequently drew on another related practice in a much more contextually-savvy way: the use of questions embedded in direct addresses to readers, particularly at moments of transition. Apple developed this practice as he learned the TOEFL metalanguage for prescribing particular writing practices that would make his writing clear for his reader. During one draft workshop in Iris's class, he explained that, when he was trying to make connections clear, he was encouraged to think that, at such moments, "the reader might ask why that here," so it was useful to include the reader's questions in his own writing. Unlike in Apple's more simplistic use of transition words and phrases, based on his sense that such pieces of language just needed to be included, this use of the concept of "reader" imagines that someone – albeit in the most general sense – might be reading and asking questions.

Because of Iris's emphasis on a reader-centered view of writing, Apple was able to recontextualize this more generic view of a reader to develop more complex ways to show the relevance of his ideas with actual readers in mind. This move showed up in Apple's writing in a piece early in the semester. After introducing the context of his paper, telling the story of Alphago's defeat of a leading *Go* player, he begins his second page, "Now you might be thinking, what has it to do with? It is just a game after all. It is true that, in some cases, AI is still

unreliable compared to human being . . .” This direct address stood out to me, so I asked him about the choice. He linked this choice to what he learned about considering his reader for TOEFL exams:

> I think it's more related to TOEFL. Like, we used a lot of the templates in TOEFL writing because this is only way we get uh, we approach and get familiar with the English writing. Like, this is also, uh, I imitate. This [pointing to a line in his essay] is also a sentence I imitate from another essay. I don't remember what the essay is, but I just remember that it's such a sentence that make readers feel very naturally, the transition between one paragraph to another paragraph. You can't come suddenly come up with some weird things that the readers don't understand. And it should be related to what you previously said. Like I just introduced a big topic [pointing back to the first page] and the readers might don't think there is much relation to their lives. So I need to clarify what the relationship is.

Apple talks about using templates he gleaned from learning about TOEFL, leveraging them to learn to effectively communicate with his reader – who he knew was a grader but was also a human being with experiences and a need to understand things – and Apple thought about such a reader for this paper, recognizing that he could reshape that understanding of “clarifying the relationship” in this new case, leading to his use of the rhetorical question I had asked about. In this way, it is possible to see Apple starting to adopt a sense that part of the TOEFL metalanguage that emphasized ways to make sure the grader-as-reader understood his logic could be recontextualized to consider the needs of an audience more broadly.

As much transfer research on task similarity (for example, Bradford and Schwartz; James “Far”) suggests about transfer more broadly, recontextualization seems to be facilitated by a sense of broad similarity. In Apple’s case, it was still easy to imagine the reader as an individual reader-as-grader, because Apple had a sense that his computer science research might not be wholly clear to Iris or – he politely implied during one class – to me, a proxy teacher-figure in the class who he knew would be reading his drafts and final papers. His generalized sense of the reader from TOEFL writing could be applied to Iris’s class in a way that involved a slight

transformation to suit the particular needs of the individuals Apple identified as his audience. However, it might be difficult to identify this productive instance of transfer without taking on a translingual approach to transfer that assumes that writers incorporate practices and metalanguages from across their experiences in sometimes messy and surprising ways (Depalma and Ringer "Toward").

Because recontextualization is a complicated process, researchers and teachers might sometimes only see limited development when looking at individual texts like Apple's early writing for Iris's class.[11] But a close investigation of Apple's writing over the course of the semester reveals him transforming exam writing practices aimed at getting a good score into writing practices aimed at making content accessible for a particular kind of audience – one who was interested in questions Apple was investigating but also less informed than he was about the given topic. In his final research paper of the semester, this shift is evident in his opening:

> Healthcare, which is so closely related to people's well-being and life quality, has been generating tons of data due to the emergence of more complicated diseases and increasing demand of medical treatments.

This sentence is strikingly different from the opening to his early piece, which began with a template-heavy "Artificial intelligence is growing at an alarming rate these years."[12] When I asked him about that earlier sentence, he said it was how he had learned to always start TOEFL writing:

> This sentence we used a lot in something like TOEFL test or college test. I remember this form of sentence is just what I memorized. So when I want to introduce a topic, I will

[11] The research that suggests a need for longer-term research in order to understand the ways writers draw on and adapt prior knowledges is immense (for example, Beaufort; Leki "Undergraduates"; Prior "Writing"; Roozen "Tracing"; Rounsaville "Worlding").

[12] I am influenced here by Laura Aull's comments on opening sentences and generality ("Generality"). Though there is not much optimism in discussions of possibilities for helping students recontextualize or build on practices from either TOEFL exams or 5-paragraph writing experiences (see Caplan and Johns, for example), Apple's comments here suggest that he is taking practices from these fairly limiting genres and using them to imagine more effective writing practices that suit English academic writing contexts.

> always say something is growing at a fast speed or some faster rate . . . these years. (laughs)

The TOEFL metalanguage, requiring writers to produce fast and formulaic responses that could be adapted to any topic impelled him to write in this particular form. But when writing the new and more complex first sentence, he maintained a sense that "something is growing" lately, but reworked his more formulaic practices to consider the rhetorical needs of a particular kind of reader, who might not understand the connections underlying the conversation. He explained:

> For this sentence I tried to lead readers to the context and introduce. Otherwise I'm not sure reader will feel confused about how data can be related to healthcare because usually healthcare is something that we barely relate to big data.

Apple doesn't claim that he used TOEFL templates in his writing class - that wouldn't have produced effective writing for this new context. Instead, he points out that he learned how to think about engaging in practices that could help him convey himself clearly in one context, then he adapted that way of thinking about the reader's needs in this new context. Adapting his approach to thinking about his audience in this way illustrates how Apple is not only recontextualizing his knowledge, ways of knowing, identities, and goals, as Nowacek discusses (20-5), but he is also adapting the way he acts on the metalanguages he has accumulated, maintaining elements of the TOEFL writing practices but recontextualizing them as a new approach that thinks about and speaks to readers in new ways.

Participants thus developed their languaging abilities by considering how the language ideologies and metalanguages of particular contexts might be more malleable than they first seemed, and open to recontextualization to suit the needs of new situations. But, as Becker (1995), García and Wei (2014), and others have pointed out, such expansion in an individual's use of language is a matter of becoming – a continual construction of the self in and through language – which can only be expected to be heightened when moving across spaces and practices, language ideologies, and modes of communication. As Paul Prior (2018) puts it, such "becoming happens in spaces that are never pure or settled, where discourses and knowledge are

necessarily heterogeneous, and where multiple semiotic resources are so deeply entangled that distinct modes simply don't make sense."

Thus, as participants reshape and add not just to their repertoire of practices but to the range of language ideologies they bring to bear in new contexts, it is unsurprising if they tend to frame such learning in terms of shifts in their own sense of selves. Ox-Man, for example, began his discussion of learning academic English writing by talking about borrowing from templates he learned for TOEFL exams:

> **Ryan:** You said that you have to pay attention to word choice and sentence, and then overall structure. Um, what kinds of overall structures do you use in English academic writing?
>
> **Ox-Man**: Yeah, for the simplest structure, that's . . . I've taken some TOEFL test. Do you know TOEFL?
>
> **Ryan**: Mm-hmm.
>
> **Ox-Man**: Yeah, so for the TOEFL writing, the overall point is 30 points and I got 29 points. So, so I think I'm good at it. So what I learned is that I have to have a basic structure five paragraphs. First paragraph is for the topics and then the thesis statement is a generalization of my whole topic. And I will, I have three body paragraphs, which includes three different arguments, which support my thesis statement. Also in the conclusion sentences I just summarize the ideas that I have mentioned, so. So it's, this is a simplest structure.

Students like Ox-Man recognize that the templates they learned for exam writing are limited because of their rigid formula, which he calls "simple," but he ultimately finds that these practices still might still be useful for building on in new writing situations. He recontextualized the practices privileged by the exam metalanguage, reworking them to fit with the new knowledges and identities he was experimenting with, echoing Nowacek's sense that such recontextualization is a matter of considering "multiple avenues of connections among contexts," including a range of goals (20-25).

The range of goals that might drive a students' recontextualization can be difficult to difficult to understand, especially when they lead to what might seem to be questionable writing choices. However, as Tardy reminds, while "the intent of the writer is not always evident to text readers" it is important to consider that "Decisions to depart from convention may be motivated by a writer's desire to portray him- or herself in a particular way" ("Beyond" 38). Neither Iris nor I identified a recontextualization of TOEFL writing metalanguage or practices in Ox-Man's writing, but his choices were explicitly grounded in his goals of growing as an individual studying abroad. These larger personal goals influenced the ways that Ox-Man thought about his more specific writing goals, recontextualizing prior understandings by pushing beyond the boundaries of the kinds of writing the exam metalanguage privileged. He explained these attempts when describing his first essay for Iris's class, "Loyalty in National Basketball Association,", saying, "I am good at the [TOEFL] structure, so when I wrote about my first draft I'm a little bit about creative." Expanding the formulaic one-paragraph introduction he has learned, he spends two paragraphs telling illustrative stories to "give context," which he hoped "can attract some part of [his] audience." Like Xiaoye You's student Wenyuan, who noted that she intentionally diverged from a standard TOEFL-style approach to argumentation because "[s]ometimes different can be [. . .] very specialized" and convey a writer's intentions more effectively, Ox-Man wanted to adapt the approach to writing he had learned to master when preparing for the TOEFL exam ("Cosmopolitan" 163). He has learned the TOEFL-prep metalanguage and has mastered the writing it describes; as a new college student, he is interested in doing something more complex with his writing practices.

It is important to note Ox-Man's conscious move here, recontextualizing the language ideologies he has been exposed to in learning to write for English-speaking audiences. Like other participants, he was often encouraged to conflate TOEFL writing practices with English academic practices. Learning to do one would facilitate his ability to do the other. However, his moves to expand and shift these practices illustrates the ways that participants learn to problematize the narrow language ideologies conveyed by a particular metalanguage. What was once understood as *good writing in English* has been reduced to *one form of writing in English*,

one set of practices among many, all functioning according to their respective local views and purposes. Ox-Man is learning, as You puts it, that "English writing, though a local language practice, mediates multiple cultures and subjectivities" and, I would argue, encompasses and is encompassed by multiple language ideologies ("Cosmopolitan" 138). He is, therefore, expanding his ability to language.

The blending and expansion of the metalanguages he draws on when writing is central to Ox-Man's expanding languaging abilities. When I asked why he had chosen to move away from aspects of the introduction-thesis formula he knew so well, he emphasized that he was building up "context for discussion" because he was interested in "explaining something," not just making "the straightforward argument" he associated with more simplistic 5-paragraph TOEFL writing. He went on to describe his choice in terms of his developing sense of how to explore ideas in the world:

> Cause I'm growing up now. I know there's no extreme right and extreme false. So, I'm just going to explain myself about a, a feeling. And also I'm open to any arguments and I'm just to express my feelings and my ideas of this kind of topic. Also I think it is reasonable for any existence. So maybe that's the reason why now I'm writing little bit uh, ambiguous or I'm not sure, but I think there's no . . . there's no absolutely right or absolute false ideas. So I just write the way that I think is appropriate.

Ox-Man's recontextualization of the understanding of writing he brings from TOEFL prep is intimately tied up with his sense of his own development as a person, with growing communicative and epistemological repertoires. The rigid thesis-driven nature of TOEFL writing can be made a bit more "ambiguous" in his effort to more effectively express more complex discussions, as he feels himself becoming a more complex person. This connection makes sense from a translingual perspective on transfer because, as García and Wei note, since "language constitutes us, then adding to a linguistic and semiotic repertoire means that we acquire not only new ways of speaking and acting, of languaging, but also of being, of knowing and of doing" (79).

Ox-Man's comments illustrate the important interaction of knowledges, ways of

knowing, identities, and goals that Nowacek identifies in her discussion of transfer as recontextualization. Ox-Man is looking to expand his writerly repertoires, but this expansion happens most clearly when he is drawing on and adapting the metalanguages he has encountered in early phases of his learning. He notes a strong connection to practices associated with the exam metalanguage, but goes on to suggest that his developing sense of self – driven by the new contexts and practices he is encountering – impels him to reconfigure his writing in such a way that he is able to develop a more creative flexibility that he finds more befitting his growing sense of self. This is a process of languaging clearly linked to his ongoing sense of becoming, with the local practices he has encountered turning out to be not nearly as static as he had assumed them to be.

Such instances of languaging further illustrate the ways that students can come to see the situated nature of given local practices, thus revealing the language ideologies underlying the metalanguages associated with those practices so that "language and identity are seen as products of these social performances" (Pennycook, 125). In the cases of participant recontextualization of ways of thinking about and engaging in language already described, I have illustrated several ways that students might be able to expand their language and identity by reshaping social performances in new settings. However, these social performances can also sometimes be constrained by the extent to which a given language ideology might associate particular metalanguages and practices with very distinct contexts. In such cases, as I describe below, student attempts to tap into their potential for drawing on a full range of metalanguages and practices can be frustrated, narrowing the rhetorical possibilities individuals bring to new situations.

Wén Cǎi

As participants' discussions of contrastive rhetoric and TOEFL writing metalanguages show, drawing on some metalanguages in a new context can lead participants to a more critical understanding of that context and, in the best cases, can show the way to integrating prior

understandings of how writing should work with new expectations and new ways of understanding the self. However, that this was the case with some metalanguages is not to say that reflecting on *all* metalanguages was quite so productive for participants. In some instances, participants' identification of a metalanguage with local practices that they felt cannot or should not be translated to new contexts led them not only to conclude that they should not draw on those practices, but also to over-emphasize the lack of certain features in the writing they encountered in a new context. That is, participants sometimes drew on a metalanguage to identify practices that they identified with Chinese contexts and insisted that these were not compatible with writing in English academic contexts. Therefore, the rigid separation of this metalanguage and its accompanying practices from other ways of conceptualizing and engaging in writing led to a failure to see connections or recontextualizations that were possible in new writing situations.

As I argue here and throughout this dissertation, a translingual approach to transfer, which understands writing as a matter of inevitably drawing on and adapting prior experiences in new situations, is particularly suited to helping students, teachers, and researchers see potential for recontextualization. Indeed, a translingual approach to transfer is especially useful for identifying cases when recontextualization is happening in ways that might not be otherwise recognized. But it is also useful for identifying instances when recontextualization could happen, but currently is not, often because of prevailing language ideologies in the new context, which proscribe the incorporation of other practices. Such instances illustrate the ways that writers can feel "tongue-tied" when writing and communicating in new contexts where they perceive audiences to "dismiss particular uses of English [or other languages] because they jar the ears and eyes of those educated to find only particular accents, idioms, lexicons, syntactic constructions, and meanings to be legitimate" (Lu and Horner, "Logic" 100).

This tongue-tied feeling was especially prevalent in discussions of writing that led participants to describe *wén cǎi* (文采), a characteristic of writing that conveys "literary talent" or "grace," but can also denote the idea of a text being "brightly colored." An approach to

writing that is only sparsely discussed in English, wén căi was described by Liu Xie, a literary and rhetorical scholar in the early 6th century Chinese Dong Jin Dynasty (Jilin, 29).[13] Xie calls for "enchanting appeal in argument and discussion" but cautions that "to achieve a merely embroidered beauty by grafting enchanting appeal upon one's argument, and to effect mere literary decorativeness by the image-carving of eloquence are examples of an extreme decline in literary tendency" (231). Instead, the adornment of wén căi writing requires that we "put sentences together to form beautiful patterns for the purpose of making our ideas clear" but if "the patterns become too florid and the rhetoric too eccentric, our ideas will be rendered vaguer than ever" (233). Therefore, this metalanguage, beginning with Xie, emphasizes a balance between aesthetics that make meaning, not simply a pleasing ornamentation. In these discussions of wén căi, the role of a metalanguage in laying out both a description and a prescription for writing, providing students with a language for describing what makes something wén căi and criteria by which to judge such writing as particular effective or ineffective.

The aesthetic emphasis of this metalanguage – particularly in its dialectical relationship of form and content – often encouraged participants to see such practices as a contrast to more "straightforward" writing in English academic practices. Participants considered the practices described by the wén căi metalanguage to be proscribed in English academic writing, just as they did the contrastive rhetoric metalanguage descriptions of Chinese writing, discussed above. Neil described these differences by pointing to the ways that wén căi conflicted with academic approaches to writing in English saying that, in such practices "when you write a paper or a

[13] Explicit references to wén căi in composition and writing studies research is very limited. Patrick Sullivan, Yufeng Zhang, and Fenglan Zheng, describe the differences between American and Chinese writing, emphasizing that the latter "values beauty of language and the moral message," tendencies necessary for writing to be *wencai*, or "possessing literary elegance" (324). Similarly, Liqiu Wei and Ji Liu describe one student who recalled that, during exams, "We were encouraged to write with "*wencai* (a long-celebrated feature of good writing, realized by a mastery of rhetoric)," adding, "As raters have barely 30 seconds to score a composition, articles with *wencai* (grand tone, wild quotations, and beautiful language) would easily attract their attention, and win high scores, though logic problems might exist" (1052-3). However, there has, to my knowledge, been no investigation of how these views of writing influence later writing and learning.

article, or even you talk in the real life, some words we have, may have hidden meaning. And people, we all know that, so it's like a self-evidence thing." Because he understood academic writing in English through a contrastive rhetoric metalanguage that privileged writing that was very explicit about its argument, Neil decided that the use of such wén cǎi words and phrases was not possible in the writing he did at LPRU.

Nonetheless, some participants experimented with wén cǎi practices in their writing and these participants' attempts to translate elements of the wén cǎi metalanguage into English contexts illustrate the difficulty with recontextualizing metalanguages that favor practices proscribed in new contexts. Sometimes, participants did so by trying to graft a previously learned metalanguage onto a new understanding of writing. For instance, Apple – who first introduced me to the term – described wén cǎi writing as mainly interested "in rhetorical word ways" that "make the reader feel comfortable" though not necessarily in terms of persuasion, just aesthetic pleasure. However, his conflation of *wén cǎi* and *rhetoric* limited both terms to matters of word choice and ornamentation. Similarly, Lexy tried to translate the wén cǎi metalanguage to fit with her growing sense of the meaning of *rhetoric* directly, without recontextualizing her prior understandings to adapt them to a new situation, a wholesale carrying over that ultimately limited the meaning of the meaning of both *wén cǎi* and *rhetorical*. She described wén cǎi elements as being important to good Chinese writing, translating the idea to mean "rhetorical" but only insofar as it related to word choice, not the broader connection of form and content called for by Liu Xie. Lexy explained:

> Writing in Chinese, the teacher are very . . . many emphasis on our expressions. We have to use the mm, rhetoric? The rhetoric skills like, put many beautiful sentences in that passage will make to . . . help us to get a good score.

The suggestion that beautiful phrasing is the goal of rhetoric limits wén cǎi to a matter of the mere ornamentation without concern for its relationship to content that Liu Xie warns against, and it reduces *rhetoric* to a matter of word choice, without larger considerations of social interaction and genre that the term conveys.

In Lexy's attempt to align these two terms, she came to the conclusion that, because she could use beautiful phrasing – that is, she could write wén căi – in Chinese contexts, she could write rhetorically. However, she noted that she cannot do so in English writing contexts. When I asked why she could not incorporate her wén căi understandings of writing at LPRU, she gave the example of an early piece written for Iris's class, a critical summary of discussions of equity in American college education. Lexy identified her use of "peeling off the beautiful coat of the higher education" as an example of beautiful wén căi phrasing, early in the text. The metaphor is an apt one, given her argument, with the external façade of the educational system seeming fairly positive (even warm) but only acting as a cover for something else. It also structurally resonates with the text Lexy wrote, which begins with a rosy depiction of American higher education and progressively uncovers problems like prohibitive costs and frequent mental health concerns for students. Therefore, the use of this line is "beautiful phrasing" that at least passably matches Liu Xie's demand for form to match content. Still, because of the ways that Lexy learned to limit her use of this particular metalanguage and the practices it described, saying "I feel very pity because I think these expressions are very, very great" but just not allowed in academic writing in English. She decided not to experiment further ways to recontextualize her understanding of wén căi writing in academic writing in English, leaving her feeling somewhat "tongue-tied" as Lu and Horner put it.

However, as a translingual approach to transfer might predict, even the most stringent proscriptions against adapting wén căi approaches to writing cannot fully erase signs of other language practices.[14] Cameron noted that this inability to fully erase such practices is due to the

[14] In a discussion of translation that I argue resonates with a much broader field of language negotiation (McCarty "Translational"), translation theorist Lawrence Venuti shows that translators "can never entirely avoid the loss that the translation process enforces on the source text, on its meanings and structures, figures and traditions. And translators cannot obviate the gain in their translating, the construction of different meanings, structures, figures, and traditions" (37). He refers to signs of these productive moments as "translational remainders" and calls for translators to consciously include them in texts, just as I suggest that Lexy and Cameron might have done in their writing, enriching their writing with visible signs of their recontextualizations.

fact that Chinese "culture is rooted in our minds. We can adjust to new environment, but we cannot root it out. That is language too." Even students like Cameron, who suggested that he was not interested in incorporating wén cǎi elements into his writing, are still influenced by their experiences with this metalanguage, and signs of it are not as easy to "root out" as it may seem. A translingual perspective takes this difficulty a step further and asks why struggle so mightily to erase the signs of such rich languaging? How might wén cǎi views of writing – if they were allowed – contribute to a more effective piece of academic writing in English by infusing that writing with signs of difference that better reflect the global nature of English?

In a clear reflection of a writer "adapting to a new situation" of writing in English but not fully "rooting out" the other cultures and influences he brings with him, Cameron wrote the most striking example of a use of practices associated with the wén cǎi metalanguage, noting in a piece on the future strains of research in AI that "[a]rtificial intelligence went through its winter in the late 20th century." In an otherwise very formulaic analytical piece of writing, the language stood out, so I asked him what that phrase contributed to his argument. He explained:

> I mean, the concept of AI was come up in 1960s. So since limitation of the condition, at that time AI didn't make great progress. It didn't fulfill the scientists' wish to mimic some calculated functions. So when the concept appears, many people think it, "Well it's a cool, it's a great idea because it's artificial intelligence can help people do many things," but the condition is limited. They didn't make progress and those people who invested their money, they withdraw their money. So the research, the funding of research was cut off. So they were confronting with some difficulties about funding, about the research methods. So they were stuck at that time. And then someone come up with new methods like machine learning. So artificial intelligence make great progress in the 21st century.

The depth of the metaphor must certainly qualify this phrasing as conveying "literary grace" that is not merely ornamental but also conveys meaning. Cameron encapsulates the shift from the past "summer" of AI research to the long cold downturn, which only currently was beginning to end in the "spring" of "new methods like machine learning" that were moving the field toward – in Cameron's view – a new summer. The wén cǎi phrase allowed him to encapsulate in a

metaphor what took him much longer to explain in non-metaphorical terms, and it imbued Cameron's discussion of AI with historical and social background that he might not otherwise have included. Unfortunately, Cameron ultimately decided that this kind of language should be removed from his writing. He attributed this erasure to the fact that readers of American academic writing do not find metaphors to be "straightforward enough," even though the phrase "might tell the reader a lot," a clear instance in which the rigid siloing of language practices leads writers to do less than they might with their writing.

Cameron's decision to erase this particular phrasing might have been motivated by several factors that provide insight into the ways that language differences are sometimes proscribed in ways that affect some communities in different ways than they affect others.[15] Indeed, it is not necessarily the case that the use of a metaphor in writing about AI would always be proscribed. It is easy enough to imagine a writer framing the line of AI research that Cameron writes about as one that "has been dormant" without much comment.[16] But that metaphor, while not necessarily being *clearer* in any definitive way, conveys a much narrower range of meaning. Cameron's wén căi phrasing could, therefore, provide readers with more insight into the technological developments he was discussing. The main difference between these two metaphors is a much more important one though, illustrating the ideological and ethno-racialized divides that these metalanguages police. It may be the case that Cameron identified the specific stereotyped *Chinese-ness* of his wén căi phrasing, drawing as it did on the modulation of seasons to make meaning. It leaves open the question of whether some wén căi practices would be more easily incorporated than others, depending on the extent to which they can be seen as indexing a

[15] Translingual scholars have not yet sufficiently addressed Keith Gilyard's critique that, while translingual theories effectively point to the fact that all language users deviate from the constructed standard language norm in some ways, these theories often elide "the recognition that we don't all differ from said standard in the same way" (286). Cameron's use of a metaphor is, at least potentially, a deviation from the standard that is less acceptable than one that does not index both deviation and otherness.

[16] I am grateful to Anne Curzan for this particular example.

non-English (thus ideologically non-American, non-white, etc) authorship in the same way that the "language of indirection" did for Kaplan.[17]

As these examples illustrate, one critical insight that a translingual approach to transfer might glean from an investigation of this particular metalanguage is that significant detrimental effects result from bounding language ideologies and practices to particular contexts, shutting down the possibility for recontextualization. To see the practices described by a wén căi metalanguage as acceptable only for Chinese writing led participants to actually make less meaning than they might have, ignoring the important potential for recontextualization that these practices held. However, it is important to reiterate that participants' decisions to silo their language practices in this rigid way wasn't merely a result of participants' noticing and acting on incompatibilities between two approaches to writing. Their decisions to separate wén căi understandings of writing from other understandings is a move that has been perpetuated by the feedback these participants have received on writing, which has continually reinforced the incommensurability of different rhetorical approaches to writing. When I asked why she tended to remove signs of wén căi from her writing, Lexy recalled: "My teacher just have me point it out . . . they just ask me to delete such expressions." Through the feedback she received, Lexy learned that such approaches to writing could not be recontextualized, just removed.

The requests to "delete" such phrases recall the hygienic cleansing that Rosina Lippi-Green identifies as a central practice of standard language ideologies, which are at the heart of monolingual approaches to languaging that do not tolerate signs of different practices or contexts. For participants in this study, the wén căi metalanguage was linked strongly to the Chinese writing contexts from which they originated. In the most obvious sense, this association of wén căi with Chinese writing is the result of learning this particular metalanguage in school settings in China when learning the language ideologies underpinning local practices there; but this association also seems to be the result of actual proscriptions, with instructors telling

[17] As critics (eg Gilard; Inoue "Antiracist") have noted, the links between racial-ethnic identifications and translingual theories are still currently under-developed and warrant much further investigation.

students that such writing choices simply do not fit in American academic writing in English. Cameron is likely right that his computer science instructors would not approve of a rich metaphor like "gone through their winter" and Lexy is probably right to worry that "peeling off the beautiful coat" does not translate well into the most normative versions of academic argumentative writing. However, there is no reason that this has to be the case. The link between language and meaning that Liu Xie describes and that both Cameron and Lexy's examples of wén cǎi writing illustrate is an understanding that could transcend contexts and provide insights into any number of local practices. Recontextualizing wén cǎi practices could have thus added significantly to participants' languaging, but because of the rigid association of this approach to writing with a particular context and set of language ideologies, that kind of work went undone.

Conclusions

These discussions of participants' negotiations of contrastive rhetoric, TOEFL writing, and wén cǎi metalanguages illustrate that students can recontextualize not only actual writing practices, but also the metalanguages that correspond to these practices. Indeed, these metalanguages often function, themselves, as prior texts that participants adapted to the requirements of new contexts, shifting their views of how writing worked to suit the needs of new audiences and expectations. Though I have presented these metalanguages in three distinct subsections to reflect the ways participants originally discussed them – siloed into separate and contextually-bound categories – my analysis illustrates the substantial interconnectedness between many of the ways that participants discussed their writing. For instance, it was through their exposure to both contrastive rhetoric metalanguages and TOEFL writing metalanguages that participants came to see wén cǎi writing as proscribed in English writing contexts. But it was also through a critical rethinking of the too-narrow descriptions of writing favored by TOEFL and contrastive rhetoric metalanguages that led participants to imagine ways to write in ways that made them more adaptable to new situations.

If, as Lorimer Leonard and Nowacek suggest, a translingual approach could help transfer

research "to also account for language ideologies in the writing skills, knowledge, and contexts studied," then this discussion of metalanguages has, I hope, provided one specific way in which to do so (260). While drawing on and reshaping metalanguages they bring from past writing experiences, these participants are learning and recontextualizing practices, referencing, drawing on, refuting, reworking, and blending views of what makes writing good in and across contexts. What is particularly striking in participants' negotiations of a range of metalanguages is that they illustrate that views of writing can be recontextualized and therefore repurposed in ways that free them from the limitations of a given language ideology. Therefore, these participants' comments might provide a guide for researchers and teachers like Gita DasBender, who suggests that "the influence of different rhetorical traditions upon the different types of writing instruction experienced in China and in the US [. . .] if purposely integrated into L2 writing instruction can help diminish the confusion students experience when faced with new writing tasks" (292). As participants' metalanguage makes clear, though, they have already experienced the effects of these differing rhetorical traditions and can, instead, highlight first steps to developing the ability to draw on knowledge of these differences in their writing, albeit in sometimes conflicting and conflicted ways that reflect an ongoing process of individual development.

Chapter 4: Finding Ways to Recontextualize through an Attunement to Difference in Math Writing

This chapter presents participant talk about writing in math and its relationship to other forms of academic writing, highlighting the ways that those participants develop awareness of the possibilities of recontextualizing math writing practices in other writing contexts. While the previous chapter emphasized the ways that participants recontextualized metalanguages and practices across a range of contexts, this chapter focuses solely on discussions about math contexts. I make this choice of one disciplinary case because I found that participants' experiences were saturated with influences from math classes, both in Chinese and English-language contexts, and those experiences often provided them with some of the most significant rhetorical insights we discussed over the course of this study. Therefore, a chapter on recontextualizing writing practices in math provides an in-depth look at the ways that such recontextualizations might work in one particular context. As such, I argue that this engagement with math writing functions as an activity through which participants learn to be attuned to language differences, a disposition that Rebecca Lorimer Leonard describes as one "in which individual literate practice cannot help but be understood in a larger context of globalizing literate experiences" (Lorimer Leonard "Multilingual" 230). I describe math contexts in which participants became attuned to difference – that is, they come to be highly aware of the ways that writing practices differ in nuanced ways across and even within contexts – in order to illustrate the complex negotiations that participants engaged in as they came to see connections between a diverse set of experiences. Furthermore, math writing practices also offer some participants opportunities to experiment with recontextualizing practices across genres and contexts, even though they sometimes encountered ideological obstacles to bridging math writing practices with those from other contexts. In this way, this chapter providing a disciplinarily-specific case that illustrates how a translingual approach to transfer could allow teachers, researchers, and students to see connections between writing practices that might otherwise have gone unexamined.

I begin by describing the ways that participants came to talk about math during our interviews, illustrating the ways that participants assume that when a writing teacher asks about writing, they're not interested in the things students do in math classes. However, as I show, participants bring rich understandings of the ways that writing functions in math classes, with many participants also comparing that writing to other academic writing contexts, once they felt invited to do so. I go on to describe the complex rhetorical activity of proof writing, which is the most common writing experience students encounter in math courses. Having established this background, I move on to discuss individual cases in depth, analyzing participant discussion of proof writing and, when available, examples of student proofs. The first two provide examples of math and computer science students who develop rich rhetorical awareness in math writing, helping them to think about the exigencies of proofs and the ways that writers can shape readers' experiences. The third case goes further, illustrating the ways that an attunement to difference might facilitate a growing sense of the ways that writing practices can be recontextualized to suit the different epistemological needs of readers across contexts.

Mathematical Language Practices

Participants who are hesitant to discuss connections between math and other ways of languaging do so because, I would argue, they have been taught to view writing within a monolingual perspective that encourages them to see specific writing practices as static and appropriate only for a given context. Writing practices learned in math are useful, according to this view, only for the task of doing math. Other practices associated with non-mathematical academic writing are useful only in those other contexts. However, this perspective fails to see the interrelated nature of mathematical and non-mathematical language practices.[18] In the very

[18] The language of mathematics is technically a matter of *register* insofar as it consists of "a set of meanings that is appropriate to a particular function of language, together with the words and structures that express these meanings" (Halliday "Some" 65). However, I discuss *mathematical language practices* for several reasons. First, to highlight the activity of doing math through language, emphasized by *practices*. Second, to align with research and general parlance in some

simplest sense, practices are related because math cohabitates with other languages. Words from other varieties of English or Chinese are repurposed in mathematical practices, creating new – though related – kinds of meanings. This is possible because mathematical language, like that of other scientific and technical fields, is in constant development, which M.A.K. Halliday argues is not always a matter of simply adding new words and technical structures, but of "combining existing elements into new combinations" and "through the bringing into prominence of structures that already existed but were rather specialized or rare" ("Some" 66-7). Thus, though their use is specific to a given context, math practices – at least in English – resonate with a range of other practices. Halliday notes that this is one of the difficulties with mathematical language in English, which sometimes uses common words with specialized meanings rather than always resorting to the creation of new words. Terms like *set* or *point,* for instance, convey specialized meanings that are not wholly congruent with more everyday meanings, infusing their use with resonances of other contexts and practices.[19]

Therefore, the language of mathematics – like all language – is hardly monolingual or autonomous, that is, "made up of discrete structures (as in Saussure) or a context-free mental grammar (as in Chomsky)" (García and Wei 9). Instead, it is polyglot, infused with meanings and practices that resonate with other contexts and other utterances. This is particularly clear at the lexical level, where context is so clearly inseparable from meaning. Understanding what *set* means in a non-mathematical context – a collection of individual objects taken as a whole, like a set of dishes or a set of action figures – can contribute to an understanding of a mathematical set

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research, which discusses "the language of math" insofar as it focuses on the relationship between the meaning-making potential in natural language and mathematical language. Finally, I do so to match my participants' senses that math is a *language* that is often (though not always) distinct from varieties of English and Chinese.

[19] I'm conscious here that I'm reading Halliday through Bakhtin, with Halliday's sense that language is a social semiotic that works through ideational, interpersonal, and textual metafunctions sharing similarities with Bakhtin's notion of heteroglossia, in which a given instance of language is always a matter of interaction with other speakers, views, and instances of languaging. This connection has been touched on in terms of the general sense that Bakhtin's thinking might have influenced socio-semioticians like Halliday more broadly (Zou) or that the Appraisal framework is specifically influenced by Bakhtin and Voloshinov (White 5-6).

that depends on, among other things, a notion of "cumulative hierarchy" and developing axioms to avoid logical paradoxes (Stoll). However, an understanding of a mathematical *set* and an understanding of a non-mathematical *set* are related, not wholly congruent meanings, each informed by the contexts they are associated with. Shifting from one of these meanings to another is, thus, a matter of recontextualization at the word level, in which a given utterance means what it does because of its relationship to the given context and the intentions of the speakers and audience.

However, the relationship between mathematical language practices and those of other contexts goes beyond the lexical level. As Candia Morgan notes in her discussion of the discourse of mathematical investigation, viewing mathematical writing practices as completely isolated from others fails to recognize that mathematical "texts do not on the whole consist only of strings of symbols or of naming things; rather they are, like other academic texts, rhetorical in nature, addressing and attempting to persuade a reader" (10). That is, good mathematical writing is a matter of not simply doing good calculations or producing ironclad logic, but also considers what kind of connections require explicit emphasis, which axioms need to be mentioned, and which can be taken as given. She also notes that the amount of non-symbolic "natural" language in a text is important to consider, though it is equally important to recognize the extent to which the division of mathematical communication into "symbolic" and "natural language" practices is problematic because the "non-symbolic 'ordinary' component also has specifically mathematical aspects which bring into question its 'ordinary' nature" (10).

Therefore, attempts to understand mathematical language and writing practices – including their relationship to other non-mathematical practices – would benefit from a translingual approach that emphasizes the ways that these practices are dynamically interrelated. Suresh Canagarajah highlights this interrelationship in his description of the lectures of a math TA, Tan ("Materializing"). Tan's languaging, Canagarajah argues, can best be understood in terms of "a materialist orientation that treats all resources working together as an assemblage for meaning-making" (268). While Tan teaches a lesson, he draws across this range of resources as the specific moment requires. He blends "board work" – the actual writing of mathematical

calculations and proofs – with at least two different kinds of speech acts reflected in the use of two different kinds of registers, one facing the board "doing math" and another facing the students "teaching math." The practices that corresponded to these different moments of languaging blended fluidly, with markers of each register highlighting the relationship between different identities and activities. The pronouns "we" and "you" indexed these shifts. "We" indexed doing math together (as in "if we consider a pipe"), and "you" indexed addressing students as an instructor (as in "so you can remember by, this, formula"). (274)

What is interesting in the examples identified by Canagarajah is the ways that practices indexing these two registers are shuttled back and forth between in one "text": the math lecture. This kind of shuttling highlights the ways that a range of practices are brought to bear on effective moments of engaging in the work of mathematics. These moments help to illustrate that this mathematical work is not done via a static one-size-fits-all math language but through processes of shifting between a range of practices that best fit the goals of a given situation and the specific needs of the audience.

That is, an effective language user in math contexts is one who is attuned to and acts on the nuanced differences required by a given situation; but, as I illustrate below, this attunement to difference also provides participants with tools to use when recontextualizing writing practices in non-mathematical contexts. Some highlighted the ways that they approached writing differently across contexts and goals in math, providing examples of the ways that such writing can be part of broader languaging across a range of situations. To show the potential of such languaging, I present several instances in which participants drew on developing awareness of complex mathematical practices in ways that also displayed a heightened awareness of the ways that practices differed across mathematical and non-mathematical contexts. These participants grapple with the monolingual ideologies that sometimes suggest that math and other disciplines should be rigidly siloed, but ultimately found ways to develop insights that broadened their understanding of writing across this divide.

I conclude by discussing Neil, an exemplary case to be sure, but one who provides a model for thinking about how students might further attune themselves to rhetorical differences

and productively leverage that understanding when learning and writing. Neil's case bolsters my argument for a translingual approach to transfer, which insists that language difference is inherent in all use, is evidence of recontextualization of writing practices across contexts, and is a resource that is ripe for cultivation as instructors look for ways to help students learn how to see and draw on their full range of knowledge and experience. I hope that analysis of such a case provides at least one way to help researchers and teachers "unlearn the dispositions that lead us to dismiss particular uses of English" that force students into "tongue-tied" states that limit their intellectual and expressive potentials (Lu and Horner "Logic" 100).

Hidden Languaging

Participants brought a paradoxical sense that math writing practices are related to other writing practices, but are still fixed in their separation from those practices. This was clear early on in interviews where, despite the importance of math in their languaging experiences, almost all participants were hesitant at first to talk about math in the context of an interview about their writing processes. However, when I showed interest in their experiences writing in math courses, almost all of the participants immediately shifted into thoughtful conversations about math, comparing its logical progression of ideas to those in argumentative academic genres, and describing the complex rhetorical nature of proofs. This tendency suggests that participants can be attuned to the differences and connections across contexts, while also performing a monolingual approach to language practices, which rigidly separates practices based on the presumably static requirements of a given situation. This unfortunate trend is especially important when considering a translingual approach to transfer, which assumes the presence of language difference and looks to highlight the connections participants might already be drawing on, since it provides one clear instance where transfer could be facilitated by encouraging students to experiment with and give voice to a more expansive kind of languaging.

My interest in participants' experiences with math was peaked during the first two interviews I conducted, where I was surprised that both participants eventually mentioned proof

writing in math when I asked what they had to write in other classes, besides Writing for International Students. Like many writing teachers, math is far from my comfort zone and I seldom think about it in terms of writing or rhetorical exigencies, even though I already associated math and proofs with argumentative processes that came to conclusions by showing the irrefutability of a position. Still, I was not prepared to have students talk at length about math writing. So it was probably for good reason that, initially, both students suggested that this wasn't the kind of writing I might be interested in. Still, Cameron explained: "Sometimes when we do provement[20], we will write, but just you make your instructor know what you mean and your logic is right so it's good. We don't need to pay attention to the word choice or … we just need to make sure the instructor understand and the logic is right." Similarly, Neil answered "Yeah, but it, it's not like the real writing. It's the, it's the proof." Intrigued, I pushed on their understanding of this kind of writing, revealing a more nuanced understanding of writing in math contexts:

> **Ryan:** Is there any similarity between that and argumentative writing? Or not so much?
> **Cameron**: Uh, yes. You mentioned that and it's kind of interest. It's kind of similar things. In provement … to do provement you have to claim something first. And then use theorems to support your claim. So it's like argument. You state your opinion and you use examples to support.

Cameron's comments resonate with the metalanguage of Iris's class, focusing on a claim-centered argument, supported by a series of examples. I was especially interested in the richness of this discussion, immediately following statements that writing was not really important in math. It seems that Cameron has thought more about writing in math – and perhaps the ways it was and was not similar to writing in Iris's class – than he first suggested.

[20] Cameron was the only one who used the word *provement* which I initially took to mean the same as *proof*. After some research though, I realized that it is a term that is specific to computer science. In a follow-up email, he acknowledged this difference, but said it was fairly insignificant and that he uses the two interchangeably, though he tends to use *proof* more.

Of course, it is possible that my question invited Cameron to discuss connections that he otherwise would have assumed to be irrelevant to this conversation about academic writing. As he notes, the connection of provements and argumentative writing was spurred by my question, but only insofar as it suggested to him that I was interested in the ways he wrote in contexts that were much different than the one I was studying. His response was quick, giving me little sense that he was constructing a similarity based on the question. Instead, the nuance provided in his description suggested that the idea was one that was not new to him, but part of an attunement to the formal and rhetorical connections between proofs and generalized academic argument. Similarly, Neil's insights into math proofs as a kind of writing, discussed in depth below, further solidified my sense that asking more explicitly about writing in math contexts did not spur these connections, but invited students to talk about associations they were already conscious of but did not think would be relevant to discussions of college writing. Thus, early on in this research, I began to see participants' comments illustrating a distinct attunement to difference and a growing understanding of ways that these differences functioned in a range of contexts, though they were not asked to build on this understanding in any formal way.

The simplest and most straightforward ways that participants made these connections was voiced by Lexy – one of two students who were not pursuing math-heavy majors – who noted in passing that there were still connections between generalized academic writing practices and her math work, drawing on the Kaplanesque contrastive rhetoric metalanguage discussed in the previous chapter. When describing the writing demands she was experiencing in her first semester at LPRU, she emphasized the extent to which linear writing pervaded all of her classes. She concluded a list of examples by noting that she thought "there are also step-by-step logic in other subjects, like math." When I followed up, asking her how her growing understanding of these linear writing patterns might influence her writing in math, she recanted a bit, saying that the connection she saw did not relate that explicitly to *writing*, saying that she was only required to "write down formulas." Though this was the most fleeting of the discussions I had about math with participants, the spontaneous connection and its subsequent dismissal provides an interesting possibility for a translingual approach to transfer, since it reveals at least the

possibility that Lexy's ambivalent attitude toward math might have been altered somewhat by encouraging her to make her experiences with mathematical practices more dynamic, inviting her to put them in dialogue with reflections on languaging that were more central to her interests in her first semester at LPRU.

This kind of translingual form of transfer was somewhat more effectively realized by Ox-Man, the other student who was less focused on math-heavy studies. Like Lexy, Ox-Man offered an unprompted reflection on writing in his honors calculus class, connecting his discussion of the kinds of "academic writing" he was learning with the work he was doing in math:

> And also for the … hmm … what else I have? Honor calculus one. We have to … Yeah, even in math we have to write in a kind of academic way 'cause math is very straight forward. This is right or this is wrong. And we have, for this honor calculus it's different from the math 115. It's about some facts. [We] are supposed to analyze a fact by using the calculus, but we are going to prove some theorem or some facts or … So we have to do a lot of proof work, so in the calculus we have to support something and to do some induction, step-by-step to get our proof done.

While Ox-Man seemed rather surprised by the realization that work in math classes (which he did not particularly enjoy) related to the other kinds of learning he described as more engaging, his off-the-cuff discussion is rich in a Kaplanesque metalanguage, with analysis driving the effort to prove something, supported by evidence unfolding in a logically-determined way. Since, as I note in the previous chapter, Ox-Man was particularly interested in thinking about the relationship of the process of diversifying his language practices and his own individual growth and becoming, this rather spontaneous connection is rich in potential for thinking about how students might language more broadly than monolingual academic views might suggest. Ox-Man identifies ways that writing practices are recontextualized in similar ways across his courses,

suggesting that is thinking about relationships between practices. However, like Lexy, he is not encouraged to build on that recognition in productive ways.[21]

The remaining two interviews followed a pattern similar to Cameron and Neil's, with participants who were interested in math initially denying that they wrote in math class, then jumping into complex conversations about the ways that they think about writing proofs. Apple suggested at first that writing in math and computer science was not really writing but was just about making sure the teacher knew that he understood the lessons, but then quickly elaborated, moving back to link writing in math and computer science to his interest early in the semester in difficulties with translation:

> **Ryan**: When you're writing for that kind of class, how do you write to make sure that your teacher knows that you understand?
>
> **Apple**: Uh ... I just write what I think.
>
> **Ryan**: Okay.
>
> **Apple**: I think it's- But sometimes it's more- There, there is some problem about the word choice. For example ... like, like in ... In math, there is also some, you need to write some proof, some words we use in Chinese we need to think again how it is applied to English math.
>
> **Ryan**: Um, do you ever ... Have trouble translating?
>
> **Apple**: Yeah.
>
> **Ryan**: At those moments?
>
> **Apple**: Yeah, sometimes. I uh, at first I just do have some problems about these kind of writings. So I just, the way I use is to just gradually read more proof and more simple proof and to memorize how they choose the words.
>
> **Ryan**: Mm. That's interesting.
>
> **Apple**: I think it's easy to just memorize.

[21] In my study of multilingual students from the Bronx moving from high school to college, I found similar cases in which students are engaging in rich forms of transfer, but those practices are neither acknowledged or built on in any school contexts (McCarty "Translational").

Apple's emphasis on finding examples to help facilitate his movement between Chinese and English is characteristic of the process of identifying templates and gradually integrating less formulaic elements to differentiate and create more complex kinds of writing. For Apple, a central consideration was how to manage the moments of natural/non-symbolic language across Chinese and English. Apple seems to be very conscious of the fact that such moments of natural language use, as Morgan notes, are themselves pieces of mathematical meaning-making which play an important part in writing practices of math. That he must think about incorporating symbolic language with natural language in translation reveals a moment of translingual transfer that highlights the ways that Apple draws on knowledge of math, language difference, and genre models in order to write for a new situation. But, like several of his classmates, Apple assumed that this kind of writing was not what I was talking about when asking about writing, suggesting that even though he engages in broader approaches to languaging, when discussing his writing, he has learned to perform monolingual views that delineate sharply between the contexts in which languages practices are considered appropriate.

Though this performance of monolingual views of writing was common across most participants, with the exception of Neil, discussed below, one way that participants seem to have been encouraged to recognize and draw on relationships between language practices across contexts was a fairly simple one though: explicit instruction in writing *in more than one context*. All participants had received explicit writing instruction before coming to LPRU, and were receiving very focused instruction in Iris's class, but some were also not only writing in other classes, but were being taught *about* writing in those contexts as well. The most pronounced example of this kind of simultaneous writing instruction can be seen in Faker's discussion of writing practices across contexts. Initially, like other participants, he denied that he had been writing in math, but then he quickly recanted, saying that he did, in fact write in math class, but only for the first time that semester. He described a course in which he was learning to write proofs, which he disliked at first, but came to find to be meaningful. Again, the need for a slight prompt in order to get him to admit that he writes in math class is pronounced:

Ryan: No writing at all in math?

Faker: No writing at all in math.

Ryan: Not even little bits of writing?

Faker: Oh, yes. I have ...Yes, this little bit. (laughs) My math course is about proof. Yes, and that is very different for me because as an engineer student, we don't do proof, you know? We just do computation. Yes, and this is kind of the first time I do some proof in college. It's very difficult and I need to write something very specifically. Yes, and I can uh, let you see some works about my proof. And I-

Ryan: Cool.

Faker: Find this very annoying to do so-

Ryan: (laughs)

Faker: Because uh, in math I have to write so much things. But I think we don't need to write so much things in math. It's kind of uh, it's just ... It's kind of, kind of like that.

Ryan: Let me see.

Faker: Yeah, it's very ... Yes. It's kind of writing like, writing course. And my teachers in this math course told us, "You have to treat this course as a writing course," because we have to do some writing proof.

Faker explained that his frustration with proof writing initially stemmed from the fact that, as an engineer, he is more interested in computation than proofs and he did not originally associate math with a place where he had to write a substantial amount or attend much to the specifics of that writing. But because of his instructor's emphasis on proof writing, he came to think about the relationship between writing and math differently.[22]

This course – described as "a rigorous introduction to linear algebra" for "potential math majors and those interested in the theory behind the mathematics" – emphasizes writing in a remarkably nuanced two-pronged approach, with students using writing to learn theoretical

[22] The simple fact that math teachers are emphasizing the importance of writing even in courses that are not designated as disciplinary writing courses would likely come as a pleasant surprise to many writing teachers and researchers, as Writing Across the Curriculum research (*eg* Bazerman; Meltzer) report that writing is seldom explicitly connected to the content of math classes.

methodology while also developing a sense of communicating practices for writing math effectively. The syllabus emphasizes the former explicitly:

> We will not only study the above concepts and their applications, but also the methods by which one proves the foundational results in linear algebra. Consequently, this course has two major goals: to learn linear algebra and to learn how to write a rigorous mathematical proof. Students should leave this course prepared to use linear algebra as well as to succeed in further theoretical courses in mathematics. This is a challenging course, and those interested only in the computational side of linear algebra should consider Math 214 or 417.

The deepened understanding of theoretical methodologies underlying linear algebra is directly linked to writing, linking these theoretical underpinnings with clear, specific, logical communication. There is no explicit discussion of the reader in this description, but because he is experiencing writing-focused instruction in multiple classes, simultaneously, Faker is able to find common threads in the feedback he receives from instructors in both contexts. Faker explains that, as he writes in math, he recognizes shortcomings that are also present in his writing for Iris's class:

> Yes, and the first class, the first few class I just feel very uh, I don't want to prove this because it's very obvious to me. But then I learn something like that, I, yes I have to prove this because something need to be illustrate very specifically. And it's like my writing course, the logic way, because sometimes I just jump out to the other part. So in math, I sometimes, I do this same thing. Yes, and I think I should, I must write clear and then it can not only train my brain to think like this, this way and, and it can make the others to know what I mean. Yes, it's very important.

While Faker eventually decides that math and writing *classes* might be incommensurable, his growing sense that he encounters the same difficulties (jumping from point to point in ways that make it difficult to see connections) in two very different contexts allows him to develop practices to "train [his] brain" to think about helping his readers understand his logic. But the important thing to note about Faker's observations about writing practices in math and in his

writing course is the extent to which he is understanding and responding to feedback by recontextualizing practices between these two contexts. He is not saying that his difficulties writing in math and in other academic situations are the same, but that he must consider the needs of the reader in similar ways and in doing so he must consider his own tendencies as a writer and how they might affect that reader in a given situation.

A translingual approach to transfer encourages teachers and researchers to help students draw out such connections, first and foremost because such a perspective assumes those negotiations are already taking place. As these cases illustrate, the negotiation across language practices in math contexts serve as fruitful ways for participants to become attuned to the nuances and effects of difference, even though that attunement runs up against the countervailing force of a monolingually-oriented university. These discussions of mathematical writing practices revealed that participants found these practices to be related to others in a range of dynamic and reader-oriented ways. In the next section, I discuss the most concrete manifestation of these writing practices: the proof. I argue that the proof writing these participants encountered entails not a static and formulaic performance, but an opportunity to language across contexts that are not often enough in conversation.

Theories of Proof Writing

Though "proof theory" is a major subfield of mathematical logic (Troelstra and Schwichtenberg), and another related field – the philosophy of math – often investigates the language and nature of proving (Davis and Hersch), little work has been done to study the actual writing of mathematical proofs. This is especially true in composition-related fields. In her study of writing to learn in mathematics, Sandra Keith suggests that learning to write proofs could be one way to mitigate situations in which "the students don't understand what constitutes an explanation, and they are insecure about their ability to communicate with the teacher" (145). She suggests thinking about proof writing as an opportunity to foreground critique and revision of "bad" proofs to learn to write better ones. Bahls, Mecklenburg-Faenger, Scott-Copses, and

Warnick identified ways that differing disciplinary reading practices lead to differing assessments of mathematical writing, including proofs. However, in both of these studies, the actual writing of proofs themselves is touched on only briefly.

Considering Morgan's argument, discussed above, that proofs are rhetorical genres that require a range of persuasive features, and Burton and Morgan's later argument that mathematical writing writ large offers rich potential for thinking about how mathematicians "through their writing, convey very particular perspectives on themselves as well as on their mathematics and on how they build their identities with respect to their communities," a translingual approach to transfer could offer an important way to theorize how learning to write proofs can be a matter of recontextualizing practices from other contexts or to theorize how proof writing can itself be a matter of practices that are recontextualized in other contexts (449). In this section, I highlight the ways that definitions of *proof* overlap and diverge from other versions of argument, including those that are commonly associated with academic writing in courses like Iris's. These definitions position proof writing in a way that emphasizes practices that center on considerations of the expectations of readers, encouraging more flexibility and rhetorical nuance than non-mathematicians might expect. For instance, in their historical and philosophical overview of modern mathematics, Reuben Hirsch and Philip J. Davis describe *proof* via their caricature of an "ideal mathematician":

> Anyhow, what you do is, you write down the axioms of your theory in a formal language with a given list of symbols or alphabet. Then you write down the hypothesis of your theorem in the same symbolism. Then you show that you can transform the hypothesis step by step, using the rules of logic, till you get the conclusion. That's a proof. (39)

Highlighting that there is a level of formalism in language required – as well as a predictability or regularity in use of symbols and logics – reiterates the fact that proof writing is an interaction with an audience that both conforms to and sets the expectations of the interaction. In order to move through these steps, from axioms to conclusion, it is important, in the ideal mathematician's estimation, to engage in a series of practices in a convincing way. Though this early definition is only hinting at the importance of interactions with audiences, ultimately, the

ideal mathematician prioritizes the relationship of proof writing to its audience over the formal considerations he began with, deciding that a proof is really "an argument that convinces someone who knows the subject," emphasizing the importance of a community of readers who will expect and understand certain practices (39). Similarly, Probst and Schuster describe proof writing as following the notion of "relative certainty," which "means that a proof is a successful demonstration that a mathematical theorem necessarily follows by logical reasoning from axioms which are considered evident for the given context and/or agreed upon by the community" (1). Theorists of proofs seem to agree with theorists of rhetorical genre studies (Devitt; Miller; Reiff and Bawarshi) and translingual researchers, both of whom understand writing practices and social contexts to be co-constitutive. Like other language practices, proofs are social activities, responding to the needs and assumptions of a given community. Consensus is based on a shared set of beliefs and expectations.

Still, in discussions of proof writing, mathematicians generally agree that mathematical investigations convey a more rigorous relationship to truth than other forms of writing (Pedemonte; Recio and Godino). In her comparison of argumentative models and proof writing, Pedemonte finds some nascent similarity between the two, saying that Toulmin's argumentation theory is rather like the Aristotelian dialectic, and thus is somewhat like proof, claiming:

> [d]ialectic, like rhetoric, does not necessarily lead to true conclusions. But one who engages in dialectic starts from principles which he believes to be true, while one who engages in rhetoric is not necessarily convinced about the truth of what he defends. Argumentation in mathematics as proof is closer to dialectic (and then to Toulmin's theory), since it should produce true statements (26)

The importance of the *belief* in (which, it seems, is the same as the fact of) the truth value of initial principles is central. Proofs are based on statements taken as true – axioms – and produce true statements that can later be used as theorems for further proving.[23]

[23] The certainty that premises must be true is so strong, in fact, that it lead to an interesting moment of difficulty in one class session. While encouraging students to draw their claims from evidence and not the other way around, Iris used a modification of the famous Aristotelian

However, while proofs are generally discussed as a single genre, drawing on similar logics, practices, and language ideologies, they are rhetorically quite diverse, a fact that is important to consider when thinking about how students like those who participated in this study might learn to write proofs. As Recio and Godino insist, a mathematical inquiry is based on a

> generic, abstract, metaphysical way of thinking [but this abstraction] should not conceal the rich and complex variety of meanings acquired by the concept of proof, or, better, by the diversity of 'proof objects' each of which is given a local meaning by the members of such institutions (95)

Recio and Godino's warning against homogenizing proof writing across contexts is especially important to consider in a translingual approach to transfer that seeks to better understand the ways that students are attuned to the differences across contexts, leading them to recontextualize practices to better suit new situations.

In the following section, I present three cases in which participants grapple with the ways that effective proof writing conforms to and resists a normative genre form. As these cases illustrate, attention to the nuanced requirements of context and audience provides participants with the most dynamic understanding of *proof*, matching the definition offered by Recio and Godino, and allowing the writers to more easily recontextualize practices in new situations.

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syllogism, asking students what problem they could identify in the statement "Socrates is immortal. Socrates is a man. Therefore, men might be immortal." The point seemed clear enough but the students struggled to answer the question. While discussing lessons on types of logical statements for one of his math courses, Shawn reflected back on why the question was so difficult at the time:

> I, at that time I was confused. What is wrong with this? (laughter) Because I just learn this course at the same time. I couldn't think of any part of her proposition is wrong. Then, she said "Because the premise is wrong." (laughs) We never encountered some problem that the premise is wrong because we always use the premise to deduct the conclusion. So I was confused when she said the premise is wrong. (laughs) I, uh, I suddenly realized it.

Writing Proofs

For some participants, learning mathematical writing practices is not a simple selection of formulaic phrases, but a matter of learning that writing is about making choices to create meaning in the most effective way possible when engaging with a particular audience. In such cases, when participants see given practices as choices, it helps to attune these participants to the ways that language functions differently in and across a given context, both mathematical and otherwise. This awareness of difference seems most useful when it provides the learner with a sense that languaging in a given way creates specific kinds of meanings for specific audiences. Choices are not arbitrary, but geared toward negotiations with those audiences based on their expectations and on the exigencies of the mathematical work in question.

In the context of proof writing in particular, participants often developed this kind of audience-centered approach to writing, with a clear sense that the choices they made affected readers' reception of the mathematical concepts presented. However, like in discussions of writing and math addressed above, some participants' views of proof writing constrained their abilities to fully acknowledge the rhetorical nature of proofs. In this section, I present two cases in which participants – Apple and Cameron – write proofs as part of their ongoing attunement to difference within math contexts. Both describe practices they associate with proof writing in ways that illustrate this growing attunement to difference and reflect their understanding of the complex ways that writers draw on a range of choices to satisfy the rhetorical exigencies of writing about math. These participants illustrate the extent to which a translingual approach to transfer might reveal students' abilities to see the productive potential of variation within the bounds of a particular disciplinary context. In one final case, I illustrate the ways that an attunement to differences in proof writing across concentrations provided one student, Neil, with a particularly adaptable approach to thinking about writing in math contexts and beyond. Neil's attunement to the origins and effects of differences in proof writing across concentrations offers a narrative of one path students might take to broader languaging potential like that advocated by translingual approaches to transfer.

Such a translingual approach emphasizes the extent to which language difference is a norm of communication. Attention to the productive meaning-making potential of such differences is, from this perspective, one key way to help students develop an awareness of the adaptability of language. For instance, as Apple developed his understanding of writing out pieces of formal logic in a mid-level math class, he recognized that identifying multiple ways of phrasing a series of statements changes the effectiveness of the argument because it changes the meaning that he is creating. He discussed these changes in terms of re-ordering or rephrasing terms in his writing, but, in effect, these different ways of phrasing that Apple learned are, he recognizes, related to different ways of looking at a given problem. Therefore, while one phrasing might seem to be clearer for a given reader, Apple noted that this clarity is not just about "simplistic" or "straightforward" phrasing, but is also a matter of thinking about the math he was writing about. Apple described his awareness of these different practices as a productive one for imagining different ways to address his reader's needs. He explained that, because he thinks about math in terms of formal logics related to the problems he is presenting, he "can think of three ways [to argue] now. The first is, directly prove it. Like, just use the very normal way like, 'Because of this, so then'." To illustrate, Apple constructed a very basic example (the extent of its simplicity was likely an attempt to help me understand), asking if there is a relationship between "It will snow" and "I will stay home." For Apple, this kind of "direct" connection is the simplest form of logical presentation, one of cause and effect, with the cause always preceding the effect.

He used this example to contrast direct logic with "the contra-positive because the contra-positive is theoretically the same as the original sentence" but conveying a different approach to the problem and its terms, saying "[I will] use contra-positive, because [the two parts of the statement] are theoretically equivalent, so I can use this as a premise. 'I don't stay at home tonight'. Then I use deduction to come up with this conclusion: 'it doesn't snow'." The relationship between staying home and snow remains, but a much different kind of meaning is presented. This example, Apple noted, was both about presentation – considering what is given a primary position in the phrasing – and the modification of terms from positive (I stay home) to

negative (I don't stay home).[24] In this case, Apple suggests that he can adapt his presentation of a problem to address the needs of a particular reader, but in so doing, he presents a new and distinct kind of meaning.

Though he struggled somewhat to fit this more abstract concept into his simplistic snow example off the top of his head, Apple used this illustration to explain that his growing ability to distinguish between and talk about patterns of logic allowed him to think in more nuanced ways about his proof writing since, sometimes, reframing the wording to address his readers' needs clarifies the content in his mind because it changes the way he is addressing the problem:

> Maybe it's not, it doesn't look very different for this problem, but sometimes the problem, if you view it in the original order, it's very complicated, but if you view it as the opposite order, it's just very ... it follows the normal human logic.

Apple presents an important observation about the ways that "clarity" is a matter of the relationship between practices and the exigency of a given moment. To write clearly differs by situation, depending on the intentions of writers and their respective readers. This is a particularly striking example of how a student can begin to see the nuanced ways that choices affect meaning. Mathematical writing – like all good writing – is not a static formula to learn and follow, but a series of possibilities in the ways that propositions can be laid out, affecting meaning. Thus, Apple is able to begin to think of ways that he might alter his writing in order to make his proofs more effective on multiple levels.

Thus, the language choices that correspond to differences in the writer's approach to meaning making in a given context are not ends in themselves, but reflect the ways that language can be shaped and reshaped to fit the rhetorical exigencies of a proof and its audience. In such cases, adaptation of formulaic templates can allow students to begin to see the possibilities for genre variation through a growing attunement to difference. For example, Cameron displays a

[24] Discussions of what is given primary position in a statement resonates with discussions of Theme and Rheme in systemic functional linguistics (Fang and Schleppegrell). That Apple was concerned with the meaning that placement of terms conveys might indicate something about his understanding of how other languages structure meaning by ordering terms.

broader awareness of the ways that proofs function through a series of rhetorical stages, with the presentation of a proof's logic driven by a series of choices. While he learns to understand the ways that proofs construct arguments via a series of what he calls "key words" provided as scaffolds by his instructor, his attention to the range of ways he can adapt his language practices to move beyond these scaffolds leads him to write in ways that present interesting adaptations of formulaic structures to more effectively engage his readers.

Such adaptation is rooted in his understanding that writers unfold their meaning in proofs through a matter of a set of moves, which Cameron associates with certain words and phrases at moments of transition through different parts of the proof:

> Yeah, so basically, there are some key words like, so I try to follow every time when we submit our assignment. The professor will send us the key. So, every time I look through his answer and I try to learn from his writing. So, basically there were some key words like, "I claim what ..." and then, "Then". They use "then", "Therefore," "Thus"-they use a lot of kind of these words. And so, usually I have . . . for proof, I ... So for, in the first step, I claim something. "I claim that." Then, the key observation, or "note that." Then we'll use some words, "note that" or the key observation is what, blah, blah, blah. And then "we have what", and thus. So, for the conclusion, "therefore we get" what?
>
> **Ryan:** Mm. And that's a pattern that you've been picking up from examples that you get from instructors?
>
> **Cameron:** Yeah.

At first, it seemed to me as if Cameron based his understanding of proof writing on a fairly a-rhetorical sense that certain transitional words were simply required in math writing, since they are required on the key provided by his instructor. However, as he continued, it became clear to me that these "key words" functioned as scaffolds for Cameron, illustrating one particular way that a writer can lead a reader through the proof. In the end, he provided a fairly rich sense of how these words function in relationship to main steps in the process of proving. He outlines the logical development of a proof through his explanation that "I claim" is one way to signal the important first function of the proof, that "note that" points to the key observation driving the

proof forward, and that "thus" and "therefore" signal the conclusion of the proof. Taken in this way, it is clear that Cameron understands that these words function in direct relationship to the logic of the proof as it unfolds, reflecting an awareness that the writing practices he deploys are not arbitrary, but actually construct the meaning of the text.

When looking at Cameron's sample proofs, it becomes clear that he is not just selecting transitional words in a template-fashion, but is adapting these "key words" in ways that reveal that he understands their role in constructing the actual meaning of the proof. While Cameron notes that his instructor's sample proof, which he looks at for guidance, frequently uses the words and phrases he mentions, in his own proof – with the example of *thus* – those "key words" only rarely appear. Instead, he moves through the stages that he paired with those key words by deploying a range of markers, suggesting that what he has learned is not that a proof writer must first say "I claim" then later say "note that," but instead must state a claim and draw readers into the logic of this claim's truth by presenting a key observation on which the rest of the proof will be built. For example, one of Cameron's proofs from a combinatorial math course begins:

> Given a grid with n x n square cells, considering lattice paths which do not pass above the diagonal, there are only two kinds of move: 'up' and 'right' and from the lower left corner to the upper right corner. The number of right move is at least as many as the number of up move. Thus the number of lattice paths which do not pass above the diagonal of the grid with n x n square cells is the number of Dyck paths with steps, which is the Catalan number.

This claim, which moves the rest of the proof forward, is structured to facilitate a relatively easy movement through series of connected ideas. Each condition is listed in relation to the next. He begins with a grid that is "Given," then directs that grid to a certain consideration, with a particular limitation ("do not pass above"), then another limitation ("only two kinds of move"). leading to a statement about the Catalan number.

Cameron constructs his proof in a way that very carefully unfolds its logic without limiting himself to the basic scaffold language he described in our interview. He draws on conventions for presenting a proof, but does so through a series of choices that are a bit more

reader-friendly than sometimes gave himself credit for. Later in the proof, for instance, when he introduces an additional observation on which to base his discussion, he does not repeat his previous use of "note that" and uses "On the other hand, for each sequence . . ." instead, facilitating his reader's awareness of contrast in a way that simply asking for a fact to be noted would not. In the conclusion to his proof, Cameron chooses to use "So" – a word that he had suggested was "more like conversation" in a peer review session with Neil – to signal that he will wrap up by discussing the ways that these integers satisfy the conditions he has set forth. Each of these moves illustrate ways that he has taken a genre example from his instructor and used it as a scaffold, but ultimately identified the ways that what he called "key words" were actually pieces of language that constructed the main rhetorical moves of a proof. A set of phrases like "I claim" and "note that" function well to scaffold students' understanding of how to construct proofs, but Cameron's flexible use of other language resources create a proof that might better respond to the needs of readers in this particular instance. That is, he seems to have recognized that such formulas "have to be situated [. . .] in every ecological context of use to be meaningful" (Canagarajah "Translingual" 7). A template, in this case, can provide a basis for dynamic languaging, since it is the moves, not necessarily the particular words that signal those moves, that facilitate effective reading of the proof.

Both Apple and Cameron's approaches to writing illustrate the extent to which growing familiarity with practices in a given context allow for some degree of language manipulation and adaptation. Both negotiate the ways that individual local choices affect meaning writ large, leading both to become more attuned to difference in the range of possibilities in math writing, allowing them to more effectively address their readers. Insofar as critiques of translingual approaches might argue, as Christine Tardy does, that many multilingual writers "are still building their proficiency in established varieties, so negotiation of multiple varieties may no yet be a realistic or appropriate goal," what these two cases illustrate is that some students are already seeing their writing as a matter of several varieties that can be chosen from and adapted based on the needs of a given situation ("Beyond" 139-40). Apple and Cameron's navigation of a range of acceptable varieties illustrates that students can develop an attunement to difference in

such situations, even when their adaptations do not necessarily break the bounds of what might be considered an acceptable approximation of the target genre.

In one final case, I present Neil, whose proof writing navigates different mathematical contexts and goals, reflecting to an even greater extent how effective writing in math is facilitated by an attunement to difference based on readers and contexts. A translingual approach to transfer highlights this attunement to difference and identifies ways that it primes learners to recontextualize practices in new situations. For Neil, learning to write proofs in new situations involved such recontextualization, as he realized that proof writing in different concentrations did not just require him to tweak a pre-existing formula for proof writing in new classes, but required him to reimagine how that genre interacted with readers and presented the content of that particular concentration. Such an awareness that practices are not merely formal, but actually tied up in the ways that certain fields of math make meaning, allowed Neil to more dynamically adapt to new proof writing exigencies, recontextualizing his sense of how to construct proof to suit those exigencies.

In his early description of proof writing, Neil identified the ways that proofs might be written differently, based on the audience, though at first it seems as if he was simply attributing those differences to instructor preference or personal style, not differences in the contexts themselves:

> So we need to prove, we need to write proof. But because I take two different math class, so I got different requirements for the proof. The one I take for topology, grader asked us to write in full sentence. So it may make the proof more like a dialogue. Because … maybe I'm influenced by my lecturer because she always wrote in a way mm, more you know, conversational way. So when I wrote my proof in this class, I will pick some words like 'let us' like 'if we' like these words so that it makes the reader for the proof like they, that he just has a conversation with me. And for another class, the professor prefers to use symbols and formulas. So in this class there's fewer words and more symbols. Uh, it's more like this mathematic language.

Neil's description of proofs in topology as "dialogue" and "conversational" suggests that he had been taught that proof writing in topology involves imagining the reader as one who is engaged in the discussion, instead of one who is being lectured to. For the manifold analysis class, on the other hand, the emphasis on non-alphabetic writing through symbolic "mathematical language" seems to substitute the authority of this symbolic language for actual interaction with the reader. Still, in both, the writer draws on practices that present the proof in a comprehensible and convincing ways to a given audience.

However, Neil was not simply constructing a binary choice between natural language "dialogue" and mathematic "symbols and formula"; nor was he conflating instructor preference with writing in a particular concentration of math. Instead, Neil linked particular practices with the epistemologies of particular mathematical contexts. That is, the differences he attributes to topology and manifold analysis are geared, rhetorically, toward the expectations and needs of members of those respective communities. I asked if these were just individual styles of his professors or if there was something about these two classes that actually required different kinds of proof writing. Neil explained:

> I think there are differences. For the topology one, first it's more abstract. So we need to explain as carefully, as thoroughly as we can. And for the manifold one, sometimes we can use graphs to help under-, uh, interpret this proof. So it's less abstract so you can use more symbols. And also, the relations between these two class … topology seems to lay a foundation for manifold because when we talk about manifold, we use some knowledge in topology. So I think that's why we use more symbols in manifold.

Neil presents a nuanced awareness of the reasons why these proofs might require different practices. The "abstract" nature of topology necessitates careful discussion in order to make it understandable, while the more practical manifold analysis field allows for more symbolic and graphic representation to convey ideas.

This attunement to difference facilitated not just a comparison of two different math writing contexts though, but a very thoughtful recontextualization of writing practices that considers the epistemological differences underlying those different contexts. He makes this

clear in his description of the ways that these differences across fields of math require him to think about his writing in nuanced ways to best suit his audience:

> The way mathematicians think is different. Because there are so many different fields in mathematics. So, people in different fields may have different fixed pattern of thinking. So, if, for example if people in statistics, he will be more curious about the numbers and about the numbers and the maybe percentage. So for this, for these people you need to provide them as many numbers as you can. But for people in analysis, they may prefer to read logically clear proof. So that's because that's related to the way people think. So we need to wr-, so when I write a proof, I need to be straight forward and logical enough so that even people just have some basic knowledge about this field can follow my proof.

Again, Neil has identified the "different fixed pattern[s] of thinking" that he must consider when writing proofs. Neil frames these differences in distinctly rhetorical ways that frame audiences in rich ways. While some readers, according to Neil, "prefer" proofs to be presented in terms of formal logic, other readers "will be more curious" about an attention to lots of numbers. The choices he makes as a writer infuse proofs with signs of difference, as he considers the ways that a given kind of proof (indeed, that there are different kinds of proofs) for a particular audience functions effectively. If, as Lu and Horner argue, student agency is best encouraged by translingual approaches that can help researchers and teachers "to learn to recognize, and help students learn to recognize, the production of the same in what appears to be different, [and] the production of difference in what appears to be the same," then Neil's reflections on proof writing across concentrations provides an effective model for considering the ways that students might begin to recognize and build on such difference ("Translingual" 35).

However, for a range of reasons, it is important to consider how this attunement to difference affects actual writing. Neil's emphasis on the difference between conversational and symbolic tendencies in proof writing takes interesting shape in his actual writing of proofs across these two classes. Like Cameron and Apple, he understands that the meanings he is trying to construct – conversational and more rigorously symbolic, respectively – are constituted by the practices he chooses when writing. However, unlike Apple and Cameron, Neil is able to further

his attunement to difference by exploring ways that he recontextualizes these practices in different math contexts, based on his sense of the goals and exigencies of that particular situation and audience. This is especially clear in the markers that he suggests create a "conversational" proof. The two examples of dialogic markers that he mentions off the top of his head early in our discussion ("let us" and "if we") both include the use of a first person plural pronoun: readers are invited into the conversation by use of these kinds of pronouns, suggesting that *us* and *we* would likely be used more in topology than in manifold analysis. His proof writing for both classes complicates this simple reading though, as first person pronouns, particularly *we*, actually appear more frequently in the manifold analysis proof. Similarly, imperative verbs that instruct the reader to "Notice that," "Define," and "Remember that" are slightly more prevalent in the manifold analysis proof. While Neil's observation that the manifold analysis proof uses more of the "mathematical language" with less linking together of steps using natural language holds true, his sense that the use of *us* and *we* creates a more dialogic proof seems not to hold up since, at least in terms of pronoun and imperative verb use, his manifold analysis proof appears to be talking to the reader quite actively as well.

However, when considering the *functions* of the pronouns, Neil's distinction seems more accurate. As Kay L. O'Hallorhan notes, the mere use of pronouns like "we" in mathematical writing can "give rise to interpersonal metaphors where it is clear that the relations are being manipulated" insofar as the choice to use "From Equation 3 we recognize this limit" could "be seen as a metaphorical variant for the command 'Recognize this limit" (70-71). She concludes that math writing might be necessarily monologic, where "the reader nonetheless remains the receiver of information, and the one whose answers and responses are checked against those provided by the author of the mathematics text" (71). This description fits with the writing practices Neil chose in his manifold analysis proof. While he uses *we* more frequently in this proof, Neil does not do so in a way that actually invites the reader into the conversation. In fact, very few of the uses of *we* seem to be including the reader at all beyond the somewhat manipulative metaphor O'Hallorhan describes. He begins by noting that "From previous IBL, *we* have shown that the inverse function theorem implies that *we* can restrict . . ." (my emphasis).

Neither of these uses of *we* are what Hyland and others describe as an "inclusive" pronoun that "identifies the reader as someone who shares a point of view or ways of seeing with the writer" (125). Instead, these *we* uses indicate moments where Neil talks about members of the class more broadly and the small group that he works with in class, as is more commonly seen in methods sections of a research article where authors use exclusive we to describe not what is shared with the reader but what was done by a team of researchers and/or collaborative authors.

In contrast, his topology proofs draw on quite different practices, subtly including the reader in a more pedagogical way, which creates a sense that Neil is walking his audience through his methods of analysis, not only to prove something, but to explain how such proving is done. He begins the first with a fairly typical *suppose* statement: "Suppose X x Y is disconnected." This introductory premise is followed by "Then we discuss the different cases," which – particularly in its use of "then we" – suggests that he is narrating his method of coming to this conclusion, telling his reader what they would be doing (together) next: first, if we suppose this, then we need to discuss these cases in order to do something with that supposition. Unlike the manifold proof, this topology proof uses *we* in a particularly inclusive sense, "putting your arm around the reader," as Neil phrased it when we talked briefly about this proof again after a class.

However, like in the case of Cameron's broad adaptation of "keywords" to drive his construction of proofs, Neil does not seem to feel forced into using *we* in order to create an inclusive relationship with his topology readers. In the introduction to the second topology proof, the tone is even more conversational and explanatory, beginning by framing it in terms of Neil's goals and methods: "I want to find a finite subcover and I'll start from considering . . ." Neil shifts from a discussion of what we (the author and his classmates) have done in the manifold proof and what we (Neil and his readers) are doing in the first topology proof, to what Neil (the author) needs to do in order to proceed in the second topology proof. In the latter case, he is sharing his work with an ambiguous reader (who does not seem to be a member of the class), a positioning of the writer's relationship to his audience that helps to create a more dialogic approach to proving that he identifies as a feature of writing in topology.

His use of *so, but*, *then*, and (to a slightly lesser extent) *therefore* further develop this explanatory tone, corresponding to his sense that this kind of proof is more conversational. He proceeds in Case 1 by making a statement, but in the next line brings his reader back a step, saying "However, $\{x\} \times Y$ is homeomorphic to Y, so it's connected." The use of *so* – which is used twice in one topology proof and four times in the other, though it does not appear at all in the manifold analysis proof – provides an explanatory tone in the topology proofs that is lacking in his manifold analysis proof, evident in moments where he asks his reader to notice something, then explains its importance: "Notice that $\{U_x | x \in X\}$ is an open covering of X and X is compact. So there is a finite subcover $U_1, \ldots, U_m$. Correspondingly, we can find . . ." In this example, Neil follows up by providing another piece by which his readers can understand his proof. In contrast, his manifold proof simply directs his readers to remember, then links this mathematical language with more of the kind, using a *thus* that does not elaborate on whether he is grammatically positing a particular consequence, as in the identification of the finite subcover in the topology proof above: "Remember that $(Dexp)_0 = Id$ thus $(Dlog)_{Id} = (Dexp)_0^{-1} = Id$." Again, the practices visible in the text reflect an awareness of not just a static form, but of an approach to writing that is impelled by the contexts and audiences Neil is writing to. Topology proofs, because of the nature of their lines of inquiry, can require more inclusive and explanatory practices, while manifold analysis proofs, in their more practical nature, require him to address his readers and the content of the proof itself in rather different ways.

From this investigation into Neil's views on the rhetorical range of proofs and his deployment of this understanding in his writing across two different math courses, it is possible to see both a rich attunement to the differences in the ways that these proofs function, and a recontextualization of practices to facilitate these differences. That these two kinds of proofs do such drastically different things with is an especially interesting kind of recontextualization, since Neil's writing practices are so clearly impelled by the social interaction in question. This is a basic truth of a functional view of language, but here we can see that it is an understanding that Neil comes to as an important part of his growing sense that his writing practices can and should

be reshaped across contexts. As Nowacek points out, recontextualization of genres and genre knowledge in new situations is central to questions of transfer that must navigate between conditions of difference, in which the writer is in a new situation that is unlike a previous one they might already be familiar with, and similarity, in which the writer recognizes that they know something that can be adapted to suit a new situation (18-20). Neil knew how to write other proofs before encountering the need to write topology or manifold analysis proofs. That the goal of proving and much of the logical structure was the same across context did not mean that Neil could simply apply practices to these new courses, since those practices were based in exigencies that were quite different than the ones he found himself faced with. Instead, in a truly recursive kind of learning, Neil attended to the ways that those contexts engendered different practices, further attuning him to the ways that language difference functions to make meaning that is particular for a given audience and context.

Conclusions

What these cases help to illustrate is that a translingual form of transfer already underpins participant understanding of languaging and proof writing, with considerations of context and readers at the center of effective writing in mathematical settings. These participants provide clear examples of ways to answer Burton and Morgan's call for "novice (and indeed experienced) researchers to develop their critical linguistic awareness – their knowledge of the forms of language that are available to them and their abilities to make effective choices among them" (451). Even beyond this call, participants – especially Neil – provide insights into the ways that given forms of language available to writers are themselves imbued with difference, based on the context and goals of a piece of writing. Like the findings from much good genre pedagogy (Devitt, Reiff, and Bawarshi; Hyland "Genre"; Swales and Feak; Tardy "Building") this chapter illustrates that it is helpful to provide students with somewhat formulaic scaffolds, not just to provide an a-rhetorical template, but to facilitate a growing sense of the ways that language practices construct meanings and variations on familiar patterns are not deviations, but

reconstructions of meaning. Apple, Cameron, and Neil come to recognize that it is not enough to rely on formulaic approaches to writing in math. Instead, their discussions and their writing reflect a rhetorically-savvy perspective on difference in writing, which recognizes that such choices are continuously shaped and reshaped by the audiences and situations in which they are made. And, as Neil's case suggests, a translingual approach to transfer might provide insights into the ways that a writer's attunement to difference can highlight potential for writing practices to be recontextualized to fit new needs, both similar and vastly different to those the writer might otherwise have encountered.

Therefore, as this chapter has shown, there is rich potential for further exploring the ways that students are becoming attuned to difference in contexts outside of writing classrooms. Indeed, it is especially important to consider the ways that such attunement happens in contexts that seem to be unrelated to writing at all. In these contexts – though not framed in such terms – students are learning to understand variation and recontextualization in ways that would be productive to better understand and build on across the curriculum. A translingual approach to transfer assumes first and foremost that such adaptability of writing practices is omnipresent, and it is this assumption that allows us to see not *if* these participants brought a range of knowledges and experiences to new writing situations, but *how*. This is an assumption, for certain, but like in my discussion of the clear recontextualization of metalanguages in chapter 3, it is an assumption that seems warranted, based on the ways that participants' attunements to difference drive potential for adaptation and recontextualization of writing practices in math. In the final findings chapter, though, I describe instances in which potential for such transfer is shut down, highlighting the ways that institutional pressures can sometimes frustrate broader possibilities for recontextualization, and pointing to instances in which participants managed to language more broadly despite these pressures.

Chapter 5

Recovering Recontextualization: Understanding Moments of Fixity as Mobility

In this final findings chapter, I discuss the ways that translingual approaches to transfer can help teachers and researchers account for situations in which some students choose to draw widely from across a range of practices and experiences, recontextualizing them to fit the needs of new situations, while others maintain rigid divides between contexts and practices. The fact of these differences is indisputable. Some participants talk openly about connections they see and draw on across contexts, while others deny the existence or – at very least – the importance or usefulness of such connections. On the surface, this divide reinforces research that suggests that perception of task similarity is an important driver of transfer (James), as well as the long list of deficit-framed terms like *failed transfer,* in which "norms of one discourse community were inappropriately transferred to another context" (Beaufort "College" 183), and *zero transfer,* where knowledge in one contexts has no effect on new situations (Schunk). As Nowacek points out, the latter is widely-assumed to be experienced by most students in most situations (37). However, she goes on to note that teachers and researchers who assume instances failed or zero transfer

> have not sufficiently acknowledged that in the contexts of colleges and universities, the positive or negative nature of a given act of transfer is not evaluated solely by the student perceiving a connection [but instead] it is the instructor who has the power to decide whether to recognize and whether to reward or punish a given instance of transfer (37).

Therefore, in response to this power imbalance and the ways it often narrows the range of acceptable transfers, it is understandable if students learn to (at least initially) deny the existence of connections between contexts, even when a closer look at participants' writing suggests that recontextualization is indeed taking place, as chapter 4 highlights. That is, to point out that students often discuss practices and contexts as distinct from each other is not to say that

practices related to those contexts are not still actually informing each other or that recontextualization is not still happening in ways that might be useful for teachers, researchers, and students to better understand and build on.

Extending Nowacek's discussion of the ways that institutional power dynamics influence perception of transfer, in this chapter I illustrate the ways that a translingual approach to transfer can help to better understand decisions to silo practices as a response to prior experiences in institutional academic settings, and I argue that such a translingual approach also can help to recognize recontextualization of practices, sometimes in direct response to those institutional demands. A focus on such recontextualization offers an opportunity for researchers and teachers to better understand student writing choices to better help those students broaden their languaging experiences. In this chapter, I describe the ways that these recontextualizations can sometimes happen in "fixed" ways, drawing on a term provided by Lorimer Leonard in her discussion of the literate resources of migrant multilinguals. She argues that being aware of the ways that language practices are bound up in understandings of particular contexts can create these moments of "fixity," in which institutional and cultural pressures cause individuals' literate movements to "stall" (66). In such moments, these individuals are less able to draw on the full range of practices in their repertoires than they might wish to be, or they might choose not to draw on that full range of practices in ways that they might in other contexts. However, these moments often arise in response to institutional pressures that individuals perceive to require distinct siloing of practices. Therefore, what a translingual perspective offers to questions of transfer is a way to better understand how institutional pressures might lead a student to seem disinclined to actively transfer between contexts, as well as a way to begin to identify transfer that is happening nonetheless, albeit in subtle moments of recontextualization.

In this chapter, I present two case studies, each illustrating the ways that a student might engage with the institutional demands of languaging across contexts, leading these individuals to see languaging experiences in terms of stalled and frustrated movement, seeming to effectively shut down recontextualization of language practices. In the first case, I show how Lexy brings a dynamic understanding of shifting writing practices to address the needs of a wide range of

readers. However, she ultimately frames her experiences with writing in a way that shows that she understands the limitations of her range of practices as directly corresponding to constraints related to American academic institutions. Lexy comes to understand English academic writing in terms of the absence of practices from other contexts. However, analysis of moments of her writing over the course of the semester illustrates ways that recontextualization can take place even when the writer is siloing language practices to suit a particular set of institutional demands. In the second case, Faker describes the economic and curricular imperatives that drive his sense that practices often must remain fixed in a given context. Nonetheless, like in Lexy's case, a closer examination of Faker's description of pieces of his own writing highlights the ways that his understanding his writing practices maintains some signs of "literate movement," which Lorimer Leonard insists is still a feature of fixity, offering potential for individuals' languaging to become unstuck. From a translingual perspective, then, both cases complicate discussions of failed or non-transfer for two reasons. First, they illustrate the ways that the monolingual language ideologies underlying institutional pressures to silo writing practices are – like the metalanguages discussed in chapter 3 – functioning as prior texts that influence participants' negotiation of new instances of writing. Therefore, a seeming lack of transfer can, itself, suggest that students are aware of differences in language ideologies across contexts. Second, these cases suggest the ubiquitous nature of transfer for individuals immersed in and navigating among so many different contexts and practices.

Fixity and Fluidity in Translingual Transfer

As the preceding chapters have shown, a translingual approach to transfer recognizes the ways that an attunement to difference functions as an important part of the languaging experiences of many international students. Neil's recognition of the ways that proofs differ across concentrations in math enables him to begin to recognize the differing epistemologies underpinning the work he does across his math courses. Apple's sense that he can modify his writing practices to suit the expectations of different readers in different situations lead him to

recontextualize exam writing practices to more effectively address his readers, while also recognizing the relationship between ways of framing arguments in math and the actual content those arguments convey. Similarly, Ox-Man's recontextualization of templates he learned to write for the TOEFL exam allowed him to experiment with new identities, which he associated with more expansive views of thinking and languaging. For each of these participants, attunement to difference allowed them to make meaning in the process of being international students moving across languages and spaces.

Such attunement to difference can facilitate what Rebecca Lorimer Leonard calls "literate fluidity," which she describes as "the messy, connected, agentive movement of literate practices among languages, writers, and locations around the world" ("Writing" 61). Because of these writers' experiences navigating across a range of languages, practices, contexts, and goals, they are primed to recognize "a system of discourse beyond themselves" (62). Fluid movement across practices and contexts is, itself, a way to learn about the functioning of those practices, as such movement allows for learners to hold those practices up against each other for comparison in ways that less mobile learners would be unlikely to do. Therefore, as participants in this study navigated among practices of writing in both English and Chinese, which they experienced across a range of contexts, they came to see these practices in nuanced and often critical ways, allowing for the kinds of recontextualization described so far.

Sometimes, an attunement to difference can seem to act as a bit of a literate liability though, particularly when it can lead to fairly rigid instances of siloing, shutting down possibilities to navigate across those differences and language more broadly. In such cases, individuals might decide that some practices are best kept separate, seeming to enforce the ideological boundaries between contexts. However, as Nowacek also notes in the quote above, Lorimer Leonard insists that this kind of stall is not a matter of multilingual language deficit or failed transfer, but is itself a feature of literate movement, arguing that her discussion of

> fixity points beyond literacy lack to the agents and conditions that benefit from controlling literate movement. The values held by teachers, advisors, colleagues, and writers themselves can also mediate how repertoires move. This is not to say that

> powerful institutional values simply shut down writers' practices. Rather, the values held by both writers and powerful agents together muddy movement. (68)

Therefore, Lorimer Leonard argues, moments in which a multilingual individual might perceive a minimal possibility for broad languaging still signal a deep understanding of the ways that contexts and participants interact, particularly insofar as attunement to difference draws individuals' awareness to the constraints on languaging imposed by institutional forces. The tendency for gatekeepers – teachers, perspective employers, native speakers of English – to mediate which practices are allowed and which should be excluded was discussed across participants, leading to a contraction of language repertoires, even as such mediation helped those participants to develop critical understandings of those contexts. For example, the feedback given in response to *wén cǎi* practices that both Cameron and Lexy received shut down movement of those practices in certain contexts, regardless of whether the writer agreed or disagreed with such feedback. Furthermore, the potential for drawing on these practices in more expansive attempts at meaning making was limited, as discussed more fully in chapter 3. Therefore, both participants' growing understanding of American academic writing contexts led them to compartmentalize their writing practices precisely because they had engaged in what Lorimer Leonard would describe as more fluid language practices but were encouraged not to do so. That is, siloing their senses of how writing worked in each context was an act of transfer, albeit one that was based on rather unfortunate prior experiences.

For these reasons, as Lorimer Leonard's discussion of fixity reminds us, it is important to consider how and why individuals moving across languages and contexts might take up more static and siloed language practices. On one hand, these considerations help us to recognize the ways that transfer is impeded, not by deficits in the multilingual writer's ability to connect practices, but by a series of power dynamics belonging to the university itself and to monolingual English standard language ideologies more broadly. On the other, as both cases show, the potential for more fluid mobility of language practices often remains, even in cases of particularly stalled languaging. Students can describe their writing in starkly divided terms, even while a closer look at actual examples of writing suggest recontextualization happening in

interesting ways. Because of its certainty that difference and negotiation underpin all languaging, one productive potential for a translingual approach to transfer is that it can begin to identify such places where instructors can help students find ways to recover and make use of the fluidity that is still latent in their writing.

Lexy

Participant narratives illustrate an important contradiction at the heart of educational institutions. While the basic concept of learning presumes a wide range of types of transfer (Beach; Bransford and Schwartz) and general education requirements often are justified in terms of transferability of skills and knowledges, schools at all levels still almost universally enforce monolingual approaches to languaging, dividing practices and rigidly enforcing boundaries that limit the possibility for many kinds of transfer. As such, participant discussions of non-transfer were often accompanied by awareness of institutionalized ideologies of monolingualism, which encourage fixity of literate resources. Therefore, as Lorimer Leonard notes, when individuals draw on a smaller range of practices than they might have at their disposal in a given context, it is often a sign of an awareness of that context's expectations for languaging. However, as she also points out, even when multilinguals experiences their languaging in terms of fixity, that does not always shut down the connections between different practices and knowledges; it just limits them or creates contradictions and conflicts. It is not as if the language practices that make up a given person's communicative repertoire can ever be completely set aside.

The ways that students learn to maintain borders between their practices, leading to a fixity of otherwise mobile resources, can be seen pronouncedly in Lexy's carefully demarcated version of language practices. Though she thinks about the relationship between practices across different kinds of writing, her emphasis on what she has identified as the prescribed practices of a given context – particularly those that will "earn a good score" – lead her to decide that many practices she associates with academic writing in Chinese or pubic writing online will not be acceptable in new academic writing contexts. However, while she abides by these divisions,

Lexy experiences this fixity with a sense of personal loss. This loss is evident in the erasure of *wén cǎi* practices, discussed in chapter 3, but also in the tensions she experienced in when identifying and crafting her writing to suit the needs of a particular audience when writing about the purposes of education in Iris's class. As I will illustrate, she felt impelled to shift her writing to argumentatively address a more generalized governmental audience focused on policy changes, rather than writing in an explanatory mode for an audience of college students, drawing on the writing practices she associated with answering questions on *Zhihu* (知乎), a Chinese-language site similar to the English language *Quora*, where users post questions about a range of topics and other users answer them. Early in the semester, the need to make such shifts frustrated Lexy because she brought positive associations with writing from these other contexts and practices. However, as I show below, because Lexy came to understand academic writing in English as directly opposed to other kinds of writing, she decided that drawing on such online writing practices was not allowed.

As her case illustrates, Lexy attempts to reconcile her frustration by taking on an By the institutionally-justified metalanguage of "writing for the reader," which she takes up as a discourse to reinforce appropriacy rhetoric that says *all* her resources and practices might be valid, but not for English academic writing. While Lexy's recognition that writing is a response to the needs of a particular reader aligns well with the widely-accepted view in Composition and Rhetoric that writing "addresses, invokes, and/or creates audiences," her adoption of this position is largely one that she has had to resign herself to because of her desire to perform for the institutional pressures she has encountered (Lunsford 20). That is, she speaks of the needs of a reader when she has to explain why she is not able to write in more fluid ways, not just when she needs to identify the ways that she shapes her writing for a given rhetorical situation. Still, close analysis of Lexy's writing choices over the course of the semester reveal ways that she is indeed recontextualizing writing practices that she associated with writing for *Zhihu*, developing deeper insights into the ways that explanation and persuasion work together to address a given audience. However, in other parts of our later conversations, Lexy simultaneously describes the interaction

between these contexts and practices and denies their relationship because she remains certain that more fluid languaging will create distractions that will negatively influence her grades. Therefore, her case is an especially good one for understanding the ways that fluidity and fixity interact with institutional pressures a student encounters.

What Academic Writing is Not

Because of Lexy's sense of its prestige status in academic writing contexts and because of its presumed function as a marker of English proficiency, what Lexy referred to as "academic writing" stood apart from other kinds of writing early on. She understood the writing requirements of writing at LPRU strictly in terms of their difference from other writing she did and from the writing she encountered when reading for assignments. However, this contrastive approach to understanding academic writing was not a matter of constructing an understanding of the language of schooling (Schleppegrell "Language") or of academic discourse communities (Swales "Genre") or disciplinary identities (Hyland "Disciplinary"). Instead, Lexy framed the requirements of academic writing as a matter of pure difference: what academic writing *is* was a matter of the extent to which it did not do things that she associated with other contexts. Lexy highlighted the ways that practices she was familiar with were not acceptable in academic contexts. The first of these related to questions of how to use readings she was drawing on for the content of her writing in Iris's class. She noted that many of the texts she found in news outlets, blogs, and magazines were both "useful and not" when writing an academic argument:

> The writers may point out some, may have some argument in their essay and I may agree or disagree with it, or it make me think of another thing. That's how it goes. But I found that many of the articles on the internet maybe are informal. So, their writing skills cannot be used in your article. I have tried to, tried to imitate their articles, but the writing skills is not accepted [. . .] the writing style in our academic writing is totally different.

Lexy suggests that she is engaging with texts both in terms of the ideas they convey and the ways they shape meaning, but cannot use these insights in her academic writing because such practices

are “not accepted.” Though this quote suggests a growing sense of what these other kinds of practices *do*, it only suggests what academic writing *does not do*. Lexy encountered further difficulties when she noted the ways that writing in academic and non-academic contexts seemed to differ in their priorities with respect to style and ideas. She was fairly successful at gaining internships and other volunteer experiences, but the writing she did in those contexts could not be recontextualized for academic contexts because:

> Internship writing is . . . they have templates, so you just put your things into it. And volunteer writing, they might ask two or three questions. I did not take it that seriously. I just put what I think into it. I think they are not looking for many writing skills in that. They are looking for your real thoughts. I think they had different requirements from academic writing.

In this case, academic writing is again defined in terms of its difference from internship and volunteer writing, which Lexy claims are not as focused on formal features of writing.

> Maybe not in this kind of writing, but if I write something that is interesting, I might just uh, what's the word? Imitate. Imitate a writing style or some kinds of skills, but in our reading, such kinds of styles or skills might not, cannot be put into use right now into our assignments. There are some kinds of restrictions in the assignments.

Lexy is able to imagine ways to use imitation to further understand how texts work and how writers might choose to construct a given kind of meaning, but feels restricted by the requirements of academic writing, limiting her ability to use imitation skills when writing in new academic contexts. Academic writing in English is, again, something that excludes these other practices, the same way it excludes practices like *wén cǎi* and “skipping steps” that Lexy associates with Chinese writing. Therefore, because of Lexy’s sense that institutional pressures require her to write in a certain way in order to “get a good score,” her attunement to difference leads to a shutting down of any possibility for recontextualizing writing practices. Academic writing in English, for Lexy, is something that does not use *wén cǎi* principles, does not skip steps, and avoids making the kinds of moves she associates with online writing. This emphasis on academic writing as an absence of other practices leads Lexy into a situation in which her

fluid practices stall, though – as Lorimer Leonard suggests is often the case in such moments of fixity – closer investigation of Lexy's actual writing choices, which I discuss in the next section, suggest that possibilities for translingual transfer of practices still remain and, as I argue in the Conclusion, can be productively built on to encourage students to draw across their full repertoires.

Recontextualizing Explanatory Writing for New Audiences

Because of their increased attunement to difference, multilingual writers are often excellently prepared to think about the ways that different audiences require different approaches. However, recontextualizing practices for new audiences can be difficult when "consider the needs of your audience" is often code for "write academic English," particularly when the latter notion is understood to be an absence of other practices, as Lexy does. While Lexy developed a strong affinity with the reader-centric metalanguage of Iris's class, it often conflicted with her experiences thinking about audience in other contexts. In an early version of a thesis statement for her essay "The Higher Education in the U.S. Need to Grow Up," Lexy framed her argument in terms of explanation, showing her audience – other students – that research on the downsides of American education might provide a more nuanced and critical view of the institution:

> When peeling off the beautiful coat of the higher education with rich education resources and courses of high quality, we find out that there are several problems in the system. The unreasonably high tuition, mental health condition, and assessment standards. Only by learning better about the downsides of the higher education could students have a overall view on it.

The audience is marked by the inclusive "we" in this thesis and in an early draft of the section discussing mental health conditions, where Lexy drew on personal experience as a new student at LPRU, noticing that "there is a large independent mental health centre on campus and several student clubs are devoted to help students with mental difficulties to face and overcome their

mental problems." This positioning allowed Lexy to create affinity with other students, both international and American-born, suggesting that what all newcomers might have expected was unreasonable, given some of the existing higher education research that she was setting out to explain.

Behind this move was the very real movement Lexy had made into a new space, and her own surprise at what she encountered in this new context. It also allowed her the opportunity to recontextualize practices she associated with online writing. When I asked about her experiences writing explanatory pieces like this one, she described a clear process of imitation and direct transfer:

> For the materials for the passage like this, I have read a lot of articles on the questioning website called *Zhihu* in China. It is like Quora. So many of the of the times [the writers] are professional. They might answer some questions. I might look at some, look for some interesting questions and look for the answers. Read the answers. So, uh ... When I write this article that, uh the answer just come into my mind.

Lexy's sense is that her background reading and writing answers to questions on *Zhihu* naturally transferred to her writing for Iris's course. However, after a conversation with Iris, Lexy ultimately decided that her own perspective was not suitable for academic writing and that, perhaps, students would not care about this topic.[25] She eventually revised her thesis, targeting "the U.S. educational department" as an audience that still needed to realize the problems with the education system but, unlike students, might have the power to act to change that system (major changes bolded for emphasis):

> When peeling off the beautiful coat of the higher education with rich education resources and courses of high quality, **the experts** find out that there are several problems in the system, for instance, the unreasonably high tuition, mental health condition, and assessment standards. Only by learning better about the downsides of the higher

[25] It is difficult to determine from information from interviews and my observations in class if Iris told Lexy these choices were not suitable or if it was a decision based on their conversation.

education could **the U.S educational department** have a overall view on it, **and realize the emergency for the system to grow up**.

Lexy's new thesis corresponds to a more abstract sense that " academic writing" engages with readers in more subtle forms of interpersonal interactions than the solidarity move signaled by an inclusive we and often does not speak directly to the audience when making a recommendation. She did not remove the personal anecdote as evidence, though, largely because of time constraints in her revision process, suggesting before one class that this would make her paper "not get a good score." In general, though, Lexy finished this first paper for Iris's class feeling ambivalent at best about academic writing in English because it limited her ability to draw on the ornate and expressive language she enjoyed using and because she felt much less confident than she did when writing online for *Zhihu*. What could have been a site of fluid languaging – drawing on Lexy's surprise at the experiences she encountered when moving to a new university and her sense that explanatory personal writing is an effective way to engage other students as an audience – led instead to a stalled sense that a wide range of writing practices are incommensurable with academic writing in English.

Over the course of the semester, there were signs that at least some of this fixity was lessening though. As Lorimer Leonard suggests, for many multilingual writers, developing a more "heightened audience awareness" is one way that literate movement might maintain more fluidity, often acting as "one of the most salient elements" of multilingual literate repertoires ("Writing" 40). Because of Iris's genre-based pedagogy, which highlighted the important role of audience awareness, Lexy began to think about audience in less static ways, considering the interaction of a writer's goals and a given reader's needs, identifying this awareness as a main characteristic of good writing in general:

> **Lexy:** What's gonna make good writing? I think the most important thing is to analysis the audience. Yeah. So every of your sentence, your passage all through the paper should focus on how to persuade your audience or how to let the audience understand what you are gonna say. So, this gonna make the paper more focused, I think.

Ryan: You just said you need to let your audience know how you're going to persuade them, or how you can let them understand what you're trying to say.

Lexy: Yeah.

Ryan: Are those the same thing? Or do you sometimes have to do things differently if you're trying to persuade them, or let them know what you're trying to say?

Lexy: I think it's different. When you persuade somebody, you have a very strong argument that is different from the normal thinking. So, it can be a critical analysis paper. And if you want to let somebody understand – I'm talking of like the research paper – you are explaining something that is complex to the audience. And you have more frank way.

Lexy's distinction between persuasion and explanation allowed her to begin to break out of earlier problems with academic writing, which she only understood as only requiring an absence of non-academic writing practices. Instead, she recognized that the different genres she encountered required a different relationship with the audience, and considering her readers was not merely a question of how interesting the content of a piece might be for that audience.

This metalanguage, strongly influenced by Iris's teaching, which contained strains of Composition and English for Academic Purposes research and pedagogy, led Lexy to write in ways that were less constrained than earlier in the semester. When Lexy specifically mentioned her research essay, I asked how this piece balanced explaining and persuading and she pointed to her thesis:

> In order to provide nonprofit organizations with a rational view on the partnership with business, the article analyzes how nonprofit organizations generally benefit from the partnership, and what challenges they may face. In this way, the nonprofit organizations could work out a strategy beforehand in case of the upcoming issues and reach the goal of sustainable development.

The format of this thesis is similar to that of her higher education piece at the beginning of the semester, opening with a description of what the reader will learn about, followed by a statement of what action could be taken in light of that information. However, it adopts features that might

be more commonly associated with general academic writing practices such as the clear delineation of the steps the paper moves through, which was influenced by the more academic readings she was drawing on for information. Because her earlier comments suggested that Lexy seemed to feel a bit differently about the way she was balancing explanation and persuasion in academic writing, I asked why framing her thesis in this way was an effective choice, she returned to discussion of what the reader does not know, and how a writer can explain in order to move into later persuasive practices:

> **Lexy:** When you, when you talk about something you have to come up with the definition cause the reader did not necessarily know what not-for-profit organizations is doing. The background knowledge may provide something for them to understand the later things better.
>
> **Ryan:** Yeah. That's what I thought too, but I always . . . when people stop and say, "It's important to do this," I always like to know what motivates you to do that.
>
> **Lexy:** Also, it's helpful to contribute to the pages of my paper. (laughter)

Her final comment, though offered as a quasi-joke, illustrates the way that Lexy's focus – like that of many students – continues to be affected by institutional realities of grades and page requirements. A factor in her recontextualization of writing practices in this piece was driven mainly by the real context: that of the classroom and grade. It is possible that Lexy's willingness to begin to think more fluidly about the relationship between audience, explanation, and persuasion was facilitated at least somewhat by the fact that it fit into institutional requirements for her to write more.

However, the institutional ideologies that encourage siloing of writinge practices maintained their influence over Lexy's languaging:

> **Ryan:** So is there any way that being somebody who writes a lot in these online forums helps you as a writer in this kind of school writing?
>
> **Lexy:** Mm ... I don't think so. They might distract me from writing this kind of paper. Yeah. I may think of their style of expressing. Yeah, but it is totally the different thing.

Lexy returns to definitions of English academic writing practices that emphasize only their difference from other practices. Like Faker, below, she frames the need to silo writing practices as a matter of avoiding distractions. But these stark divisions were slightly more porous. She admitted that she might consider the ways of expressing in forum posts, and when I asked her to expand on that, her comments were similar to the justification she gave for including explanation before persuasion in her research paper thesis:

> Zhihu is also a platform that is open to all kinds of readers. So, the answerers have to explain what knowledge is at the beginning. But they are gonna explain in a more interesting way, using more stories. And it's like mm, less professional, I think. Their point is more about to attract the readers to press a "like" for their answers

Lexy expresses a sense that explanations are necessary to structure larger discussions across a range of contexts, while considering the requirements of those contexts and expected readers when choosing practices that she expects will be most effective. She is recontextualizing practices that contribute to her ability to get likes in online forums, incorporating that understanding of writing for a particular audience in academic contexts. Lexy's navigation of overlap between online and academic writing is, therefore, an interesting example of translingual transfer, with an individual bringing adapted practices into new situations in a way that sheds light on the ways that contexts construct meaning in distinct ways. However, like in the previous chapter's discussion of math writing, fluidity of Lexy's literate resources comes up against contradictions with ideologies that privilege the stark division of contexts and practices. These contradictions lead Lexy to both point out and enact possibilities for fluid incorporation of practices across contexts, while simultaneously denying the feasibility of doing so. Ultimately, this made her somewhat successful in the moment of writing this final piece for Iris's class, but it left Lexy feeling unsatisfied and without a clear path for thinking about the transferability of the practices she was adding to her literate repertoire, forcing her to continue to think about them – at least some of the time – in terms of siloed fixity, despite her experiences moving across many contexts.

Faker

These conflicted moments of fixity within an otherwise mobile and diverse approach to languaging were also especially prevalent in my discussions with Faker, who voiced support for the idea of fluidly drawing across literate resources even though he also had a tendency to insist on the separation of practices into rigid silos in his own work. This contradiction led to cases in which the separation of literate resources he enforced on his writing did not reflect his full range of practices, which often straddled contexts and frequently shone through in unexpected ways that reveal a writer who is constraining his writing to fit a certain preconceived notion of contextual expectations, while often still writing in ways that show a much broader repertoire. As our discussions progressed, Faker suggested that this contradiction was rooted in the institutional contexts in both Chinese high schools and programs for international students in American colleges. As his case illustrates, translingual approaches to transfer should account for the ways that students navigate the power structures facilitating movement across international educational contexts, but these approaches also provide an opportunity to think about the ways that too-narrow forms of transfer mirror an overly-deterministic view of education in a global capitalist system.

International students like those participating in this study are especially situated to react to the power dynamics of difference across global contexts because of the fact of their actual movement across space, traversing a range of languages, cultures, and practices, and because of the extent to which they are often primed to see these contexts as incommensurable, as some of the metalanguages discussed in chapter 3 illustrate. Therefore, moments of siloing like those described by Faker are indicative of the ways that a translingual approach to transfer might identify and help to break up the moments of fixity that sometimes arise in the rapid movement of international students across contexts. Such a view helps to see moments of fixity like those described by Faker as part of a process of movement that makes more fluid languaging possible. As Lorrimer Leonard points out, it is important to understand "fixity-as-movement" because it highlights the fact that "writers have setbacks that are actually moments in a long trajectory of literate speed-ups and slow-downs" (67-8). Moments of siloing or rejecting the productivity of a

wide range of practices often result from the very mobile act of moving across multiple contexts and practices. These experiences attune individuals to difference and allow them to comment insightfully on the ways those differences influence meaning-making potential in given situations, understanding both individual practices and the process of broader languaging by contrasting the ways that practices function in certain contexts.

However, if those differences are seen as rigid, demanding a monolingual performance of fluency, awareness of difference can cause conflict, leading individuals to feel as if it is more productive to silo practices, ignoring the insights that more fluid movement generates. For example, even though, as I discuss in the previous chapter, Faker sometimes suggests that he is learning about writing more broadly when thinking about how he could avoid "skipping steps" in both Iris's class and in his proof writing class, he also sometimes decides that it is best not to think too much about these kinds of connections. He attributes this separation to an incommensurability between different kinds of courses and practices:

> When I do X-course, when I write X-course homework, I don't think about math. I don't think about English and something like that. I just focus more on this stuff and separate this [other] stuff. Yes, because I think the writing course may be not be helpful when I write a proof. And when I write a proof, I think this math course will be the same. It's not helpful for my writing course. Yeah, so I separate them in a way. Like single subject.

It is interesting to note that, even as Faker is stating that he separates the practices of contexts and does not draw across them, the residue of his mathematical thinking remains visible in his use of an X-variable to generalize about classes other than English or Math. This phrasing provides a clear example of how understanding and making meaning transcends boundaries and influences other contexts, even in moments when a speaker is in the process of denying that they draw fluidly across contexts.

On a somewhat simpler level, of course, Faker's desire to separate subjects and practices in this instance can be understood just in terms of a personal management strategy. To "just focus more on this stuff" resonates with ideas of maintaining discipline, avoiding distractions. But the emphasis on utility is an interesting one. It is useful for Faker to just think about one

course at a time because that keeps him focused. But what he *does not say* is that thinking about and recontextualizing practices across contexts is a bad idea. It just might not be important to talk about or spend much time dwelling on when trying to manage the day-to-day of being a student learning to approximate the kinds of practices expected by English and Math teachers, both in China and at LPRU. Therefore, a translingual approach to transfer might read Faker's statement that keeping practices siloed into their respective disciplinary contexts – even as he draws on mathematical practices in his description – as a choice that is impelled by an awareness of the ways that language difference is received by certain audiences.

However, it is important to reiterate that being aware of the fact that institutional expectations for students often don't prioritize fluid movement of practices is not the same as thinking that such movement is undesirable. When I asked how this kind of separation related to his earlier discussion of blending practices from Iris's class with proof writing practices, the complexity of fluidity and fixity movements are quite explicit:

> I think this is very interesting because I think some students will not find the connection between this situation writing and the other situation writing. They just focus only the parts of the writing. And I think this is very, it's very skill. When you have some connection between this part and this part. And this is, I think this skill is very important for your future because when you first do some work, you have no knowledge about this work, but you can use some of your own knowledge before you get in the other area and then apply this knowledge into the new part. And I think this skill is very important. It's very, yes. And I think this question is very uh, yes, hard for me to answer right now because I think ... But the goal is to do so.

The rigid distinctions between contexts were clear to Faker, even as he endeavored to suggest that there is a possibility for forging connections. His continued reference to "this situation" and "this work" took on an embodied character, as he often used his hands to physically separate them, holding his hands palm-down with his fingers arched in a way that made it clear that each set of practices were contained by their respective contexts. However, he recognizes that transfer is a great "skill," which he sees as an ultimate goal, even though he thinks he has not learned to

draw from across a range of knowledges and practices yet and sometimes suggests that to do so would not be effective or even possible.

Faker's case suggests that the fact that students do not always find ways to draw on connections between situations of writing is, perhaps, a question of teaching. Faker had only just begun to engage – uncomfortably at times – with a math professor who insisted that a class on proving should focus on writing practices (see chapter 4). For a much more substantial amount of time, Faker had, instead, been encouraged to see all learning in utilitarian terms, related to individual institutional goals. The strength of this tendency came through in his response to my question about why it was so hard to connect practices together into larger bodies of knowledge or ability:

> Because in China, we just learn something when we are in high school. We just learn something in order to pass examination. This sentence I say too many times, but this is main goal for our high school. So, sometimes we don't train our students to have some interest in some part. We just infuse the knowledge to our students' brain and make them to memory something. And then make them to pass examination. But not to train their interests.

Faker's description of a test-focused educational experience, which he feels dampens the possibility for broader transfer, leads him directly to a deeper issue: questions of student interest. Faker understood more fluid movement between contexts as related to the extent to which students are able to make their own choices in their educational paths, something that he felt was limited for Chinese students, particularly compared to their American peers:

> Yeah, and that is the point of our Chinese . . . the teaching system is different from American because we just teach students, before they are in college, we just teach them something they must to learn, but that maybe they don't like to learn this. Yes, because maybe some students like old culture, but we teach them math.

Faker's discussion of "old culture" interested me and when I followed up on it, asking what he meant by that, he lamented that he did not know enough about the great findings of ancient

Chinese thinkers, who had already grappled with many of the problems he was trying to understand in his academic work more broadly:

> **Faker:** Because the scientists in Western, in America countries, they wanted to deal with this problem. The quantum theory problem, but some traditional Chinese guy already think about something about this. It's like . . . uh, black and white. Do you know black and white?
>
> **Ryan:** Mm-hmm (affirmative).
>
> **Faker:** It's kind of yes, something like that. They have some thought about this quantum theory when they are in the Asian history, yes. They have already think about this, yes.
>
> **Ryan**: Mm-hmm (affirmative). Just using different words.
>
> **Faker:** Yeah, just using different words, but the main point, the main soul is the same. Yes, that is the magic, I think. And I, in fact I am ashamed to haven't know about this much, because yes, we just know the symbol of this black and white, but we don't know some theories, some main point. How they think of this way. Yes, I think I am ashamed of this. Yes. (laughs) Something like that, because we don't know much about this. So, the student from these teachings, graduate from these studies and they just know what is right to learn. But they don't know what they are, what they want to learn.[26]

Faker's shame at not knowing enough about his own cultural background is caused, he argues, by the push for students to learn the "right" thing, that is, the institutionally-mandated curriculum that emphasizes testability and a STEM focus. However, he is not simply arguing that he would have been happier studying ancient culture or history, but that he would be a better

[26] There are two possible readings of this final sentence, which I hesitate to push because of the impromptu nature of Faker's speech here, but which bear mentioning none the less. On a simpler level, it is possible that "they don't know what they are" is a false start, which he corrects his intended meaning "they don't know what they want to learn." Over the course of our conversations, there were many such false starts, often involving a decision to change a verb mid sentence. However, it is also possible that Faker intended this sentence as he said it: that students learn what they are told to learn, but never actually learn who they are or what they are interested in. This second reading suggests a much more direct relationship between fluid incorporation of practices and cultural knowledges and full realization of identity.

mathematician if he knew more about "black and white" (more broadly referred to as yin yang) theories developed in China millennia ago. Faker suggests that the potential in these yin yang theories, which would allow him to better understand complex mathematical work, is undermined by narrowed learning experiences in schools, driven by capitalist logics operating in China as it changes its position in the global economy:

> So, what happens? I think we need to think about these things (laughs) in China. Because the main point is, in China we just think about one thing too much right now. We just want to get money, get money, but we lose some important things, the culture or something like that.

For Faker, then, the fact that he has not learned – in his estimation – enough about how to engage in more fluid approaches to languaging is rooted, he argues, in utilitarian views that influence education and broader cultural moves in China.[27] For Faker, academic writing is not a site for fluid languaging because institutional logics are siloed and monolingual. Goals and projects are not related to each other because that would not be an efficient use of time. Languaging is not so easily constrained by capitalist motivations though.[28] Faker's writing sometimes incorporated practices from across different contexts, even as he described himself feeling forced to silo language practices in academic settings. As I show in the following section, a translingual approach to transfer, which assumes that individuals bring a range of practices with them and can recontextualize them in ways to productively address new contexts and audiences, is useful for identifying more fluid practices at work in a particular text.

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[27] It is important to note that I am only making a statement about Faker's views about Chinese school and culture, as well as the ways that they influence his educational experiences. The evaluation of Chinese schools or their differences from American schools are well beyond the scope of this dissertation.

[28] This is the most important insight, I think, of the Vološinov/Bakhtin school of thought, which identifies polyphony in ostensibly monoglot texts, resonating with the translingual project more broadly.

Clearing up Misunderstandings by Recognizing Fluidity at Work

A translingual orientation to transfer, which assumes that students bring a wide range of practices to bear on their work and that those practices, can help students to leverage the practices they are already familiar with. But it can also help to mitigate misunderstandings when texts do surprising or confusing things. This was the case when Faker and I discussed my confusion when reading his "What Matters in the Gun Control Debate," a critical summary of a set of arguments about gun control. Faker's inspiration to write about this complex issue was partially due to his own difficulty understanding American gun debates, which he attributed to the very different gun-ownership dynamics in America and China. In his paper, he argued that many pieces of writing on gun control depend on "subjective opinions" about guns, and thus do not provide compelling arguments that might convince people to tighten restrictions:

> However, recognizing the negative thoughts about guns is not entirely useful to solve gun control problem, because what people think about guns, like negative stereotypes, is just a subjective opinion. To find more effective ways to solve the gun control problem, we need find evidence showing specific gun control law could reduce criminal rates.

In the context of the "Critical Summary" assignment, this argument was quite fitting insofar as it made a general critical statement about the texts Faker had read on the subject of gun control, then suggesting that more evidence was needed to fully understand the problem. However, Faker's overall discussion of gun control takes a turn that readers might not be expecting when he comments on a pro gun control piece by using it to explain the problems with gun control arguments:

> According to the previous illustration, fewer guns do not lead to less violence. What's more, the rule, allowing people to bring guns outside and own guns in their home, will help them protect themselves whenever there is an emergency. Furthermore, some citizens hold a belief that they can rely on police to keep them safe. However, talking about relying on police, the point is that America is a country where the rate of people divided by area is much less than other countries around the world. Therefore, if you want to defend criminals by relying on police, the most possible case is that when police

> show up, the injury has happened because the number of police is far more less than criminals. So, permitting people to buy guns and carry guns may be a more effective way of defending [against] criminals.

Though his final position in the paper was that gun control laws should be improved, this part of his argument reads as a refutation of the gun control text he was reading. Each of the arguments the text presented are refuted and the final line ends with a statement that contradicts other parts of his argument, though notably including a *may* that perhaps reflects some of Iris's discussions in class of the ways that academic writing hedges arguments and perhaps reflects Faker's attempt to mitigate the strength of this conclusion at this point. I asked him about this particular piece of his argument:

> **Ryan:** Tell me about, how are you using this piece of evidence here? Like you, when you bring in this text, what are you doing with it?
>
> **Faker:** So this material is about uh, the fewer guns doesn't mean the less violence. This material means this. But they have some connection between the gun control laws with the violence reducing effects. So I go through this material and find the misunderstanding. Because fewer guns doesn't mean less violence. So that means if we can solve the gun control law, we also have violence. So 'we don't have guns' doesn't mean 'we don't have violence'. So we must have guns. So something like that - the logic is this.

Faker insisted that the text he was critiquing was based on a series of "misunderstandings," which undermined the author's argument and led to the text illustrating that "fewer guns doesn't mean less violence." His argument confused me until he started using his hands to signal that the phrases "we don't have guns" and "we don't have violence" were units he was holding up against each other, like two sides of an equation that did not balance out in his estimation. He notes that this is a question of logic, if one statement does not equal another, it might be the case that its opposite is true. His conclusions are drawn not so much from the content of the readings he's engaged with, but from the logical process of math. The relationship between mathematical

and academic argumentative practices is especially pronounced in the metalanguage he drew on when I asked what that evidence contributed overall to this piece of writing:

> **Faker:** So the main point of this essay is that we have guns. So, but how can we make it safer when we have guns? And this is main point. That's, we have to make some enforce to, make the rule more specific or make the condition of having guns to reduce the violence. The premise is having guns and we need to revise the laws uh, or do something about the guns or do something like that to reduce the violence in addition of having guns. Yes, the guns is the premise. The premise. Yeah.

In this explanation, it becomes clear that Faker's argument is shaped by his understanding – similar to Apple's, discussed in the previous chapter – of the need to begin with a premise, something that is known to be true and can be built upon. This sense of where an argument begins informed his whole writing process, even though he claimed to separate math practices from other courses. Subjective opinions about guns are not "true" in the sense that they can operate as premises, in Faker's opinion, so he begins instead with the facts of gun ownership and violent crime. These things exist and must be dealt with, and any arguments that start elsewhere run the risk of falling into faulty logic.

This realization about the connections between Faker's background in Math and his writing for Iris's class is important insofar as it highlights the ways that a translingual approach to transfer might be suited to recognize fluidity of language practices even when authors might not be aware of them. Knowing about Faker's background, interests, other courses, and personal goals made it possible for a sympathetic reading to see not disorganization or contradiction, but a different approach to argument, based on a rigorous attention to logic. However, this translingual approach to transfer also provides an opportunity to think about the ways that Faker's writing could have been strengthened by making these connections more explicit.

Conclusions

What both cases illustrate is the need to rethink what constitutes transfer and how it can be recognized by teachers and researchers. As Min-Zhan Lu and Bruce Horner argue, because languaging is always a process of negotiation across systems of power that writers respond to in many different ways, "a translingual approach enables us to recognize agency even in the production of the most seemingly clichéd, resolutely conventional writing" ("Translingual" 31). Therefore, it is important to consider the ways that writers might make very calculated decisions to see different contexts and practices as incommensurable. In focusing on these two instances of translingual transfer, I suggest that discussions of what students do with practices they associate with other contexts should not solely be about absence or presence. Instead, what these two cases show is that multilingual students are often highly attuned to difference by nature of their literate movement across spaces and contexts; their responses to this difference offers insights into what it might mean to teach for transfer from a translingual approach, given the ways that both participants recognize and engage with institutional pressures on their languaging, as well as the ways that we can see potential breakdown in the fixity those participants describe.

What a focus on fluctuations between fluidity and fixity provides to discussions of transfer is, therefore, a potential explanation for why students might seem not to be drawing from across their full repertoires in a given situation. In one such case of reports of limited likelihood of transfer, for example, Mark James describes a process of looking at interviews and sample student writing for evidence of transfer from an English for Academic Purposes course they had taken previously ("Investigation"). James comes to an ambivalent conclusion about the potential for transfer, stating that "transfer in this context, while possible, is not inevitable" (198). However, his research depended, on one hand, on participants explicitly identifying moments as examples of transfer, and, on the other, on clearly visible signs of use of EAP skills in later disciplinary writing. As Lexy and Faker's cases illustrate, though, there are situations in which students might point to a writing choice and label it "not transfer" precisely because of the stalled nature of their experience of writing at that particular moment. It is not that there was no important negotiation of language difference underlying those particular choices, but that the

institutional pressures Lexy and Faker experienced led them to see their writing choices across contexts as siloed by a range of competing language ideologies.

Chapter 6: Implications and Further Questions

Introduction

Participants in this study described writing in rhetorically savvy ways, discussing academic and exam writing in Chinese and English, literary language practices in Chinese, online writing in a public forum, highly-specialized genres in mathematics subfields, and writing for a range of individualized purposes. These practices are the accumulation of a lifetime of literate movement, across languages, registers, and physical space, illustrating an impressive ability to adapt and learn in new situations. As these individuals have worked to learn new kinds of writing in new situations, they have recontextualized practices from other contexts to navigate these new situations. At times, this navigation leaves markers that make transfer easily apparent, but much more often, students strove to erase any signs of the rich recontextualization they were engaged in. This erasure was frequently necessary because, as each chapter has argued, these participants' adaptability often comes into conflict with monolingual ideologies encountered across many contexts, but especially in contexts requiring them to engage in approximations of "English academic writing."

As Chapter 3 shows, many of the metalanguages participants encountered posited this particular kind of writing in starkly contrastive terms that make it incommensurable with other practices from other contexts. Still, the writing processes that participants describe illustrate the extent to which they are engaged in translingual negotiations of new exigencies via the recontextualization of practices they bring from other contexts. Their adaptations of previously-learned normative views of writing allowed participants to develop more complex approaches to academic writing tasks at LPRU, even when those practices ended up more or less imperceptible in final versions of participants' writing. Providing an in-depth study of one particular writing context, Chapter 4 illustrates the ways that participants are taught to see writing practices in math as inherently different from other writing practices. Nonetheless, participants found productive ways to discuss math writing in terms that helped them develop both their understanding and

approximation of approaches to writing favored in Iris's class. Thus, even when participants encounter writing contexts that called for siloing of practices along rigid boundaries, they were able to draw critical insights that contributed to their overall sense of possibilities for recontextualization. Chapter 5 provides two case studies of participants whose more fluid language practices become stalled when they encounter institutional pressures to avoid thinking across their experiences and just stay focused on the task at hand. These experiences illustrate the extent to which participants experience institutional language ideologies as always-monolingual mandates that run the risk of shutting down the possibility for transfer.

Taken as a whole, these chapters illustrate the extent to which participants recontextualize a range of practices across contexts, even in the face of monolingualist ideologies demanding that those practices remain siloed in given contexts. Throughout this dissertation, though, I have identified moments of fluid languaging within these more narrowed constraints, illustrating ways that participants continue to recontextualize writing practices across contexts, sometimes accidentally and sometimes in more active ways that provide guidance for teachers and researchers to better understand and build on the rich range of practices students bring with them. Chapter 3 highlights the ways that some participants learned to blend metalanguages describing what constituted good writing, allowing those participants to develop more nuanced conceptualizations of audience expectations. This blending allowed participants to begin to subvert monolingual ideologies that demand writing be restricted to a narrow set of prescribed practices, determined by a given static context. Chapter 4 illustrates the ways that the siloes constructed around language practices can begin to break down when participants are encouraged to discuss connections between seemingly incommensurable kinds of writing. As I argue in that chapter, participants brought rich insights about connections between writing practices in math and practices in other contexts, illustrating that finding recontextualization might simply be a question of inviting students to talk about different kinds of writing more freely. Chapter 5 cautions that this kind of openness to languaging often runs up against strong institutional constraints, making it difficult for students to engage as fluidly as they might. Still, conversations and close analysis of writing in these two cases illustrates that, even in the face of

the monolingual ideologies of many educational institutions, signs that writing practices are influencing each other across contexts remain. Across these three findings chapters, I have argued that such examples of fluid languaging illustrate that recontextualization of writing practices is ubiquitous, an outcome of the lived reality of an individual who moves across so many different kinds of contexts and languages.

Recontextulizing Transfer Research

My incorporation of translingual theories, which assume difference as a norm and fluid incorporation of knowledges and practices as the natural state of language, helps me to problematize easy distinctions between the absence or presence of transfer, suggesting instead that if we assume a productive influence from the rich range of practices and experiences students bring with them, it is more likely that we will learn something about the complex nature of decisions those students make when writing across contexts. Adopting such translingual theories, which assume the incorporation of difference to be "an inevitable feature of all writing, whatever forms that writing might take," makes it more likely that we will come to recognize the ways that moments that seem devoid of transfer are, in fact, often rich with recontextualized knowledges and practices (Horner "Teaching" 88).

Besides suggesting ways to recognize students' potential for recontextualization, this dissertation suggests that it is also teachers and researchers who should consider recontextualizing their practices – practices that have often been developed in particular kinds of contexts with assumptions about particular kinds of students who are presumed to have particular kinds of goals – to suit the exigencies of new situations, in which learners, their practices, knowledges, and goals are increasingly mobile and fluid. That is, if it is beneficial for learners to consider the ways that their prior experiences can be negotiated and adapted to suit the needs of a new situation, audience, and expectations, then it is equally – if not more – true for those who are tasked with helping these students through such negotiations. This dissertation, I hope, raises questions about how to engage in such recontextualization of terms and understandings, insofar as it highlights the process of not only analyzing what students do, but also of changing

assumptions about what actually qualifies as writing transfer in the face of new ideas about prior texts, relevant antecedent genres, and institutional pressures. Such insights might lead researchers and teachers to investigate assumptions about definitions of transfer in populations of mono- and multilingual teachers or the ways those views shift when encountering an increasingly (though already long-prevalent as Matsuda reminds us) multilingual composition of students. Further research on recontextualizing pedagogical and research practices to better support transfer might also investigate the sometimes surprising places across the curriculum where writing instruction is already prompting students to start to draw more freely from a range of practices and see connections with writing from other contexts, as was the case for some participants in their math courses.

The importance of recontextualizing approaches to transfer research is also especially apparent when considering the ways that threshold concepts have been taken up as a way to codify the writerly metalanguages of the discipline of writing studies. While this work has contributed highly important insights into the ways that professionals in the discipline conceptualize writing, it has sometimes narrowed our conception of what qualifies as good writing in a given context. For instance, Kathleen Blake Yancey describes the ways that, for many students experiencing problematic negative transfer, "prior knowledge can function in . . . less hospitable ways" that undermine the effectiveness of writing (37). As one example, she describes:

> "when students enter a FYC writing classroom with an unelaborated writing process – one absent of multiple drafts, peer review, and revision – that they believe is the 'right' way to write, or when they enter 'knowing' that an edited text is necessarily a strong one, even if it has no purpose, claim, or contribution" (38).

The critique of such prior knowledge is striking. In this description, such students could hardly be said to have any prior knowledge at all. They do not know about writing because they do not know about writing *in the contextually-specific and disciplinary sense Yancey describes*. Their writing is purposeless, claimless, and lacks a significant contribution. But those are terms that draw on a particular metalanguage, indexing a particular set of language ideologies about what

good writing does and – it seems from this description – what even constitutes writing. However, it is easy enough to imagine a piece of writing in which the writer constructs what could constitute a clear claim, though they construct their text in such a way that it does not conform to Yancey's definition of "claim." Neil's discussion of the differing ways that writers "make a point" in Chinese and American academic contexts, along with his own experiments with blending those two argumentative approaches, might not align with Yancey's definition of *claim* or *purpose*, but his mobilization of these differences in his writing suggest that he is critically engaging with these practices to navigate new contexts in savvy ways that might simply be invisible when held to standards of more normative and monolingualist approaches to writing.

Similarly, the perceived lack of purpose in a piece of writing might likely be attributable to the presence of other knowledges, not the absence of knowledge. Purpose, insofar as it invokes the goals of a writer and their relationship with a given audience, is an especially fluid concept, and can be realized in many different ways, based on the writer's individual sense of which choices will be most effective. As Xiaoye You argues, a too narrow view of something like the writer's purpose often springs from an assumption of native-readers as ideal audiences ("Comparative"). Describing another researcher's negative assessment of Chinese students' organizational moves in writing, You counters that, while "it was true that Chinese students wrote hypothetically for native speakers, in reality they tried to communicate with their Chinese audiences (i.e., teachers and peers) who truly mattered in the rhetorical situation (i.e., class assignments and tests)" (116). These students were not without a sense of purpose in their writing, but the practices they drew on to address their purposes might have obscured their effectiveness if *purpose* is limited to its meaning within the particular metalanguage Yancey and other writing studies scholars draw on. This might certainly right true of Faker's seemingly problematic gun control essay, which at points seemed to obscure or even contradict what might seem to be his ostensible purpose. However, his description of adaptations of logical structures he brought from math contexts reflect that he not only had a clearly-defined purpose, but that the choices he made were made to facilitate his own attempts to use his writing to understand the rationales behind opposing gun control views.

Therefore, when investigating the prior knowledges of international students, recontextualized research practices might lead us to consider if students bring an absence of knowledge about something like claim-making or if the practices they have experience with situate claim-making in a different way, which might provide important comparative and contrastive insights. Further research might continue the work of identifying common patterns of influence, first of all by assuming they exist and setting out to understand them. Such work might be best considered as a local concern, with programs conducting ongoing and in-depth studies of their own student populations (Hall "WAC/WID"). Fraiberg, Wang, and You's wide-ranging study of the academic experiences, discourse strategies, and broader living conditions of the rapidly-growing Chinese student population at Michigan State University provides an excellent model for such work, producing rich data about the practices students have at their disposal, the goals they have for writing and learning, and the day-to-day considerations individuals must navigate. Importantly, these researchers frame their inquiry in terms that foreground the need to recontextualize programs and pedagogical practice, centering their discussion on "questions about who changes, how much, and to what effect" (25). While such research will necessarily be local, based on the populations at a given institution, this work will also require further development of pedagogical and research methods that provide new approaches for engaging with students about their past, present, and future goals as writers, as well as means of inquiring about the ways students' full range of experiences inform their choices and contribute to a fuller possibility for rich languaging.

Languaging and Learning

In the introduction to this dissertation, I argued that discussions of development can fail to capture the messy and non-linear nature of learning to write effectively in and across contexts. Instead, *languaging* and its emphasis on the dynamic interrelationship between building a larger language repertoire and an ongoing building of self seemed to better describe the experiences participants shared with me. When Ox-Man reflected that his sense that he was "growing up"

corresponded to learning to rework what he had learned about TOEFL writing, crafting more contextually-savvy discussions for his readers, he did not really imply a movement toward completion, but a moment where his changing sense of self was simultaneously reflected in and impelled by new practices he was trying out. Ox-Man didn't say that he set out to experiment with his introduction because he needed to build a particular writing skill or even develop a more nuanced habit of mind; he framed this work as part of a process of his own ongoing and ever-changing sense of self. Similarly, Apple's note that he used to consciously think about incorporating and reworking a range of practices but more recently did so less consciously as he learned to "just write" was not a statement of linear development, as if he had originally needed to scaffold his thinking and later learned to remove those supports. Instead, he suggested that he incorporated more practices into his broader repertoire as part of his overall growth, especially connecting this ability with his decision to leave his small-town school and come to LPRU. Therefore, *languaging* reminds us not only of the messy and iterative nature of learning, but also emphasizes the ways that the process of an individual adding to their communicative repertoire is inseparable from that individual's ongoing process of becoming.

This distinction is important insofar as it serves as a reminder that we cannot develop as individuals without language growth and significant language growth is hard to imagine without an expanding sense of self. For teachers and researchers interested in writing, such a distinction could reiterate that student goals for writing are not always strictly related to writing per se, but are inextricably bound up in a larger dynamic of self-making. That these participants' reflections suggest an orientation toward languaging over development provides a counterpoint to research that suggests that, for L2 writers, writing in college is decidedly not related to personal growth (Leki "Undergraduates"). Leki's participants struggled to produce texts that conformed to normative approximations of Standard Academic English, and only encountered limited opportunities for transfer beyond sentence-level considerations and citation styles. Instead, their writing experiences were saturated with autonomous views of writing that assumed development to be a linear process and transfer to be automatic and unprompted.

While not all developmental views of writing are based in the seemingly poor writing

pedagogy critiqued by Leki, the contrast between participants in this dissertation and those in Leki's study raises the question of why participants at LPRU were able to see writing as a part of their broader becoming. There are many possible reasons to explore further, but the simplest is that perhaps participants from LPRU simply encountered better writing instruction. The math instructors participants described provided rich rhetorical discussions that helped students see the relationship between context, audience, and genre. Neil and Cameron both participated in authentic research experiences that provided them with detailed instruction in writing for research audiences. The short analytic writing pieces in Lexy's art history course provided her with an opportunity to use writing to explore her interest in photography. These experiences undoubtedly enhanced the rhetorically-informed curriculum in Iris's class and, perhaps, encouraged participants to see writing as inextricably bound up in their individual growth, even if only by virtue of the pervasiveness of good writing assignments, suggesting that further research on effective WAC programs might highlight their contribution to student languaging.

Such questions are especially relevant when thinking about students who are not monolingual English speakers, as Jonathan Hall points out ("WAC/WID"). Hall calls on instructors to develop pedagogies that draw on multilingual competencies, prior experiences, and individual goals and needs. He emphasizes that such pedagogies are important for both multi and monolingual learners, and calls for rigorous assessment of these pedagogies to provide the best education possible for all students. As WAC/WID programs move in this direction, the experiences of participants in this dissertation could provide some inspiration for facilitating not just good writing instruction in individual classes, but also writing experiences across the curriculum that allow multilingual students to see writing assignments as relevant to their developing senses of self – that is, as part of their broader languaging.

Teaching for Translingual Transfer

Because a translingual framework assumes language difference to be not a problem but a norm, a translingual approach to transfer proceeds from the assumption that language use in a

new context is always a matter of responding to, adapting, and recontextualizing prior experiences, knowledges, and practices. This is not a matter of fetishizing difference, but a simple recognition that it is a reality.

This does not mean we should assume that influences from other contexts will be immediately visible though. Often, they are surfaced through conversations with writers by inviting them to describe their practices across contexts, assuming that experiences are inter-connected. For this dissertation, I asked participants explicitly about their past experiences with writing and set the stage for them to talk about the ways that language and writing worked in and across contexts. Participants were, therefore, prompted to explain relationships (or lack thereof) between different kinds of writing and to explore relationships that they might not have considered before. This method of inquiry mirrors a wide range of reflective writing pedagogies for monolingual students, much like those described by Yancy and commonly used across many classes ("Reflection"). This comparison suggests a need to further consider the ways that translingual pedagogies might build on the benefits of teaching for transfer by incorporating reflection that asks students to do participants in this study did: consider the relationship of a given piece of writing to their broader experiences writing and languaging. Doing so could emphasize, as Horner's construction of a "translingual norm" suggests, that the divide between "writing" and all the other language practices that contribute to the creation of that text – planning, translating, action-reflection, conversation – is a false one, further shifting discussions of transfer toward discussions of practices and process, not static products ("Reflecting").

Such a shift could help to highlight the extent to which all new writing tasks are enmeshed in a complex navigation of prior texts, including languages, metalanguages, and other contextual factors, while also acknowledging that, for many students, courses that adopt a translingual perspective are not presenting something new, but authorizing learners to engage in practices that are already part of their daily lives (Alvarez et al). Therefore, one important goal for teaching for transfer from a translingual perspective might be to shift translingual pedagogies

to more explicitly deal not only with the incorporation of other languages and texts but the treatment of them as practices that are recontextualized to enrich learning and writing in new contexts. This distinction is especially important when considering that some students who bring rich and diverse repertoires with them to new writing contexts do not always want to incorporate signs of difference into their writing (McCarty "Translational"; Milson-Whyte). This hesitance was certainly true for participants in the current study. Lexi and Cameron were both interested in the insights we discussed regarding *wén cǎi* writing, and Lexy suggested that she might continue experimenting with such practices, but neither of them wanted to incorporate such practices in their academic writing if they would mark it as non-standard. Similarly, Neil expressed nervousness that his complex understanding of using practices he associated with Chinese deductive writing to more effectively frame lines of inquiry in his research writing might sometimes mark him as someone who puts "the conclusion" in the wrong place. In the semester after this study, he reflected that he was definitely recontextualizing those practices, but he was doing so in a way that American readers would likely not notice. Thus, these participants' experiences illustrate that translingual practices contribute to writing processes in ways that are often invisible by design, and are therefore not explicitly supported in classrooms. Further work is necessary to develop pedagogies that can help students recognize and build on these practices, both to improve students' abilities to use their full repertoires to construct approximations of "standard academic English" and to create the possibility for recognizing moments when incorporation of visible difference might be rhetorically useful.

Further developing reflective practices like those deployed as research methods in this study might also help students to see moments where incorporating recontextualized practices from other contexts might be deployed strategically and meaningfully, not as markers of lack of fluency or as fetishizations of the exotic, like Lee describes in his discussion of a student awarded a prize for an essay in which he incorporated incomprehensible bits of Chinese writing ("Beyond"). Developing translingually-inflected reflective metalanguages in classes could, instead, highlight the rhetorical means by which writers incorporate and adapt practices based on the goals and audiences they encounter. Such an approach is important because, as Dryer and

Mitchell argue,

> When students have a language to describe the ways writers try to shape their audiences and purposes, they are less likely to work across languages for 'show' and more likely to do it more purposefully as a way to marshal an alternative yet essential line of evidence or to invoke a particular kind of relevant expertise." (142)

For instance, when Cameron included the *wén cǎi* inflected phrase "[a]rtificial intelligence went through its winter in the late 20th century," he was not showing off his dexterity with the use of a particularly Chinese metaphor. He was using language that "tells the reader a lot" in a small number of words, resonating with both the writing practices he encountered when writing in China and the practices he was learning in his computer science courses, which prioritized concision in writing. This choice was a purposeful alternative, though one that Cameron decided to cut from his revisions. However, a course foregrounding a translingual approach to transfer might have provided Cameron – as well as Lexy and Apple – with the critical insights necessary to further experiment in their writing with *wén cǎi* practices they brought with them.

Such an approach would, again, require teachers to recontextualize what effective writing might mean, in their courses and beyond. As Canagarajah argues, instead of "asking what we can offer to deficient or novice students, we have to ask how we can let students bring into the classroom the dispositions and competencies which they have richly developed outside the classroom," thus transforming "the classroom into a site for translingual socialization" ("Translingual" 184). This socialization would, I add, involve the explicit focus on transfer, helping students not only bring in practices, but to further refine them through dialogue with new practices, contributing to individuals' ongoing sense of languaging. The goal of such teaching, then, would be to look for ways to see all student writing as a series of choices that can be built upon rather than as a series of problems to fix, a more just approach to teaching, to be sure. As Inoue suggests, "the conditions of fairness begin and end with listening compassionately and carefully to students and their uses of language without the need to penalize anyone's ways with words, instead making sense of the potential emergent in each instance of language, rigorously investigating with students their languaging" ("Writing" 131). Further work is necessary to find

effective ways to balance students complex goals, which, participants in this study suggest, often entail complex and sometimes seemingly conflicting desires for expansive incorporation of a broad range of practices, the ability to recontextualize practices (sometimes covertly), and production of texts that will be viewed as successful examples of normative academic discourse.

Lingering Questions

As I have suggested throughout this conclusion, perhaps the most important contribution to both pedagogy and research that a translingual approach to transfer might offer is simply one of perspective. One of the most central innovations of translingual theories is the shift to viewing difference as a norm to be built upon, not eradicated. We should assume that language difference exists and is productive. Teachers and researchers should assume that students bring a range of experiences, knowledges, and practices to class with them and they are already in the process of comparing these resources to those they encounter in each new context and recontextualize their practices accordingly. Thus, the question shifts away from *How do we teach students to transfer?* to more agentive ones like *How are students already transferring?* and *How can we help students better recontextualize practices they bring with them?* These are, it is quite clear, shifts based on assumptions about the nature of language, learning, and transfer, but no more so than the assumptions on which monolingual ideology has dominated previous discussions of academic writing. As the experiences of the participants in this study illustrate, though, such monolingual assumptions certainly do not reflect the lived reality of all students.

However, the narrowness of this study – based on six students from the same country during one semester in the same class – raises questions of generalizability, even though, as I note in my discussion of methods, does not invalidate my findings. Still, it necessitates a great deal of further reflection and work. Does it matter that these participants were all from China, studying in the United States at a time when xenophobic diatribes against their home country were aired daily? Of course, the answer is yes, but in what ways? How does the politicalized positioning of these participants as "international students" preload assumptions about what

kinds of prior knowledges and experiences such students might bring with them? How can we understand the differences and similarities between these individuals' experiences and views and those of the mostly "Gen 1.5" students of Dominican origin I have worked with (McCarty "Translational")? Both groups recontextualized their rich and fluid practices to write in new situations, often with the explicit goal of obscuring any signs of difference in the final product. But how might their motivations have differed or overlapped? What might we learn from studies like this dissertation, but including both international and domestic multilingual students, along with groups that do not identify as multilingual? Courses that mix international and domestic students in "Cross-Cultural" writing experiences (Matsuda and Silva) or translingual experiments (Dryer and Mitchell) provide excellent points of departure for localized studies of student populations and cross-institutional collaborations to better understand and support best practices for pedagogy and program development.

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